

Greater Dalton

2045 Metropolitan Transportation Plan



Prepared in Cooperation With:
Whitfield County, Murray County, City of Dalton, City of Chatsworth, City of Cohutta,
Town of Tunnel Hill, City of Varnell, Town of Eton, Georgia Department of Transportation,
Federal Highway Administration, Federal Transit Administration



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Greater Dalton Metropolitan Planning Organization
A Resolution by the Greater Dalton Metropolitan Planning
Organization Policy Committee Adopting the 2045 Metropolitan
Transportation Plan

WHEREAS, in accordance with the U.S. Bureau of the Census officially designated Urbanized Area Boundaries established on May 1, 2002; and

WHEREAS, the Greater Dalton Metropolitan Planning Organization (MPO) has been designated by the Governor of Georgia as the MPO for the Greater Dalton Urbanized Area in accordance with Federal requirements of Title 23, Section 134 of the United States Code to have a Cooperative, Comprehensive, and Continuous transportation planning process; and

WHEREAS, the Policy Committee (PC) is the recognized decision making body for transportation planning with the Greater Dalton MPO; and

WHEREAS, the Greater Dalton MPO will conduct federally-required transportation planning activities that will improve the transportation system and help coordinate the area's future growth within the area bounded, at minimum, by the existing Urbanized Area; and

NOW, THEREFORE, BE IT RESOLVED that the Greater Dalton MPO PC has adopted the 2045 Metropolitan Transportation Plan.

A motion was made by PC member Lynn Laughter and seconded by PC member Radney Simpson and approved this the 8th of June, 2020.


Kent Benson, Chair
Policy Committee

Subscribed and sworn to me this the 8th of June, 2020


Notary Public

My Commission expires 10/25/2021



The opinions, findings, and conclusions in this publication are those of the author(s) and not necessarily those of the Department of Transportation, the State of Georgia, the Federal Highway Administration, or the Federal Transit Administration. No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance



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Chapter 1

Introduction

Purpose of the MTP

The 2045 Metropolitan Transportation Plan (MTP) for the Greater Dalton Metropolitan Planning Organization (GDMPO) outlines the goals, objectives, policies, and proposed improvements needed to maintain a safe, effective, and efficient multi-modal transportation system for the movement of people and goods throughout the region which includes all of Whitfield County (including the Cities of Dalton, Tunnel Hill, and Varnell) and the urbanized portion of Murray County (including the Cities of Chatsworth and Eton). Updated every five years, the MTP (previously known as a Long Range Transportation Plan) is one of the required items addressed by the GDMPO to meet Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) standards that in turn enables the GDMPO to utilize and distribute federal transportation funds for use in its member communities. As such, the MTP articulates a multi-year and long range program of transportation improvements that are intended to address the collective transportation needs and enhance the economic, social, and environmental assets for the entire region. A key component of the MTP process is incorporating fiscal considerations so that the program of transportation improvements is realistic based on anticipated transportation funding.

History of the MPO

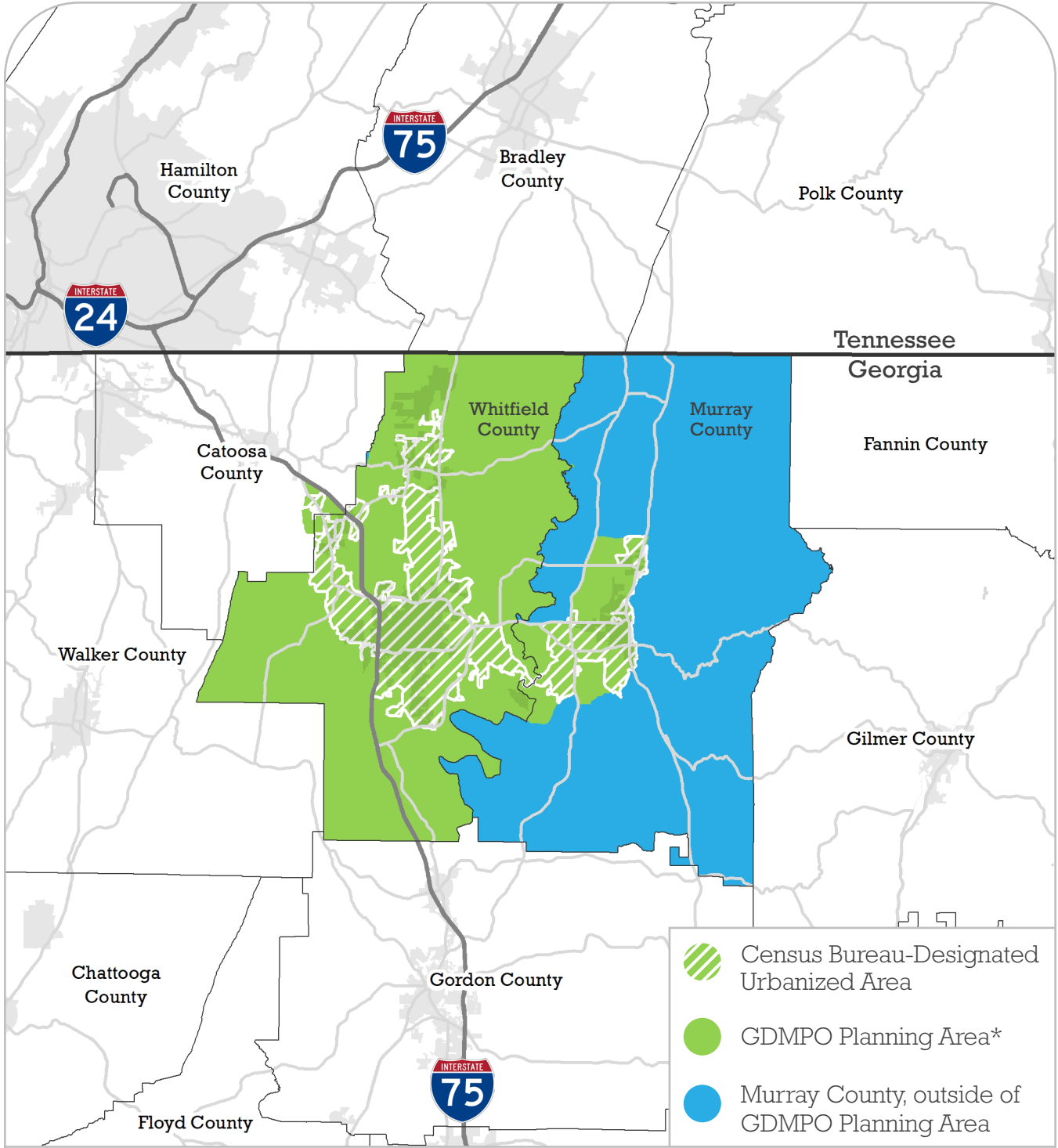
In the 2000 Census, the Dalton area was officially recorded as having an Urbanized Area (UA) population of 57,666 people and classified as a Metropolitan Statistical Area (MSA), defined as a “densely settled territory that contains 50,000 or more people.” This subsequently led to the establishment of a Metropolitan Planning Organization (MPO) in 2003 in compliance with Federal Legislation for urban areas with a population of over 50,000 people or more in order to ensure that transportation investments are based on a comprehensive, cooperative, and continuing (3-C) planning process. The Governor of Georgia initially designated the North Georgia Regional Development Center (NGRDC) as the MPO for Dalton and Whitfield County in March 2003 which was later merged with the Coosa Valley Regional Development Center to form the Northwest Georgia Regional Commission (NWGRC).

On September 30, 2009, the Governor of Georgia approved the designation of the Dalton-Tunnel Hill-Varnell-Whitfield County (Greater Dalton) Urban Transportation Study as the MPO and approved Whitfield County as the entity to staff the MPO. Shortly after, the 2010 Census recorded an UA population of 98,037 people with an expanded geography that includes parts of both Whitfield and Murray Counties as well as a small portion of Catoosa County to the northwest, further expanding the MPO’s boundaries. Transportation planning activities and responsibilities



1 | Introduction

for this part of Catoosa County are carried out by Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (CHCNGATPO) under a Memorandum of Understanding (MOU) with the GDMPO.



*The portion of the planning area in Catoosa County is managed by Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (CHCNGATPO)

The Planning Process

The GDMPO's primary objective is the development of plans and programs that address transportation needs of the MPO area. The planning process is conducted in accordance with 23 CFR, section 450.112 and in cooperation with the Georgia Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, the City of Dalton, Whitfield County, and Murray County. This cooperation and guidance is conducted through the activities of two GDMPO committees as indicated below:

- Policy Committee (PC), which is composed of the principal elected and/or appointed officials of participating governments and agencies that oversee or operate major transportation modes within the GDMPO area. This committee reviews and approves all transportation plans and programs resulting from the GDMPO.
- Technical Coordinating Committee (TCC), which provides professional technical assistance to the PC and recommends transportation plans and programs for consideration and approval by the PC.

The MPO's first Long Range Transportation Plan (LRTP) contemplated a horizon year of 2030 and was adopted in June of 2005, largely informed by the Whitfield County/City of Dalton Municipal Multi-modal Transportation Plan, completed by the Georgia Department of Transportation in September 2003, prior to the creation of the MPO. Subsequent updates of the LRTP were adopted in June 2010 and June 2015 (with horizon years of 2035 and 2040, respectively). Therefore, this GDMPO 2045 MTP serves as the 5 year update to the GDMPO 2040 LRTP.



How to Use and Understand the MTP

The MTP document is organized to largely reflect the process that was used to create the MTP. As such, it includes the following elements:

Chapter 1 Introduction: Introducing the purpose of the MTP and the history of the MPO.

Chapter 2 Community Profile: An exploration of underlying community conditions and trends in the MPO that influences travel behavior, transportation needs, and decision making.

Chapter 3 Community Goals: A description of various transportation and broader community related goals that are used to help guide the transportation planning process. These goals include consideration of federal and state transportation goals, localized goals and performance based planning targets, and systematic goals that describe holistically the local vision for the future of the transportation system.

Chapter 4 Plan Development: A documentation of the various efforts used to inform the plan's recommendations. This includes discussion of the community engagement efforts utilized as well as the various technical analyses utilized to determine the transportation system's existing and future needs.

Chapter 5 Evaluation and Implementation Plan: Further documentation focusing on the plan's recommendations, including the efforts to develop transportation projects and initiatives, evaluate and prioritize those projects and initiatives, and finally documentation of an Implementation Plan that includes fiscal considerations of future transportation funding and anticipated implementation costs.

Chapter 2

Community Profile

A robust transportation planning process is much broader than simply identifying areas of traffic congestion or where a new sidewalk may be needed. Instead, it is based on an understanding and integration with various socio-demographic conditions in the community and trends that may influence future transportation needs. This includes not only understanding future population and employment growth, but also where the locations in the community where that growth is anticipated to be more intense, understanding where vulnerable populations concentrate so that we can be equitable in our transportation decision making, identifying major commuter patterns, understanding the role of education and schools in transportation needs, and the relationship between land use planning and the transportation system.

Trends in Population

Historical and Projected Growth

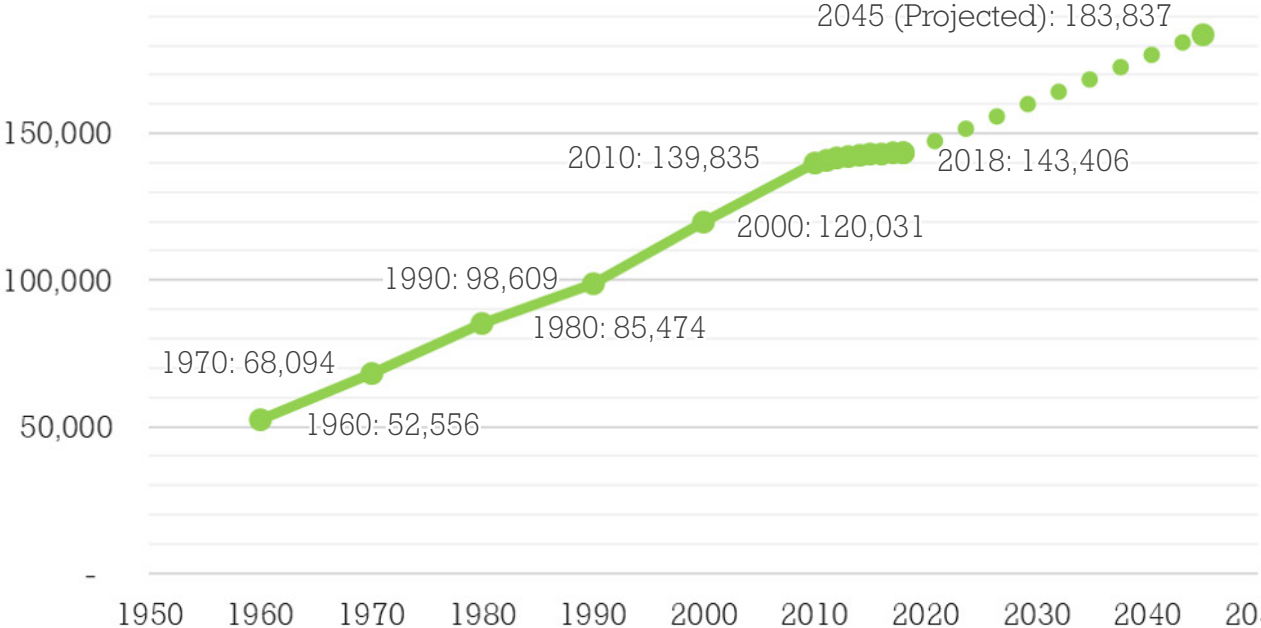
Population growth in both Whitfield and Murray Counties has occurred steadily and is anticipated to continue through the year 2045 from several sources as shown in the table below. Through a process used to support travel demand modeling technical analyses for the MTP (and documented in **Appendix A**), various projections for population growth in the region were considered and combined to anticipate a year 2045 population in Whitfield County of 135,268 and in Murray County of 48,569 for a combined regional population of 183,837.

Household Size

Households are a function of population, defined by the US Census as a group of people sharing a dwelling unit. Household sizes in the Dalton region have remained mostly consistent over the years and are anticipated to not dramatically change in future years.

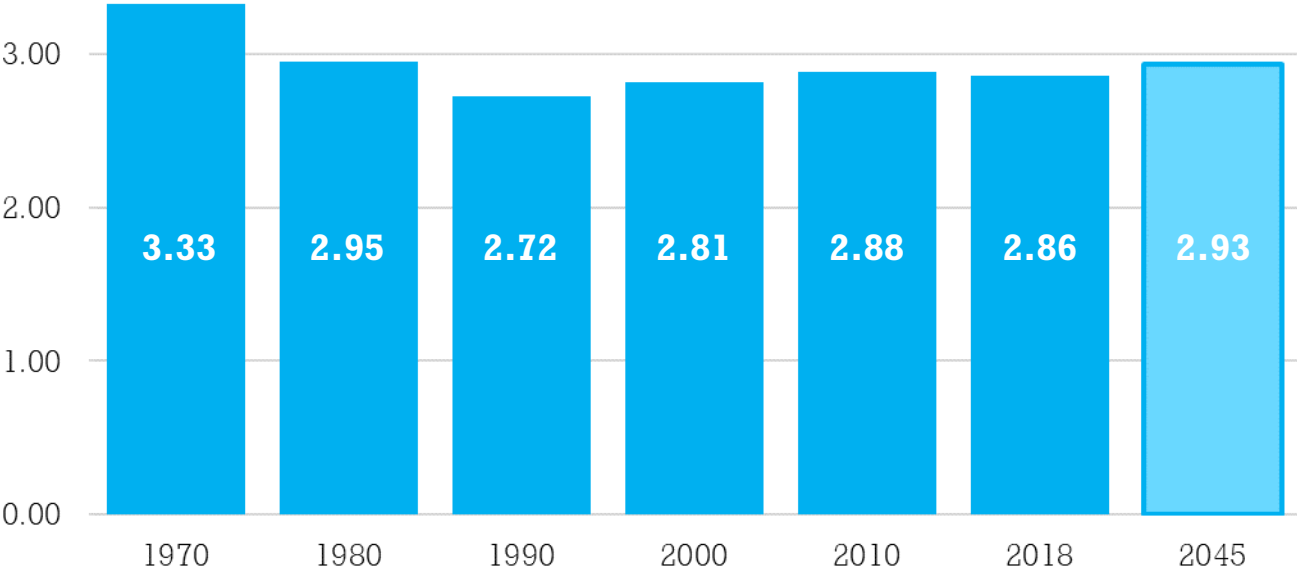


Historic and Projected Population of Whitfield and Murray Counties, 1960-2045



Source: US Census Bureau 1960-2018; Socioeconomic projections 2045

Historic and Projected Household Size of Whitfield and Murray Counties, 1970-2045

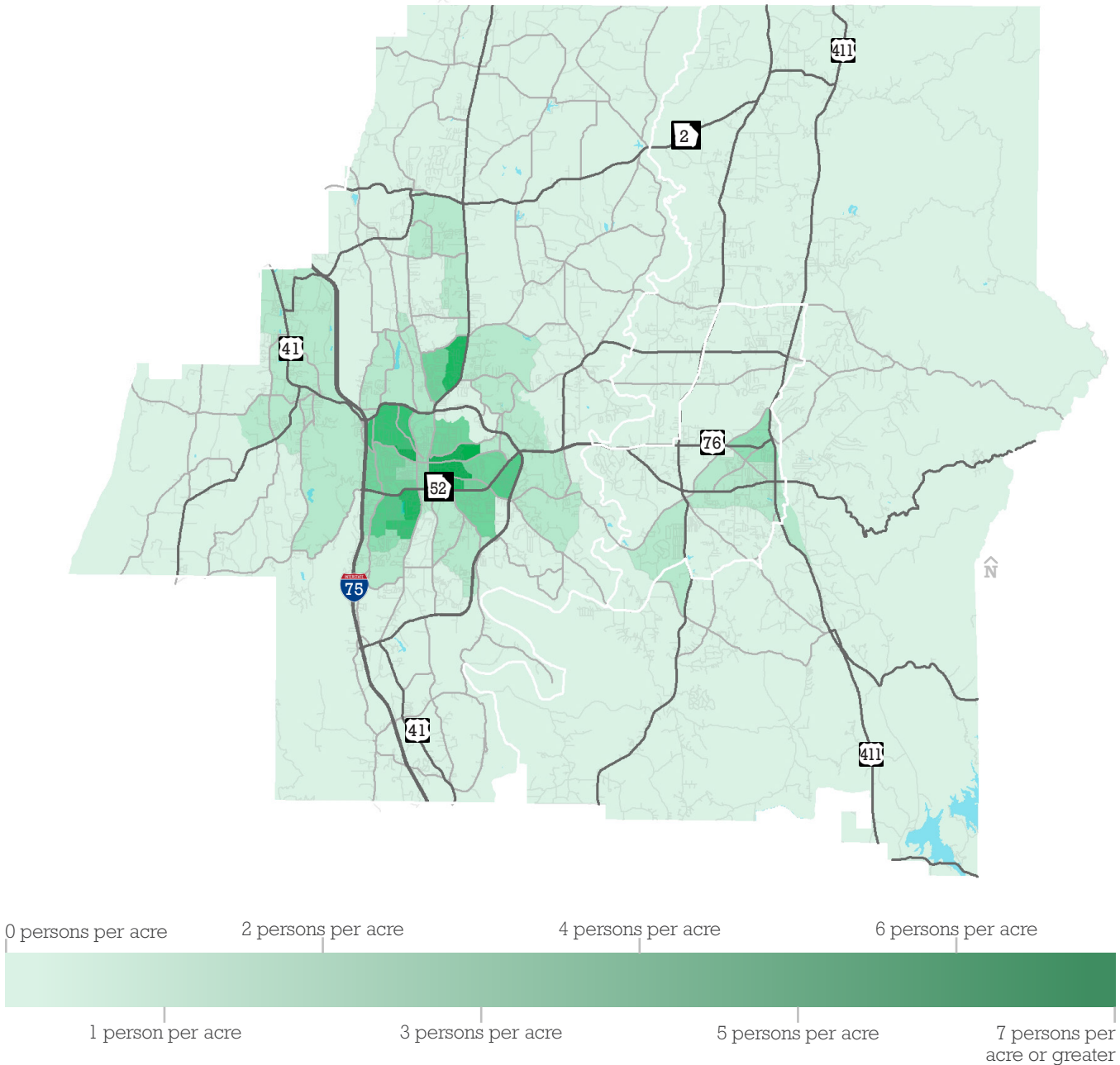


Source: US Census Bureau 1960-108; Socioeconomic projections 2045

Population Density

While total population and households help to define why a region or area may need specialized transportation planning through an MPO process, that planning needs to understand where and how population is clustered in the community. As the largest city in the region, Dalton is home to the most obvious concentration of population in the region, but several other communities (particularly Chatsworth, the seat of Murray County) indicate a noticeable concentration of population as well.

Population Density, Whitfield and Murray Counties, 2018



Source: US Census Bureau 2018



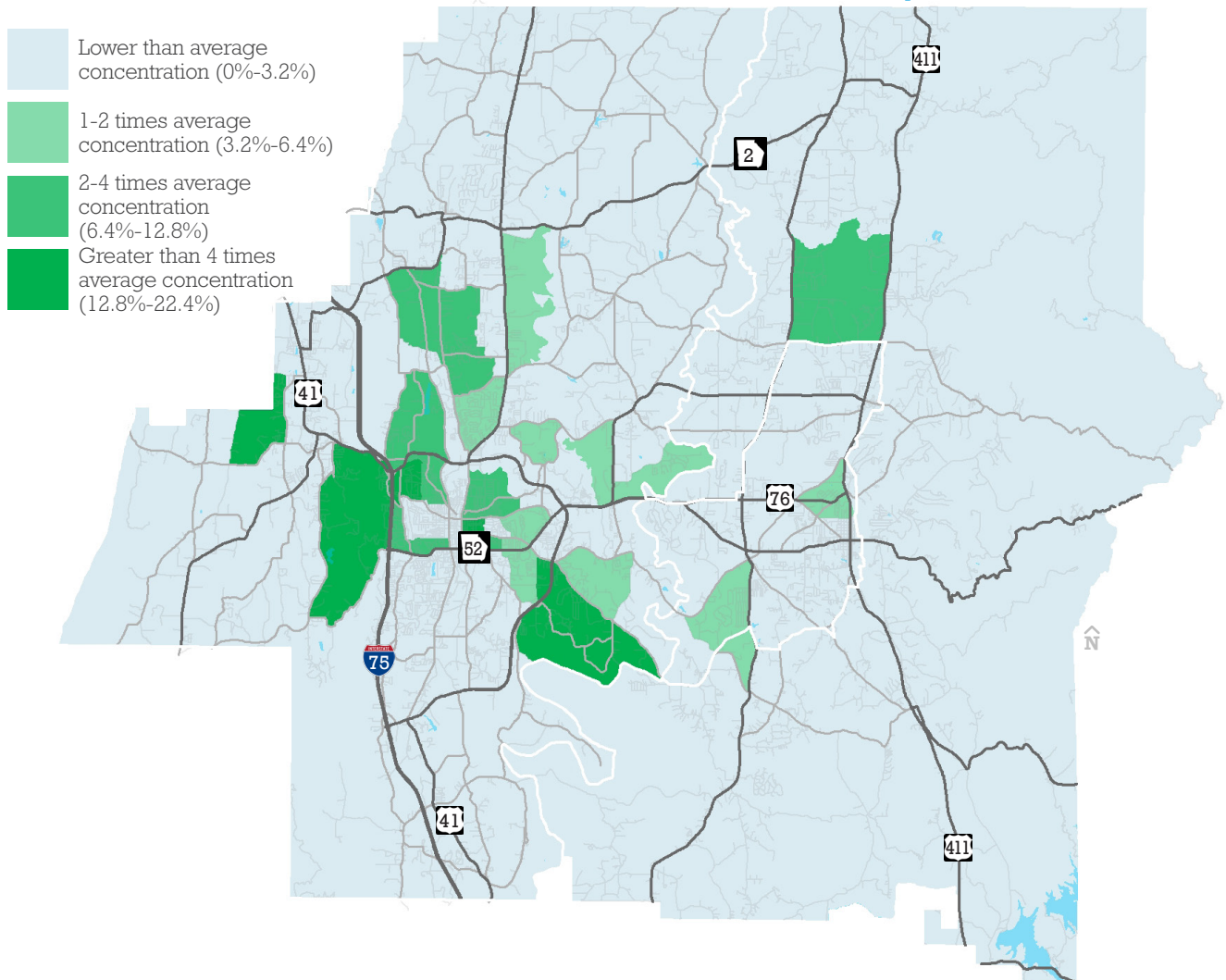
Title VI and Environmental Justice

Title VI of the Civil Rights Act of 1964 states that no person should be subject to discrimination under any program or activity receiving federal financial assistance on the grounds of race, color, or national origin. A related focus on Environmental Justice (EJ) states that federal agencies shall identify and address disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations. As recipients of federal transportation funds, the MPO's planning process must incorporate Title VI and EJ analysis. Using US Census geographies, areas were identified in the MPO region with EJ populations that exceed the regional average in Whitfield and Murray Counties.

Minority Populations

African American: Whitfield and Murray Counties have a combined regional average African American population of 3.2 percent of the total population. Using Census block groups, mapping of the region shows several dispersed areas exceeding the regional average.

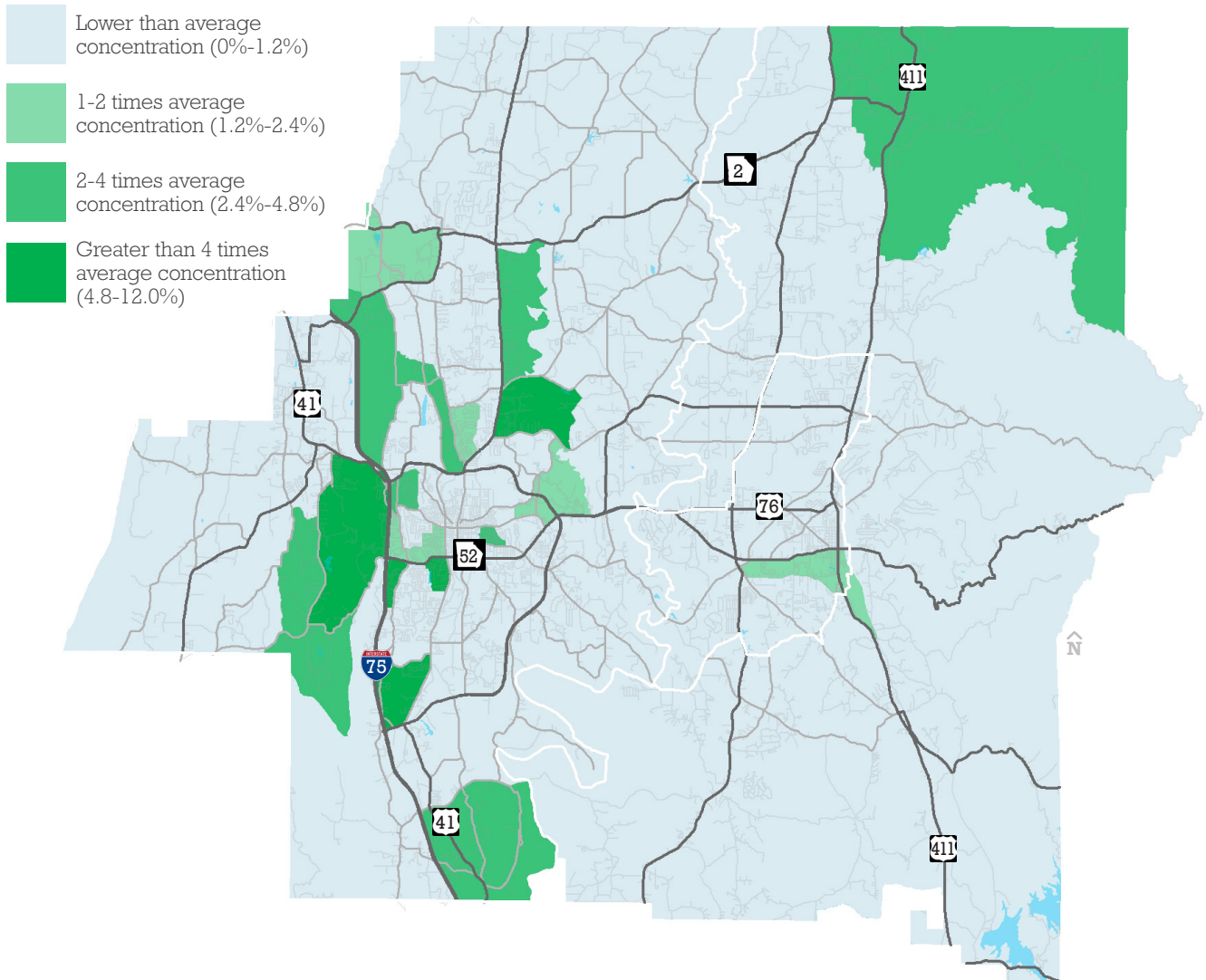
Black or African American Concentration, Whitfield and Murray Counties, 2018



Source: US Census Bureau 2018

Asian: Whitfield and Murray Counties have a combined regional average Asian population of 1.2 percent of the total population. Using Census block groups, mapping of the region shows several areas, many in the areas west of Dalton exceeding the regional average.

Asian Concentration, Whitfield and Murray Counties, 2018

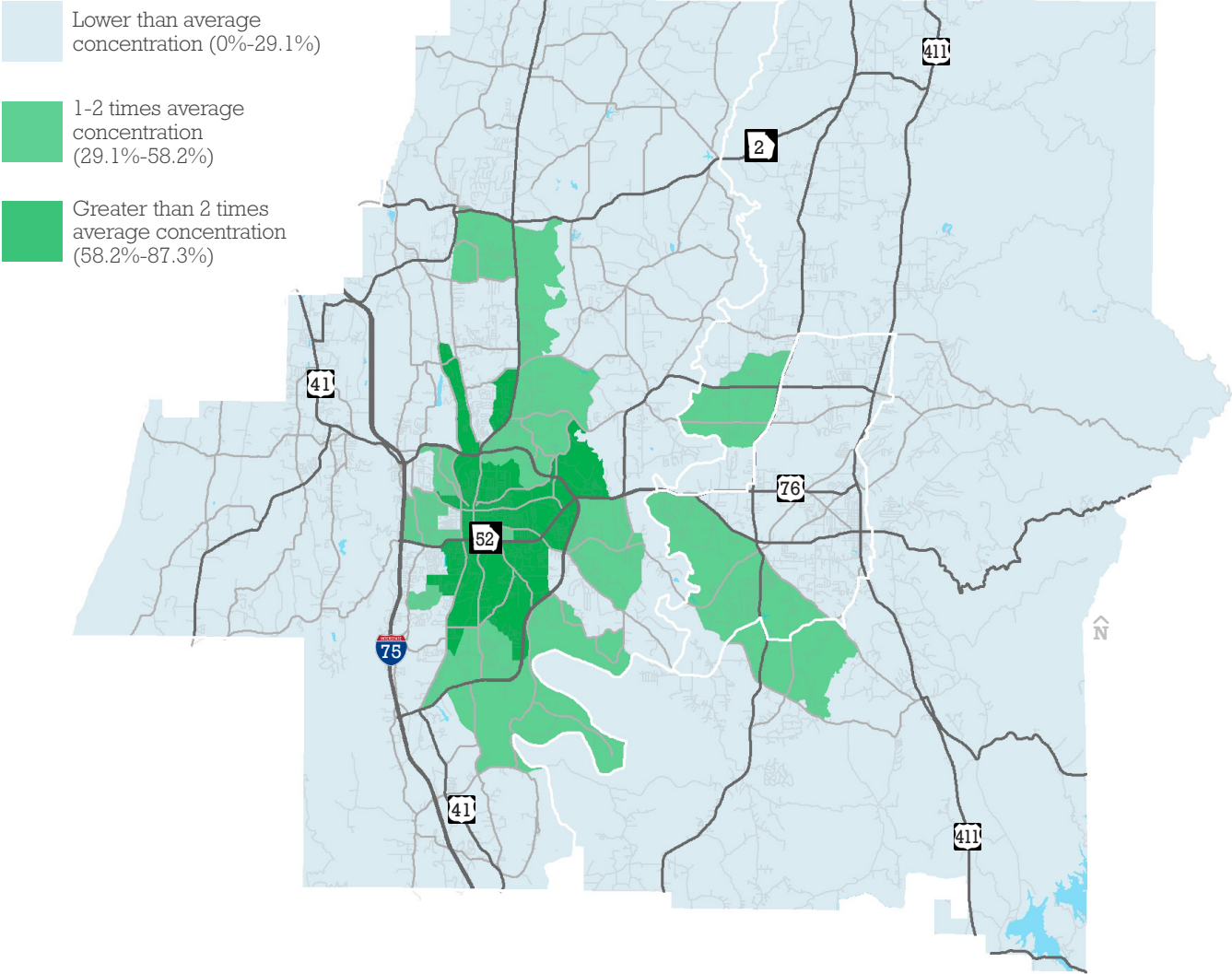


Source: US Census Bureau 2018



Hispanic/Latino: Whitfield and Murray Counties have a combined regional average Hispanic/Latino population of 29.1 percent of the total population. Using Census block groups, mapping of the region shows that much of this population is concentrated in the immediate Dalton area.

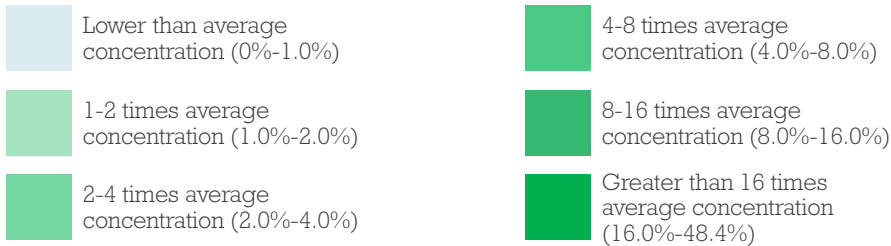
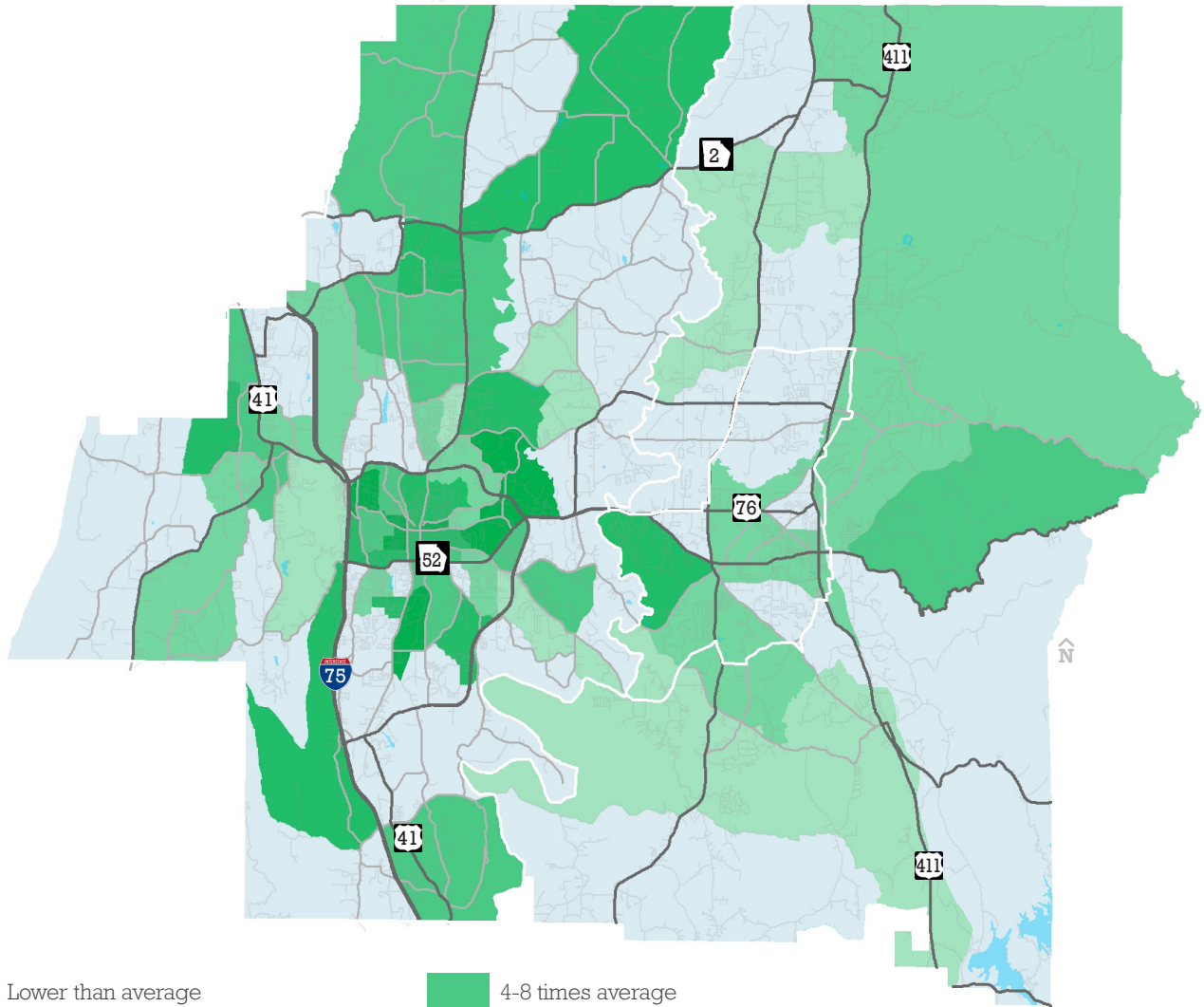
Hispanic or Latino Concentration, Whitfield and Murray Counties, 2018



Source: US Census Bureau 2018

Other Non-White Minorities: Whitfield and Murray Counties have a combined regional average other race population of 1.0 percent of the total population. Using Census block groups, mapping of the region shows several dispersed areas exceeding the regional average.

Other Non-White Concentration, Whitfield and Murray Counties, 2018



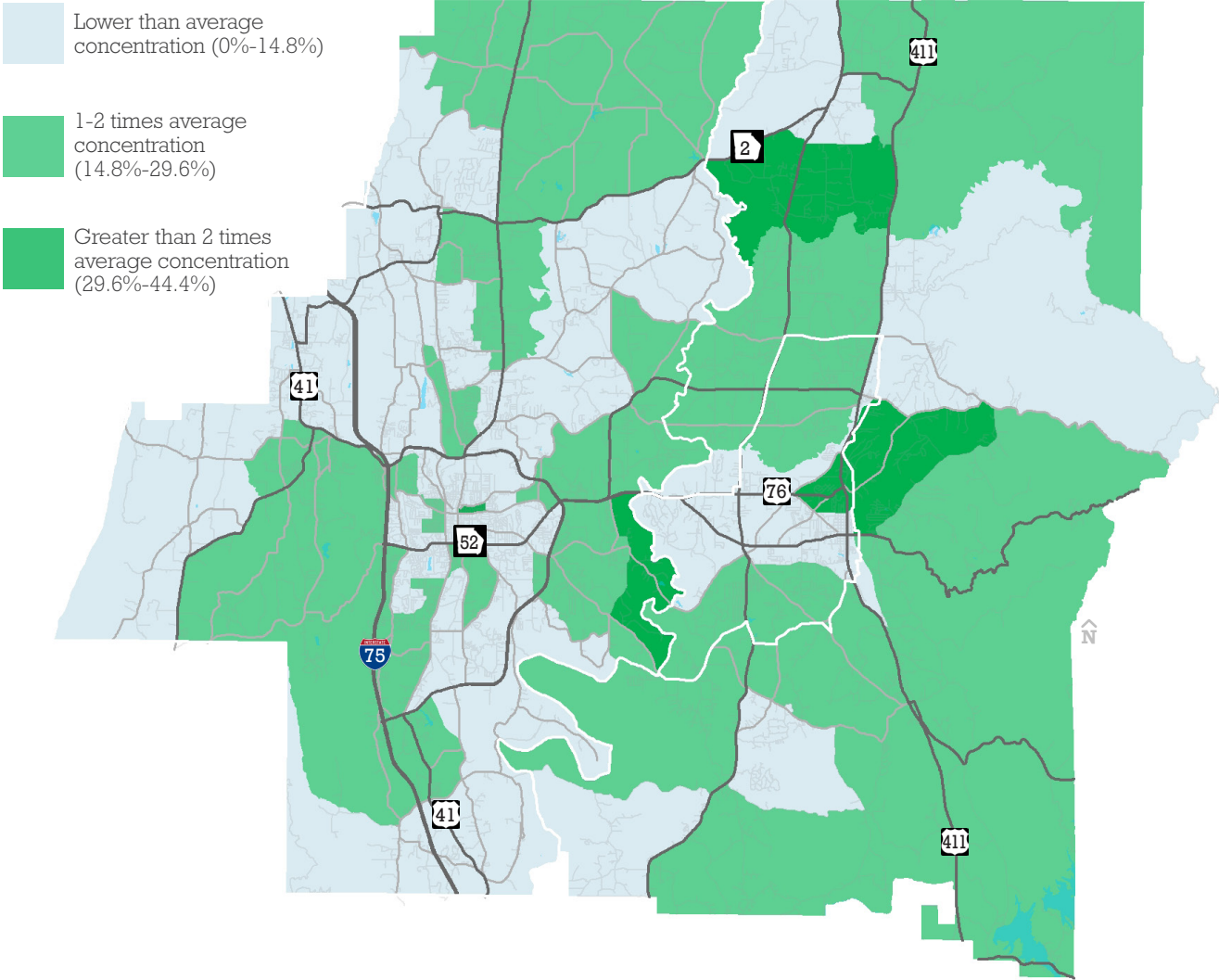
Source: US Census Bureau 2018



Disabled Populations

Whitfield and Murray Counties have a combined regional average disabled population of 14.8 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

Concentration of Disabled Persons*, Whitfield and Murray Counties, 2018



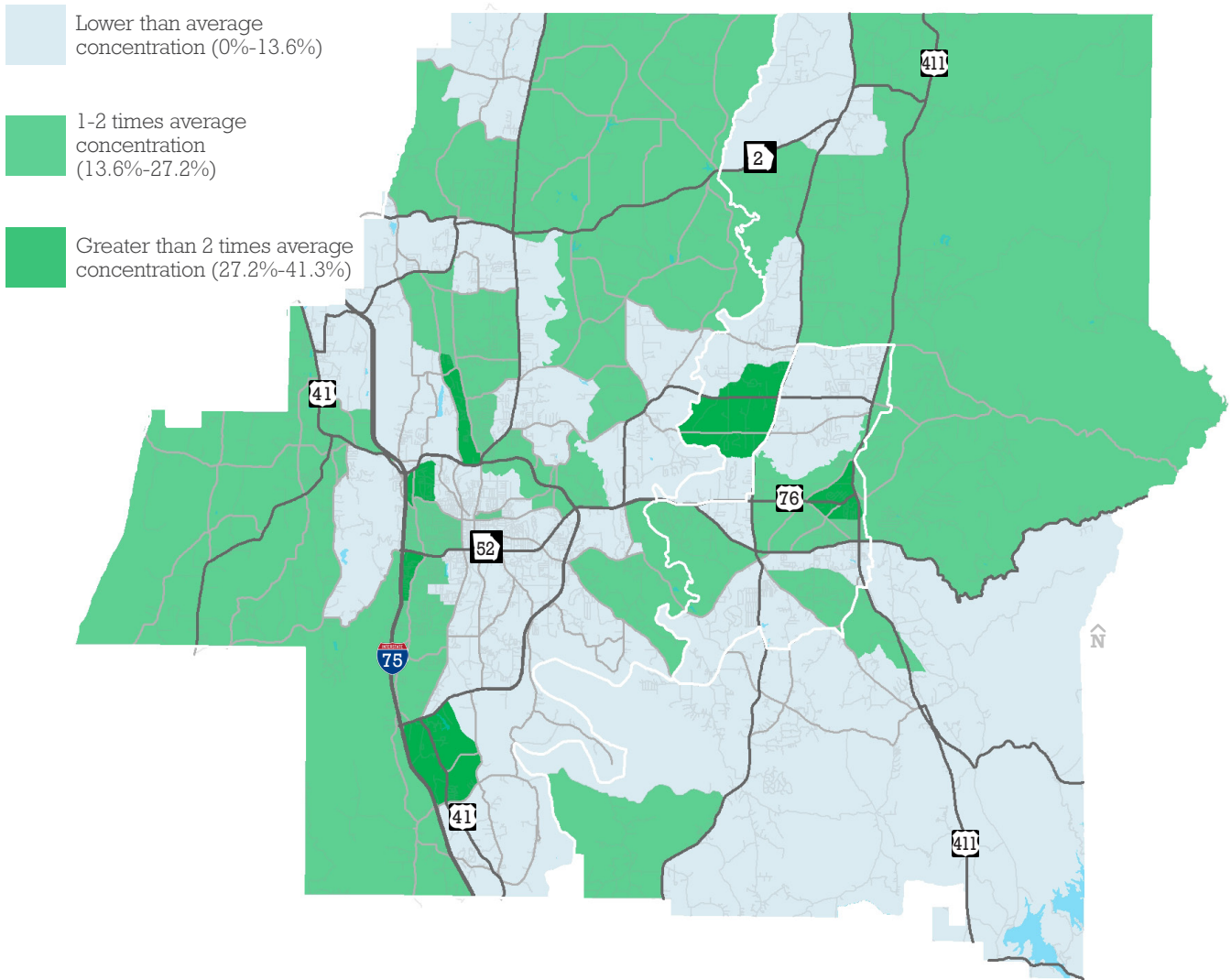
Source: US Census Bureau 2018

*This map shows the percentage of the civilian population over 18 years old that is disabled, due to limitations in Census Bureau data

Elderly Population

Whitfield and Murray Counties have a combined regional average elderly population of 13.6 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average, many in the more outlying portions of the community.

Concentration of Elderly (65+) Persons, Whitfield and Murray Counties, 2018



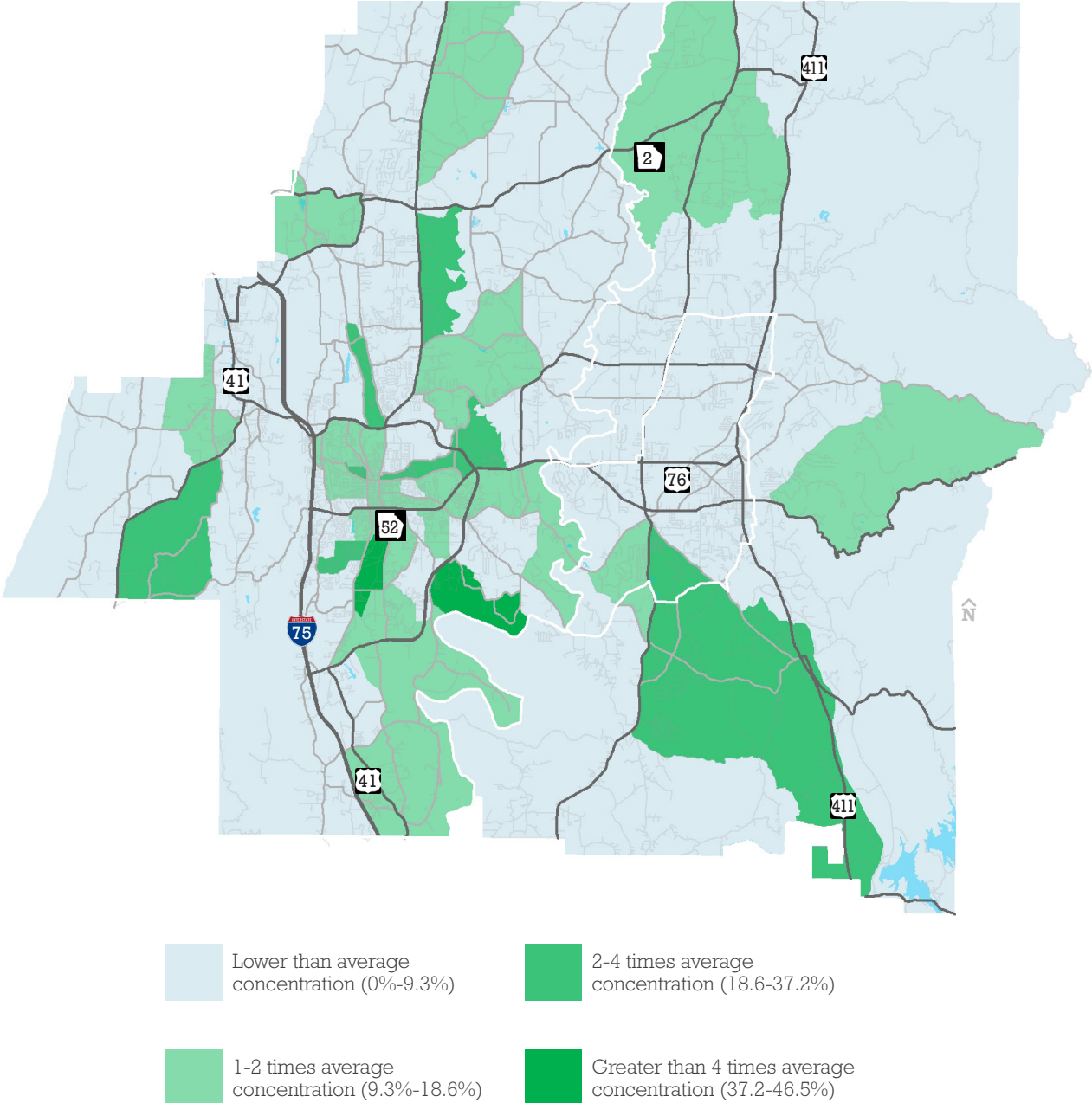
Source: US Census Bureau 2018



Poverty

Whitfield and Murray Counties have a combined regional average impoverished population of 9.3 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average, many in the immediate Dalton area and others in surrounding communities.

Concentration of Impoverished Households, Whitfield and Murray Counties, 2018

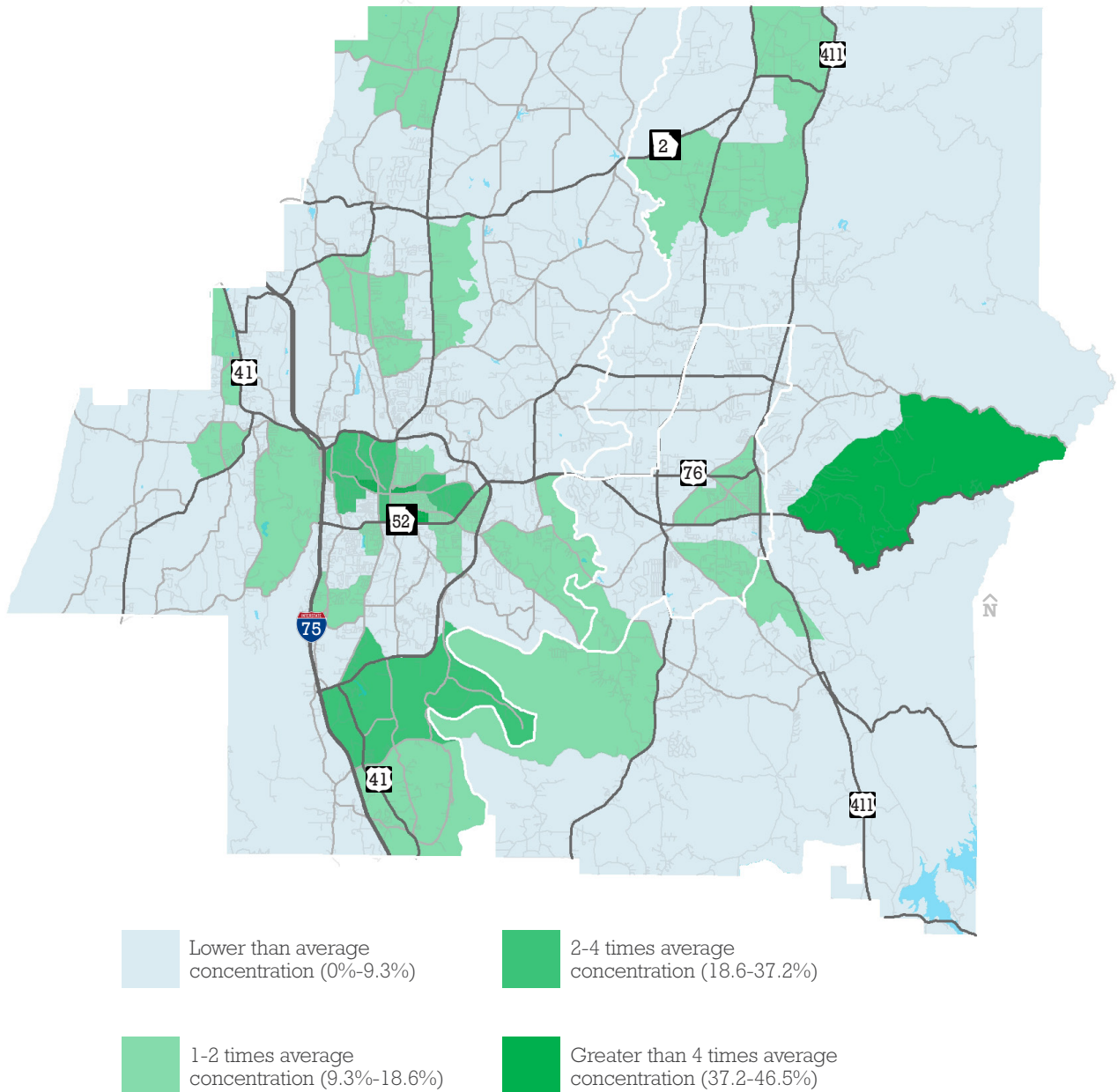


Source: US Census Bureau 2018

Households With No Vehicles

Whitfield and Murray Counties have a combined regional average of households with no access to a vehicle of 5.6 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

Concentration of Households with No Vehicles, Whitfield and Murray Counties, 2018



Source: US Census Bureau 2018



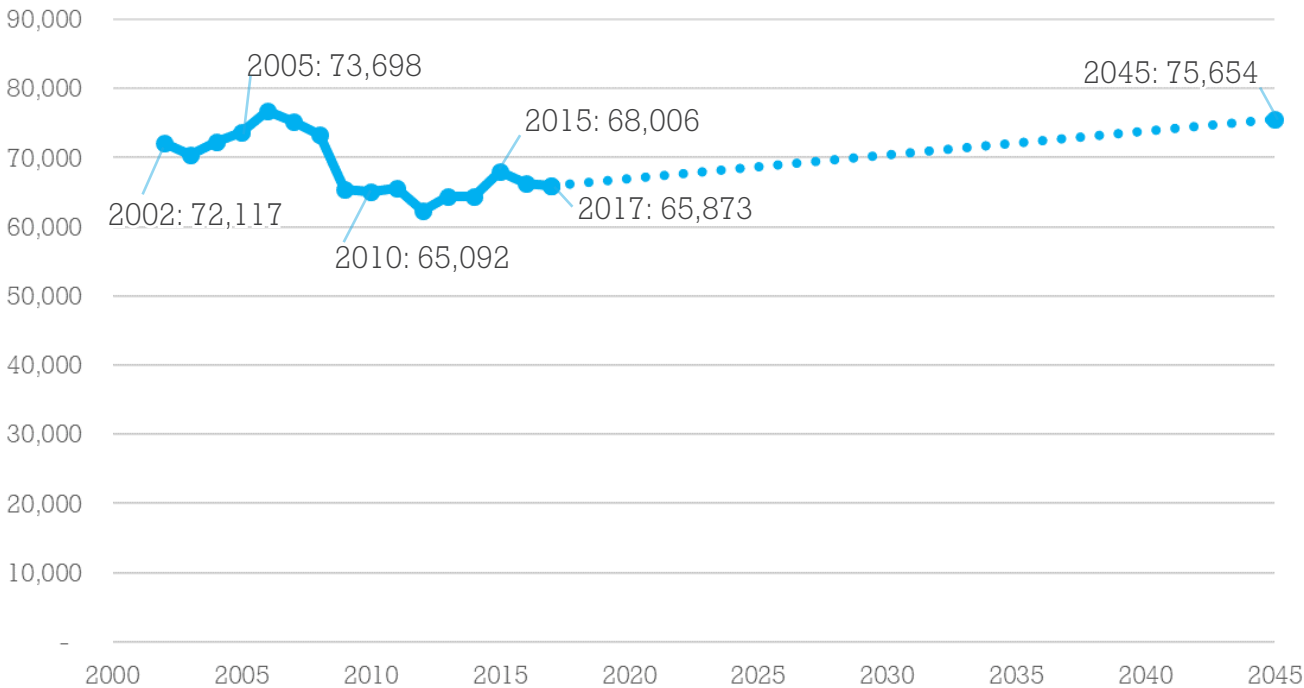
Trends in Employment

Historical and Projected Growth

The Dalton area produces the majority of the world's carpeting in addition to many other types of floor covering. The importance of the floor covering industry in the region extends beyond direct employment since important clusters in the area are largely supported by the industry, including chemicals and plastics firms and wholesaling firms. In recent years, the number of jobs and companies in the floor covering industry has decreased so local leaders in economic development have diversified the region's economy through the development of new industrial parks and attracting industries that can provide support to the Volkswagen plant that opened in nearby Chattanooga in the mid 2010s. This diversification of industry is intended to increase employment in the region between now and 2045.

Similar to our understanding of anticipated population growth, it is important to understand not just the total amount of employment in the region but also where that employment is anticipated to occur in order to further understand how that may impact future travel needs.

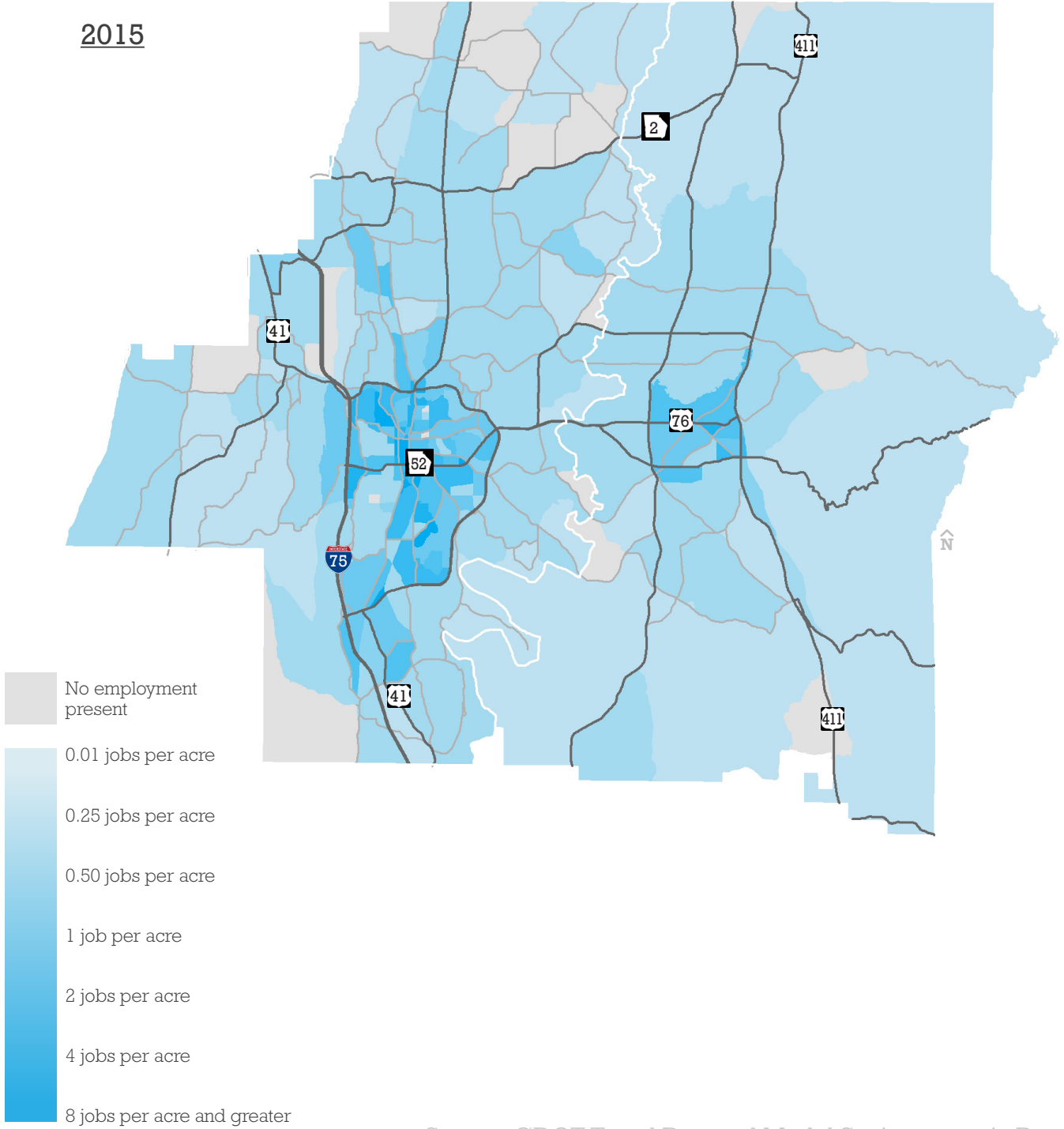
Historical and Projected Employment, Whitfield and Murray Counties, 2002-2045



Source: US Census Bureau 2002-2017; Socioeconomic projections 2045

Employment Density, Whitfield and Murray Counties, 2015

2015

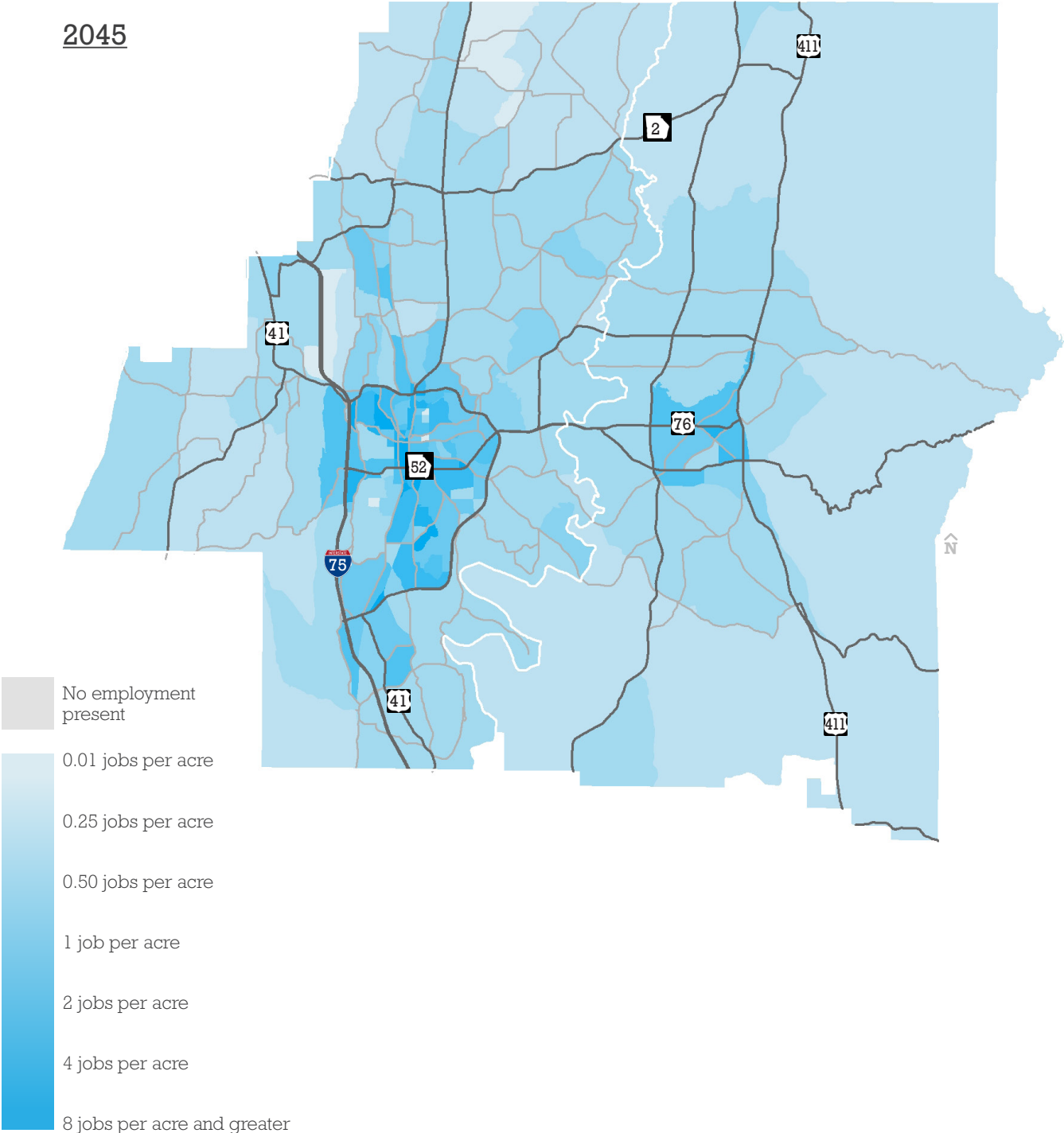


Source: GDOT Travel Demand Model Socioeconomic Data



Employment Densities, Whitfield and Murray Counties, 2045

2045

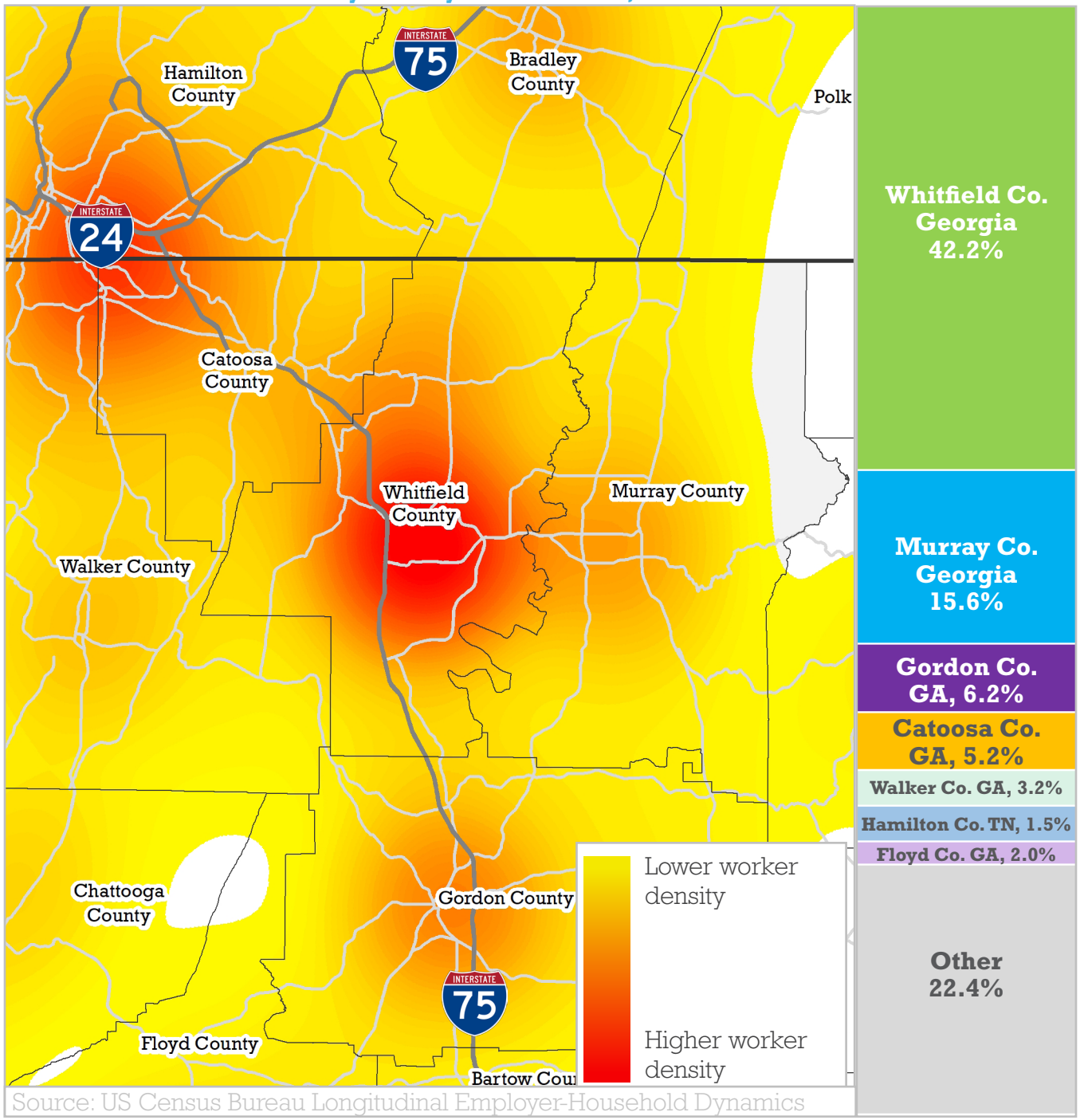


Source: GDOT Travel Demand Model Socioeconomic Data

Commuter Patterns

Longitudinal Employer Household Dynamic (LEHD) data allows us to understand patterns of where commuters travel to, from, and within the Dalton region travel. Focusing specifically on jobs that are located within the Dalton region, data tells us that while many of these jobs are held by people living within the immediate Dalton region there are also many people commuting into the region from surrounding communities such as Chattanooga and Cleveland to the north and Calhoun to the south.

Where Whitfield and Murray County Workers Live, 2017



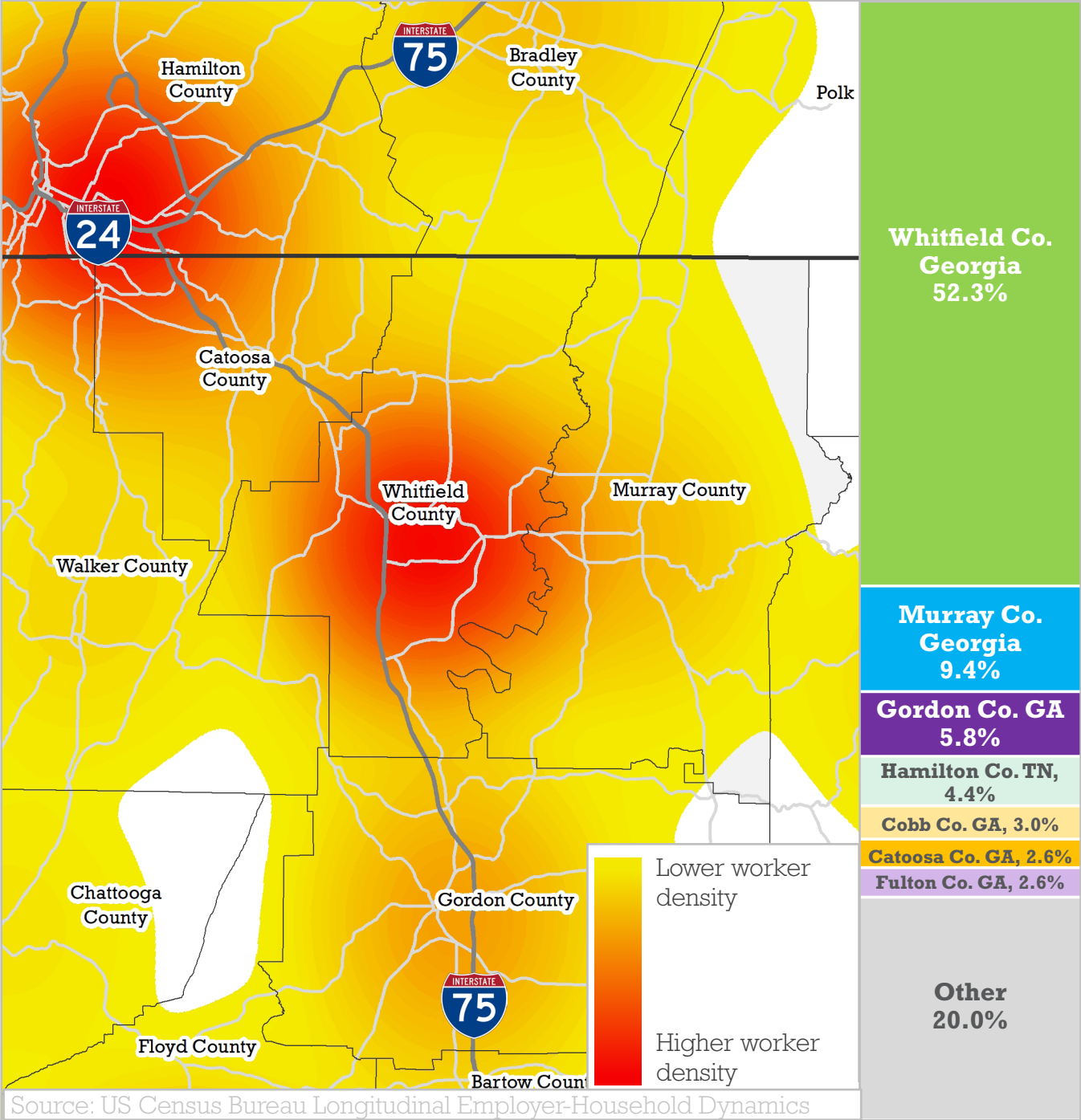
Source: US Census Bureau Longitudinal Employer-Household Dynamics



2 | Community Profile

Focusing on the workforce of the region (that is people who live in the immediate Dalton region), we do see that most people live and work within Whitfield or Murray Counties though there are many who commute to surrounding communities as well.

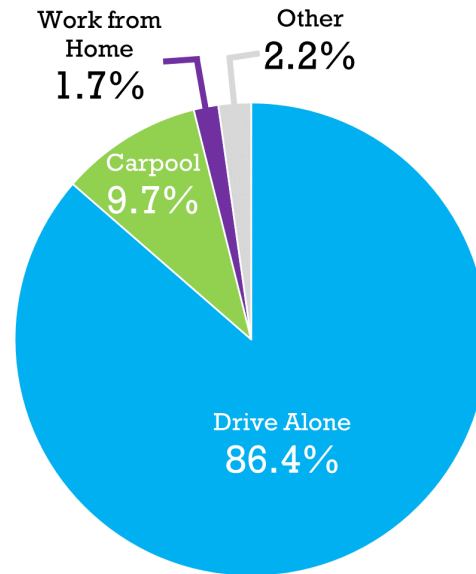
Where Whitfield and Murray County Residents Work, 2017



Commuter Modes of Choice

Using American Community Survey data, we can also understand that the majority of commuters in the Dalton area (86.4 percent) drive alone to work. However, a relatively high amount of people (9.7 percent) indicate that they carpool with others to get to and from their place of work.

Commuter Modes of Choice, Whitfield and Murray Counties, 2018



Source: US Census Bureau

Economic Profile

Employment in Whitfield and Murray Counties

Focusing on jobs that are physically located in Whitfield and Murray Counties, data reveals a large portion (39.1 percent) of jobs are in manufacturing, many directly associated with or supporting the flooring industry. However, employment opportunities are more diversified than just that with many jobs that are in the health care, retail, wholesale trade, and educational service industries as well.

Whitfield and Murray County Workforce

The workforce for the region (that is people who live in Whitfield and Murray Counties who are employed in jobs, regardless of where they are located) show some similar trends with a significant portion (33.7 percent) in the manufacturing industry.



2 | Community Profile

**Jobs by Industry,
Whitfield and Murray
Counties, 2017**



**Workforce by Industry,
Whitfield and Murray
Counties, 2017**



Source: US Census Bureau Longitudinal Employer-Household Dynamics

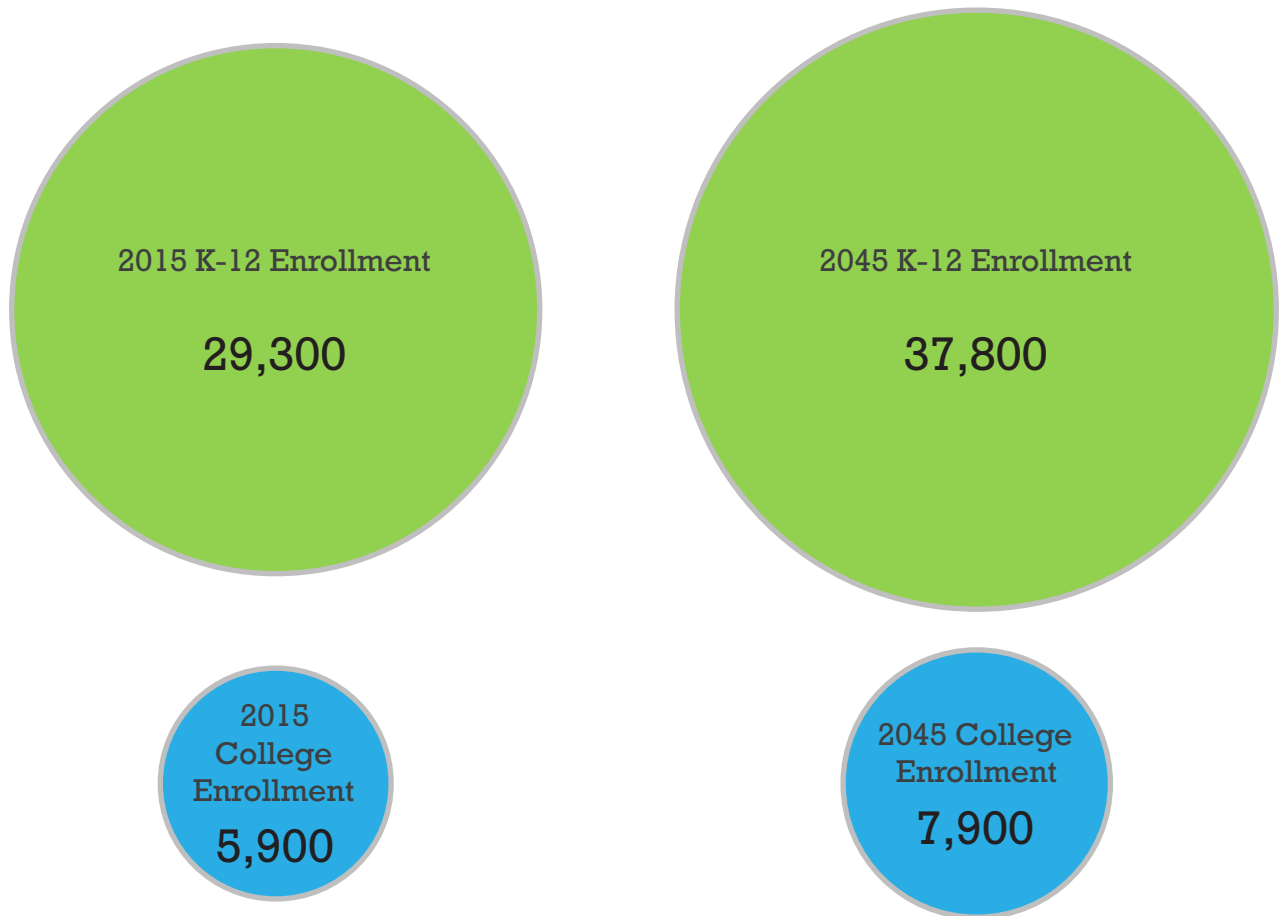
Education

School Locations

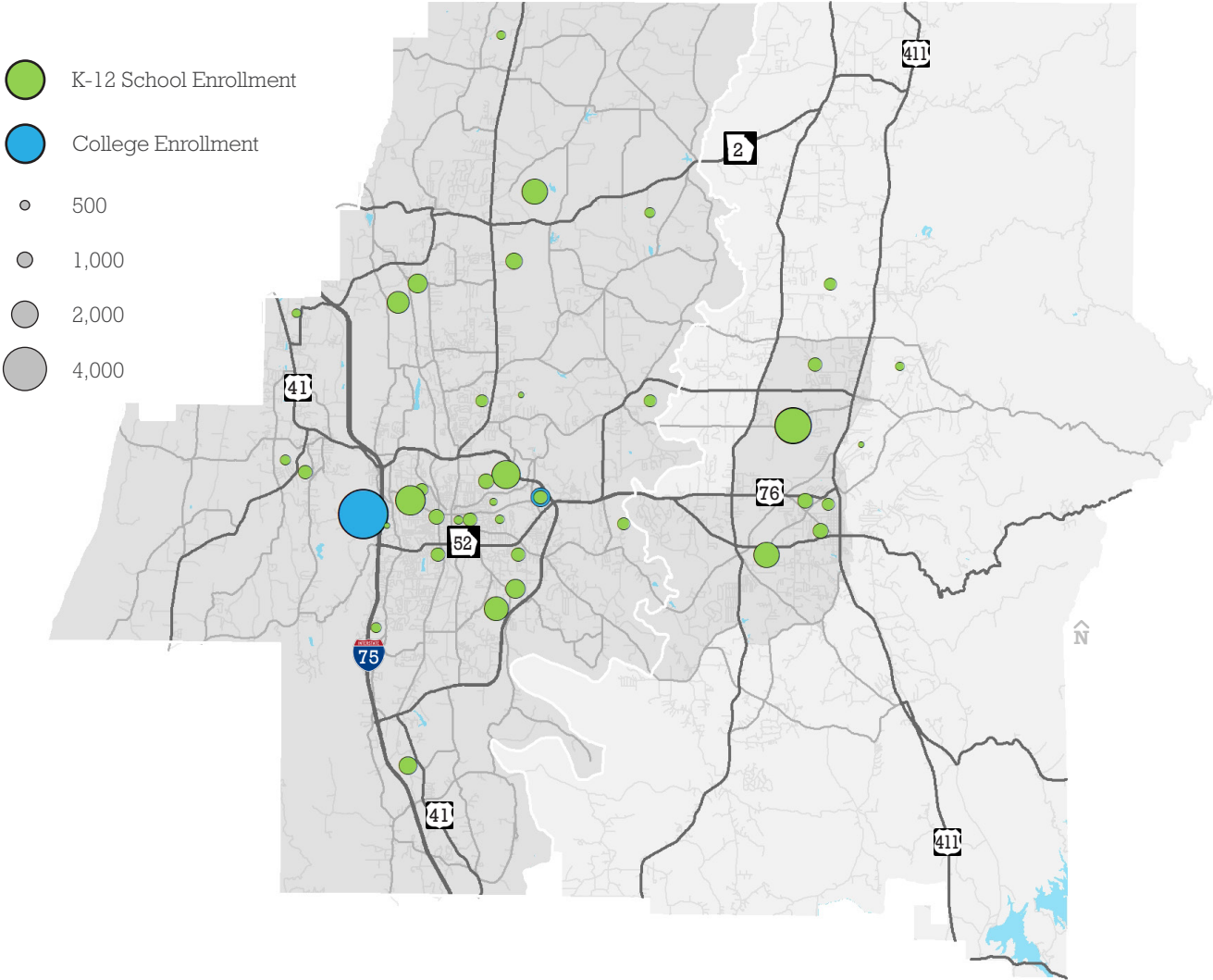
K-12 opportunities in the region include three school districts – Dalton Public Schools, Whitfield County Schools, and Murray County Schools that combined served about 29,300 students in the year 2015. Additional secondary institutions in the region include Dalton State College and Georgia Northwestern Technical College which served about 5,900 students in 2015. The locations of these schools and the relative amount of enrollment at these locations is shown in the map below.

Projected Student Growth

Student enrollment in the region is anticipated to grow in relative proportion to the region's population with an anticipated 37,800 K-12 students and 7,900 college students in the year 2025.



2015 K-12 and College Enrollment in Whitfield and Murray Counties



Land Use and Comprehensive Planning

Much of the anticipated growth in the region is guided by the comprehensive planning being conducted by the county governments in the region with particular emphasis on the elements of these plans focusing on future land use and development.

Whitfield County

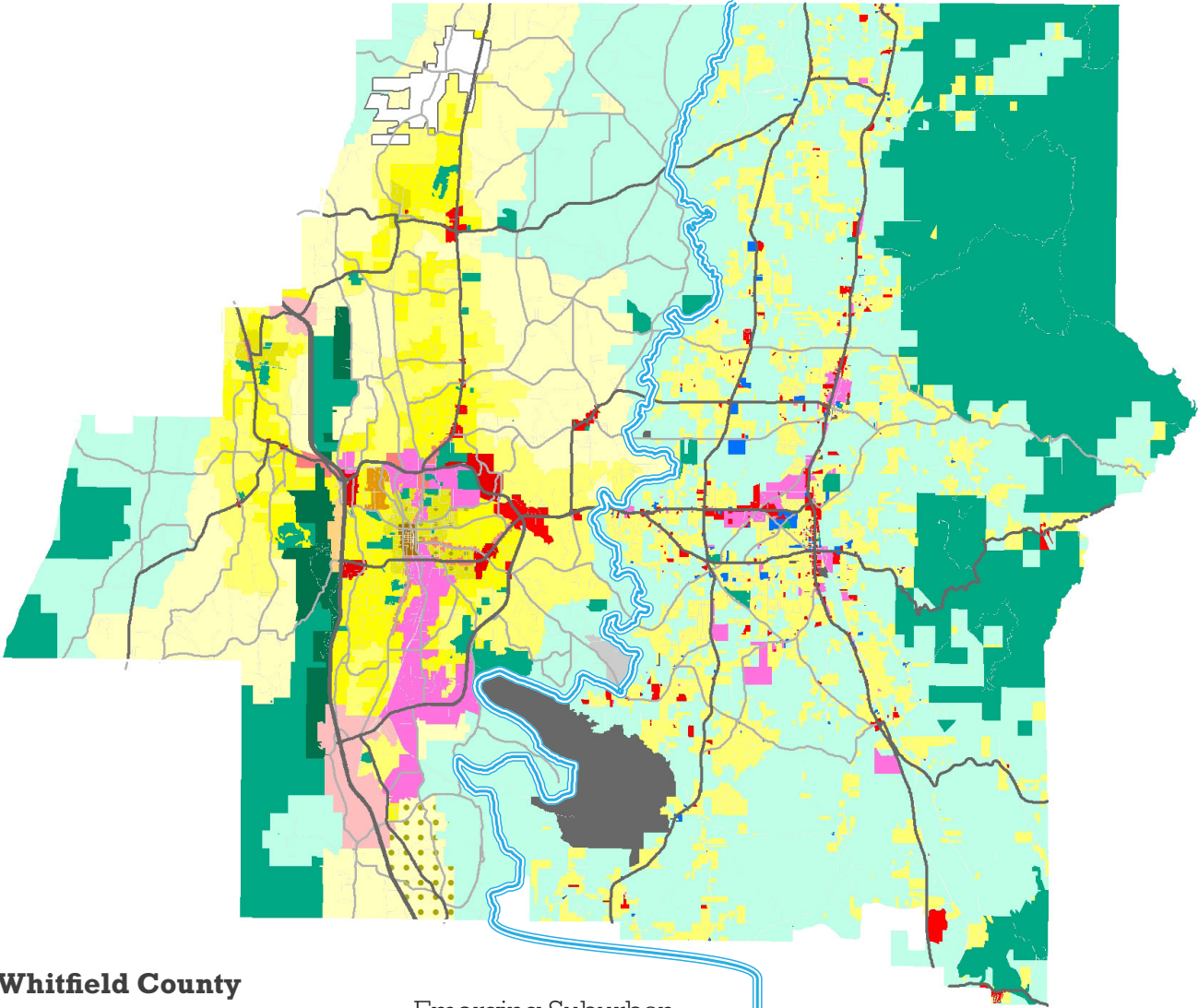
The Whitfield County Comprehensive Plan is a joint plan for the unincorporated portions of the County and the municipalities of Cohutta, Dalton, Tunnel Hill, and Varnell. This plan was prepared by the Northwest Georgia Regional Commission and adopted in 2018. The Joint Land Use Element for this plan identifies several 'Character Areas' that relate to land use and offer narrative descriptions implying the future intensity of development and the overall 'character' intended for these areas.

Murray County

The Murray County Joint Comprehensive Plan addresses the unincorporated portions of the County and the municipalities of Chatsworth and Eton Like the Whitfield County Comprehensive Plan, this plan was prepared by the Northwest Georgia Regional Commission and adopted in 2018. Similarly, the Land Use Element for this plan also identifies several 'Character Areas' that relate to land use and offer narrative descriptions implying the future intensity of development and the overall 'character' intended for these areas.



Future Land Use in Whitfield and Murray Counties



Whitfield County

- Airport
- Interchange
- Commercial
- Community Activity Center
- Regional Activity Center
- Dalton State/College Drive
- Medical District
- Downtown/Town Center
- Rural Residential
- Rural Neighborhood - Revitalization
- Emerging Suburban and Exurban Areas
- Suburban
- Town Neighborhood
- Town Neighborhood - Revitalization
- Industrial
- Rural/Agricultural Reserve
- Preserve
- Ridge Conservation
- Cohutta

Murray County

- Agriculture/Forestry
- Commercial
- Industrial
- Park/Recreation/Conservation
- Public/Institutional
- Residential
- Transportation/Communication/Utilities

Chapter 3

Community Goals

Planning Legacies

In addition to incorporating anticipated changes in population and employment growth and the land use elements of the region's Comprehensive Plans, the MTP is influenced heavily by the legacy of transportation planning and policy for the region. Much of this is articulated in the context of national and state goals as described in the following section.

FAST Act

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act – federal law authorizing \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act states that the metropolitan transportation planning process must address specific factors as described below:

- Support **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 **accessibility and mobility** of people and freight
- **Protect and enhance the environment**, promote energy conservation, **improve the quality of life**, and promote consistency between transportation improvement 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**
- Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- Enhance **travel and tourism**



3 | Community Goals

Further, the national Federal-aid Highway Program performance goals as established by Congress are:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair
- **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
- **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.
- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **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

Georgia Statewide Strategic Transportation Plan

Similarly, the Georgia Statewide Strategic Transportation Plan (SSTP) Update from 2018 includes several goals that relate to the federal goals as described below.

State and Federal Transportation Goals

SSTP Goal	Related Federal Goal
Improve safety	Safety
Improve reliability	System Reliability
Reduce congestion	Congestion Reduction
Maintain and preserve the system	Infrastructure Condition
Improve freight/economic growth	Freight Movement and Economic Vitality
Improve the environment	Environmental Sustainability

Greater Dalton Metropolitan Transportation Plan

With these considerations, the Greater Dalton MPO has developed an overall goal as follows:

“Develop a guide for the orderly development of a safe and efficient multi-modal transportation system for the movement of people and goods which supports the land use and economic goals of the area and promotes quality of life.”

This overall goal is supported by eight guiding principles as described in the table below with their related SSTP and federal goals.

Greater Dalton MPO Goal	Related SSTP Goal(s)	Related Federal Goal(s)
Include all modes of transportation	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction
Be safe, convenient, and efficient	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction
Serve and enhance existing land use and planned growth	<ul style="list-style-type: none"> • Maintain and preserve the system • Improve freight/economic growth 	<ul style="list-style-type: none"> • Infrastructure Condition • Freight Movement and Economic Vitality
Sustain the quality of the environment and preserve community values	<ul style="list-style-type: none"> • Improve the environment 	<ul style="list-style-type: none"> • Environmental Sustainability
Be financially feasible, and support all sectors of the area’s economy	<ul style="list-style-type: none"> • Maintain and preserve the system • Improve freight/economic growth 	<ul style="list-style-type: none"> • Infrastructure Condition • Freight Movement and Economic Vitality
Provide access and connectivity with diverse land uses and modes	<ul style="list-style-type: none"> • Improve freight/economic growth 	<ul style="list-style-type: none"> • Freight Movement and Economic Vitality
Maintain performance measures to maintain quality of the transportation system	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction
Be maintained through local/official citizen participation in transportation decision-making		



Performance Based Planning Targets

The FAST Act also includes requirements for performance based planning stating “the metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision making to support the national goals”. The Greater Dalton MPO has adopted several performance based planning targets to support these goals using the FHWA SMART principles which state that the measures should be **S**pecific, **M**easurable, **A**greed, **R**ealistic, and **T**ime Bound. **Appendix B** includes the MPO’s most recent System Performance Report addressing these goals.

Targets Supporting the National Goal for Safety (To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

- To maintain the 5 year moving average traffic fatalities under the projected 1,655 (2015-2019) 5 year average
- To maintain the 5 year moving average traffic fatalities per 100 million vehicle miles traveled under the projected 1.31 (2015-2019) 5 year average
- To maintain the 5 year moving average serious traffic injuries under the projected 24,324 (2015-2019) 5 year average
- To reduce the 5 year moving average serious traffic injuries for every 100 million vehicle miles traveled by three percent from a baseline 19.6 (2012-2016) 5 year average to 18.9 (2015-2019) 5 year average
- To maintain the 5 year moving average non-motorist fatalities and serious injuries under the projected 1,126 (2017-2021) 5 year average

Targets Supporting the National Goal for Infrastructure Condition (To maintain the highway infrastructure asset system in a state of good repair)

- Percentage of pavements on the Interstate System in Good condition
- Percentage of pavements on the Interstate System in Poor condition
- Percentage of pavements on the National Highway System (excluding the Interstate System) in Good condition
- Percentage of pavements on the National Highway System (excluding the Interstate System) in Poor condition
- Percentage of National Highway System bridge deck area classified as in Good condition
- Percentage of National Highway System bridge deck area classified as in Poor condition

Targets Supporting National Goal for Congestion Reduction (To achieve a significant reduction in congestion on the National Highway System)

- Annual Hours of Peak-Hour Excessive Delay Per Capita
- Percent of Non-Single-Occupant-Vehicle (SOV) Travel

Targets Supporting the National Goal for System Reliability (To improve the efficiency of the surface transportation system)

- Percent of Person-Miles Traveled on the Interstate System that are reliable
- Percent of Person-Miles Traveled on the Non-Interstate National Highway System that are Reliable

Targets Supporting the National Goal for 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)

- Percentage of the Interstate System Mileage providing for Reliable Truck Travel Times

Targets Supporting the National Goal for Environmental Sustainability (To enhance the performance of the transportation system while protecting and enhancing the natural environment)

- Percent Change in Tailpipe CO2 Emissions on the National Highway System
- Total Emissions Reduction

Transportation System Goals

In addition to these goals, broader transportation system goals were developed as part of the MTP process in consultation with a stakeholder committee (as described in Chapter 4) to help guide long term transportation investment decisions. These goals are shown correlated with the larger MPO goals.

GDMPO Transportation System Goal	Greater Dalton MPO Goal(s)	Related SSTP Goal(s)	Related Federal Goal(s)
Accommodate Freight Traffic	<ul style="list-style-type: none"> • Be financially feasible, and support all sectors of the area's economy 	<ul style="list-style-type: none"> • Maintain and preserve the system • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Infrastructure Condition • Freight Movement and Economic Vitality
Address North-South Travel	<ul style="list-style-type: none"> • Be safe, convenient, and efficient • Serve and enhance existing land use and planned growth 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction • Freight Movement and Economic Vitality

3 | Community Goals

GDMPO Transportation System Goal	Greater Dalton MPO Goal(s)	Related SSTP Goal(s)	Related Federal Goal(s)
Encourage Downtown Reinvestments	<ul style="list-style-type: none"> • Include all modes of transportation • Serve and enhance existing land use and planned growth 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction • Freight Movement and Economic Vitality
Address East-West Travel	<ul style="list-style-type: none"> • Be safe, convenient, and efficient • Serve and enhance existing land use and planned growth 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction • Freight Movement and Economic Vitality
Develop an Active Mode Network for the Region	<ul style="list-style-type: none"> • Include all modes of transportation 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction
Enhance Connections to I-75	<ul style="list-style-type: none"> • Be safe, convenient, and efficient • Serve and enhance existing land use and planned growth 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction • Freight Movement and Economic Vitality
Provide Connectivity to Neighboring Communities	<ul style="list-style-type: none"> • Serve and enhance existing land use and planned growth 	<ul style="list-style-type: none"> • Improve freight/ economic growth 	<ul style="list-style-type: none"> • Freight Movement and Economic Vitality
Consider Opportunities for Future Transit Service in the Region	<ul style="list-style-type: none"> • Include all modes of transportation 	<ul style="list-style-type: none"> • Improve safety • Improve reliability • Reduce congestion 	<ul style="list-style-type: none"> • Safety • System Reliability • Congestion Reduction

Chapter 4

Plan Development

Leveraging the community data described in Chapter 2 and the overall guidance in goals described in Chapter 3, the development of the Metropolitan Transportation Plan incorporates both community engagement and technical analysis to explore and understand transportation needs. This chapter describes the planning efforts and overall findings from these efforts.

Community Engagement

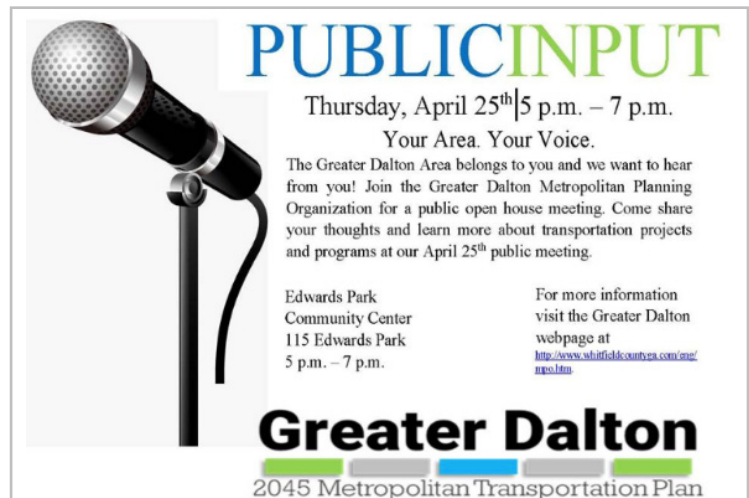
Beyond federal and state requirements for community engagement, the Greater Dalton MPO exercises specific commitment to involving the community in transportation decision-making as referenced in one of its specific goals described in Chapter 3 (“be maintained through local/official citizen participation in transportation decision-making”). During the MTP process, this commitment resulted in several opportunities for the community to provide input. Details of the community engagement process are provided in **Appendix C**.

Community Meetings

Formal community meetings were held in April 2019 to solicit input and feedback to guide the MTP planning process.

April 25, 2019, 5-7 PM
Edwards Park Community Center
(Whitfield County Location)
115 Edwards Park, Dalton, Georgia

April 30, 2019, 5-7 PM
Murray County Community Center
(Murray County Location)
651 Hyden Tyler Road, Chatsworth,
Georgia



PUBLIC INPUT

Thursday, April 25th | 5 p.m. – 7 p.m.
Your Area. Your Voice.

The Greater Dalton Area belongs to you and we want to hear from you! Join the Greater Dalton Metropolitan Planning Organization for a public open house meeting. Come share your thoughts and learn more about transportation projects and programs at our April 25th public meeting.

Edwards Park
Community Center
115 Edwards Park
5 p.m. – 7 p.m.

For more information
visit the Greater Dalton
webpage at
<http://www.whitfieldcountyes.com/enr/mpln.htm>

Greater Dalton
2045 Metropolitan Transportation Plan



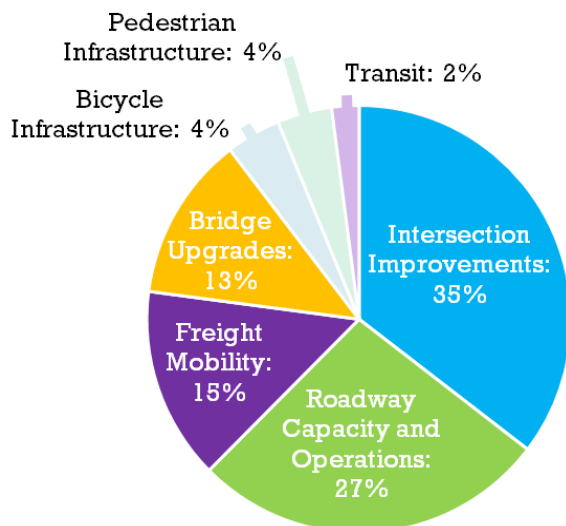
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A total of seven people attended these two meetings, both of which included the same material and exercises and input opportunities including:

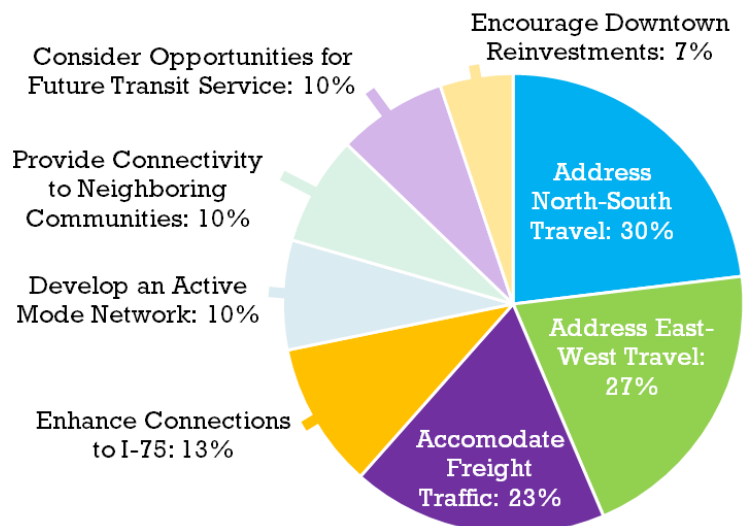
- An Introduction station, including background on the MTP process
- A Background Data station, including initial research on the transportation system (congestion, bridges, safety, etc.) and the community (population density, employment locations, households with no vehicles, etc.).
- An Evaluation Station describing the overall process in which the transportation system would be analyzed and recommendation prioritized
- An 'Exercises' Station where the community could provide facilitated input including:
 - A ranking of which project types would be considered most beneficial to the community, the results presented below on the left
 - An exercise where community members could indicate on a map the areas where they felt transportation improvements were the most critical, the results presented on the following page
 - A ranking of the transportation system goals previously described in Chapter 3, the results presented below on the right



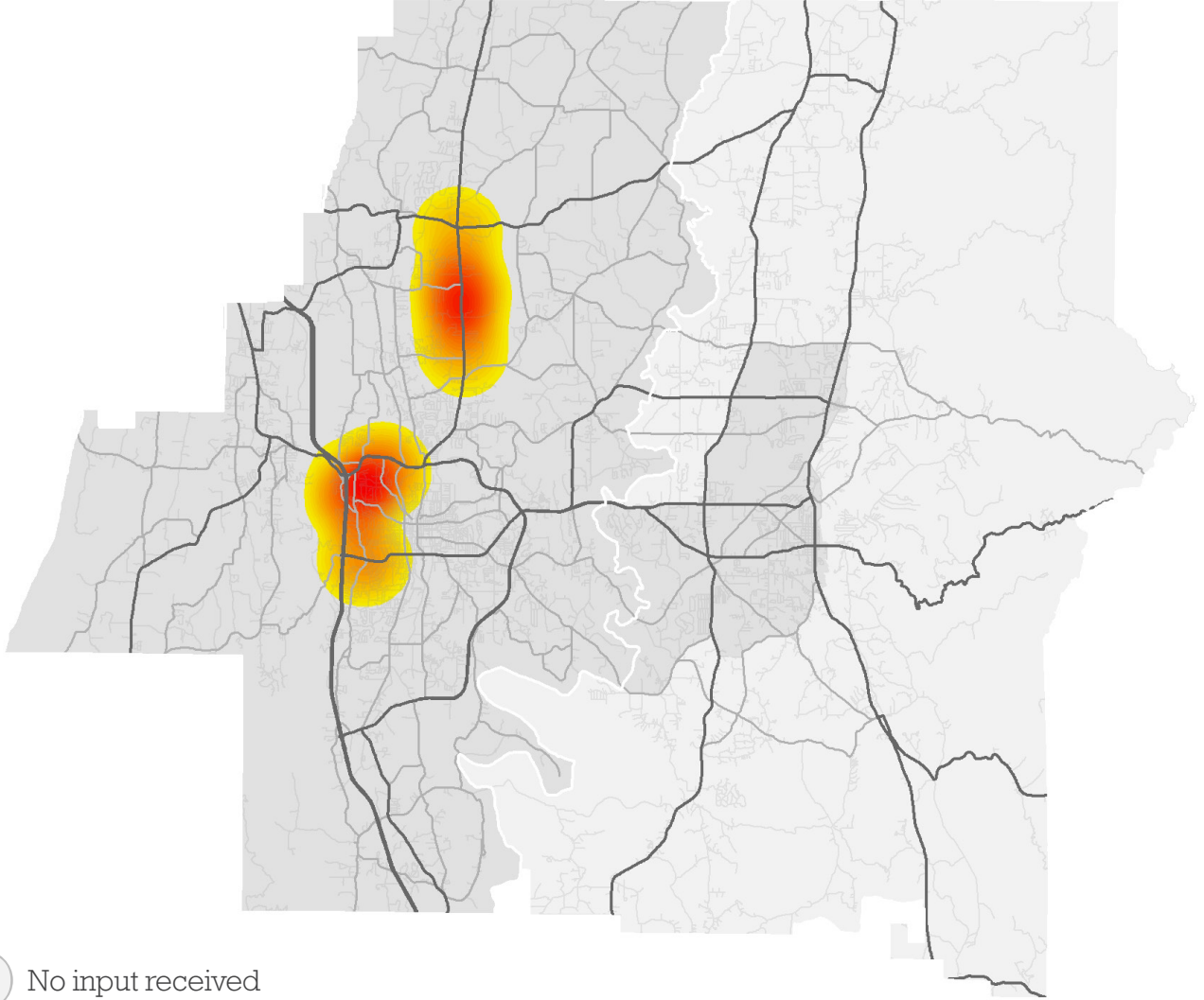
Public Meeting #1 Project Types Activity Results



Public Meeting #1 Transportation System Goals Activity Results



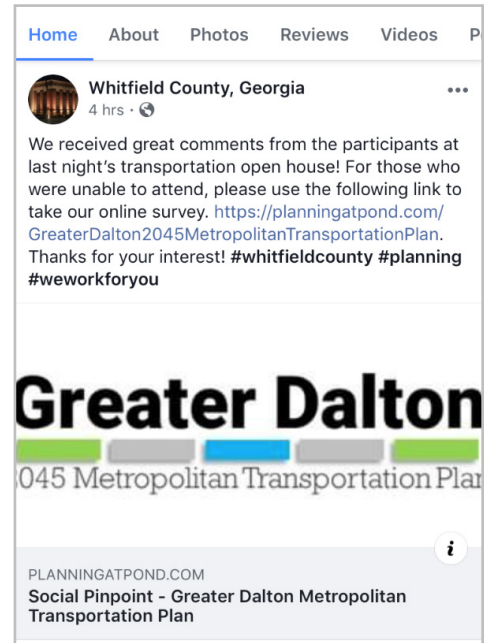
Public Meeting's Map Responses



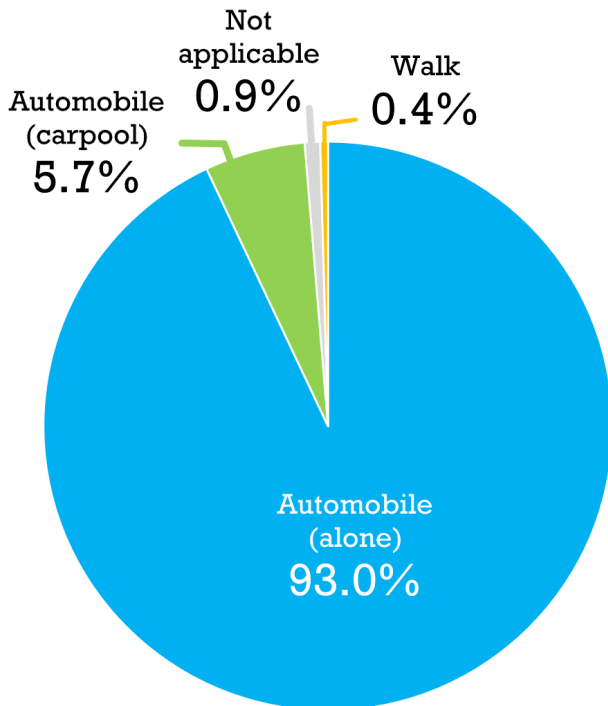
Online Engagement

To supplement the in-person engagement, opportunities for the community to engage online were created through a Social Pinpoint website that included traditional survey formats and an interactive map. This website was publicized in a variety of ways including via social media, e-mail lists, and coordination with planning partners in the region. 231 people participated in the traditional survey component of the site. Additionally, 274 comments were registered on the interactive map.

The online survey was developed to replicate two of the exercises from the traditional community meetings while included a handful of additional demographic questions in order to understand how well responses reflected known transportation conditions in the community. For instance, respondents were asked on their typical commute modes (as shown below) which compares relatively well – in both the number of ‘drive alone’ responses as well the relatively large number of ‘carpoolers’ - to data on the region from the American Community Survey.

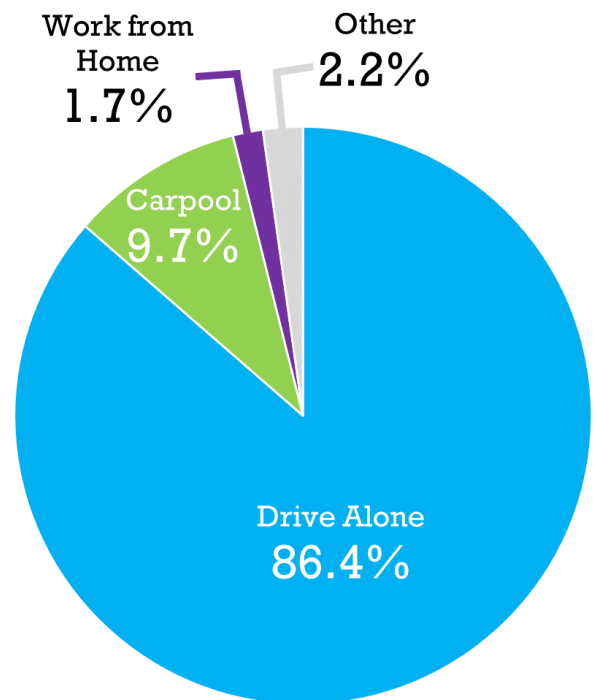


Online Survey Responses to “What is your primary mode of transportation for commuting to work or school?”



Note: Respondents could also select “Private paid service (van, taxi, Uber, Lyft),” or “Bicycle,” but no responses of these were received

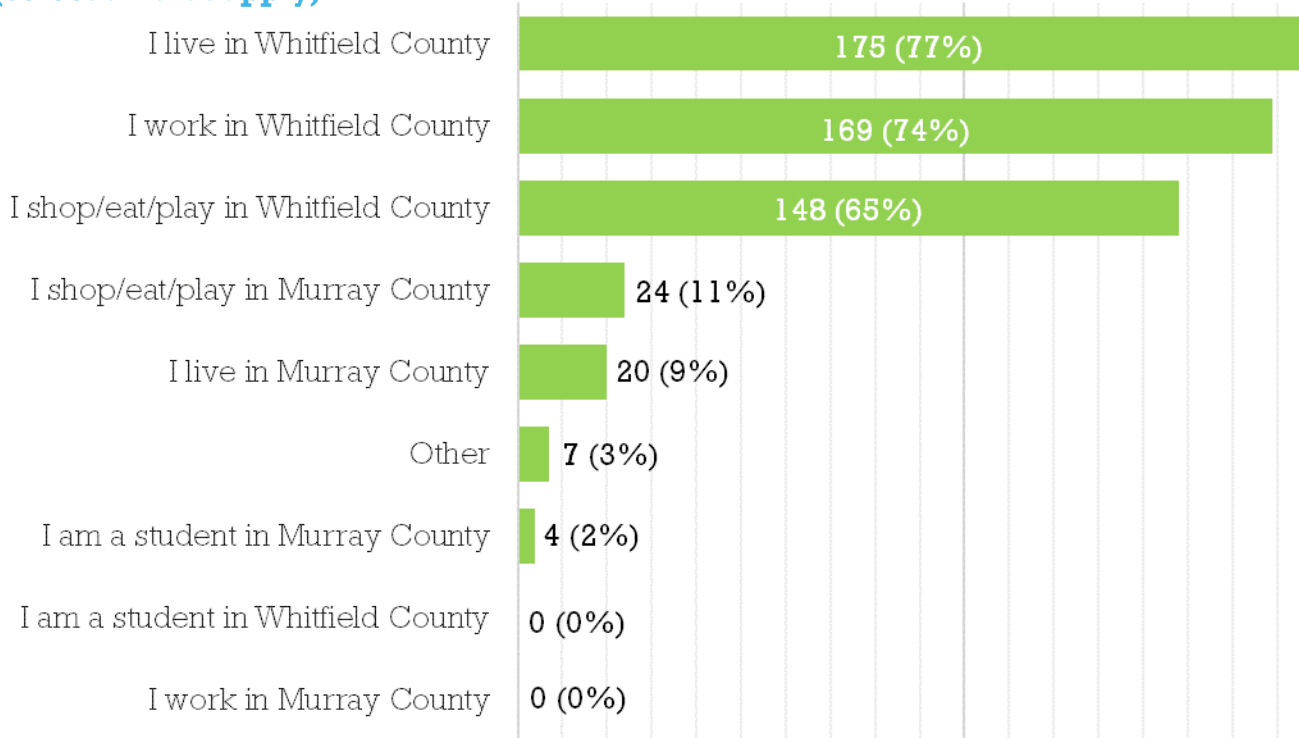
Commuter Modes of Choice, Whitfield and Murray Counties, 2018



Source: US Census Bureau

Similarly, the survey inquired on each respondents relationship to the region. The majority of respondents associate with Whitfield County though some respondents indicated relationships to Murray County as well.

Online Survey Responses to “What is your interest in the Greater Dalton region? (select all that apply)”



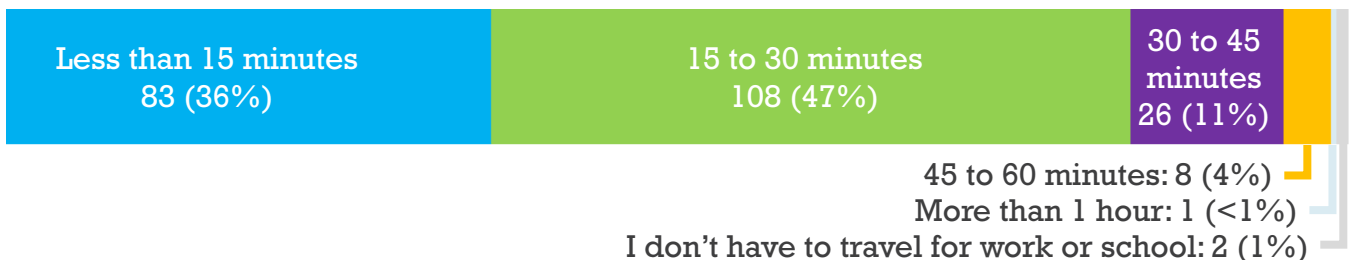
Note: A total of 228 individual responses were received to this question. Respondents were able to select multiple options as appropriate

Other questions in the survey focus on overall transportation conditions such as average distance and travel time to/from work.

Online Survey Responses to “How far do you have to travel to get to work or school?”



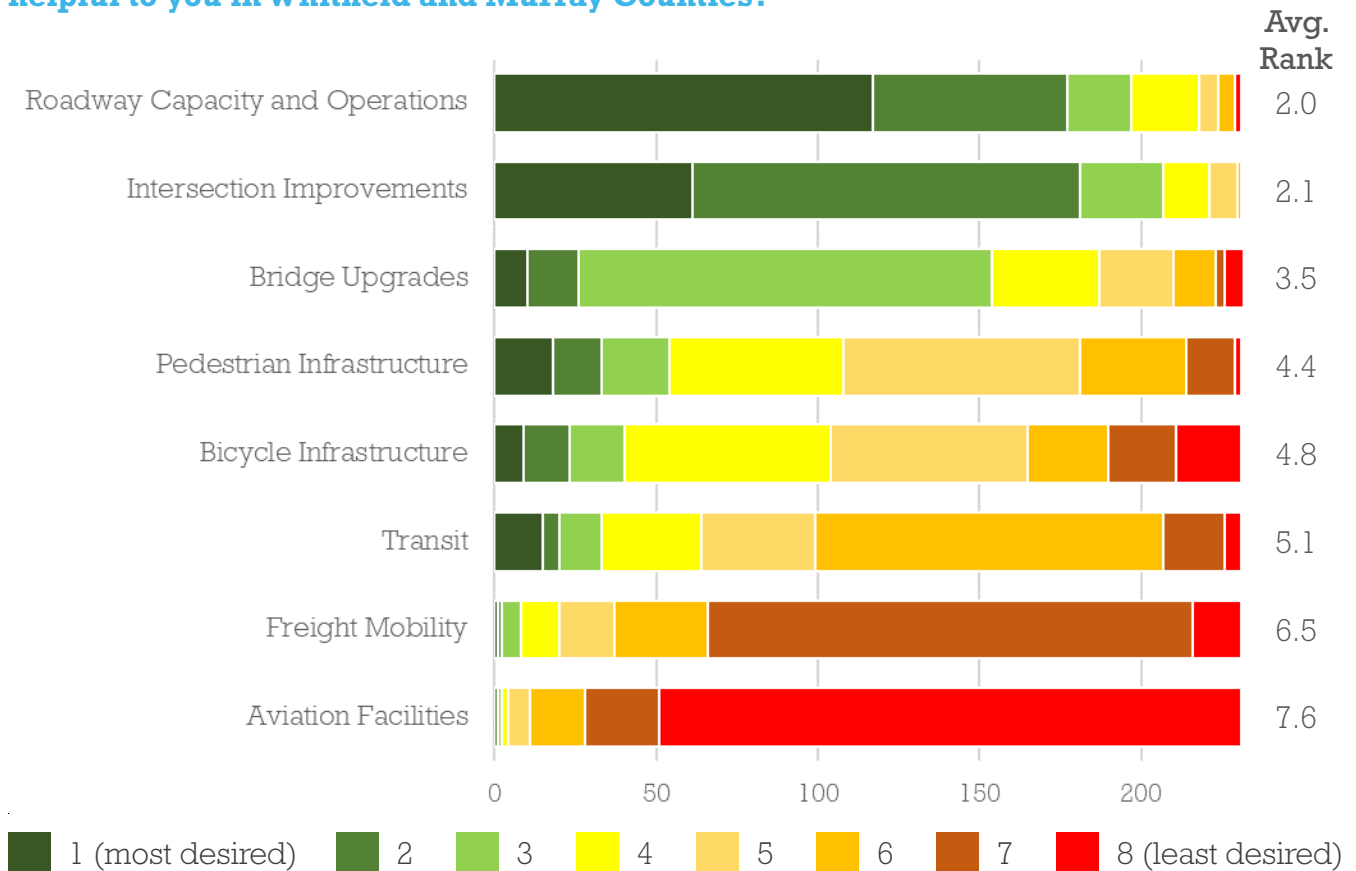
Online Survey Responses to “How long does it typically take you to get to/from work or school?”



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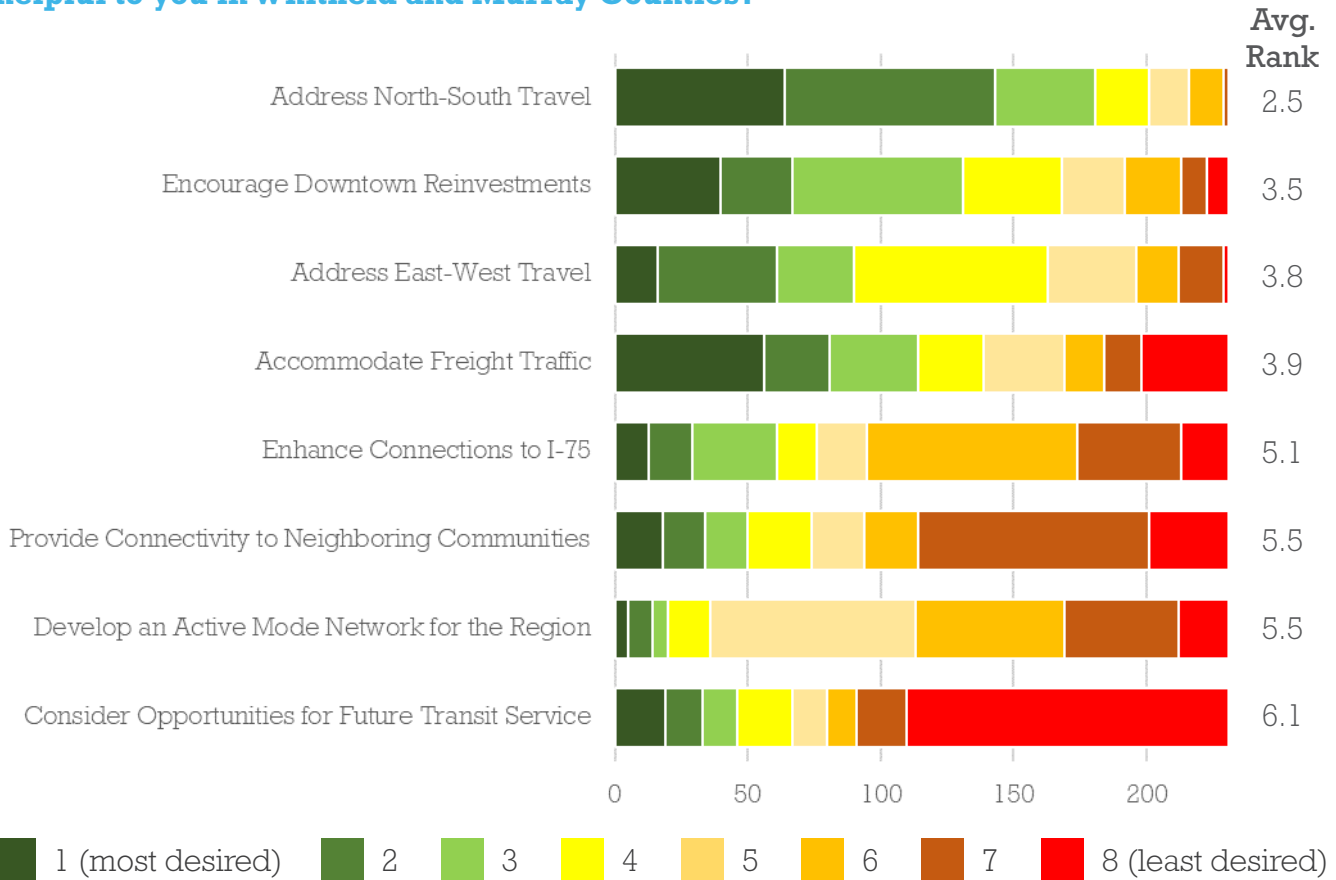
The key part of the survey replicates two of the exercises from the public meetings. One question focuses on the types of transportation projects that would be most helpful. Similar to what was observed in the community meetings, the top categories include 'roadway capacity and operations' and 'intersection improvements.'

Online Survey Responses to “What types of transportation projects would be most helpful to you in Whitfield and Murray Counties?”



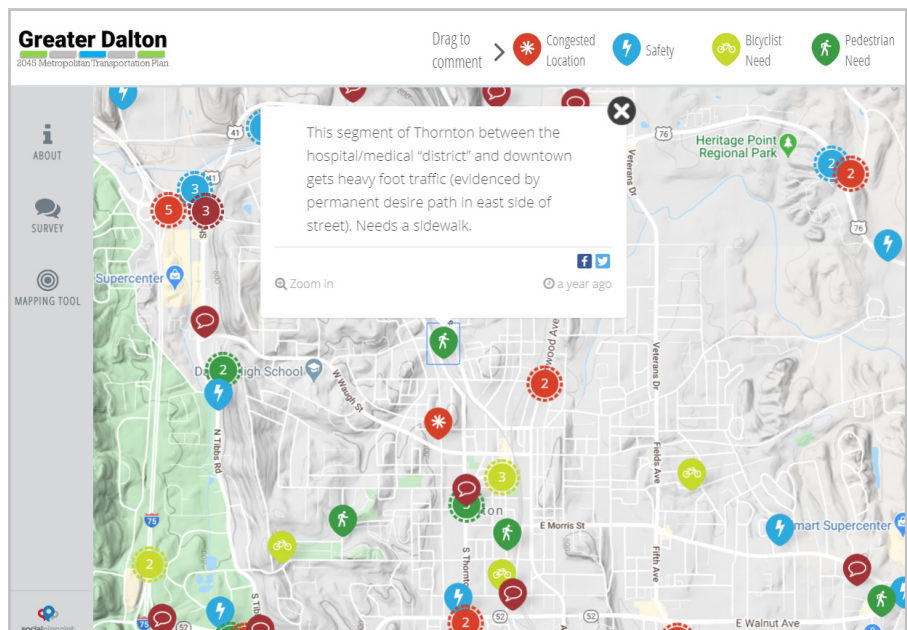
Similarly, respondents were also asked on their preferences for the transportation system goals, showing collective preferences similar to what was observed in the community meetings.

Online Survey Responses to “What types of transportation projects would be most helpful to you in Whitfield and Murray Counties?”

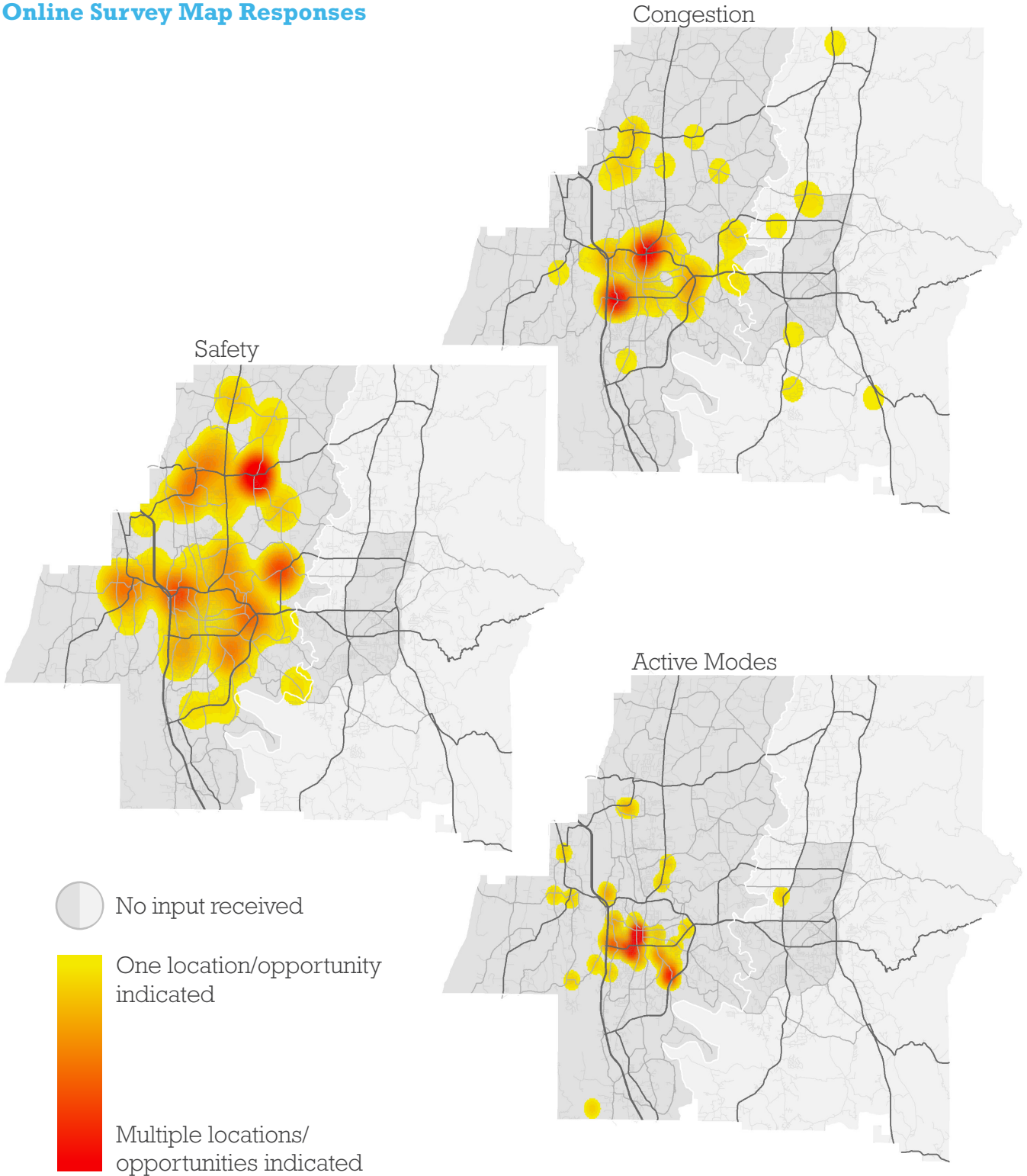


The other component of the online engagement involved the use of an interactive map where respondents could place pins down on a map representing different types of concerns and comments and provide additional commentary as they felt needed. Categories included:

- Congested Location
- Safety
- Bicyclist Need
- Pedestrian Need
- Other Comments



Online Survey Map Responses

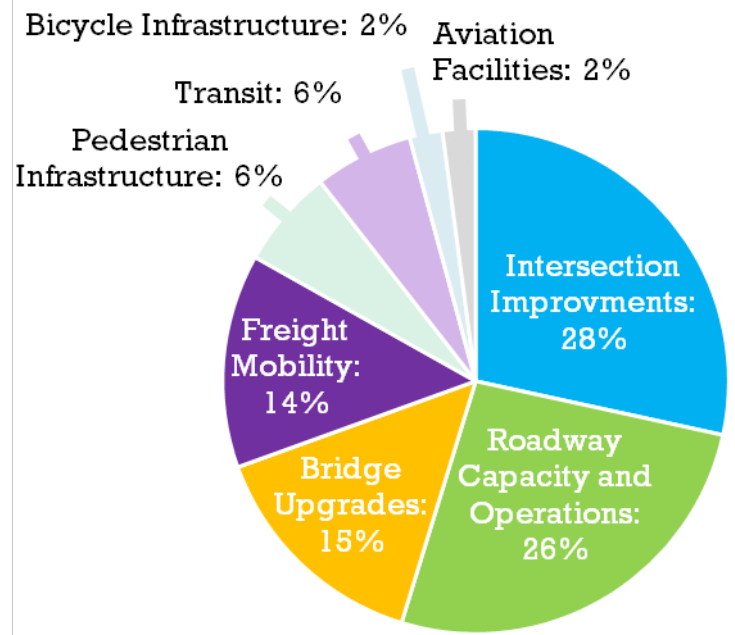


Stakeholder Meetings & MPO Committees

Throughout the process, the planning team also had regular coordination and updates with the Greater Dalton MPO Policy Committee (PC) and Technical Coordinating Committee (TCC). Supplementing these updates were two specific MTP focused Stakeholder Meetings held in conjunction with the normal MPO committee meeting to include both the members of the PC and TCC as well as representation from a few key additional non-transportation focused organizations serving the region.

The first meeting was held **March 26, 2019** and included a presentation summarizing the process, some initial findings, as well as facilitated discussion of goals and objectives including specific discussion to develop the Transportation System Goals that were described in Chapter 3. In addition to these presentations and discussions, the meeting concluded with a series of exercises mimicking those utilized in the Social Pinpoint tool and community meetings as described below.

Stakeholder Meeting #1 Project Types Activity Results

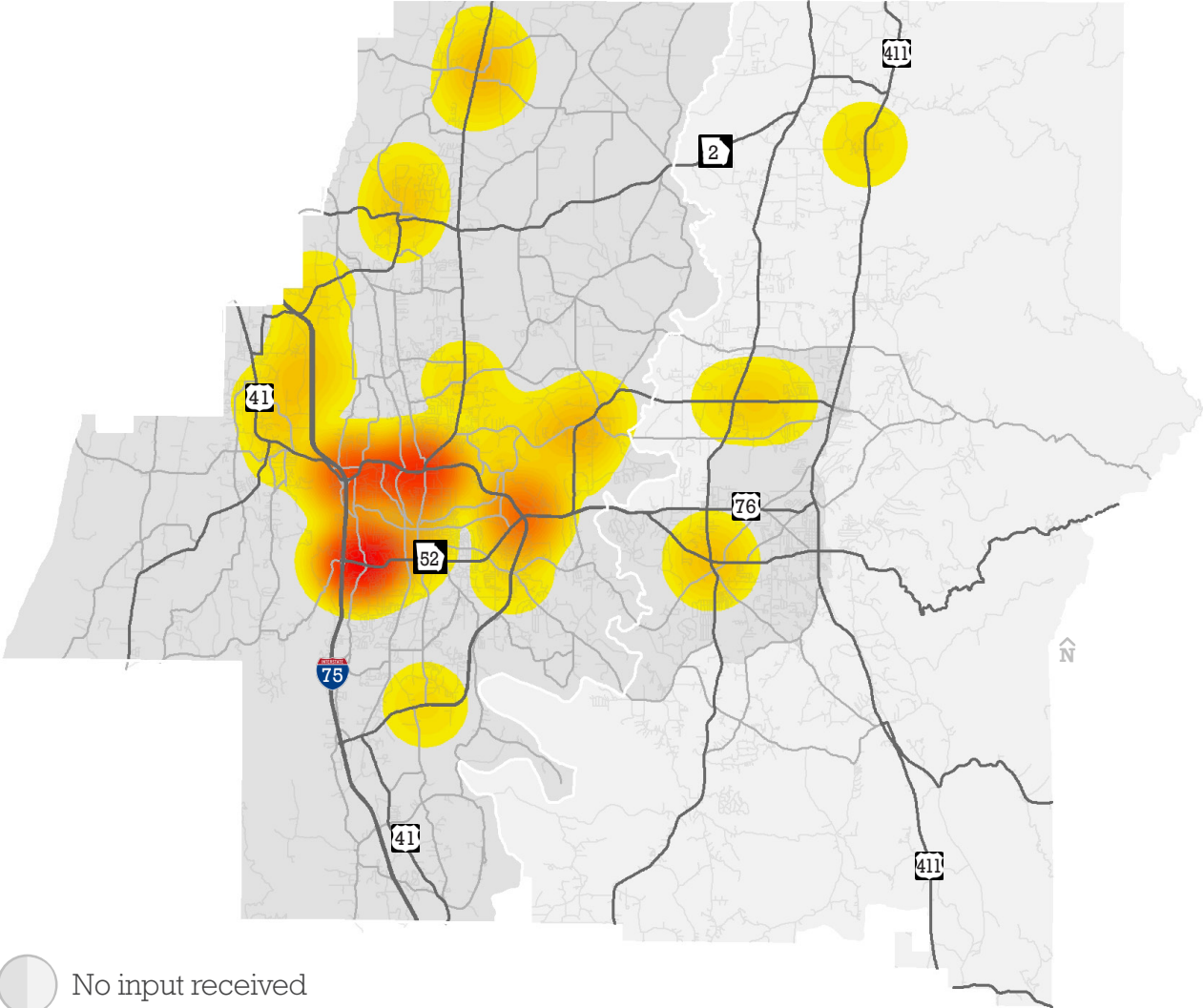


- A ranking of which project types would be considered most beneficial to the community, the results presented above, to the right
- An exercise where community members could indicate on a map the areas where they felt transportation improvements were the most critical, the results presented on the facing page

A second meeting was held on **September 26, 2019** and included a presentation updating the group on the progress in the planning process, discussions of the community input received, discussion of the proposed process to prioritize and evaluate transportation projects (and the performance measures that would support this process), and facilitated smaller group discussions to identify key transportation projects for consideration in the MTP.



Stakeholder Map Responses



○ No input received

■ One location/opportunity indicated

■ Multiple locations/opportunities indicated

Public Comment Period

Following the completion of a draft MTP, the plan document was also made available for digital review as part of a 30 day Public Comment period on the Greater Dalton MPO website at <https://www.whitfieldcountyga.com/eng/mpo.htm>. This Public Comment period was advertised through the local newspapers of record, via social media, and through email lists and began on May 7, 2020 and concluded on June 5, 2020. No public comments were received and are documented in Appendix C.

Summary of Community Engagement and Input

Given the disparate sources of community engagement and input, further compilation of results and input was appropriate to understand the collective direction from the community. In particular, this includes the three main exercises and questions held over the course of both the public and stakeholder meetings as well as through the online engagement tools.

- A ranking of which project types would be considered most beneficial to the community, the results presented below
- An exercise where community members could indicate on a map the areas where they felt transportation improvements were the most critical, the results presented on top of the facing page
- A ranking of the transportation system goals previously described in Chapter 3, the results presented at bottom of the facing page

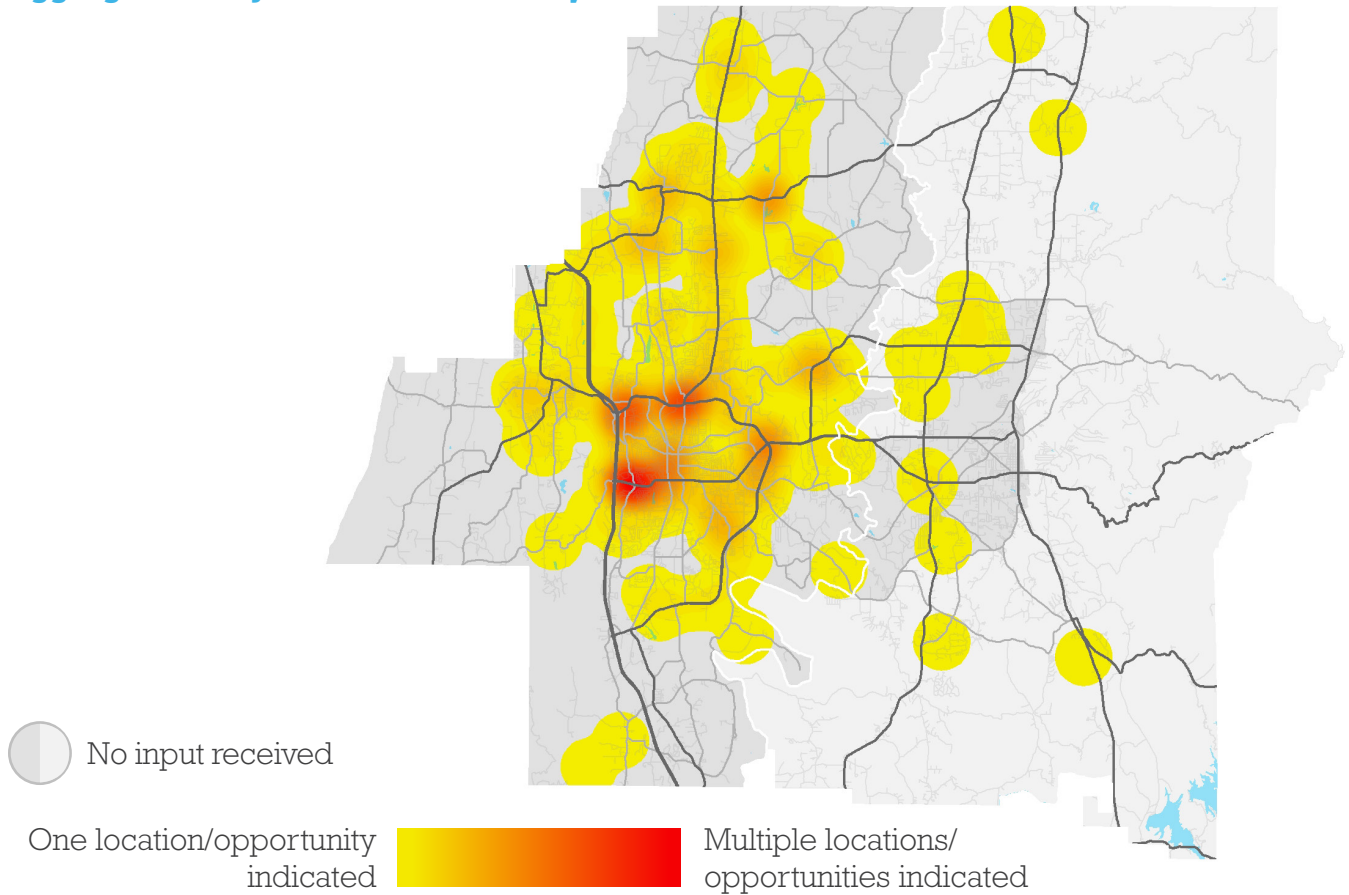
Overall Project Type Ranking

	Stakeholder Meeting (percentage of votes)	Public Meeting (percentage of votes)	Online Survey (rank, out of 8)
Intersection Improvements	28%	35%	2.1
Roadway Capacity and Operations	28%	27%	2.0
Bridge Upgrades	15%	13%	3.5
Freight Mobility	14%	18%	6.5
Pedestrian Infrastructure	6%	4%	4.4
Transit	6%	2%	5.1
Bicycle Infrastructure	2%	4%	4.8
Aviation Facilities	2%	0%	7.6



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Aggregated Project Location Activity Results



Overall Project Goal Ranking

	Public Meeting Votes	Public Meeting Percentages	Online Survey Average Rank	Online Survey Weight	Aggregate Weight
Address North-South Travel	9	23%	6.5	18%	20%
Encourage Downtown Reinvestments	2	5%	5.5	15%	16%
Accommodate Freight Traffic	7	18%	5.1	14%	15%
Address East-West Travel	8	21%	5.2	14%	15%
Enhance Connections to I-75	4	10%	3.9	11%	10%
Develop and Active Mode Network for the Region	3	8%	3.5	10%	9%
Provide Connectivity to Neighboring Communities	3	8%	3.5	10%	9%
Consider Opportunities for Future Transit Service in the Region	3	8%	2.9	8%	7%

Transportation System Analysis

Complimenting the community input during the MTP process, the technical analysis was used to evaluate and understand different aspects of the transportation system including establishing existing conditions and needs as well as identify anticipated future conditions.

Roadway Network

Functional Classification

The roadway network for the region includes a combination of different types of roadways categorized by their functional classification.

Interstates are the highest classification of roadway and were designed and constructed with mobility and long-distance travel in mind. Interstates have 'limited access' in which no direct access is provided to properties or land use abutting the roadway. Similarly, other roadways that cross the interstate do so through a grade-separation in which the other roadway crosses either under or over the interstate. In select locations – typically with arterial roadways as defined below – interchanges are built that provide entrance and exit ramps to and from the interstate. The Dalton region includes one interstate, I-75, a major north-south corridor through the Country extending from Michigan to Florida. Locally, I-75 is a major gateway into Whitfield County connecting the Dalton region to Chattanooga to the north and Atlanta to the south.

Arterials are major roadways but are able to serve land uses directly through driveways to specific parcels. Nonetheless, arterials are generally designed with mobility in mind as well and often assist in long-distance travel as well. There are classifications of arterials (principal and minor) relative to their use and important in connecting the region. The majority of major roadways in the Dalton region are classified as arterials including:

- SR 71: Known locally as Cleveland Highway, this corridor connects the North Dalton Bypass to the Tennessee state line and beyond to Cleveland, Tennessee.
- US 76/US 41/SR 3 (Dalton Bypass) and SR 3: These routes collectively serve as a multi-lane bypass on the north, east, and south sides of Dalton. On the west side of Dalton, mountainous terrain and the I-75 corridor precludes the need for a western bypass.
- SR 2: This arterial runs east-west connecting from the Catoosa County line on the west side, extending through the community of Varnell, crossing into Murray County before terminating at US 411.
- SR 201: Running north-south, this corridor enters Whitfield County in the southwest part of the community, extends north to Tunnel Hill and terminates at SR 2 in Varnell.
- SR 3/US 41: Also running north-south, this corridor enters Whitfield County from Gordon County to the south, extends north to the South Dalton Bypass/SR 3 Connector and traverses north through Tunnel Hill and into Catoosa County.
- SR 52/Walnut Avenue/US 76/Chatsworth Highway: Beginning at I-75 on the west side of Dalton and running east-west through Dalton and Whitfield County, this corridor enters into Murray County before joining with US 411 and turning in a southeastern direction and subsequently turning off US 411 at Smyrna Ramhurst Road towards Gilmer County.
- Alt. SR 52: Spurring off of US 76/SR 52 just east of Whitfield County, this corridor traverses

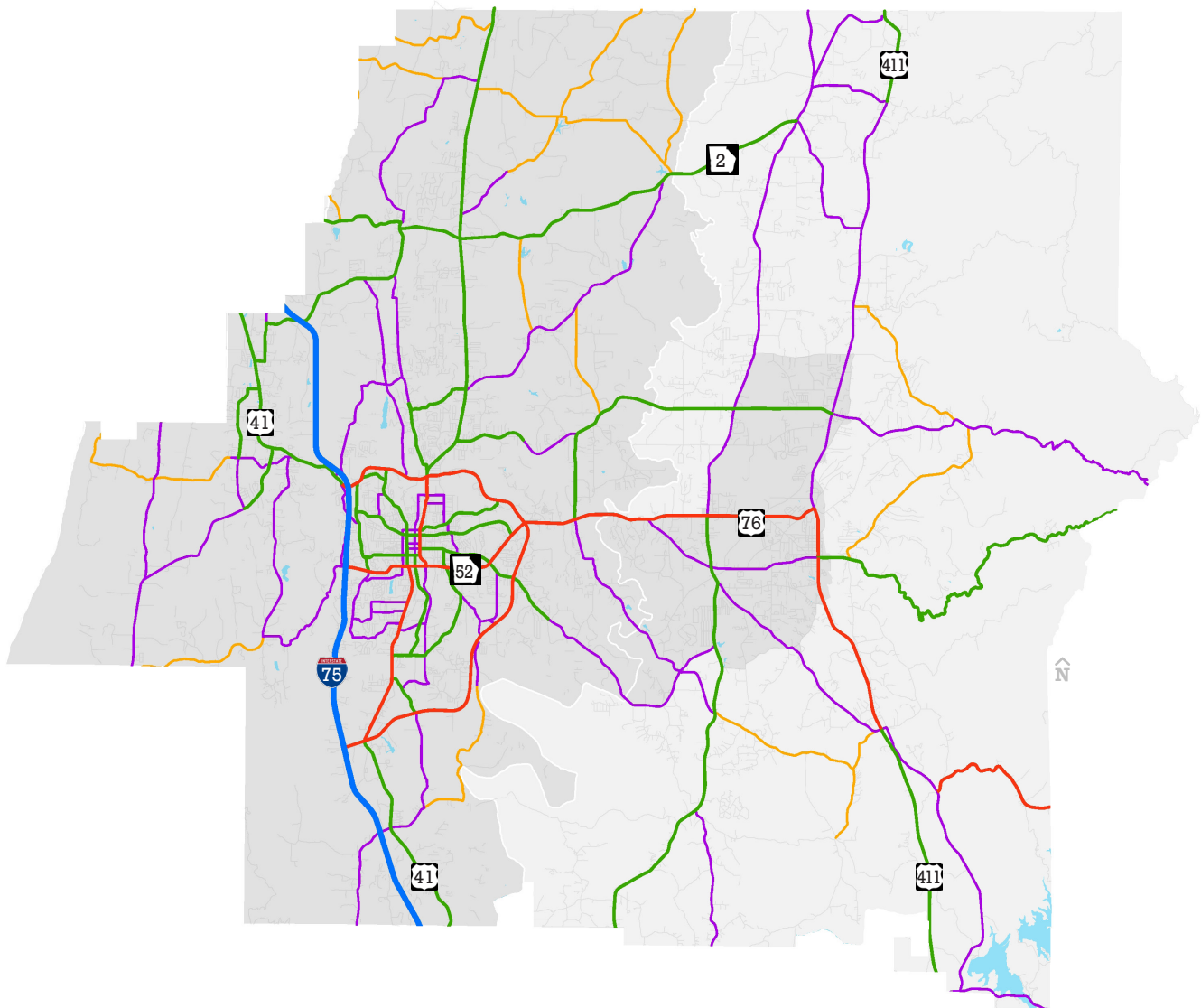


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southeasterly through Murray County, through Chatsworth, and towards Gilmer County

- SR 286: Beginning at SR 52/US 76 in Dalton, this corridor runs east-west into Murray County and terminates at US 411 in Eton.
- US 411: This corridor runs north-south from Gordon County to the south through Murray County connecting to Chatsworth and Eton and exiting to the north at the Tennessee state line.
- SR 225: Running north-south, this corridor parallels the western boundary of Murray County and US 411 towards the east.

Functional Classification in Whitfield and Murray Counties



Source: Georgia Department of Transportation

Collectors gather traffic from arterial roadways and distributes them to local roads. While they may serve relatively large volumes of traffic, it is typically less in volume than arterials and they typically run must shorter distances than arterials. Similar to arterials, these roadways are classified as 'major' and 'minor' depending on their traffic volume and connectivity.

Local Roads account for the largest percent of roadways and offer direct access to local properties. They are not intended for long distance travel and in many cases are designed to discourage through traffic.

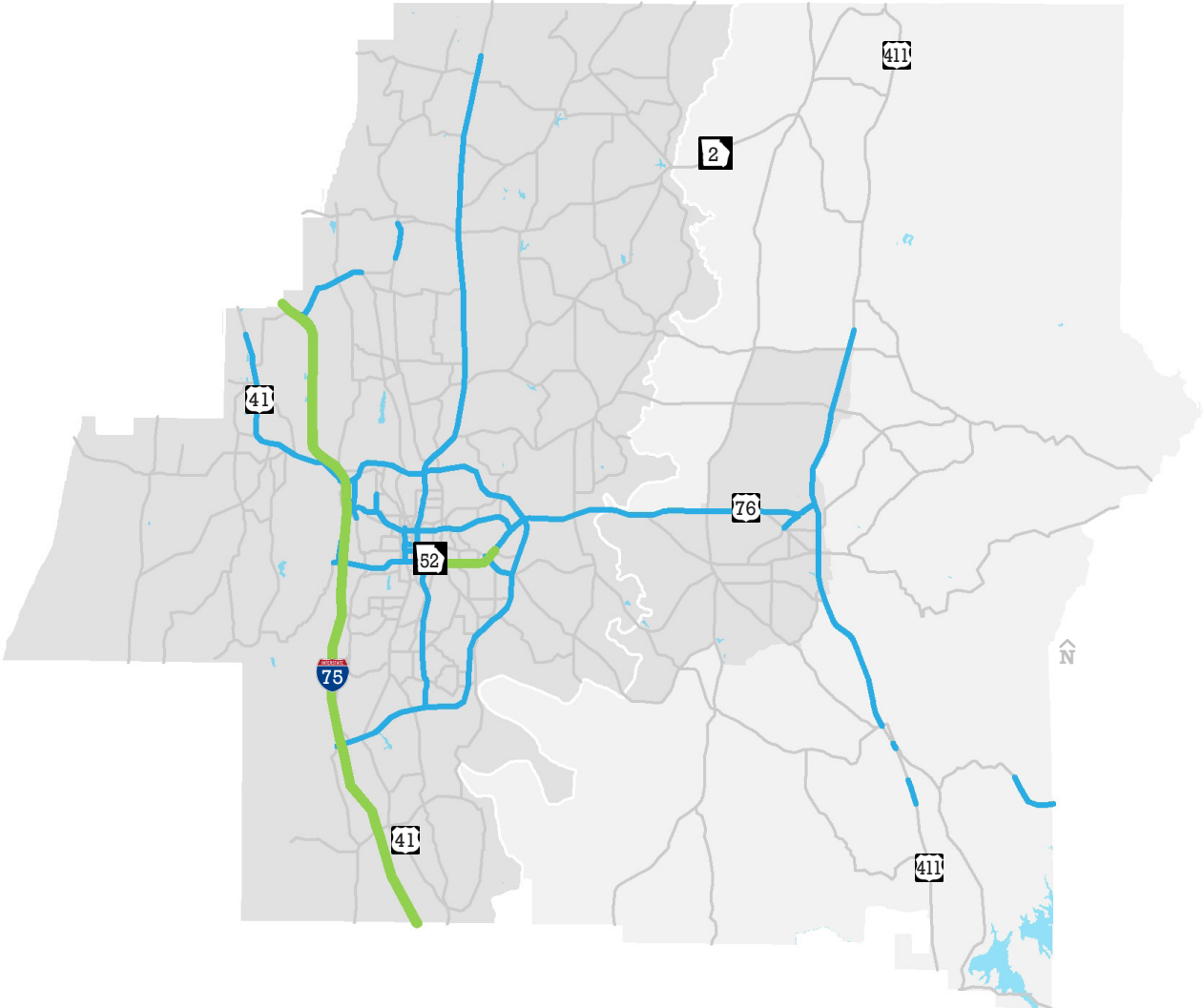
Lane miles in the region by each functional classification are provided in the tables below while the functional classifications in the region are depicted on the map.

Lane Inventory

Similar to functional classification, the number of lanes on roadways through the region influence the amount of travel. The map below depicts the number of lanes on most collectors and higher classified roads in the region, per the travel demand model, a tool developed by GDOT.



Lane Inventory in Whitfield and Murray Counties, 2015



1-2 Lanes

3-4 Lanes

5-6 Lanes

Source: Georgia Department of Transportation

Level of Service & Congestion

Travel demand models are sophisticated tools that can be utilized to determine how changes in the transportation system coupled with development patterns affects travel patterns and congestion. GDOT maintains a travel demand model for the Greater Dalton MPO region which consists of a four-step process as indicated below:

- Trip Generation – Estimates the number of trips likely to be generated based on socioeconomic data such as population, employment, and income data.
- Trip Distribution – Estimates where in the region the generated trips will likely travel to based on the attraction (based on the same socioeconomic characteristics used to determine trip generation) of different parts of the region.
- Mode Split – Estimates, where applicable, the mode of travel a trip will utilize.
- Trip Assignment – Estimates the pattern and route that a trip will take to reach its destination from its origin.

As referenced in Chapter 2, a key component of the travel demand model process was to determine both existing (year 2015) and future anticipated (year 2045) development patterns as represented by various socioeconomic data attributes – a process referred to in detail in **Appendix A**. In turn, this data was utilized to estimate the daily ‘demands’ on the transportation system. In that regard, the travel demand model also include inputs to reflect the ‘supply’ of the transportation system – information such as that already covered including where transportation facilities are and where they connect, their functional classification, and the number of lanes (capacity). These inputs can be edited to create and analyze different scenarios of possible future conditions.

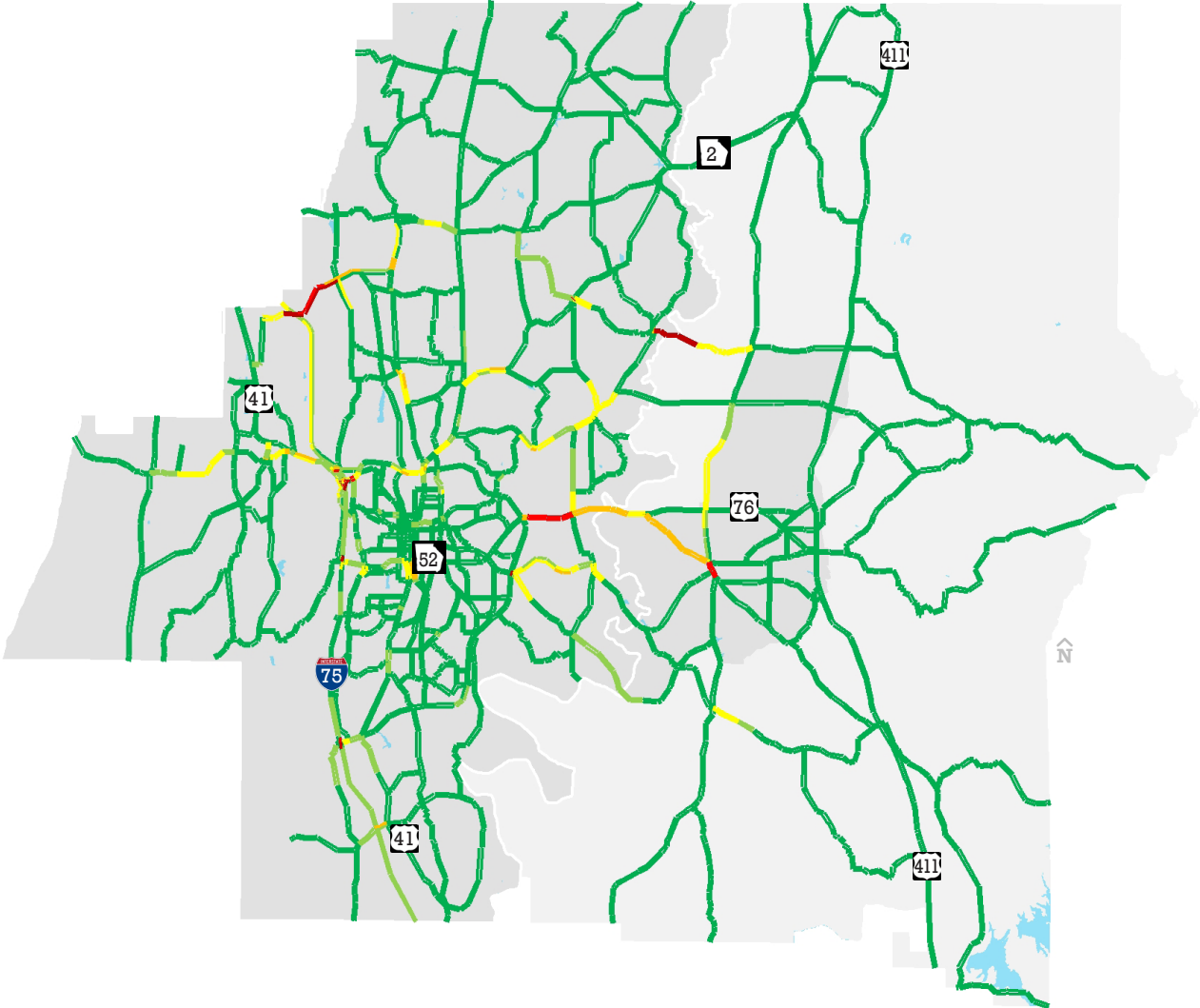
The travel demand model is used in several ways during the MTP process, many of which are discussed in the next chapter of this MTP, Chapter 5. An initial component is to articulate the needs of the transportation system by focusing and comparing the results of the three scenarios described below:

- Base Year – A travel demand modeling scenario built to represent existing conditions. In the case of the RTP, this model was developed for the year 2015 and calibrated for accuracy against actual observed 2015 conditions.
- 2045 Do-Nothing – A scenario intended to indicate what would happen in the year 2045 if no new projects were constructed. This includes projects constructed since the year 2015.
- 2045 Existing + Committed – Scenario intended to indicate what would happen in the year 2045 if only those projects with funds committed for Right-of-Way or Construction were constructed.

Focusing on these three scenarios, the planning team was able to understand generalized existing and potential future congestion in the region – congestion measured in a traffic engineering methodology known as Level of Service (LOS), which assigns letter grades A-F based on the relative amount of capacity being utilized on each roadway in the region.



Base Year (2015) Scenario Travel Demand Model Level of Service

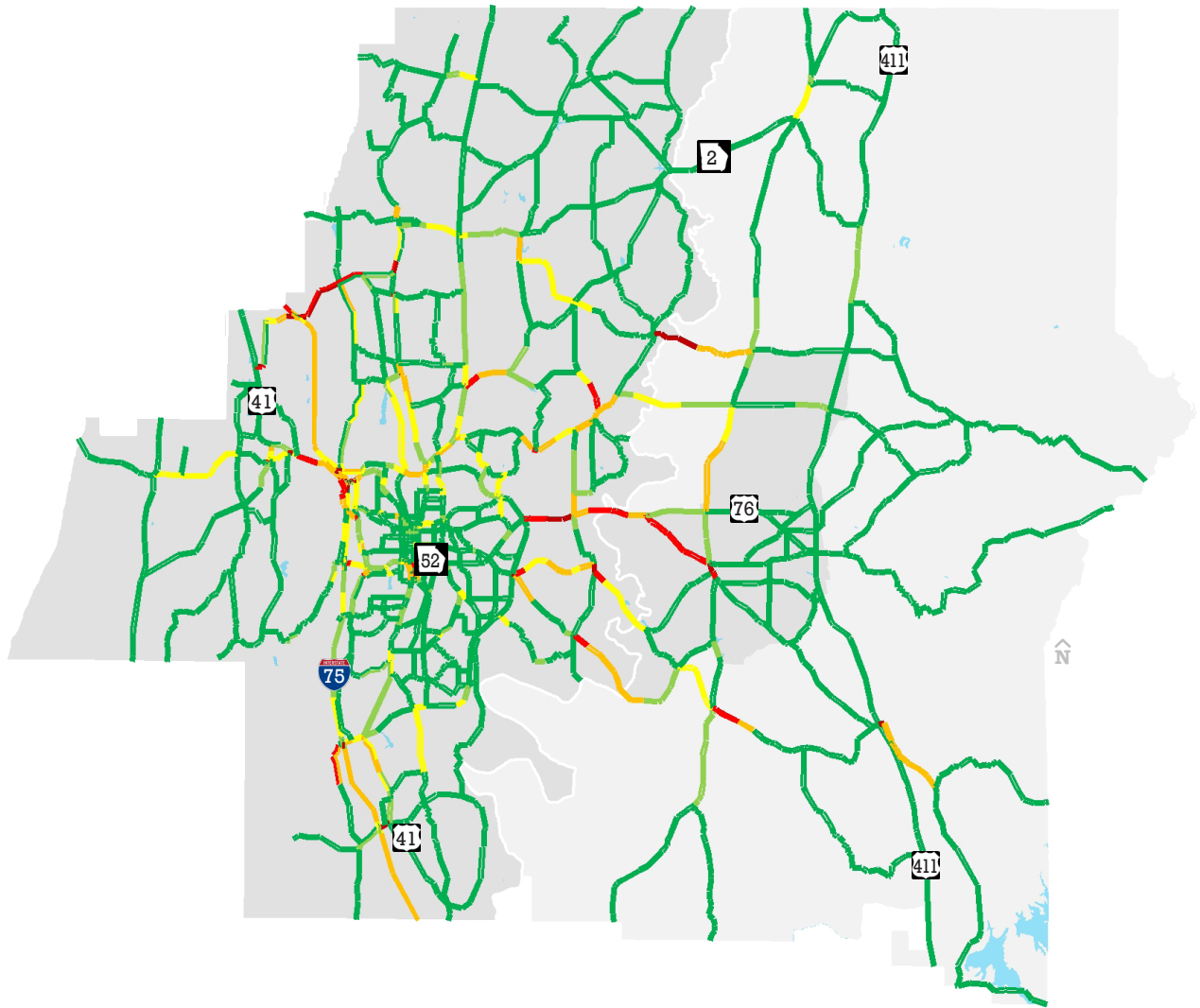


Source: Georgia Department of Transportation

Level of Service Conditions

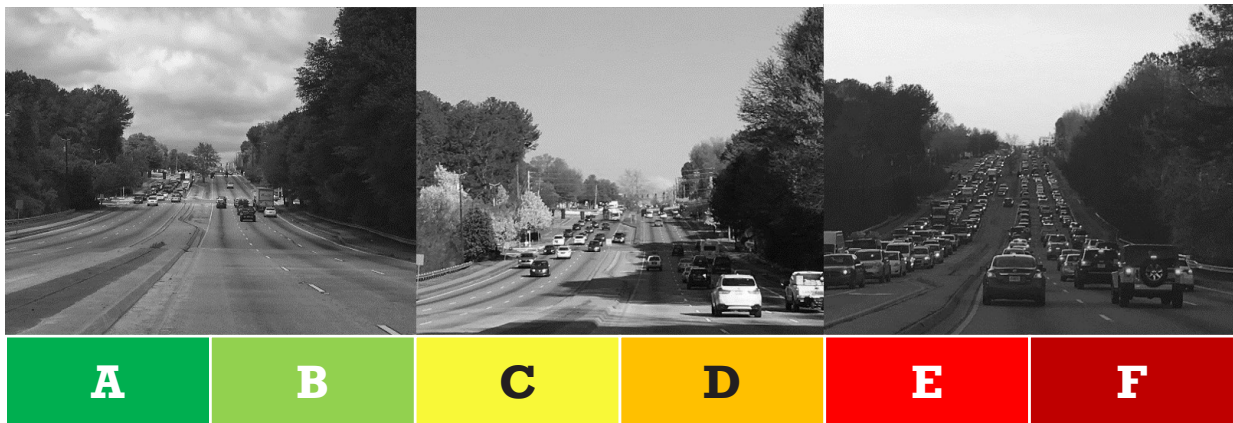


2045 Do Nothing Scenario Travel Demand Model Level of Service

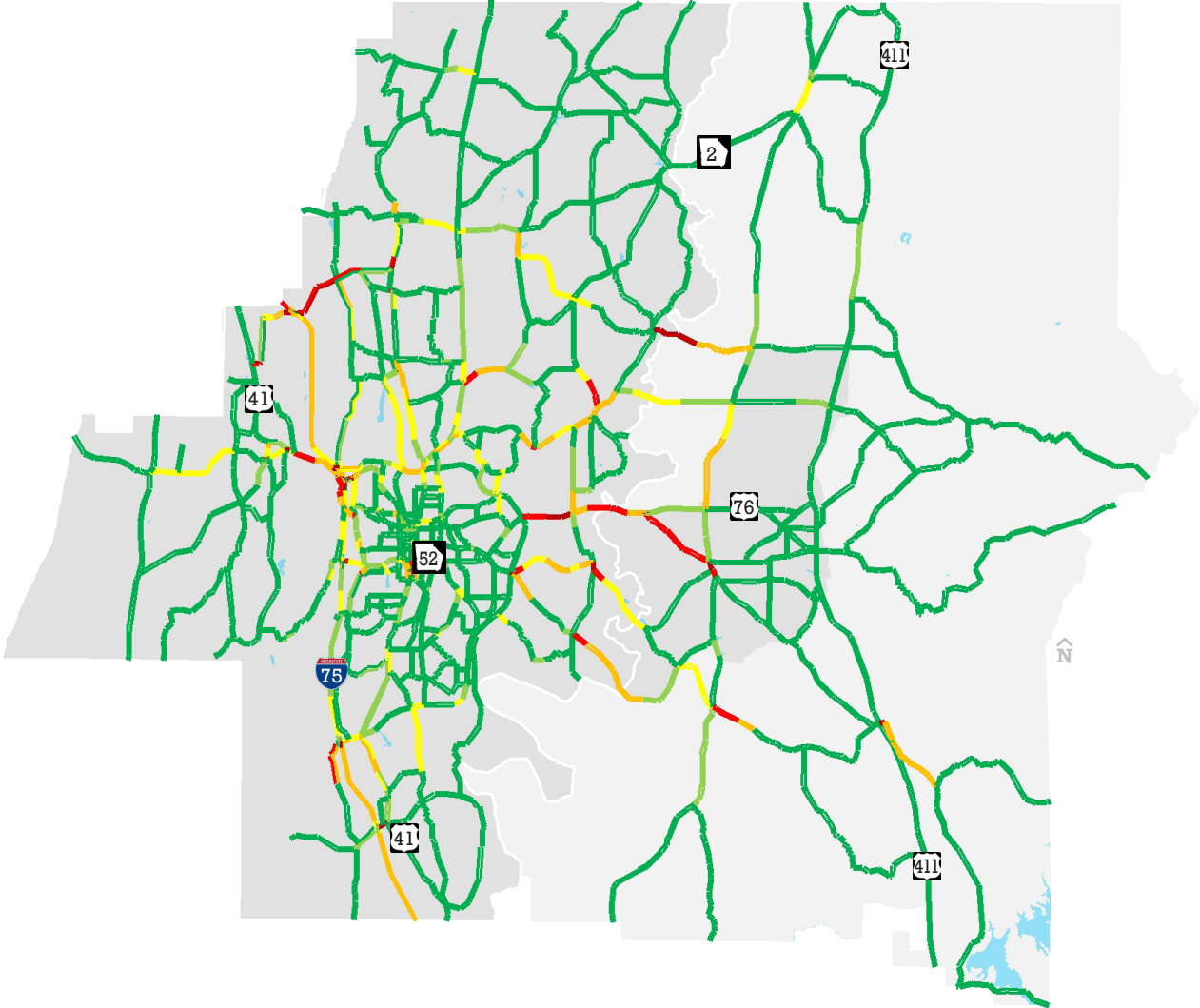


Source: Georgia Department of Transportation

Level of Service Conditions



2045 Existing+Committed Scenario Travel Demand Model Level of Service



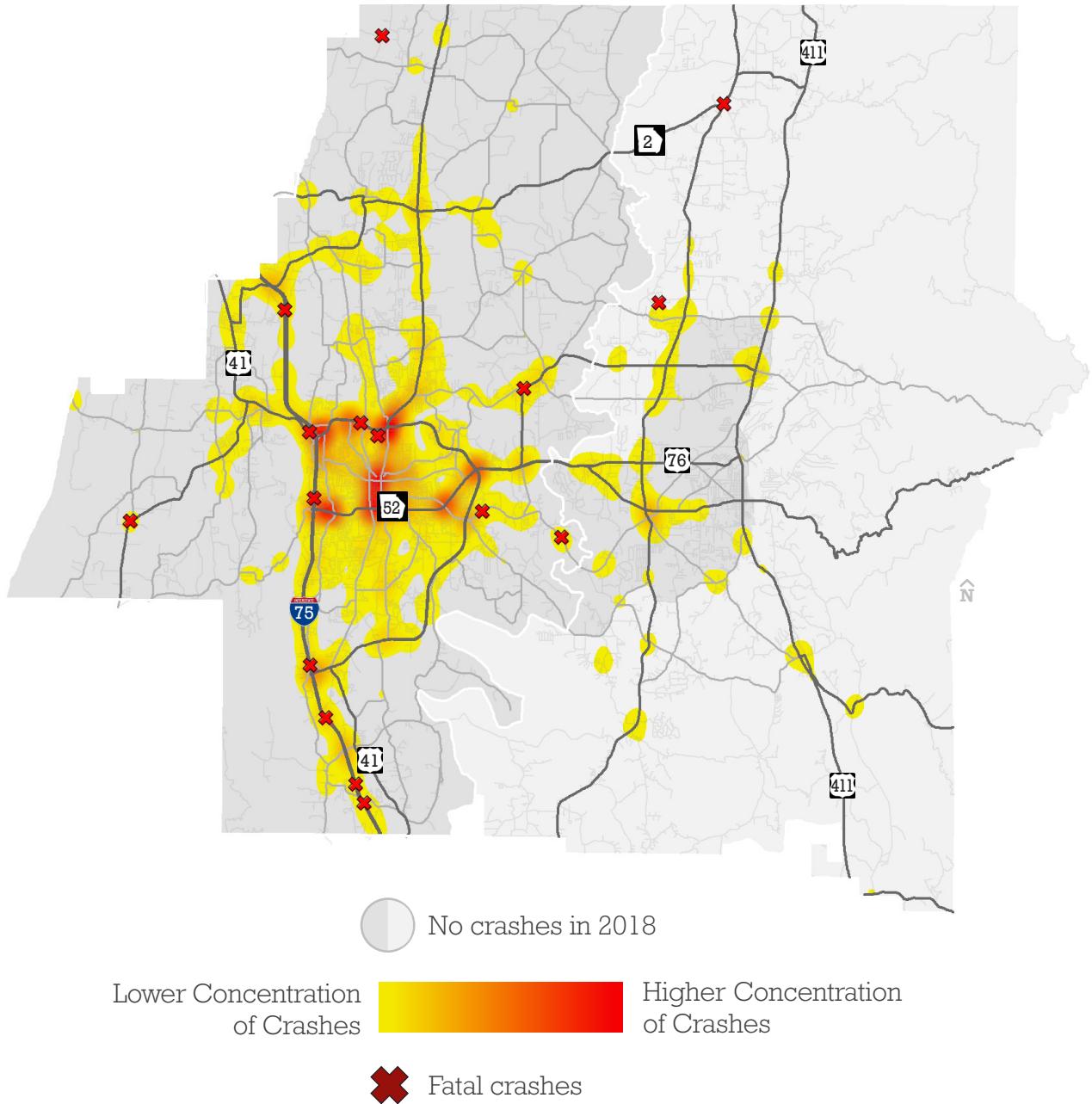
Source: Georgia Department of Transportation

Note: In this case, the “Do Nothing” Scenario and “Existing+Committed” Scenario were identical, and thus have identical results

Safety

As described in many of the federal, state, and local goals, a transportation system that emphasizes safety is just as important as maintaining its efficiency. Therefore, the planning team reviewed safety – as registered by crashes – throughout the region from the years 2013 through 2017 as depicted on the map below.

Crashes in 2018



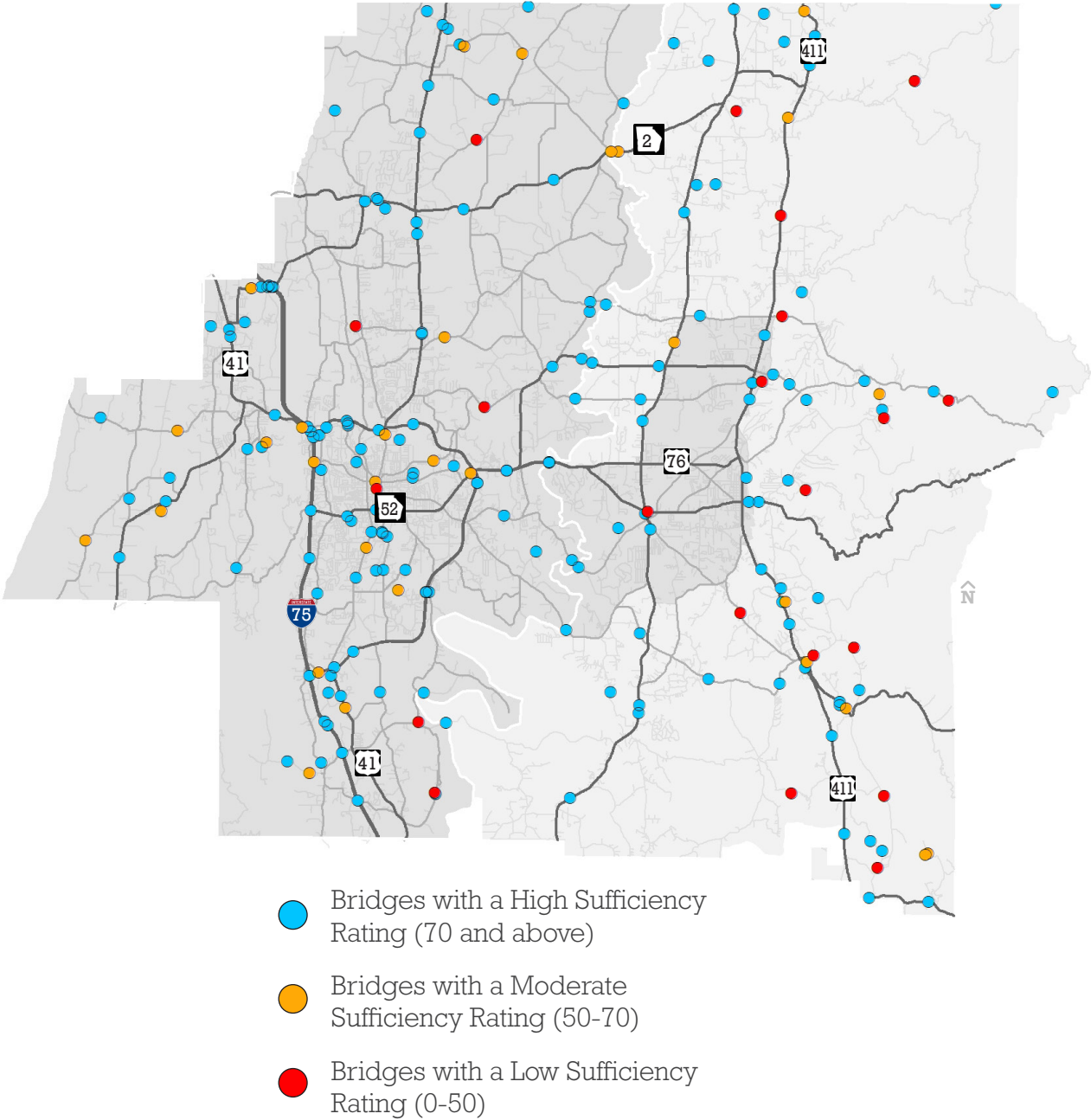
Source: Georgia Department of Transportation



Bridges

GDOT calculates sufficiency ratings for each bridge by evaluating its overall condition, taking into account all factors from low load to filed/visual observation of deficiencies. GDOT's Office of Bridge Maintenance recommends that structures with a sufficiency ratings less than 50 be replaced rather than improved. Bridges with a rating between 60 and 70 are candidates for rehabilitation or reconstruction. Bridges with ratings above 70 should be in acceptable condition over the life of the plan as long as routine maintenance is conducted.

Bridges in Whitfield and Murray Counties by Sufficiency Rating, 2019



Source: National Bridge Inventory, FHWA

Bridges in Whitfield and Murray Counties with Sufficiency Rating of 70 or below, 2019

Bridge ID	County	Name/Location	Sufficiency Score
213-5041-0	Murray	McNelly Road over a Conasauga River Tributary	4.0
213-5004-0	Murray	Dennis Mill Road over Rock Creek	16.0
213-5036-0	Murray	Peeples Spur over Rock Creek	17.5
213-5015-0	Murray	Coniston Road over Sugar Creek	18.6
213-5007-0	Murray	Old Federal Road over Mill Creek	19.7
313-0063-0	Whitfield	Gordon Street over Norfolk-Southern Railroad	21.4
213-5009-0	Murray	Loughridge Road over Mill Creek	22.1
213-0048-0	Murray	CCC Road over Emery Creek	24.3
213-5027-0	Whitfield	Hasslers Mill Road over Mill Creek	27.6
313-5031-0	Whitfield	Reed Pond Road over Poplar Spring Creek	32.4
213-5039-0	Murray	Old SR 2 over a Conasauga River Tributary	33.6
313-5053-0	Whitfield	Nance Springs Circle over a Conasauga River Tributary	35.1
313-0068-0	Whitfield	Dawnville Road over Coahulla Creek	36.3
313-5008-0	Whitfield	Old Tilton Road over Swamp Creek	36.3
313-5050-0	Whitfield	McGaughey Chapel Road over Coahulla Creek	36.8
213-0017-0	Murray	US 411/SR 61 over Sumac Creek	39.8
213-0043-0	Murray	Old US 411 over the Coosawattee River	41.4
213-0044-0	Murray	Old US 411 over Willbanks Branch	41.6
213-0004-0	Murray	Ramhurst Road over Holly Creek	42.4
213-5028-0	Murray	Cool Springs Road over CSX Railroad	45.6
213-0007-0	Murray	SR 52 Alt. over Town Branch	47.4
313-5002-0	Whitfield	Redwine Cove Road over Swamp Creek	52.2
213-5032-0	Murray	Cool Springs Road over Holly Creek	52.9
313-0004-0	Whitfield	SR 2 over the Conasauga River	53.0
313-5039-0	Whitfield	Houston Valley Road over East Chickamauga Creek	53.3
213-0018-0	Murray	US 411/SR 61/SR 2 over CSX Railroad	54.7



4 | Plan Development

Bridge ID	County	Name/Location	Sufficiency Score
313-5033-0	Whitfield	Willowdale Road over Mill Creek	54.9
213-0033-0	Murray	US 76/SR 282 over Rock Reek	55.7
313-5028-0	Whitfield	Putnam Road over Mills Creek	55.9
213-0045-0	Murray	Old Highway 411 over Chicken Creek	57.3
213-0021-0	Murray	US 411/SR 61 over SR 182/CSX Railroad	57.4
313-0020-0	Whitfield	SR 52 over Mill Creek	58.2
213-0001-0	Murray	SR 2 over the Conasauga River Overflow	58.7
313-0009-0	Whitfield	Old US 41 over Tar Creek	59.0
313-5012-0	Whitfield	Cavender Road over Stacy Branch	59.1
313-5041-0	Whitfield	Freeman Springs over East Chickamauga Creek	59.8
313-0025-0	Whitfield	West Waugh Street over Norfolk-Southern Railroad	60.4
213-0035-0	Murray	US 76 over Sugar Creek	60.7
313-0056-0	Whitfield	Beaverdale Road over Coahulla Creek	60.8
CEPSAMG A0000005	Murray	Carters Intake Access over Carters Emergency Spillway	61.0
213-5001-0	Murray	CR 1 over Carters Lake Overflow	61.2
313-0066-0	Whitfield	Tibbs Road over I-75	61.8
313-5015-0	Whitfield	Underwood Street over Mill Creek	63.6
313-0035-0	Whitfield	SR 201 over Tanyard Creek	63.8
313-5043-0	Whitfield	Gordon Springs Road over East Chickamauga Creek	63.9
213-0030-0	Murray	SR 225 over Pinhook Creek	66.2
313-5060-0	Whitfield	Green Valley Drive over a Mill Creek Tributary	68.0
313-0026-0	Whitfield	Glenwood Avenue over Mill Creek	68.3
313-0005-0	Whitfield	US 41 over Swamp Creek	68.6
313-5029-0	Whitfield	Hopewell Road over Coahulla Creek	69.3
313-0016-0	Whitfield	SR 3 Connector over Little Swamp Creek	70.0

Source: National Bridge Inventory, FHWA

Bicycle & Pedestrian Travel

The bicycle and pedestrian network in the region includes both regional and localized, community serving facilities.

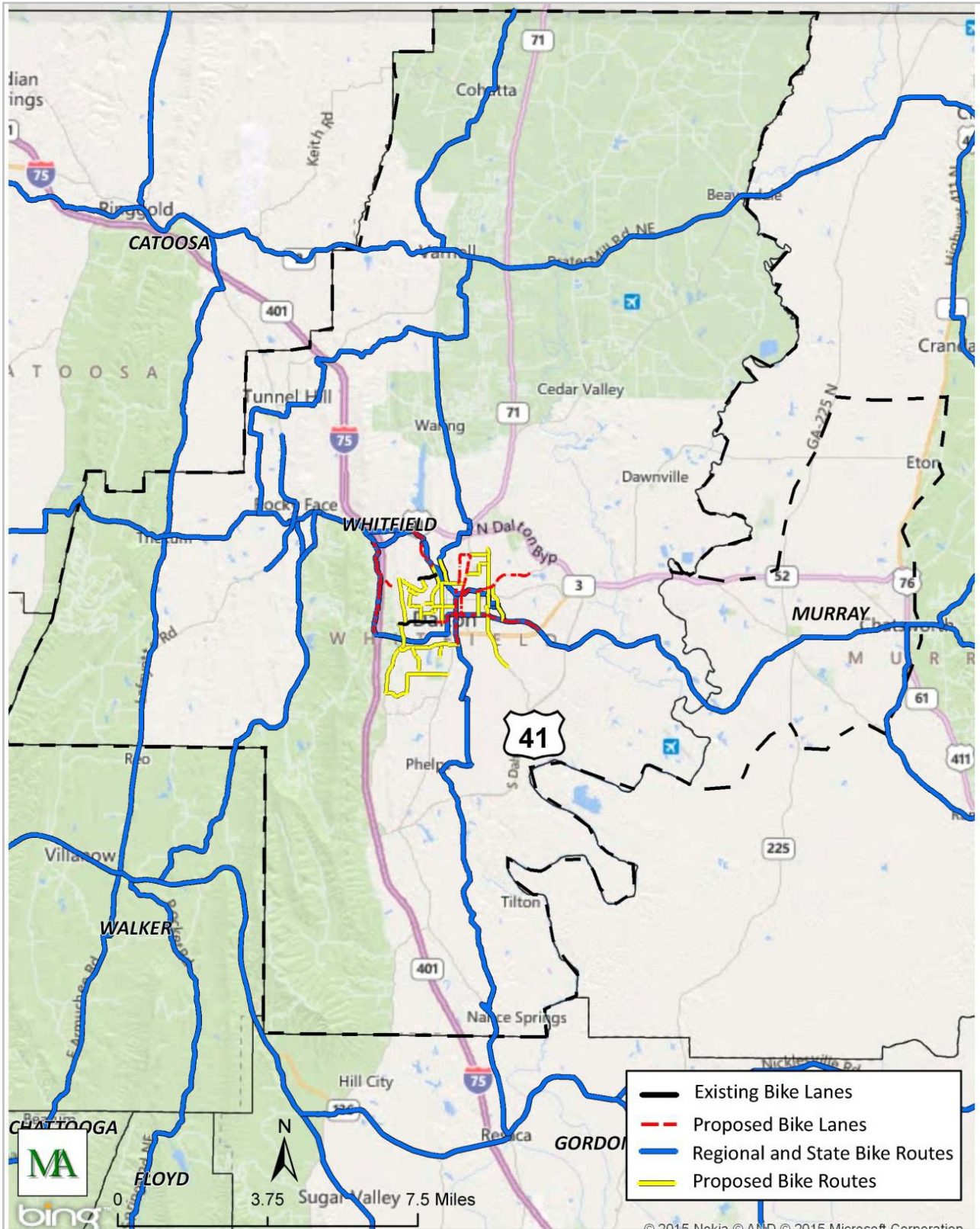
At the regional level, two state bicycle routes traverse Whitfield County:

- “March to the Sea” (Route 35) runs northwest/southeast between the Tennessee State line near Chattanooga, TN and downtown Savannah. Within Whitfield County, the route traverse 11.7 miles through Tunnel and Hill and Mount Vernon.
- “Mountain Crossing” (Route 90) runs east/west across the mountains between Walker County, Georgia (south of Chattanooga, TN) and Rabun County in the northeast corner of the state. This route crosses through both Whitfield and Murray County connecting Dalton State College, the City of Dalton, crosses the Conasauga River, and Chatsworth.

The Chattahoochee National Forest in Whitfield County contains a number of hiking and/or biking trails, including the Pinhoti Trail. The Pinhoti Trail is the connecting link between the Appalachian Trail and the Appalachian National Scenic Trail via the Benton MacKaye Trail, making it possible to hike the entire southern Appalachian Range. The completed section of the Georgia Pinhoti Trail follows the Armuchee Ridges near Rome and enters Whitfield County from Mill Creek Mountain along the Walker County line, and continues north along Middle Mountain and Rocky Face Ridge at Dalton, where it effectively ends at Dug Gap Road. Upon completion, it will cross the Great Valley to the Cohuttas and connect to the Benton MacKaye Trail.



Bicycle Facilities in Greater Dalton MPO



Source: GDMPO 2040 LRTP

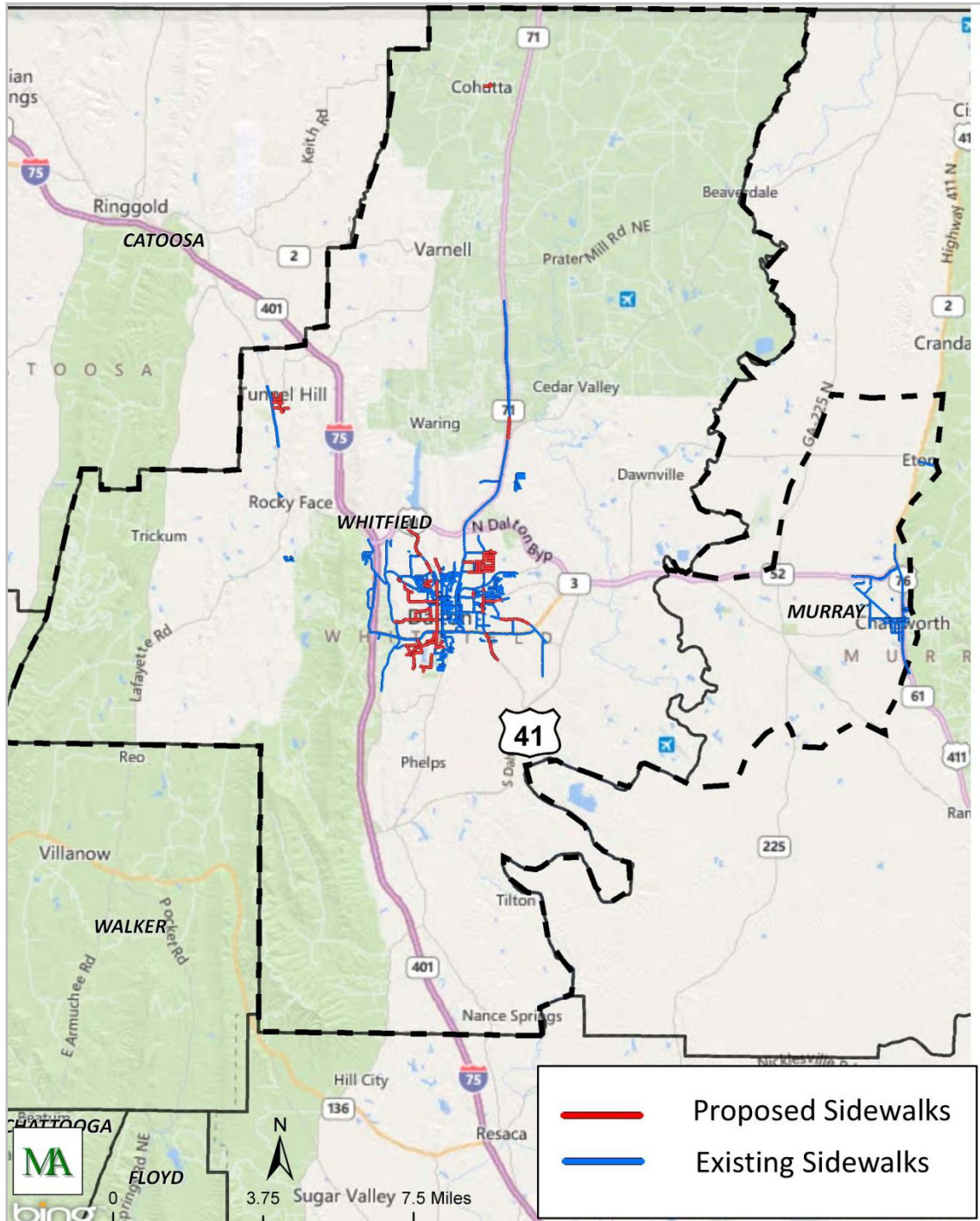
Greater Dalton

2045 Metropolitan Transportation Plan

Whitfield County has a relatively good sidewalk network within downtown Dalton and along SR 71/Cleveland Highway. Portions of the existing sidewalk system covers most of the major activity centers along SR 52/Walnut Avenue, Thornton Avenue, and Glenwood Avenue.

Murray County has mostly excellent and good sidewalks in Chatsworth, but some sidewalks need repair as shown in the image on the following page.

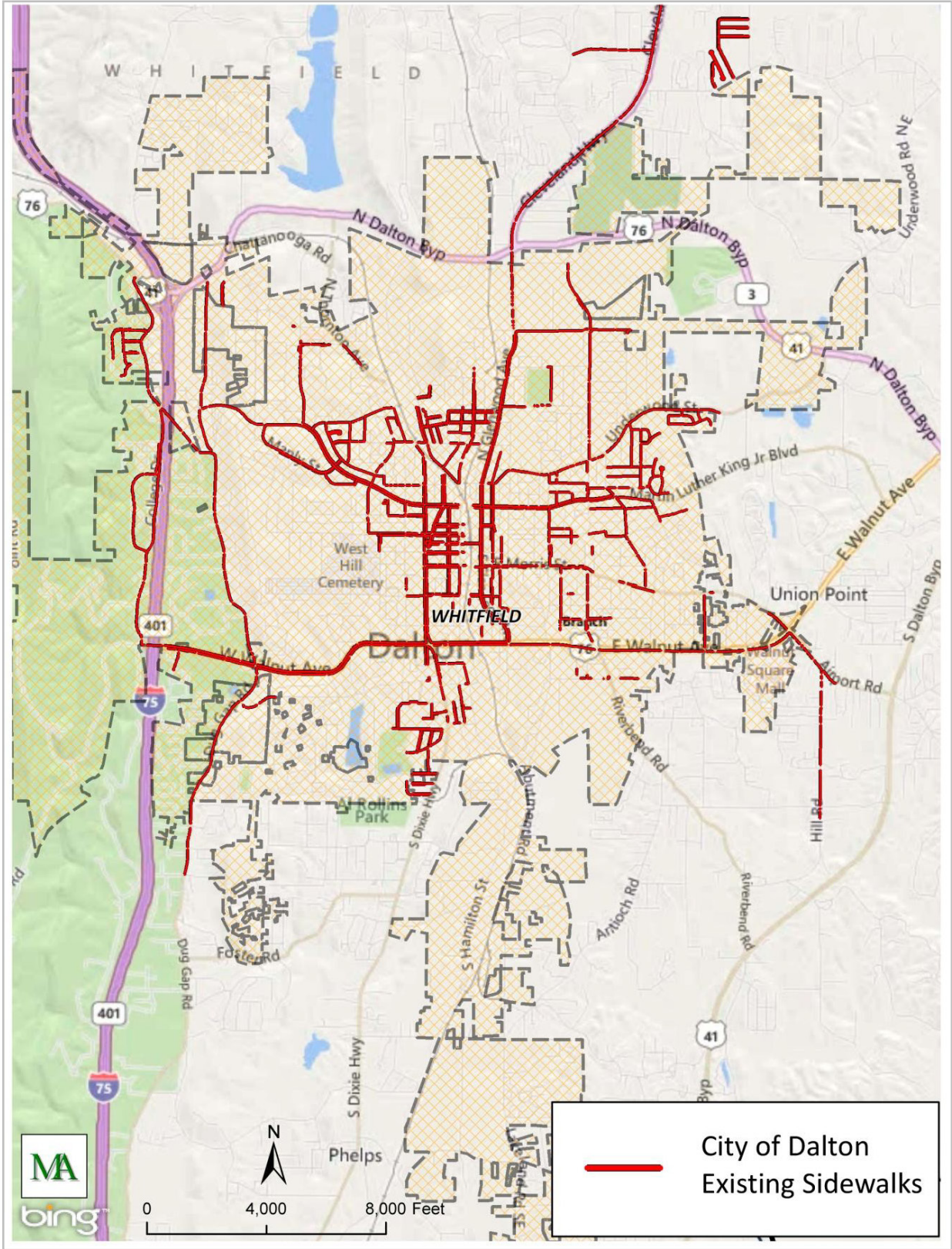
Pedestrian Facilities in Greater Dalton MPO



Source: GDMPO 2040 LRTP

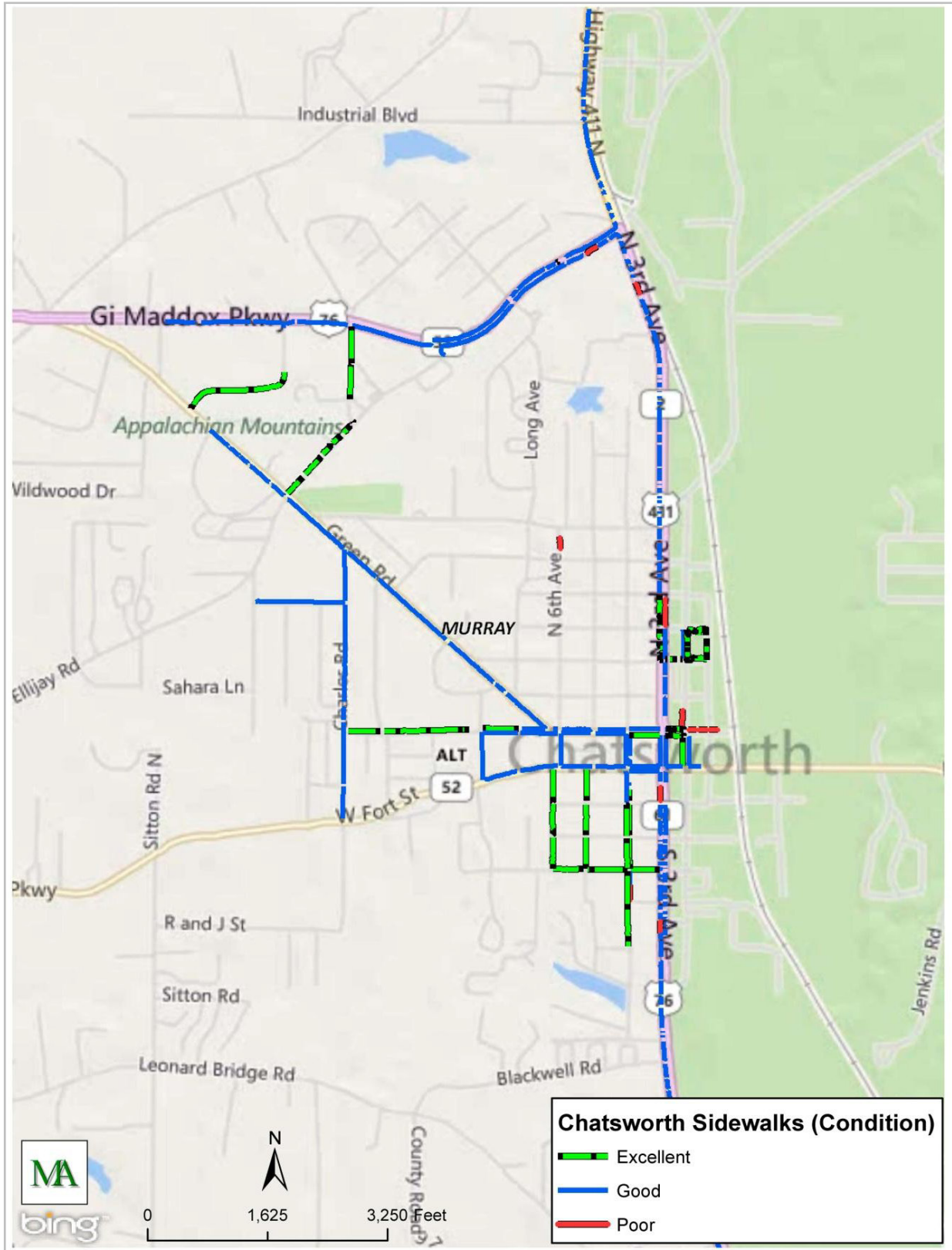


Pedestrian Facilities in Dalton Area



Source: GDMPO 2040 LRTP

Pedestrian Facilities in Dalton Area



Source: GDMPO 2040 LRTP



Transit

Through a Federal Transit Administration (FTA) 5311 grant, the **Whitfield County Transit Service (WCTS)** operates 10 vehicles in their curb-to curb, demand-response, and route-deviation transportation operations with service available Monday through Friday, from 6:30 am. to 6:00 pm. to all County residents for various trip purposes, including medical, nutrition, shopping, education, social, and recreation. In addition, WCTS provides services by a contract agreement through the Georgia Department of Human Services (DHS) with Transit Alliance, Inc., acting as the main contractor for DHS.

The FTA 5311 grant program recipients may use the funding for capital, operating, and administrative expenses on a formula based agreement whereas the Federal share of eligible capital and administrative expenses may not exceed 80 percent of the net project cost. Federal share of operating expenses may not exceed 50 percent of the net project operating costs. Up to 90 percent of Federal match funds may be used for projects that meet the requirements of the American with Disabilities Act, the Clean Air Act, or bicycle access projects.

As of January 1, 2014, Whitfield County provides all operational and administrative services in-house. About 80% of service is provided for trips in Dalton, but this service is available countywide. The cost to ride for general public is \$4.00 for each one-way trip. Reservations for service are required 48 hours in advance.

While service is available to all County residents, primary beneficiaries of the County's transit service are disadvantaged populations such as elderly, handicapped, and persons with low-income status. WCTS is providing this population with improved and affordable accessibility to shopping, educational, and medical and social service centers throughout Whitfield County.

Murray County Transit is the demand-responsive public transportation service in Murray County. The transit service operated with a fleet of six buses which are wheelchair-accessible. This service is available to all residents of Murray County and is open to the general public. Murray County Transit provides transportation to the Senior Citizen Center, to doctor's offices, grocery stores, pharmacies, and anywhere in Murray County. Also transportation service is also available for medical appointments in Dalton. The hours of service are Monday through Friday 8 am. to 5 pm. Murray County Transit operates on an advanced reservation basis at least 24 hours before the requested trip. Wheel chair-accessible service is available upon request. Fares for the service depend on the distance of the requested trip.

The charge for each one-way trip is as follows: \$1.00 for 0 to 5 miles, \$2.00 for 5.1 to 10 miles, and \$3.00 for 10.1 miles and over. Additional stops cost \$1.00. In addition to fares, the transit service receives funds from the Federal Transit Administration (FTA), the Georgia Department of Transportation, and Murray County government.

Transit Service Operations for the year 2017 are provided in the table below.

Transit Service Operations Information, Whitfield County Transit Service and Murray County Transit, 2017

	Whitfield County Transit Service	Murray County Transit
Total Passengers (unlinked passenger trips)	34,756	20,947
Operating Vehicles	10	9
Vehicle Revenue Miles	264,236	159,814
Vehicle Revenue Hours	16,751	10,388
Total Operating Expenses	\$643,431	\$272,428
Fare Revenue	\$34,562	\$17,651
Passenger Per Revenue Hours	2.07	2.02
Revenue Miles Per Hour	15.77	15.38
Passengers Per Revenue Miles	0.13	0.13
Operating Expenses Per Revenue Mile	\$2.44	\$1.70
Fare Revenue to Operating Expenses Ratio	5.37%	6.48%
Operating Cost Per Passenger	\$18.51	\$13.01

Source: National Transit Database (2017)



Regional Transit Planning

Multi-modal transportation options for the Dalton-Whitfield County area have been studied over the last several years. The **2006 Public Transportation Needs Study**, completed in January 2006 investigated the feasibility of a fixed-route transit service. Five service options were developed as part of this study.

Options 1 and 2 were demand-response options to serve all of Whitfield County, expanding upon the existing Whitfield County transit service. Options 3, 4, and 5 were various types of services for the entire urbanized area of Dalton, including a range of possible service levels. Option 5 was recommended which included a fixed route service in the City of Dalton, with complimentary ADA paratransit service. This option included six proposed fixed routes which would operate 12 hours a day, Monday through Friday.

This recommended option included the removal of the current demand responsive service. The plan also outlined four management options:

- Local Government Owned and Operated
- Contract Service
- Local Government Owned/Operations Contracted Out
- Multi-Agency Operating Agreement

Due to the costs involved, neither the City of Dalton nor Whitfield County followed the recommendations of the study.

In July 2012, through a Federal Transit Act (FTA) 5307 grant, a draft **Transit Feasibility Study** was completed. This study investigated 4 alternatives and reviewed 11 candidate routes for a flexible-route system for Alternatives 2, 3, and 4 that would radiate from a multi-modal transit center to be located in the center of the City of Dalton.

- Alternative 1 included maintaining the existing demand-responsive service.
- Alternative 2 maintained the existing service, included a local flexible-route service within the Dalton area, included a paratransit service for eligible persons, and proposed operating Monday through Saturday from 6 am. to 7 pm. with frequency of service at 30 minutes in the am. and pm. peak periods and 60 minutes during midday and off-peak periods. Alternative 2 included seven routes.
- Alternative 3 proposed the same features with the exception of proposing a different set of seven routes.

- Alternative 4, the recommended alternative, keeps the existing service; adds a paratransit service for eligible persons; includes Monday through Friday operations from 6 o'clock in the morning to 7 o'clock in the evening; serves with a frequency of 30 minutes during peak periods and 60 minutes during off-peak periods; and includes 5 routes for the local flexible-route service within the Dalton area. The 5 routes included in the recommended alternative are as follows:
 - Route 1-Dalton State College/W. Walnut Ave., routing from the transit center to W. Cuyler St. to S.Thornton Ave. to W. Walnut Ave. to College Dr. to George Rice Dr. (4.5 miles, one-way length)
 - Route 4-Medical Center/Thornton Ave, routing from the transit center to W. Cuyler St. to the north on Thornton Ave. to Memorial and looping back via Memorial to Broadrick Dr. to Professional to south on Thornton Ave. (2.8 miles, one-way length)
 - Route 5-Bi-Lo/Glenwood Ave., routing from the transit center to N. Hamilton to W. Waugh St. to N. Glenwood Ave. to US 41/N. Dalton Bypass (2.3 miles, one-way length)
 - Route 7-Underwood St., routing from the transit center to W. Morris to N. Glenwood Ave. to east on Underwood St. to North Dalton Bypass (3.3 miles, one-way length)
 - Route 8-Wal-Mart/Walnut Square Mall/E. Walnut Ave., routing from the transit center to W. Morris to south on Glenwood to east on E. Walnut Ave. to the Wal-Mart Super Center (2.7 miles, one-way length)

The system map for this preferred alternative is illustrated in the map below. The detailed analysis of the alternatives considered, including the recommended alternative, are contained in American Consulting Professional, LLC report which can be reviewed on Whitfield County's website, www.whitfieldcountyga.com.

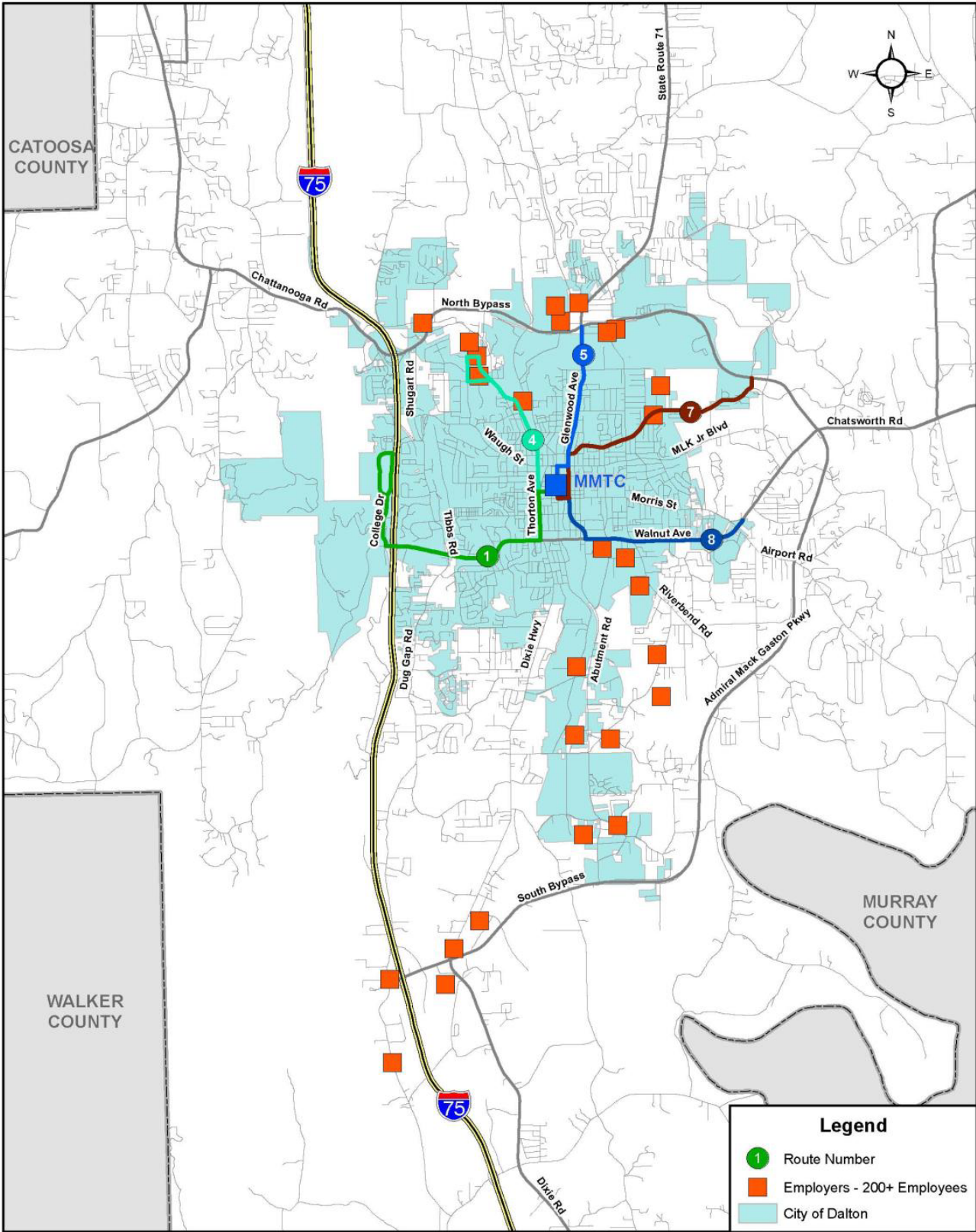
The estimated start-up costs of the recommended alternative outlined in the report are as follows:

- Annual Operating and Maintenance Costs: \$1,223,861
- Capital Costs:
 - New Vehicles: From \$364,000 to \$1,920,000
 - Bus Maintenance Facility: From \$ 2.4 to \$6 million
 - Transit Center Costs: From \$200 per square foot to \$450 per square foot depending on whether the Transit Center is a new construction or a renovation of an existing facility.

While the final plan was never approved, if pursued further next steps will include the development of an implementation plan that refines and details the preferred transit alternative, including ridership projections, an operating plan, a financial plan, social impacts, and legal/regulatory/institutional considerations. Funding options for implementation of this recommended alternative are included in the public transportation section of VIII Plan Recommendations.



GDMPO Transit Study Service Alternative 4



Source: GDMPO 2040 LRTP



Freight

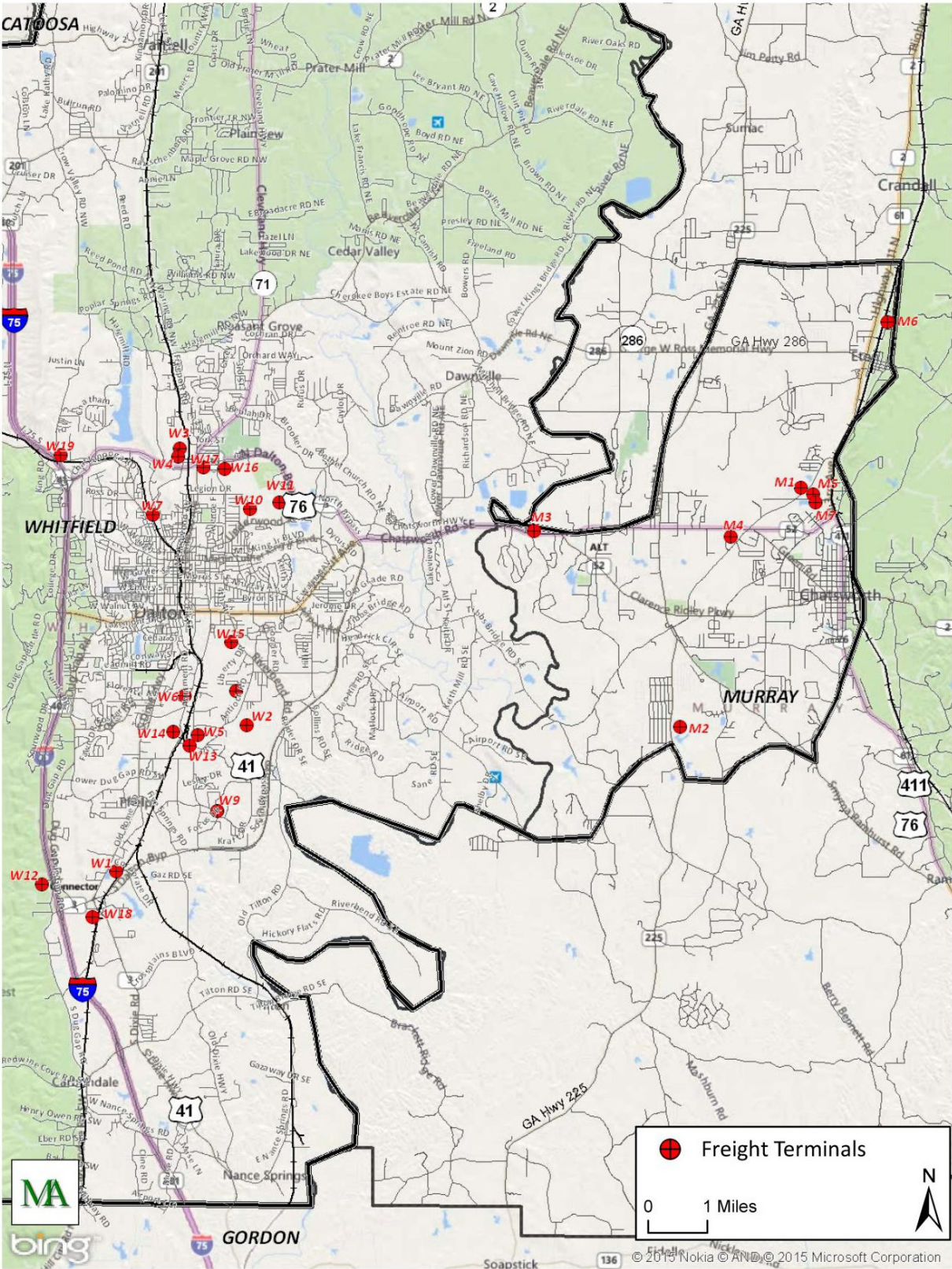
Goods movement by truck is essential for commerce in the Whitfield/Murray urban area, especially for the carpet industry. The four I-75 interchanges provide adequate access to various carpet related businesses. These highway facilities provide excellent linkages to economic markets in the surrounding region and to ocean ports primarily the Savannah port for international connections.

In 2006, Whitfield County had approximately 46 motor freight carriers, including intrastate and interstate freight haulers, liquid/dry bulk carriers, heavy haulers and local cartage. There were 1,337 trucks over 18,000 pounds registered in Whitfield County. This number does not adequately reflect the total number of heavy trucks that travel through the area because the carpet industry in the region have plants in numerous surrounding counties and many of the trucks are registered in those counties. A total of 19 freight terminals were identified in Whitfield County and 7 freight terminals were identified in Murray County. Freight terminals are depicted in the table and map below.

A large percentage of truck traffic in Whitfield County is intra-county trips between carpet manufacturing sites, such as when raw materials are shipped into and stored in Whitfield County and Murray County warehouses before trucks pick them up and deliver them to a carpet tufting plant, followed by trips to the next processing plant for finishing and finally to distribution centers for shipments from Whitfield County to ocean ports and markets worldwide. Shaw Incorporated, the largest manufacturer headquartered in Whitfield County, has 63 manufacturing plants and warehouses in Dalton, Cartersville, Calhoun, Chatsworth and Ringgold, with distribution centers in Dalton, Cartersville and Ringgold. Truck trips generate over 600 intrastate trailer moves each weekday from dry vans, liquid tankers and dry bulk tankers to straight trucks. Shaw Inc. in Dalton generates 120 interstate shipments a day with about 700 interstate shipments a week from all distribution centers to points across the US. The local intrastate trailer moves of Shaw Inc, are made with company trucks based in Dalton. Roughly 50% of Shaw's interstate shipments are made using their company trucks, with the remainder of shipments being made by common carriers.



Freight Terminal Locations



Source: GDMPO 2040 LRTP

Rail

Two freight rail systems operate in Whitfield County. Norfolk Southern (NS) connects Dalton, Varnell and Cohutta with Cleveland, Tennessee and Rome, Georgia. CSX connects Dalton with Chattanooga, TN and Cartersville, GA and operates more than 2,000 piggyback cars per month. A rail yard in Dalton serves both CSX and NS lines running north/south through Dalton. The two railroad lines actually cross in Dalton. At this crossing, one train must wait on the other, adding delays at upstream crossings. Train officials should work with Dalton officials to find solutions such as “breaking the trains” when more than a 15 minute delay is expected.

In addition, the region has benefited by the recent opening (August 2018) of the Appalachian Regional Port (ARP), which is located in the non-MPO portion of Murray County on US 411, north of Eton. The ARP is a joint effort between the state of Georgia, Murray County, the Georgia Ports Authority, and CSX Transportation. The ARP is on the CSX line, providing a direct 388 mile rail route to/from the Garden City Terminal at the Port of Savannah. As a result, the Georgia Ports Authority estimates that each round-trip container moved at the ARP offsets 710 truck miles on Georgia highways. Currently, the facility has a capacity of 50,000 containers per year. That capacity is anticipated to double per a 10 year development plan for the 42 acre site.

As implied by the challenges of the CSX and Norfolk Southern lines merging near downtown Dalton, the rail operations do impact vehicular traffic at locations where the rail lines cross streets. The map below and following tables provide the most current railroad crossing inventories in Whitfield and Murray counties, respectively. There are three grade separations at railroad crossings in Dalton

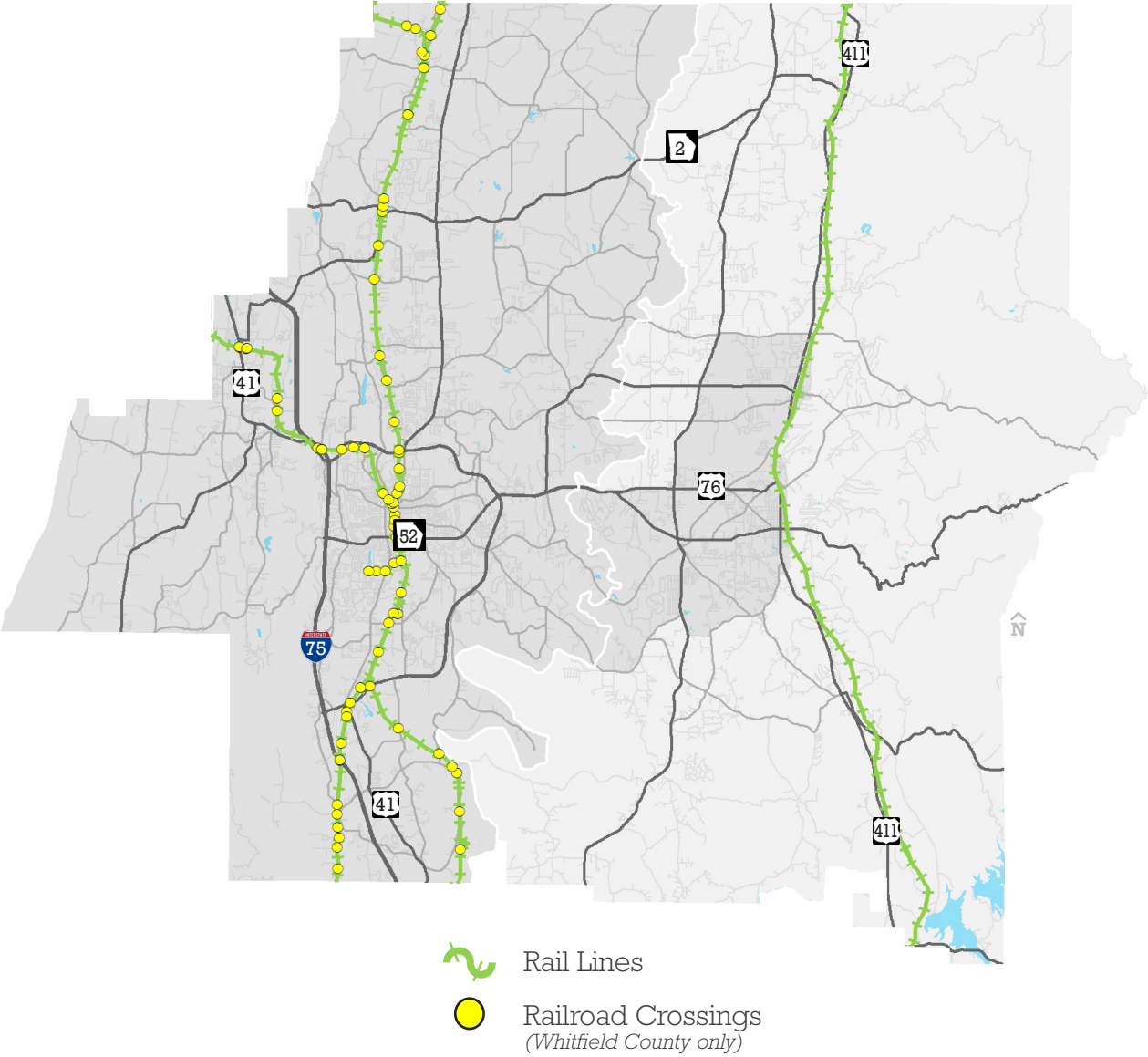


Source: Georgia Ports Authority

at SR 52/Walnut Ave., Gordon St., and Waugh St./MLK Blvd., which provide adequate east-west access in the mid and southern part of Dalton. The northern part of Dalton does not have a grade separation and frequent delays occur in this area. Within Dalton, the NS and CSX railroads run on a common track carrying 50 trains per day with speeds from 15 to 50 miles per hour. Within Tunnel Hill, CSX operates 22-26 trains per day with speeds from 22 to 45 miles per hour. Within Varnell, NS operates 27-36 trains per day with speeds from 5 to 50 miles per hour. Within Cohutta, CSX operates 44 trains per day and Norfolk Southern operates between 18 to 27 trains per day with speeds ranging from 1 to 30 miles per hour and 5 to 50 miles per hour respectively.



Rail Lines in Whitfield and Murray Counties, 2019



Source: US Census Bureau

Aviation

The closest commercial jet air carrier service to Whitfield County is in Chattanooga, Tennessee at Lovell Field. The Dalton Municipal Airport, situated on 554 acres, is located 6 miles southeast of the Central Business District, adjacent to Airport Road.

The operating hours of the airport is 8 am. to 5 pm., 7 days a week. The airport can accommodate aircraft up to the size of a Gulfstream V. There are 28 hangars and four corporate/multiple use hangars that provide space for the storage of one jet, three turbo prop twins, four piston twins and 38 single engine aircraft currently based at the airport. The airport accommodates a variety of aviation related activities including recreational flying, police/law enforcement, corporate/business jets, ultra lights, and experimental aircraft. The airport has one runway (Runway 14/32) 5,496 feet long by 100 feet wide with high intensity runway lighting (HIRL), precision approach path indicators (PAPI), and a full parallel taxiway with medium-intensity taxiway lighting (MITL). The airport has a rotating beacon, segmented circle, wind cone, and an Automated Weather Observation System (AWOS). The airport has a non-directional beacon (NDB), and a geographical positioning system (GPS) approach to runway 14, a GPS approach to Runway 32 and an Instrumental Landing System (ILS) approach for runway 14. Current landside facilities and services include a full-service fixed-base operator (FBO) and maintenance facility with a fuel concession that provides AvGas and Jet A fuels. The airport has a 2,450 square foot terminal/administration building and 75 auto parking spaces, 46 hangar spaces, and 35 apron parking spaces. The airport also provides rental cars. A review of the airport's historic demand levels shows based aircraft decreased from 78 in 1990 to a current level of 47. By 2021, the airport's based aircraft are expected to reach 69. The airport has approximately 22,995 annual aircraft takeoffs and landings divided between local and itinerant operations. This figure is projected to increase to 26,081 by 2021 as shown in the table below which depicts current and forecasted demand levels at the airport.

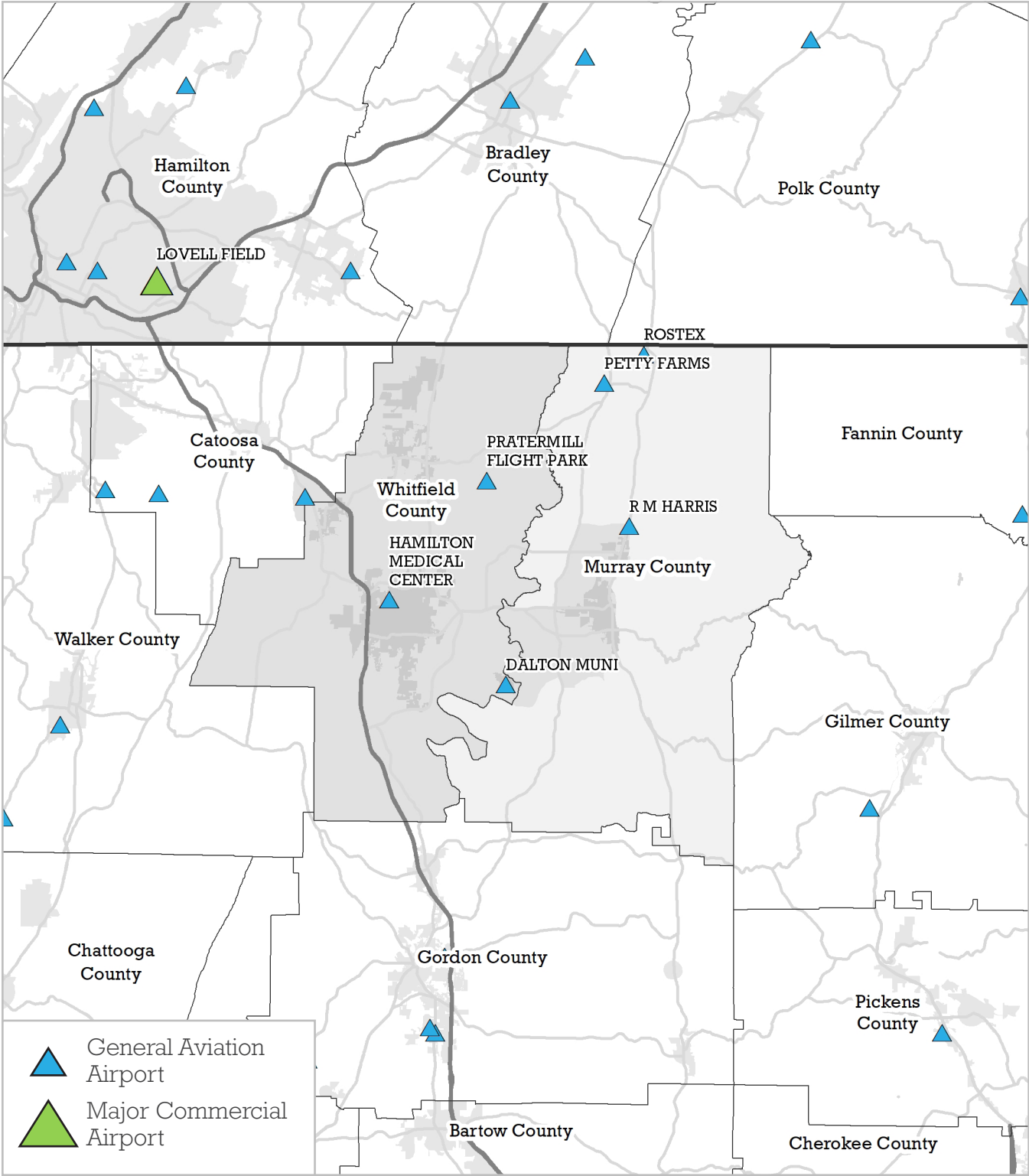
Historical and Forecasted Demand Levels at Dalton Municipal Airport

	2015	2021
Based Aircraft	47	69
Operations	22,995	26,081
Local	11,957	14,490
Itinerant	11,038	11,592
Enplanements	N/A	N/A
Demand/Capacity Ratio	10%	12%

Source: Dalton Municipal Airport



Aviation Facilities



Source: US Department of Transportation

Recent improvements to the Dalton Municipal Airport include:

- Completed a 500 ft runway and parallel taxiway extension for the Runway 14 end in 2004.
- Installed high intensity lighting on new runway extension and parallel taxiway.
- Replaced Automated Weather Observation System (AWOS), lighting system, and control vault.
- Installation of medium intensity approach lights for 2,400 feet off Runway 14.
- Installation of a glide slope antenna and related equipment on Runway 14.
- System was upgraded from Visual Approach Path Indicators (VASI) to PAPI.
- 20 hangars were replaced with new structures.
- Full perimeter security fencing has been completed.
- Replaced the underground avgas farm with an above ground self-serve system
- Acquired and cleared obstacles from approximately 70 acres of land north of the airport which consisted of 50 acres in navigation easements and 20 acres fee simple.



Dalton Municipal Airport Aerial



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Chapter 5

Evaluation and Implementation Plan

Project Development

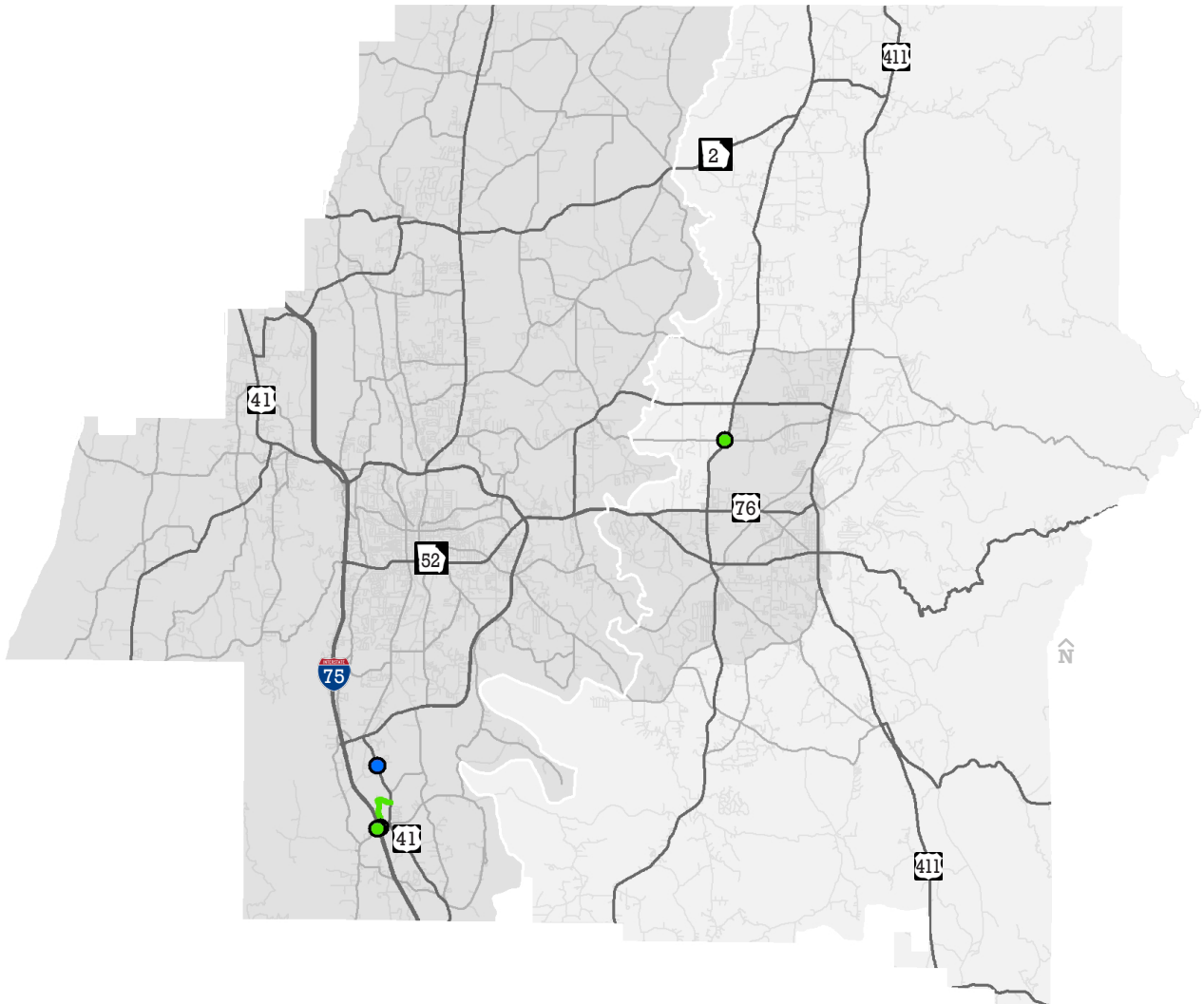
The analysis and findings discussed in Chapter 4 relate ultimately to the development of specific transportation initiatives for consideration in the Greater Dalton region. Fortunately, through previous regional and local transportation planning efforts there is a large legacy of transportation projects and initiatives already under consideration in the region. In that spirit, the map below documents projects that have been completed since the completion of the last LRTP.

Completed Projects

Project ID	Type	Name/Description
N/A	Roundabout	I-75 at Carbondale Road Interchange Improvements
N/A	Roundabout	SR 225 at Mt. Carmel Church Road Roundabout
N/A	Bridge	SR 3 at Little Swamp Creek
N/A	New Location	Carbondale Business Park Road

5 | Evaluation and Implementation Plan

Projects Completed since Previous LRTP



Projects by Type

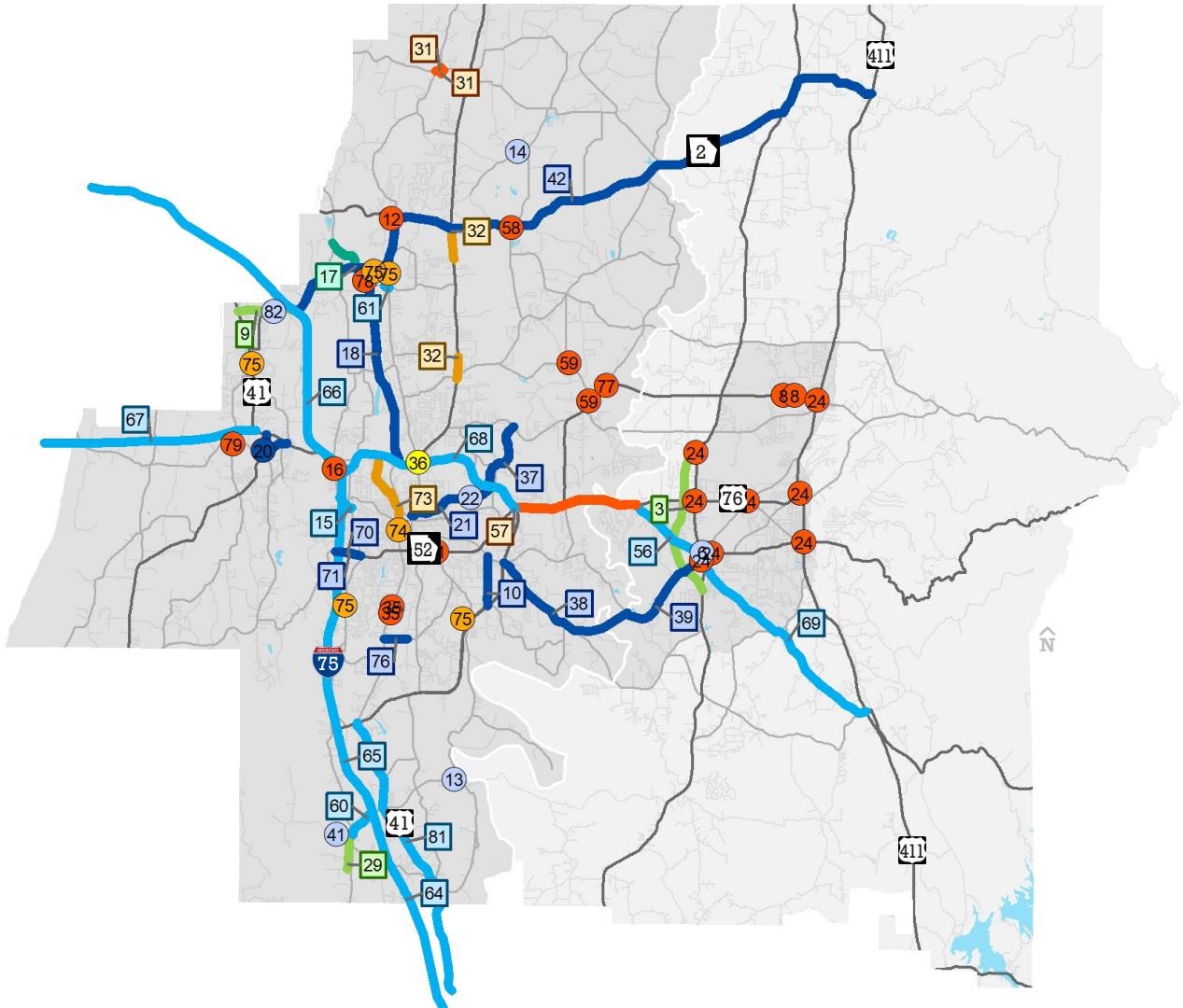
	Alignment			Operational
		Bicycle and/or Pedestrian		New Location
	Bridge			Study
	Grade Separation			Widening
		Intersection(s)		

Greater Dalton

2045 Metropolitan Transportation Plan

Starting with the remaining projects from the past LRTP and incorporating new ideas from the community and stakeholder input discussed in Chapter 4 as well as a handful of projects contemplated by local communities, a refined list of candidate transportation projects for consideration in the MTP was developed as indicated in the table and map below.

All Projects Considered in Greater Dalton 2045 Metropolitan Transportation Plan



Projects by Type

	Alignment		Operational
	Bicycle and/or Pedestrian		New Location
	Bridge		Study
	Grade Separation		Widening
	Intersection(s)		



5 | Evaluation and Implementation Plan

All Projects Considered in Greater Dalton 2045 Metropolitan Transportation Plan

Project ID	Project Type	Name/Location	Extents
2	Widening	SR 225 (GDOT PI 631550)	SR 52 ALT to Spring Place Smyrna Road
3	New Location	SR 225 Bypass (North & South) (GDOT PI 0003061)	SR 225 @ Imperial Blvd to SR 52/US76 & N to SR 225
6	Bridge	SR 52 ALT (GDOT PI 0007047)	Town Branch
8	Intersection	SR 286 (GDOT PI 0006064)	Cobb Road and at Tom Gregory Road
9	New Location	SR 201 Realignment & Improve SR 201	US 41 to I-75 Interchange
10	Operational	Hill Road	Eastbrook Road to Airport Road
11	Intersection	Riverbend Road	Walnut Avenue/US 76
12	Intersection	SR 2 at SR 201	SR 201
13	Bridge	Old Tilton Road	Swamp Creek
14	Bridge	McGaughey Chapel Road	Coahulla Creek
15	Widening	North Tibbs Road	College Drive to Shugart Road
16	Intersection	SR 3 (Chattanooga Road)	North Tibbs Road
17	Alignment	Reed Road	SR 201 to Lake Kathy
18	Multiple Intersections	Reed Road	SR 3 to SR 201
19	Operational	SR 201	SR 3 to Old LaFayette Road
20	Operational	Old LaFayette Road & Intersection w/ SR 201	SR 201 to SR 3
21	Operational	Underwood Street	Glenwood to Bypass
22	Bridge	Underwood Street	Mill Creek
24	Intersection	Intersection Improvements - 8 locations	Various
29	New Location	CR 688/Louise Lane Extension	Eber Road to Redwine Cove

Continued: All Projects Considered in Greater Dalton 2045 Metropolitan Transportation Plan

Project ID	Project Type	Name/Location	Extents
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road	City of Cohutta
32	Bike & Ped	SR 71	Beaverdale Road to Williams Road & Frontier Trail to Prater Mill Road
35	Intersection	South Dixie Highway	W. Industrial Boulevard at Foster Road
36	Grade Separation	North Dalton Bypass	At Cleveland Highway
37	Operational	Underwood Road	North Dalton Bypass to Dawnville Road
38	Operational	Airport Road	South Dalton Bypass to Tibbs Bridge
39	Operational	Airport Road/Brown Bridge Road/ New Hope Road	Tibbs Bridge to SR 225
41	Bridge	Redwine Cove Road	Swamp Creek
42	Operational	SR 201	I-75 Interchange to US 411
56	Widening	SR 52 Alt	SR 225 to SR 52/US 76
57	Intersection	US 76/Chatsworth Highway	SR 3 Bypass to US 76
58	Intersection	Lake Francis Road	SR 2/Prater Mill Road
59	Intersection	Dawnville-Beaverdale Road	SR 286 & Cherokee Estate Road
60	Widening	Carbondale Road	Redwine Cove Road to I-75 Interchange
61	Widening	Rauschengerg Road	Sonya Drive to Waring Road
67	Widening	SR 560/East-West Highway (GDOT PI 0004298)	SR 151 to SR 3
68	Widening	SR 560/East-West Highway (GDOT PI 0004299)	I-75 to SR 2
69	Widening	SR 560/East-West Highway (GDOT PI 0004300)	SR 3 to US 411
70	Study	Walnut Avenue Access Management Study	I-75 to Dug Gap Road



5 | Evaluation and Implementation Plan

Project ID	Project Type	Name/Location	Extents
71	Operational	Walnut Avenue Access Management Improvements	I-75 to Dug Gap Road
73	Bike & Ped	Thorton Avenue Sidewalks	SR 3 to Waugh Street
74	Bike & Ped	Downtown Sidewalk	Various
75	Bike & Ped	School Sidewalk Program	Various
77	Intersection	Dawnville Rd	At SR 286
81	Widening	SR 3/South Dixie Road (GDOT PI 632670)	SR 136/Gordon to South Dalton Bypass
82	Bridge	SR 201 (GDOT PI 0013816)	Tanyard Creek

Travel Demand Modeling Activities

Throughout the MTP process, travel demand modeling activities were conducted to consider different scenarios of potential future project combinations. The scenarios below were already discussed in Chapter 3 to identify areas of transportation need in the region.

- Base Year – A travel demand modeling scenario built to represent existing conditions. In the case of the RTP, this model was developed for the year 2015 and calibrated for accuracy against actual observed 2015 conditions.
- 2045 Do-Nothing – A scenario intended to indicate what would happen in the year 2045 if no new projects were constructed. This includes projects constructed since the year 2015.
- 2045 Existing + Committed – Scenario intended to indicate what would happen in the year 2045 if only those projects with funds committed for Right-of-Way or Construction were constructed.

Additional scenarios were developed later in the process to include:

- 2045 With STIP Projects – Scenario intended to indicate what would happen in the year 2045 if only those projects currently in the State Transportation Improvement Program (STIP) were constructed.
- 2045 Fiscally Constrained + Aspirations MTP – Scenario intended to indicate what would happen in the year 2045 if all candidate projects conceived for the year 2045 were constructed.
- 2045 Fiscally Constrained RTP – Scenario developed to represent conditions in the year 2045 if only those projects that are predicted to be funded were constructed.

It should be noted that as a tool designed for analyzing regional travel patterns, the travel demand model does have some limitations. The model is not sensitive to relatively-small changes such as intersection improvements, signal timing adjustments, and realignments. Likewise, its predictive capabilities are limited when analyzing any one particular location in the transportation network. Rather, the travel demand model is best utilized in understanding the overall condition of the transportation network and on major regional corridors traversing long distances. As a result, the travel demand model is most effective at determining the ability of major capacity adding transportation projects (such as widenings, new roadways, and new interchanges) to improve the transportation system. Therefore, the models were utilized to determine the relative success of the candidate transportation projects that add major capacity. The table below depicts which transportation projects were incorporated into each model scenario. Additionally, congestion for all six scenarios are depicted as Level of Service in the following maps. Finally, technical documentation related to the travel demand model is provided in **Appendix D**.



5 | Evaluation and Implementation Plan

All Projects by Year 2045 Modeling Scenario

Project ID	Project Type	Name/Location	Do Nothing	E+C	E+STIP	All Projects	MTP
2	Widening	SR 225 (GDOT PI 631550)					
3	New Location	SR 225 Bypass (North & South) (GDOT PI 0003061)					
6	Bridge	SR 52 ALT (GDOT PI 0007047)					
8	Intersection	SR 286 (GDOT PI 0006064)					
9	New Location	SR 201 Realignment & Improve SR 201					
10	Operational	Hill Road					
11	Intersection	Riverbend Road					
12	Intersection	SR 2 at SR 201					
13	Bridge	Old Tilton Road					
14	Bridge	McGaughey Chapel Road					
15	Widening	North Tibbs Road					
16	Intersection	SR 3 (Chattanooga Road)					
17	Alignment	Reed Road					
18	Multiple Intersections	Reed Road					
19	Operational	SR 201					
20	Operational	Old LaFayette Road & Intersection w/ SR 201					
21	Operational	Underwood Street					
22	Bridge	Underwood Street					
24	Intersection	Intersection Improvements - 8 locations					

Continued: All Projects by Year 2045 Modeling Scenario

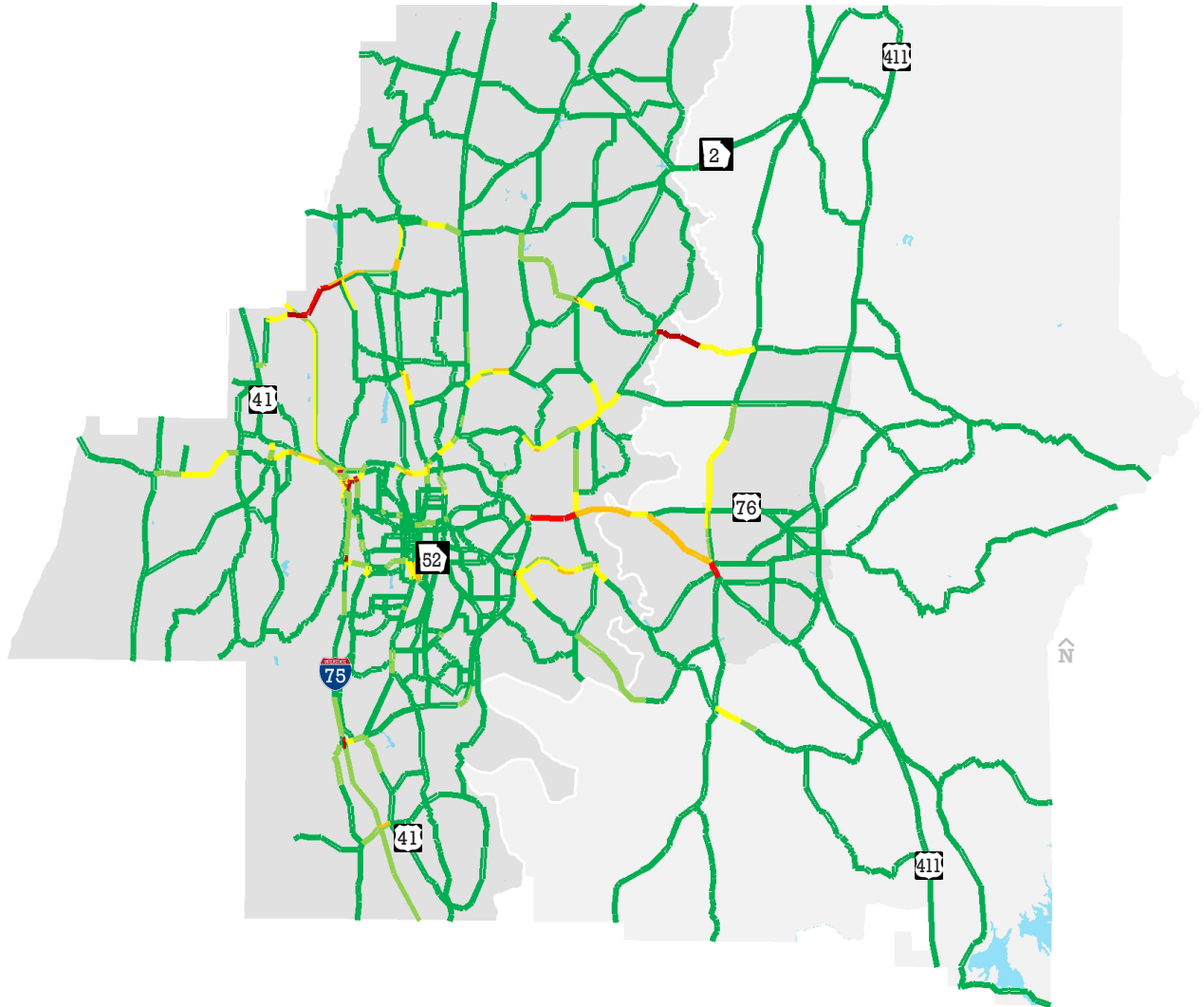
Project ID	Project Type	Name/Location	Do Nothing	E+C	E+STIP	All Projects	MTP
29	New Location	CR 688/Louise Lane Extension					
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road					
32	Bike & Ped	SR 71					
35	Intersection	South Dixie Highway					
36	Grade Separation	North Dalton Bypass					
37	Operational	Underwood Road					
38	Operational	Airport Road					
39	Operational	Airport Road/Brown Bridge Road/New Hope Road					
41	Bridge	Redwine Cove Road					
42	Operational	SR 201					
56	Widening	SR 52 Alt					
57	Intersection	US 76/Chatsworth Highway					
58	Intersection	Lake Francis Road					
59	Intersection	Dawnville-Beaverdale Road					
60	Widening	Carbondale Road					
61	Widening	Rauschengerg Road					
67	Widening	SR 560/East-West Highway (GDOT PI 0004298)					
68	Widening	SR 560/East-West Highway (GDOT PI 0004299)					
69	Widening	SR 560/East-West Highway (GDOT PI 0004300)					



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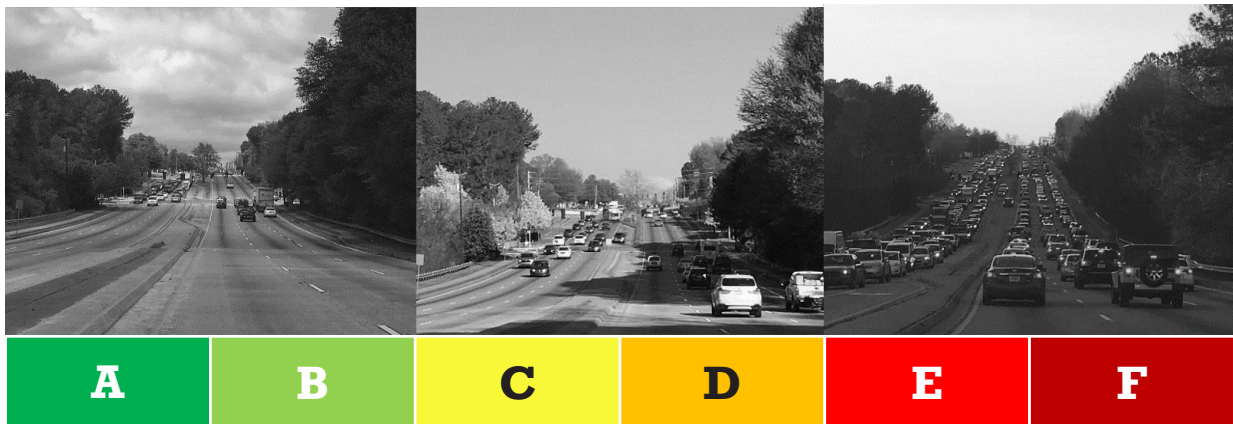
Project ID	Project Type	Name/Location	Do Nothing	E+C	E+STIP	All Projects	MTP
70	Study	Walnut Avenue Access Management Study					
71	Operational	Walnut Avenue Access Management Improvements					
73	Bike & Ped	Thorton Avenue Sidewalks					
74	Bike & Ped	Downtown Sidewalk					
75	Bike & Ped	School Sidewalk Program					
77	Intersection	Dawnville Rd					
81	Widening	SR 3/South Dixie Road (GDOT PI 632670)					
82	Bridge	SR 201 (GDOT PI 0013816)					

Base Year (2015) Scenario Travel Demand Model Level of Service



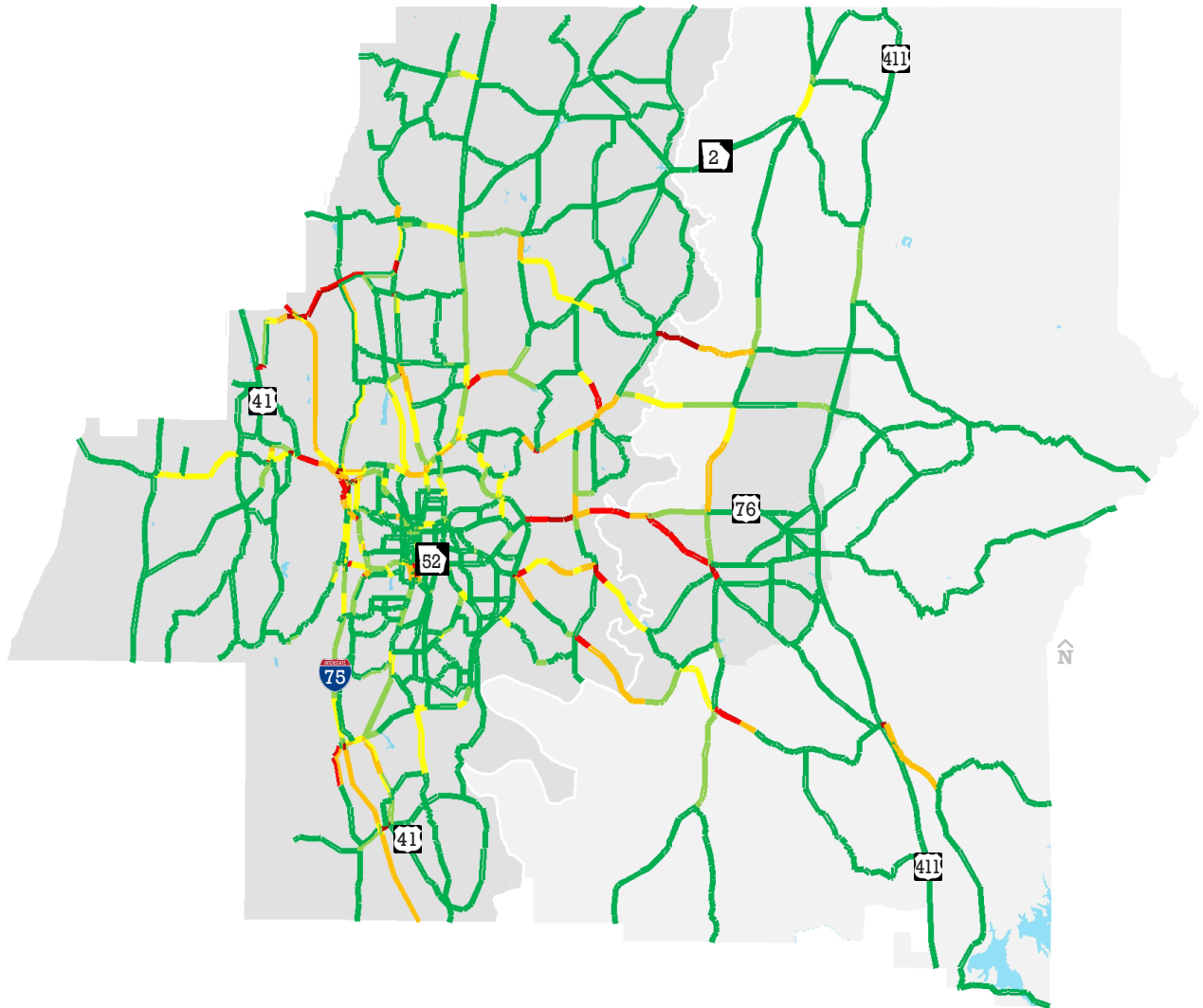
Source: Georgia Department of Transportation

Level of Service Conditions



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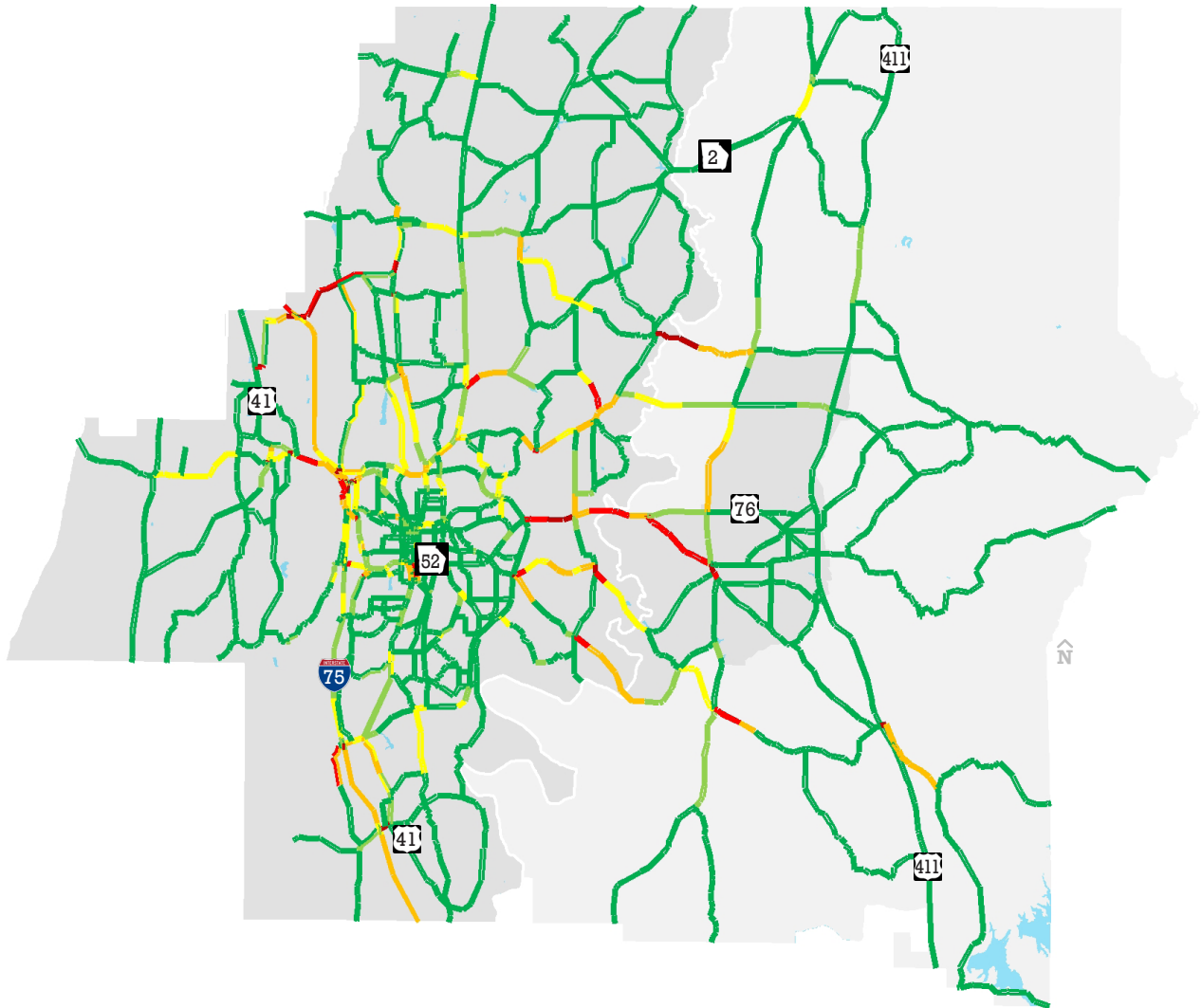
2045 Do Nothing Scenario Travel Demand Model Level of Service



Source: Georgia Department of Transportation

Note: In this case, the “Do Nothing” Scenario and “Existing+Committed” Scenario were identical, and thus have identical results

2045 Existing+Committed Scenario Travel Demand Model Level of Service



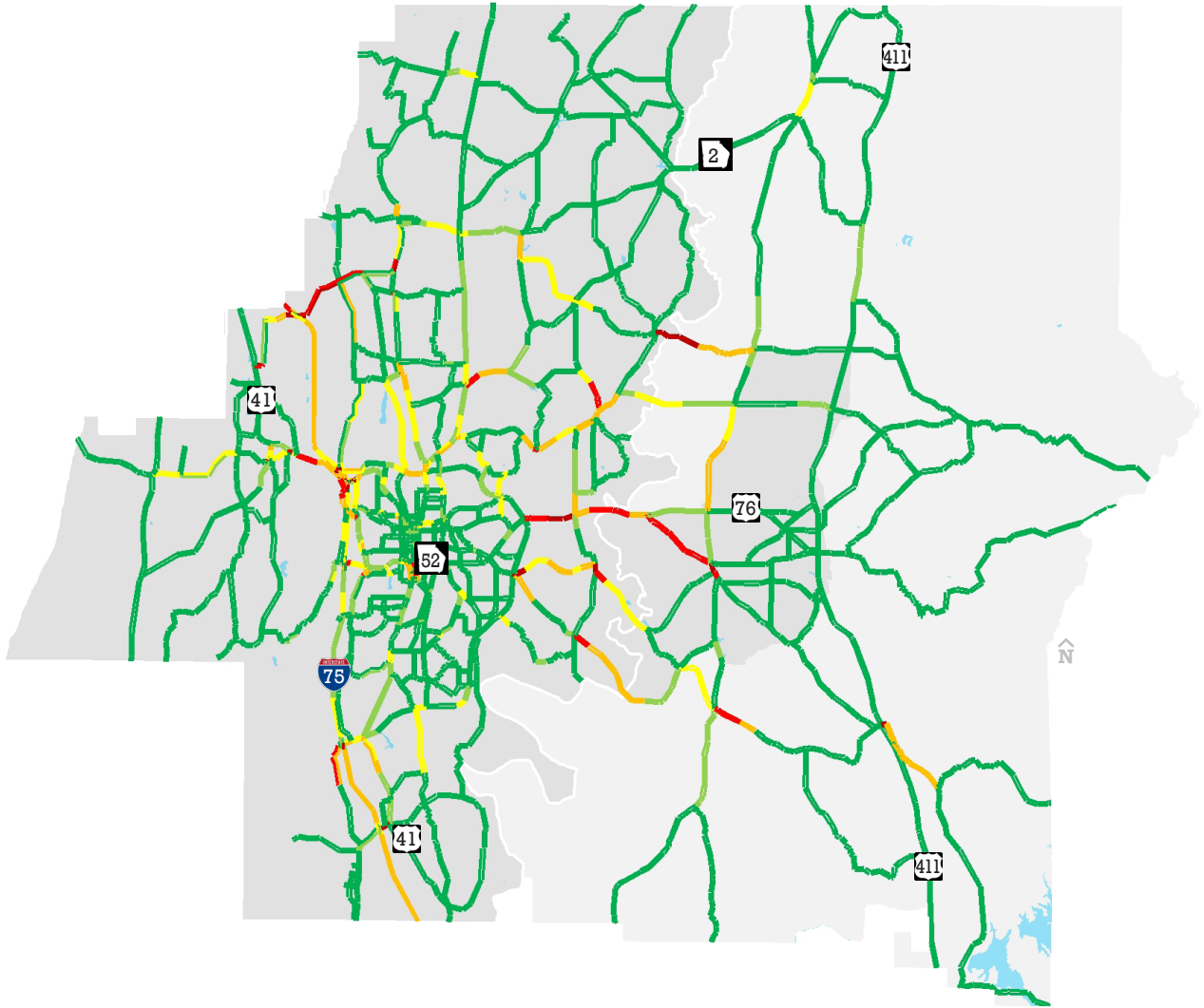
Source: Georgia Department of Transportation

Level of Service Conditions



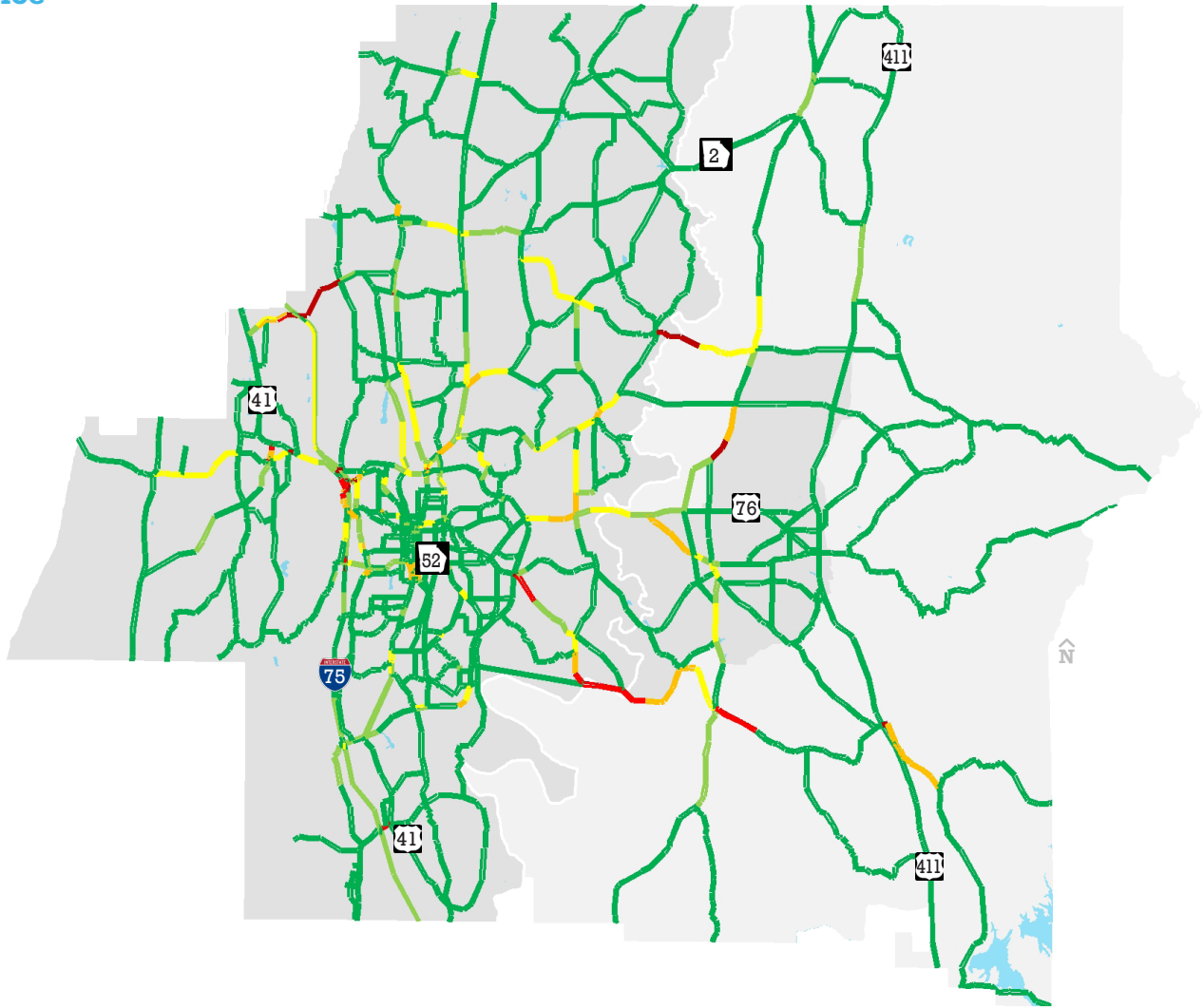
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2045 STIP Projects Scenario Travel Demand Model Level of Service



Source: Georgia Department of Transportation

2045 Fiscally Constrained+Aspirations Scenario Travel Demand Model Level of Service



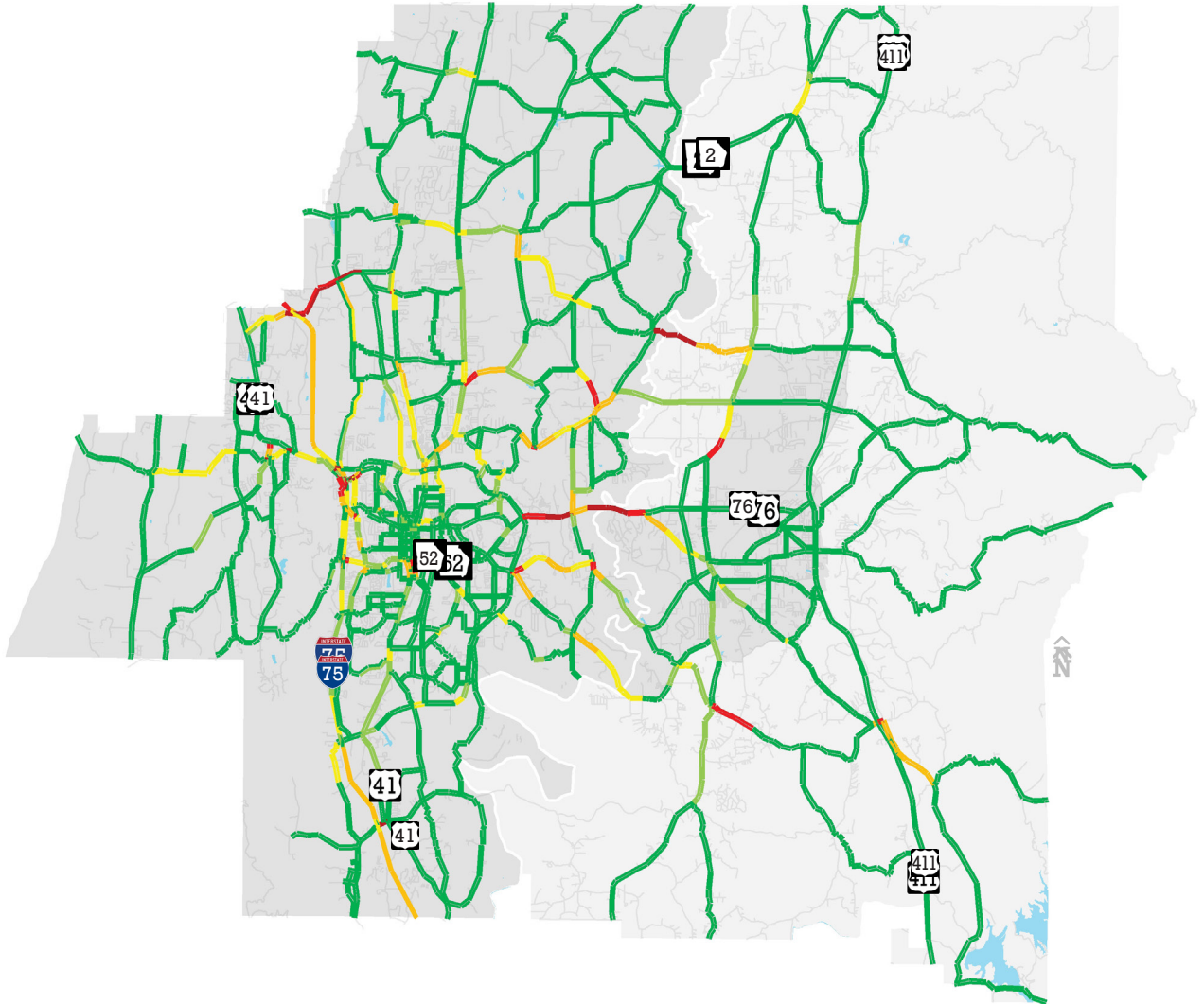
Source: Georgia Department of Transportation

Level of Service Conditions



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2045 Fiscally Constrained Travel Demand Model Level of Service



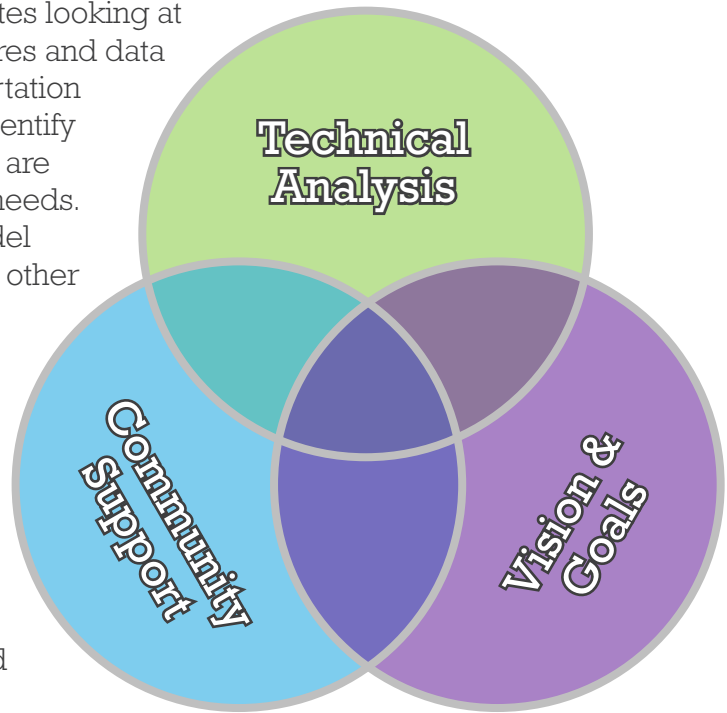
Source: Georgia Department of Transportation

Project Evaluation

As one of the purposes of the MTP is to prioritize and fiscally constrain (determine which projects are likely to be funded within the timeframe of the plan's consideration) the candidate list of projects, an evaluation process was developed to help guide decision making on which projects are likely to be the most beneficial for the Greater Dalton region.

This evaluation process was carefully considered, discussed early on with project stakeholders, and developed to reflect the various federal, state, and regional goals discussed in Chapter 3 in order to evaluate and consider the projects in an objective and equitable way. As a whole, the process considers three points of view:

- **Technical Analysis** – this component of the evaluation process incorporates looking at specific performance measures and data to understand where transportation needs are the greatest and identify which transportation projects are most likely to address those needs. While the travel demand model informs much of this process, other metrics used as well to relate directly to the measurable goals discussed in Chapter 3, reflecting a performance based component to the project evaluation.
- **Community Support** – this component of the evaluation process incorporates comments and input received during the MTP process to identify those projects that reflect stated community needs and concerns the strongest
- **Vision & Goals** – this component of the evaluation process incorporates the Transportation System Goals developed and ranked by the community to identify those projects that reflect stated systematic goals for the transportation system



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Technical Analysis

Several technical analyses were developed and implemented to evaluate the candidate transportation projects. The overall results of this component of the analysis is indicated in the table below. As different transportation project types have different potential metrics, purposes, and methods for analysis different analysis procedures were developed as discussed below. The total technical score has a maximum value of ten, regardless of project type.

Widenings, New Location, Intersection, Operational, and Study Projects

These projects incorporated four technical analyses procedures to evaluate the relative value of each candidate project. As such, each of these analyses is scored out of a maximum of 2.5 points.

Change in Corridor Congestion: In order to prioritize locations that are likely to experience the most dramatic decreases in congestion if a transportation project is introduced, the travel demand models were used to compare congestion between the 2045 Do-Nothing scenario (which effectively includes none of the candidate projects) and the 2045 Fiscally Constrained + Aspirations MTP scenario, which includes all candidate projects.

Number of Vehicles Served: Locations that are anticipated to serve the most amount of travelers in the future were prioritized by identifying the total number of travelers in the vicinity of each project location in the 2045 Fiscally Constrained + Aspirations MTP scenario in the travel demand model

Level of Existing Congestion: Locations that already suffer from some level of congestion were also prioritized by comparing the amount of congestion observed in the 2015 Existing travel demand model in the locations where projects are being considered.

Crashes: To incorporate potential safety benefits of projects, the volume of crashes in the vicinity of locations where projects are being considered were also compared with the logic that the introduction of new designs (as well as the engineering and study that goes along with these design) can be used to potentially mitigate safety challenges.

Technical Scores: Widening, New Locations, Intersections, Operations, and Study Projects

Project ID	Project Type	Name/Location	Existing Congestion	Change in Congestion	Vehicles Served	Vehicle Crashes	Total Score
2	Widening	SR 225	1.5	1.1	0.3	0.8	3.7
3	New Location	SR 225 Bypass (North & South)	1.6	1.4	0.7	1.0	4.7
8	Intersection	SR 286	0.9	0.7	0.2	0.9	2.1
9	New Location	SR 201 Realignment & Improve SR 201	1.5	1.4	0.7	0.7	4.3
10	Operational	Hill Road	0.4	1.3	0.3	0.5	2.6
11	Intersection	Riverbend Road	0.7	0.0	0.3	0.7	1.7
12	Intersection	SR 2 at SR 201	0.8	0.8	0.2	0.3	2.2
15	Widening	North Tibbs Road	1.6	1.5	1.3	1.0	5.4
16	Intersection	SR 3 (Chattanooga Road)	1.6	1.5	0.6	1.0	4.8
18	Multiple Intersections	Reed Road	1.2	1.3	0.6	1.0	4.1
19	Operational	SR 201	1.0	0.8	0.3	0.6	2.7
20	Operational	Old LaFayette Road & Intersection w/ SR 201	1.6	1.6	0.5	0.6	4.4
21	Operational	Underwood Street	0.8	1.0	0.6	1.5	3.8
24	Intersection	Intersection Improvements - 8 locations	0.8	1.0	0.8	1.3	3.8
29	New Location	CR 688/Louise Lane Extension	0.3	0.0	0.2	0.3	0.8
35	Intersection	South Dixie Highway	1.8	1.4	0.5	1.4	5.2
37	Operational	Underwood Road	1.0	1.4	0.4	0.6	3.4
38	Operational	Airport Road	0.8	0.0	0.8	0.9	2.6
39	Operational	Airport Road/Brown Bridge Road/New Hope Road	0.9	0.0	0.5	0.4	1.9
42	Operational	SR 201	2.1	1.4	0.7	0.8	5.0



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Project ID	Project Type	Name/Location	Existing Congestion	Change in Congestion	Vehicles Served	Vehicle Crashes	Total Score
56	Widening	SR 52 Alt	1.2	1.3	0.4	0.6	3.5
57	Intersection	US 76/Chatsworth Highway	2.2	1.4	0.6	0.8	4.9
58	Intersection	Lake Francis Road	1.0	1.3	0.2	0.3	2.9
59	Intersection	Dawnville-Beaverdale Road	1.7	1.8	0.3	0.4	4.2
60	Widening	Carbondale Road	1.6	1.8	0.9	0.6	4.8
61	Widening	Rauschengerg Road	0.6	0.8	0.2	0.3	1.8
67	Widening	SR 560/East-West Highway	0.8	0.4	0.5	0.7	2.4
68	Widening	SR 560/East-West Highway	1.5	1.3	0.9	1.8	5.4
69	Widening	SR 560/East-West Highway	0.5	0.9	0.5	0.8	2.8
70	Study	Walnut Avenue Access Management Study	1.4	1.4	1.1	1.6	5.4
71	Operational	Walnut Avenue Access Management Improvements	1.4	1.4	1.1	1.6	5.4
77	Intersection	Dawnville Rd	1.7	0.8	0.2	0.4	3.2
81	Widening	SR 3/South Dixie Road	0.9	1.9	0.5	0.5	3.7

Bridge Projects

Bridge projects were analyzed using the two analysis techniques described below. Each of these were scored out of five possible points.

Number of Vehicles Served: Locations that are anticipated to serve the most amount of travelers in the future were prioritized by identifying the total number of travelers crossing each bridge location in the 2045 Fiscally Constrained + Aspirations MTP scenario in the travel demand model

Bridge Sufficiency Rating: Using the bridge sufficiency ratings provided by GDOT, weighted scores were used to compare and prioritize needs at different bridge locations.

Technical Scores: Bridge Projects

Project ID	Project Type	Name/Location	Bridge Sufficiency	Vehicles Served	Total Score
6	Bridge	SR 52 ALT	0.0	3.7	3.7
13	Bridge	Old Tilton Road	5.0	0.1	5.1
14	Bridge	McGaughey Chapel Road	3.8	0.3	4.1
22	Bridge	Underwood Street	3.0	5.0	8.0
41	Bridge	Redwine Cove Road	0.0	0.2	0.2
82	Bridge	SR 201	0.0	0.0	0.0



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Bicycle and Pedestrian Improvements

Bicycle and Pedestrian projects were analyzed using the five analysis techniques described below, each worth a maximum of two points:

Crashes: To incorporate potential safety benefits of bicycle and pedestrian projects, the volume of crashes involving bicyclist and pedestrians the vicinity of locations where projects are being considered were compared.

Accessibility to Population Density: Acknowledging that areas in the Greater Dalton region that have more population density are likely to have both more bicycle and/or pedestrian need as well as more appropriateness in land use and urban character to introduce bicycle and/or pedestrian facilities, the population density of the areas surrounding candidate bicycle and pedestrian projects were compared.

Accessibility to Employment Density: Similarly, locations with more accessibility to employment were prioritized.

Accessibility to Households With No Vehicles: Locations where Census data tell us that there are more households without access to vehicles were prioritized acknowledging these communities are likely to have an acute need for bicycle and pedestrian facilities.

Level of Existing Congestion: Locations that already suffer from some level of vehicular congestion were also prioritized by comparing the amount of congestion observed in the 2015 Existing travel demand model in the locations where projects are being considered. The logic is that locations that experience higher amounts of vehicle congestion are more likely to experience mode shifts to pedestrian and bicycle travel.

Technical Scores: Bicycle and Pedestrian Projects

Project ID	Project Type	Name/Location	Bike/Ped Crashes	Population Density	Employment Density	Households with No Vehicle	Existing Congestion	Total Score
31	Bike & Ped Intersection	Chattanooga Road/Wolfe Street & Red Clay Road	0.0	0.4	0.3	0.1	0.5	1.3
32	Bike & Ped	SR 71	0.6	1.2	0.5	0.2	1.9	4.4
73	Bike & Ped	Thorton Avenue Sidewalks	2.0	2.0	2.0	0.9	1.7	8.6
74	Bike & Ped	Downtown Sidewalk	0.9	1.5	0.9	2.0	1.0	6.2
75	Bike & Ped	School Sidewalk Program	0.0	1.0	0.4	0.3	2.0	3.8

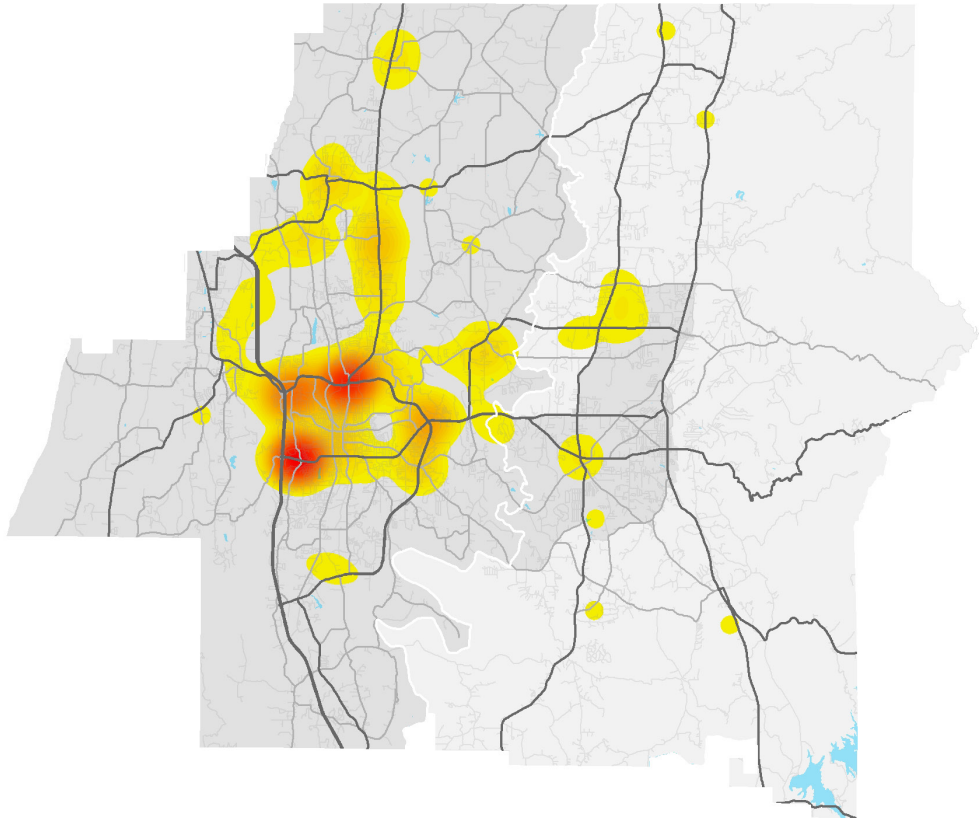
Community Engagement

Each of the candidate projects were ranked and analyzed based on the relative amount of community input received in the vicinity of their locations. Using spatial analysis, a quarter mile capture area was created around each project and compared to the geographic locations indicated by the community and stakeholders from the community and stakeholder meetings and online interactive map which were depicted in Chapter 4 on Page X and shown here again for convenience.

Projects were ranked as shown in the table below and using the following logic:

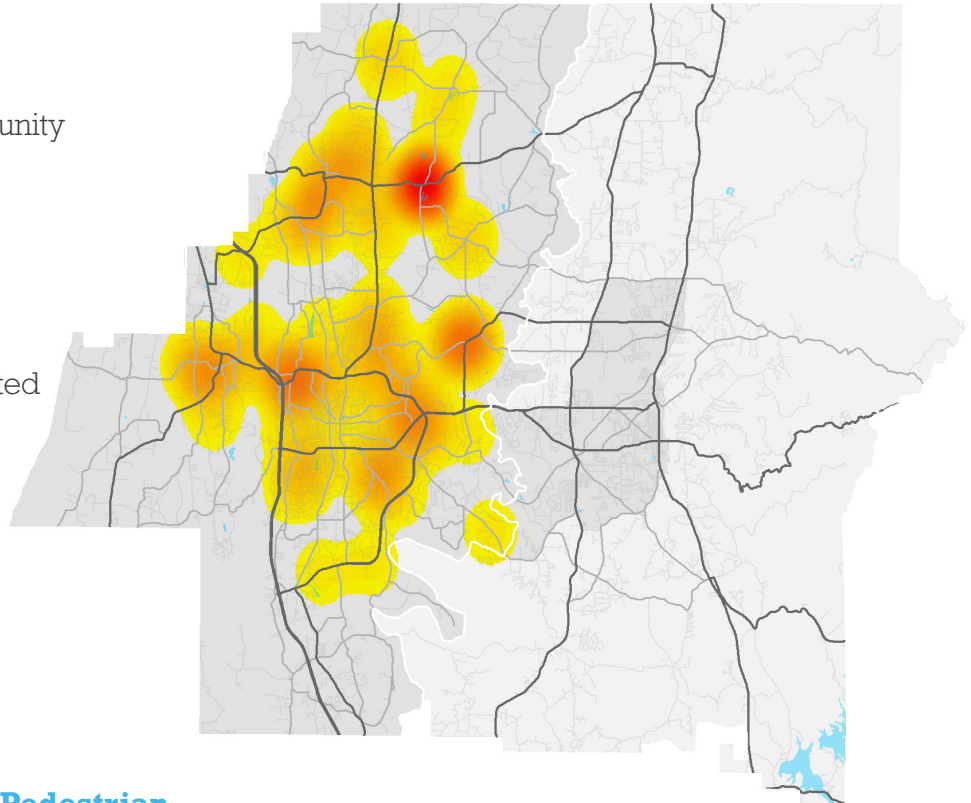
- Comments identified as “Congested Locations” were used to score the relative volume of comments for all projects with the exception of Bicycle and Pedestrian Projects
- Comments identified as “Other Comments” were used to score the relative volume of comments for all projects with the exception of Bicycle and Pedestrian Projects
- Comments identified as “Safety” were used to score the relative volume of comments for all project types
- Comments identified as “Bicyclist Need” or “Pedestrian Need” were used to score the relative volume of comments for Bicycle and Pedestrian Projects

“Congested Locations” and “Other Comments” Map Responses

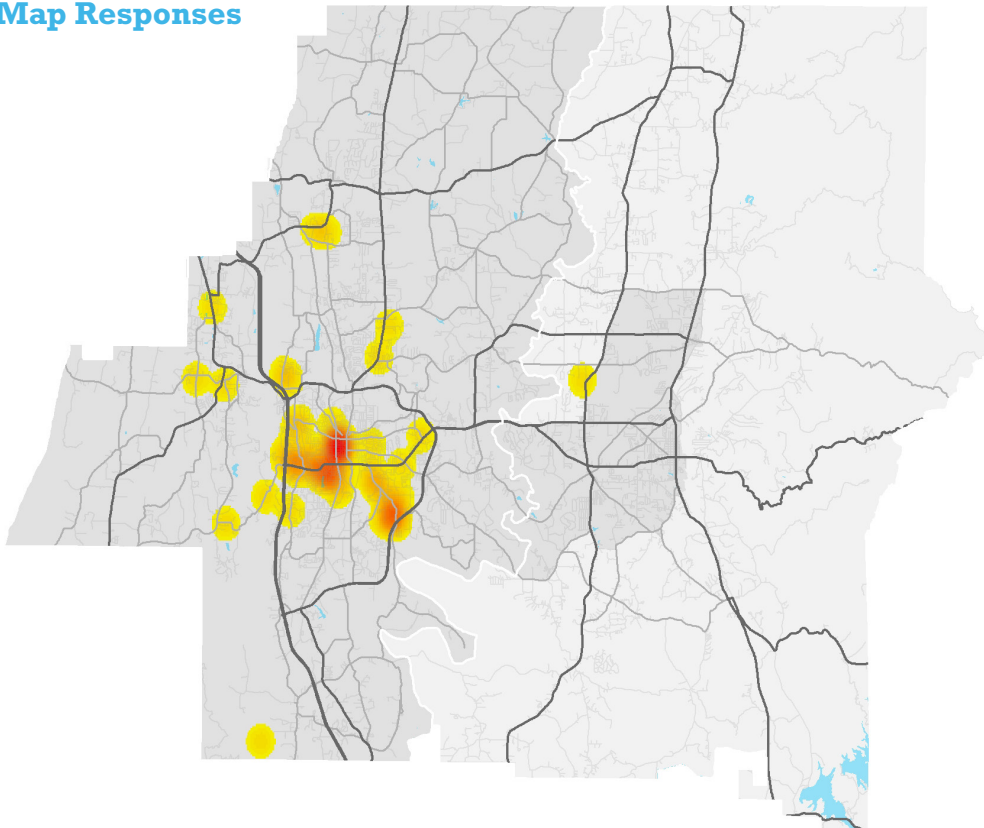


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“Safety” Map Responses



“Bicyclists Need” and “Pedestrian Need” Map Responses



Community Engagement Scores

Project ID	Project Type	Name/Location	Pedestrian Need	Bicyclist Need	Congested Location	Other Concern	Safety	Total Engagement Score	Weighted Engagement Score
2	Widening	SR 225 (GDOT PI 631550)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	New Location	SR 225 Bypass (North & South) (GDOT PI 0003061)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Bridge	SR 52 ALT (GDOT PI 0007047)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Intersection	SR 286 (GDOT PI 0006064)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	New Location	SR 201 Realignment & Improve SR 201	0.0	0.0	0.0	0.0	2.2	2.2	0.9
10	Operational	Hill Road	0.0	0.0	0.0	0.0	3.1	3.1	1.3
11	Intersection	Riverbend Road	0.0	0.0	3.3	0.0	0.0	3.3	1.4
12	Intersection	SR 2 at SR 201	0.0	0.0	3.3	5.0	3.8	12.1	5.0
13	Bridge	Old Tilton Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Bridge	McGaughey Chapel Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Widening	North Tibbs Road	0.0	0.0	0.0	7.1	2.2	9.3	3.8
16	Intersection	SR 3 (Chattanooga Road)	0.0	0.0	3.3	0.0	0.0	3.3	1.4
17	Alignment	Reed Road	0.0	0.0	0.0	0.0	3.1	3.1	1.3
18	Multiple Intersections	Reed Road	0.0	0.0	5.3	5.0	5.3	15.6	6.4
19	Operational	SR 201	0.0	0.0	0.0	0.0	2.2	2.2	0.9
20	Operational	Old LaFayette Road & Intersection w/ SR 201	0.0	0.0	0.0	0.0	3.8	3.8	1.5
21	Operational	Underwood Street	0.0	0.0	2.4	0.0	0.0	2.4	1.0



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Project ID	Project Type	Name/Location	Pedestrian Need	Bicyclist Need	Congested Location	Other Concern	Safety	Total Engagement Score	Weighted Engagement Score
22	Bridge	Underwood Street	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	Intersection	Intersection Improvements - 8 locations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	New Location	CR 688/Louise Lane Extension	0.0	0.0	0.0	5.0	0.0	5.0	2.0
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	Bike & Ped	SR 71	0.0	0.0	0.0	0.0	3.8	3.8	1.5
35	Intersection	South Dixie Highway	0.0	0.0	8.8	7.1	3.1	19.0	7.8
36	Grade Separation	North Dalton Bypass	0.0	0.0	8.2	5.0	2.2	15.3	6.3
37	Operational	Underwood Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Operational	Airport Road	0.0	0.0	4.1	7.1	3.1	14.2	5.8
39	Operational	Airport Road/Brown Bridge Road/New Hope Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Bridge	Redwine Cove Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Operational	SR 201	0.0	0.0	0.0	5.0	3.8	8.8	3.6
56	Widening	SR 52 Alt	0.0	0.0	4.1	5.0	6.2	15.3	6.2
57	Intersection	US 76/Chatsworth Highway	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Intersection	Lake Francis Road	0.0	0.0	2.4	0.0	7.2	9.6	3.9
59	Intersection	Dawnville-Beaverdale Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Widening	Carbondale Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Continued: Community Engagement Scores

Project ID	Project Type	Name/Location	Pedestrian Need	Bicyclist Need	Congested Location	Other Concern	Safety	Total Engagement Score	Weighted Engagement Score
61	Widening	Rauschengerg Road	0.0	0.0	2.4	5.0	0.0	7.4	3.0
67	Widening	SR 560/East-West Highway (GDOT PI 0004298)	0.0	0.0	0.0	0.0	2.2	2.2	0.9
68	Widening	SR 560/East-West Highway (GDOT PI 0004299)	0.0	0.0	10.0	8.7	5.8	24.4	10.0
69	Widening	SR 560/East-West Highway (GDOT PI 0004300)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	Study	Walnut Avenue Access Management Study	0.0	0.0	9.4	7.1	2.2	18.7	7.6
71	Operational	Walnut Avenue Access Management Improvements	0.0	0.0	9.4	7.1	2.2	18.7	7.6
73	Bike & Ped	Thorton Avenue Sidewalks	6.1	10.0	0.0	0.0	2.2	18.3	7.5
74	Bike & Ped	Downtown Sidewalk	7.9	10.0	0.0	0.0	0.0	17.9	7.3
75	Bike & Ped	School Sidewalk Program	10.0	0.0	0.0	0.0	3.8	13.8	5.6
77	Intersection	Dawnville Rd	0.0	0.0	0.0	5.0	5.8	10.8	4.4
81	Widening	SR 3/South Dixie Road (GDOT PI 623670)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	Bridge	SR 201 (GDOT PI 0013816)	0.0	0.0	0.0	0.0	2.2	2.2	0.9

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Transportation System Goals

The transportation system goals developed with the stakeholder group were also used to rank the relative value of projects based on each project's ability to support the system goals. The relative importance of these goals as indicated by the community through the community meetings and online survey were used to weight the importance of each goal category as described below, with a total possible score of 100 percent.

- Projects that “Address North-South Travel” received a weighted score of 20 percent
- Projects that “Encourage Downtown Reinvestments” received a weighted score of 16 percent
- Projects that “Accommodate Freight Traffic” received a weighted score of 15 percent
- Projects that “Enhance Connections to I-75” received a weighted score of 10 percent
- Projects that “Provide Connectivity to Neighboring Communities” received a weighted score of 9 percent
- Projects that “Develop an Active Mode Network for the Region” received a weighted score of 9 percent
- Project that “Consider Opportunities for Future Transit” received a weighted score of 7 percent

Acknowledging that it would be nearly impossible for a single project to meet all of these goals, the analysis results were further weighted to that the highest observed score received the total amount of points allotted as shown in the table.

Transportation System Goals Scores

Project ID	Project Type	Name/Location	Address North-South Travel	Encourage Downtown Reinvestments	Accommodate Freight Traffic	Enhance Connections to I-75	Provide Connectivity to Neighboring Communities	Develop an Active Mode Network for the Region	Consider Opportunities for Future Transit	Total Goals Score	Weighted Goals Score
2	Widening	SR 225 (GDOT PI 631550)	1			1				0.4	5.8
3	New Location	SR 225 Bypass (North & South) (GDOT PI 0003061)	1			1				0.4	5.8
6	Bridge	SR 52 ALT (GDOT PI 0007047)	1		1					0.4	5.8

Continued: Transportation System Goals Scores

Project ID	Project Type	Name/Location	Address North-South Travel	Encourage Downtown Reinvestments	Accommodate Freight Traffic	Enhance Connections to I-75	Provide Connectivity to Neighboring Communities	Develop an Active Mode Network for the Region	Consider Opportunities for Future Transit	Total Goals Score	Weighted Goals Score
8	Intersection	SR 286 (GDOT PI 0006064)			1					0.2	2.5
9	New Location	SR 201 Realignment & Improve SR 201			1	1	1			0.4	6.7
10	Operational	Hill Road	1							0.2	3.3
11	Intersection	Riverbend Road			1					0.2	2.5
12	Intersection	SR 2 at SR 201	1			1	1			0.5	7.5
13	Bridge	Old Tilton Road	1							0.2	3.3
14	Bridge	McGaughey Chapel Road			1					0.2	2.5
15	Widening	North Tibbs Road			1		1			0.3	4.2
16	Intersection	SR 3 (Chattanooga Road)			1	1	1			0.4	6.7
17	Alignment	Reed Road	1							0.2	3.3
18	Multiple Intersections	Reed Road	1			1		1		0.4	7.3
19	Operational	SR 201	1			1				0.4	5.8
20	Operational	Old LaFayette Road & Intersection w/ SR 201			1					0.2	2.5
21	Operational	Underwood Street		1	1					0.3	5.2
22	Bridge	Underwood Street	1	1						0.4	6.0



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Project ID	Project Type	Name/Location	Address North-South Travel	Encourage Downtown Reinvestments	Accommodate Freight Traffic	Enhance Connections to I-75	Provide Connectivity to Neighboring Communities	Develop an Active Mode Network for the Region	Consider Opportunities for Future Transit	Total Goals Score	Weighted Goals Score
24	Intersection	Intersection Improvements - 8 locations	1		1					0.4	5.8
29	New Location	CR 688/Louise Lane Extension	1			1	1			0.5	7.5
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road							1	0.1	1.5
32	Bike & Ped	SR 71							1	0.1	1.5
35	Intersection	South Dixie Highway	1			1				0.4	5.8
36	Grade Separation	North Dalton Bypass	1							0.2	3.3
37	Operational	Underwood Road	1							0.2	3.3
38	Operational	Airport Road			1	1		1		0.4	6.5
39	Operational	Airport Road/Brown Bridge Road/New Hope Road			1	1		1		0.4	6.5
41	Bridge	Redwine Cove Road			1					0.2	2.5
42	Operational	SR 201			1	1	1			0.4	6.7
56	Widening	SR 52 Alt	1		1	1	1			0.6	10.0
57	Intersection	US 76/Chatsworth Highway			1	1		1		0.4	6.5
58	Intersection	Lake Francis Road	1							0.2	3.3

Continued: Transportation System Goals Scores

Project ID	Project Type	Name/Location	Address North-South Travel	Encourage Downtown Reinvestments	Accommodate Freight Traffic	Enhance Connections to I-75	Provide Connectivity to Neighboring Communities	Develop an Active Mode Network for the Region	Consider Opportunities for Future Transit	Total Goals Score	Weighted Goals Score
59	Intersection	Dawnville-Beaverdale Road	1							0.2	3.3
60	Widening	Carbondale Road			1	1	1			0.4	6.7
61	Widening	Rauschengerg Road			1					0.2	2.5
67	Widening	SR 560/East-West Highway (GDOT PI 0004298)			1	1	1			0.4	6.7
68	Widening	SR 560/East-West Highway (GDOT PI 0004299)			1	1	1			0.4	6.7
69	Widening	SR 560/East-West Highway (GDOT PI 0004300)			1	1	1			0.4	6.7
70	Study	Walnut Avenue Access Management Study			1	1	1			0.4	6.7
71	Operational	Walnut Avenue Access Management Improvements			1	1	1			0.4	6.7
73	Bike & Ped	Thorton Avenue Sidewalks	1	1					1	0.5	7.5
74	Bike & Ped	Downtown Sidewalk		1					1	0.3	4.2
75	Bike & Ped	School Sidewalk Program							1	0.1	1.5
77	Intersection	Dawnville Rd			1					0.2	2.5



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Project ID	Project Type	Name/Location	Address North-South Travel	Encourage Downtown Reinvestments	Accommodate Freight Traffic	Enhance Connections to I-75	Provide Connectivity to Neighboring Communities	Develop an Active Mode Network for the Region	Consider Opportunities for Future Transit	Total Goals Score	Weighted Goals Score
81	Widening	SR 3/South Dixie Road (GDOT PI 632670)	1				0.5			0.4	6.6
82	Bridge	SR 201 (GDOT PI 0013816)			1	1	1			0.4	6.7

Overall Evaluation Results

These three categories were summed together evenly to develop an overall evaluation score for each candidate project as shown in the table below.

Transportation System Goals Scores

Project ID	Project Type	Name/Location	Technical Score	Engagement Score	Goals Score	Overall Score
2	Widening	SR 225 (GDOT PI 631550)	3.7	0.0	5.8	9.6
3	New Location	SR 225 Bypass (North & South) (GDOT PI 0003061)	4.7	0.0	5.8	10.5
6	Bridge	SR 52 ALT (GDOT PI 0007047)	2.4	0.0	5.8	8.3
8	Intersection	SR 286 (GDOT PI 0006064)	3.7	0.0	2.5	6.2
9	New Location	SR 201 Realignment & Improve SR 201	4.3	0.9	6.7	11.9
10	Operational	Hill Road	2.6	1.3	3.3	7.1
11	Intersection	Riverbend Road	1.7	1.4	2.5	5.6
12	Intersection	SR 2 at SR 201	2.2	5.0	7.5	14.6
13	Bridge	Old Tilton Road	5.1	0.0	3.3	8.5
14	Bridge	McGaughey Chapel Road	4.1	0.0	2.5	6.6
15	Widening	North Tibbs Road	5.4	3.8	4.2	13.3
16	Intersection	SR 3 (Chattanooga Road)	4.8	1.4	6.7	12.8
17	Alignment	Reed Road	3.1	1.3	3.3	7.7
18	Multiple Intersections	Reed Road	4.1	6.4	7.3	17.9
19	Operational	SR 201	2.7	0.9	5.8	9.4
20	Operational	Old LaFayette Road & Intersection w/ SR 201	4.4	1.5	2.5	8.4



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Project ID	Project Type	Name/Location	Technical Score	Engagement Score	Goals Score	Overall Score
21	Operational	Underwood Street	3.8	1.0	5.2	9.9
22	Bridge	Underwood Street	8.0	0.0	6.0	14.0
24	Intersection	Intersection Improvements - 8 locations	3.8	0.0	5.8	9.7
29	New Location	CR 688/Louise Lane Extension	0.8	2.0	7.5	10.3
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road	1.3	0.0	1.5	2.8
32	Bike & Ped	SR 71	4.4	1.5	1.5	7.5
35	Intersection	South Dixie Highway	5.2	7.8	5.8	18.8
36	Grade Separation	North Dalton Bypass	4.7	6.3	3.3	14.3
37	Operational	Underwood Road	3.4	0.0	3.3	6.8
38	Operational	Airport Road	2.6	5.8	6.5	14.9
39	Operational	Airport Road/Brown Bridge Road/New Hope Road	1.9	0.0	6.5	8.4
41	Bridge	Redwine Cove Road	0.2	0.0	2.5	2.7
42	Operational	SR 201	5.0	3.6	6.7	15.2
56	Widening	SR 52 Alt	3.5	6.2	10.0	19.7
57	Intersection	US 76/Chatsworth Highway	4.9	0.0	6.5	11.4
58	Intersection	Lake Francis Road	2.9	3.9	3.3	10.1
59	Intersection	Dawnville-Beaverdale Road	4.2	0.0	3.3	7.5
60	Widening	Carbondale Road	4.8	0.0	6.7	11.5

Continued: Transportation System Goals Scores

Project ID	Project Type	Name/Location	Technical Score	Engagement Score	Goals Score	Overall Score
61	Widening	Rauschengerg Road	1.8	3.0	2.5	7.3
67	Widening	SR 560/East-West Highway (GDOT PI 0004298)	2.4	0.9	6.7	10.0
68	Widening	SR 560/East-West Highway (GDOT PI 0004299)	5.4	10.0	6.7	22.1
69	Widening	SR 560/East-West Highway (GDOT PI 0004300)	2.8	0.0	6.7	9.4
70	Study	Walnut Avenue Access Management Study	5.4	7.6	6.7	19.7
71	Operational	Walnut Avenue Access Management Improvements	5.4	7.6	6.7	19.7
73	Bike & Ped	Thorton Avenue Sidewalks	8.6	7.5	7.5	23.6
74	Bike & Ped	Downtown Sidewalk	6.2	7.3	4.2	17.7
75	Bike & Ped	School Sidewalk Program	3.8	5.6	1.5	10.9
77	Intersection	Dawnville Rd	3.2	4.4	2.5	10.1
81	Widening	SR 3/South Dixie Road (GDOT PI 632670)	3.7	0.0	6.6	10.3
82	Bridge	SR 201 (GDOT PI 0013816)	4.3	0.9	6.7	11.9



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Financial Considerations

The RTP process requires the development of a financial plan to demonstrate that the recommendations can be implemented over the life of the plan (23 CFR 450.322). The primary elements of this financial plan include costs and revenue needed to operate and maintain Federal-aid highways as well as the cost for implementing capital investments.

Federal & State Funding

The major source of revenue for roadway projects from the federal government is administered through the US. Department of Transportation from the Highway Trust Fund (HTF). Historically, the HTF has been funded by a user fee tax on fuel (18.4 cents a gallon for gasoline and 24.4 cents for diesel) and has historically been sufficient in funding the ongoing maintenance and construction of the transportation system.

Historically, Georgia's primary source of funding for transportation has been the Motor Vehicle Fuel Tax (MVFT). The 2015 passage of House Bill 170 creating new state level revenue streams for transportation by increasing the MVFT, re-structuring vehicle registration fees, and imposing fees on tourism through hotel stays. In addition to commitments to state owned and maintained facilities, GDOT administers grants through the Local Maintenance and Improvement Grant (LMIG).

Local Funding

There is currently no dedicated local funding source in either Whitfield or Murray Counties for transportation. Special Purpose Local Option Sales Tax (SPLOST) revenues have been used in the past to fund specific transportation initiatives but currently there are no SPLOST mechanisms approved by local voters.

Anticipated Funding

	Capital Estimate	Maintenance Estimate	Total Estimate
2020	\$10,287,289	\$3,343,457	\$13,630,746
2021	\$10,390,162	\$3,376,892	\$13,767,054
2022	\$10,494,064	\$3,410,661	\$13,904,724
2023	\$10,599,004	\$3,444,767	\$14,043,772
2024	\$10,704,994	\$3,479,215	\$14,184,209
2025	\$10,812,044	\$3,514,007	\$14,326,051
2026	\$10,920,165	\$3,549,147	\$14,469,312
2027	\$11,029,366	\$3,584,639	\$14,614,005
2028	\$11,139,660	\$3,620,485	\$14,760,145
2029	\$11,251,057	\$3,656,690	\$14,907,747
2030	\$11,363,567	\$3,693,257	\$15,056,824
2031	\$11,477,203	\$3,730,189	\$15,207,392
2032	\$11,591,975	\$3,767,491	\$15,359,466
2033	\$11,707,895	\$3,805,166	\$15,513,061
2034	\$11,824,974	\$3,843,218	\$15,668,192
2035	\$11,943,223	\$3,881,650	\$15,824,873
2036	\$12,062,656	\$3,920,467	\$15,983,122
2037	\$12,183,282	\$3,959,671	\$16,142,953
2038	\$12,305,115	\$3,999,268	\$16,304,383
2039	\$12,428,166	\$4,039,261	\$16,467,427
2040	\$12,552,448	\$4,079,653	\$16,632,101
2041	\$12,677,972	\$4,120,450	\$16,798,422
2042	\$12,804,752	\$4,161,654	\$16,966,406
2043	\$12,932,800	\$4,203,271	\$17,136,070
2044	\$13,062,128	\$4,245,304	\$17,307,431
2045	\$13,192,749	\$4,287,757	\$17,480,505
Total	\$303,738,710	\$98,717,686	\$402,456,396

Revenue Estimates

Revenue estimates for capital roadway projects and maintenance were developed utilizing escalation rates (1 percent annually) to reflect the impact of inflation over time to state and federal funding for capital and maintenance in order to determine anticipated funding in Year of Expenditure (YOE). While local voters may authorize SPLOSTs to assist in future transportation funding, for the purpose of a conservative fiscal analysis, no local revenue is assumed to assist in the funding of regional transportation projects. Should a SPLOST be approved by voters, this MTP can be updated to incorporate additional funding and considered projects through administrative adjustment as appropriate.

Capital Project Costing

In order to understand how the revenue estimates relate to likely project expenses, the costs of candidate transportation projects were estimated to include the cost of preliminary engineering, right-of-way, utilities, construction, and contingencies all of which were normalized to year 2020 dollars. The majority of cost estimates are sourced from previous planning efforts and are considered ‘planning-level’ in that they are reflect general ballpark estimation that may fluctuate as actual engineering, design, and construction of the project is conducted. For some projects, GDOT was a source of more detailed costing information. In the following “Plan Implementation” section, the process to use the evaluation procedures in order to resolve the anticipated transportation revenues with project costs is discussed.

Transit Funding

Funding for the transit services in the region come from a combination of local, state, and federal assistance as well as fare revenues and purchased transportation as shown in the table below.

Historic Funding and Expenses, Whitfield County Transit and Murray County Transit, 2015-2017

	Whitfield County Transit			Murray County Transit		
	2015	2016	2017	2015	2016	2017
Funding						
Purchased Transportation	\$223,655			\$40,368		
Fare Revenues	\$36,542	\$34,985	\$34,562	\$22,581	\$19,132	\$17,651
Local Funding	\$88,523	\$342,816	\$334,017	\$85,564	\$130,668	\$151,910
State Funding	\$13,325	\$0	\$14,692	\$0	\$0	\$19,965
Federal Funding	\$424,436	\$309,110	\$407,079	\$146,320	\$122,563	\$280,123
Expenses						
Operations	\$653,228	\$686,911	\$643,431	\$294,833	\$272,363	\$272,428
Capital	\$133,253	\$0	\$146,919	\$0	\$0	\$196,951

Source: National Transit Database (2015-2017)



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Based on this information, funding projections were prepared through the year for 2045 for both systems. The funding and fare revenues for the years 2015-2017 were averaged as the basis for this forecast. Funding sources were escalated using a 1 percent annual growth rate while fare revenues were held constant in order to prepare a conservative analysis. The results are shown in the table below.

Projected Funding, Whitfield County Transit and Murray County Transit, 2018-2045

Year	Whitfield County Transit			Murray County Transit		
	Funding	Fare Revenue	Total	Funding	Fare Revenue	Total
2018	\$877,004	\$35,363	\$912,367	\$356,266	\$19,788	\$376,054
2019	\$885,774	\$35,363	\$921,137	\$359,829	\$19,788	\$379,617
2020	\$894,632	\$35,363	\$929,995	\$363,427	\$19,788	\$383,215
2021	\$903,578	\$35,363	\$938,941	\$367,062	\$19,788	\$386,850
2022	\$912,614	\$35,363	\$947,977	\$370,732	\$19,788	\$390,520
2023	\$921,740	\$35,363	\$957,103	\$374,440	\$19,788	\$394,228
2024	\$930,958	\$35,363	\$966,321	\$378,184	\$19,788	\$397,972
2025	\$940,267	\$35,363	\$975,630	\$381,966	\$19,788	\$401,754
2026	\$949,670	\$35,363	\$985,033	\$385,785	\$19,788	\$405,573
2027	\$959,167	\$35,363	\$994,530	\$389,643	\$19,788	\$409,431
2028	\$968,758	\$35,363	\$1,004,121	\$393,540	\$19,788	\$413,328
2029	\$978,446	\$35,363	\$1,013,809	\$397,475	\$19,788	\$417,263
2030	\$988,230	\$35,363	\$1,023,593	\$401,450	\$19,788	\$421,238
2031	\$998,113	\$35,363	\$1,033,476	\$405,464	\$19,788	\$425,252
2032	\$1,008,094	\$35,363	\$1,043,457	\$409,519	\$19,788	\$429,307
2033	\$1,018,175	\$35,363	\$1,053,538	\$413,614	\$19,788	\$433,402
2034	\$1,028,356	\$35,363	\$1,063,719	\$417,750	\$19,788	\$437,538
2035	\$1,038,640	\$35,363	\$1,074,003	\$421,928	\$19,788	\$441,716
2036	\$1,049,026	\$35,363	\$1,084,389	\$426,147	\$19,788	\$445,935
2037	\$1,059,517	\$35,363	\$1,094,880	\$430,409	\$19,788	\$450,197
2038	\$1,070,112	\$35,363	\$1,105,475	\$434,713	\$19,788	\$454,501
2039	\$1,080,813	\$35,363	\$1,116,176	\$439,060	\$19,788	\$458,848
2040	\$1,091,621	\$35,363	\$1,126,984	\$443,450	\$19,788	\$463,238
2041	\$1,102,537	\$35,363	\$1,137,900	\$447,885	\$19,788	\$467,673
2042	\$1,113,563	\$35,363	\$1,148,926	\$452,364	\$19,788	\$472,152
2043	\$1,124,698	\$35,363	\$1,160,061	\$456,887	\$19,788	\$476,675
2044	\$1,135,945	\$35,363	\$1,171,308	\$461,456	\$19,788	\$481,244
2045	\$1,147,305	\$35,363	\$1,182,668	\$466,071	\$19,788	\$485,859
Total	\$28,177,353	\$990,164	\$29,167,517	\$11,446,517	\$554,064	\$12,000,581

Fiscally Constrained Implementation Plan

The fiscally constrained implementation plan was put together by considering the results of the candidate project evaluation results, the capital revenue projection analysis, and the estimated costs for each project. Projects were sorted using the following procedures:

- Projects that already have identified and committed funding in the next few years were advanced first for implementation
- Following those projects, the rankings from the evaluation process were used to determine which projects to advance first. In a few cases where projects that were less expensive were advanced in front of higher ranked projects in order to maximize the number of projects implemented.
- Projects were sorted into three time periods based on when construction dollars are anticipated to be available for implementation. For the first period (Short-Term, 2020-2025), projects were costed and funded year by year. For the following periods (Mid-Term, 2036-2035 and Long-Term, 2036-2045), projects were costed and funded in buckets. As discussed previously, project costs were inflated by 2% annually while funding was inflated by 1% annually.

The table below indicates and summarizes the overall results of achieving fiscal constraint for the Greater Dalton MPO 2045 MTP. Similarly, the accompanying graph indicates the progression and comparison of revenue and expenditures over each year and time period. As shown, in some years expenditures exceed the revenue for that year. However, savings from previous years where revenue exceeds expenditures are used to make up the difference so that in each year or time period there is a positive balance of remaining funds, including at the end of the Long-Term period where there is a balance of \$331,721.

Funding and Expenditures by Time Period, 2020-2045

Time Period	Funding	Expenditures	Ending Balance
2020	\$10,287,289	\$8,410,402	\$1,876,887
2021	\$10,390,162	\$7,932,828	\$4,334,221
2022	\$10,494,064	\$2,635,839	\$12,192,447
2023	\$10,599,004	\$1,114,268	\$21,677,183
2024	\$10,704,994	\$31,477,103	\$905,074
2025	\$10,812,044	\$3,579,132	\$8,137,986
2026-2035	\$113,635,673	\$114,938,961	\$6,834,698
2036-2045	\$125,524,478	\$132,027,455	\$331,721



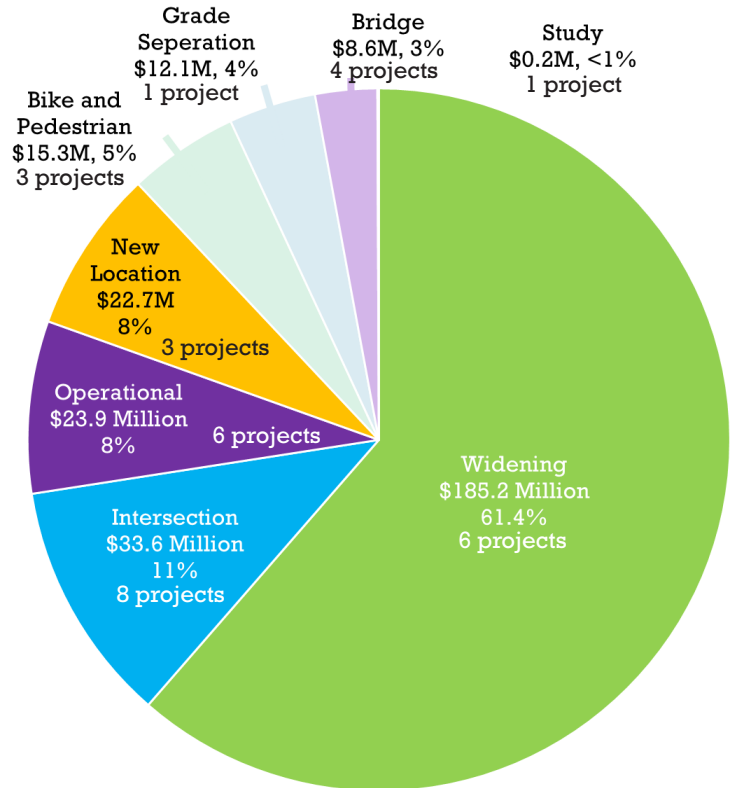
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Similarly, expenditures by project type are indicated in the below graph. While the significant amount of expenditures of roadway widenings is indicative in part of the relative costs for that type of project compared to other project types, the results still overall reflect the guidance from the community favoring projects that increase vehicular capacity and operations with relatively limited expenditure on other project types.

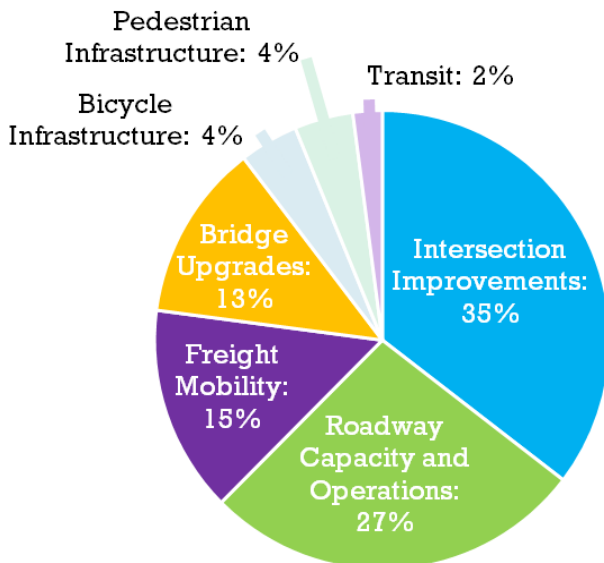
The following tables and maps indicate the projects incorporated in each of the timeframes (short-term, mid-term, and long-term) envisioned within the fiscally constrained plan. Additionally, due to the overall project needs for the region exceeding anticipated revenues, several projects are identified in the 'Aspirations' plan which represent candidate projects for future updates to the MTP or if additional sources of transportation revenue are identified.

Finally, for further reference information sheets for individual fiscally constrained projects are provided in **Appendix E**.

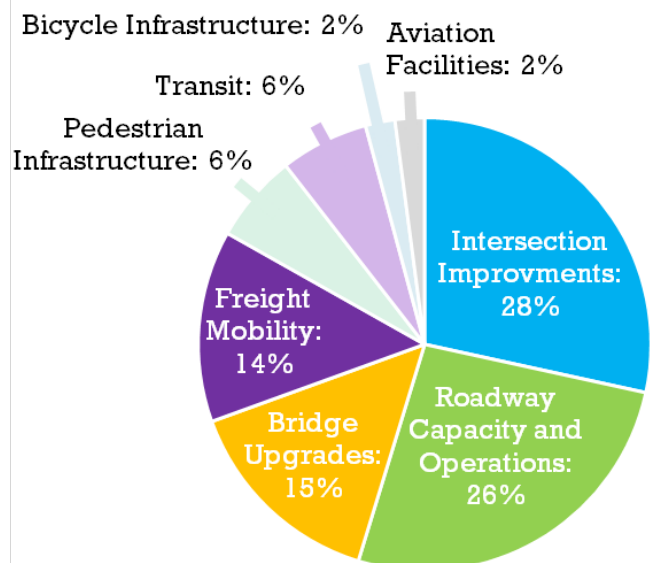
Cost of Fiscally-Constrained Projects by Project Type



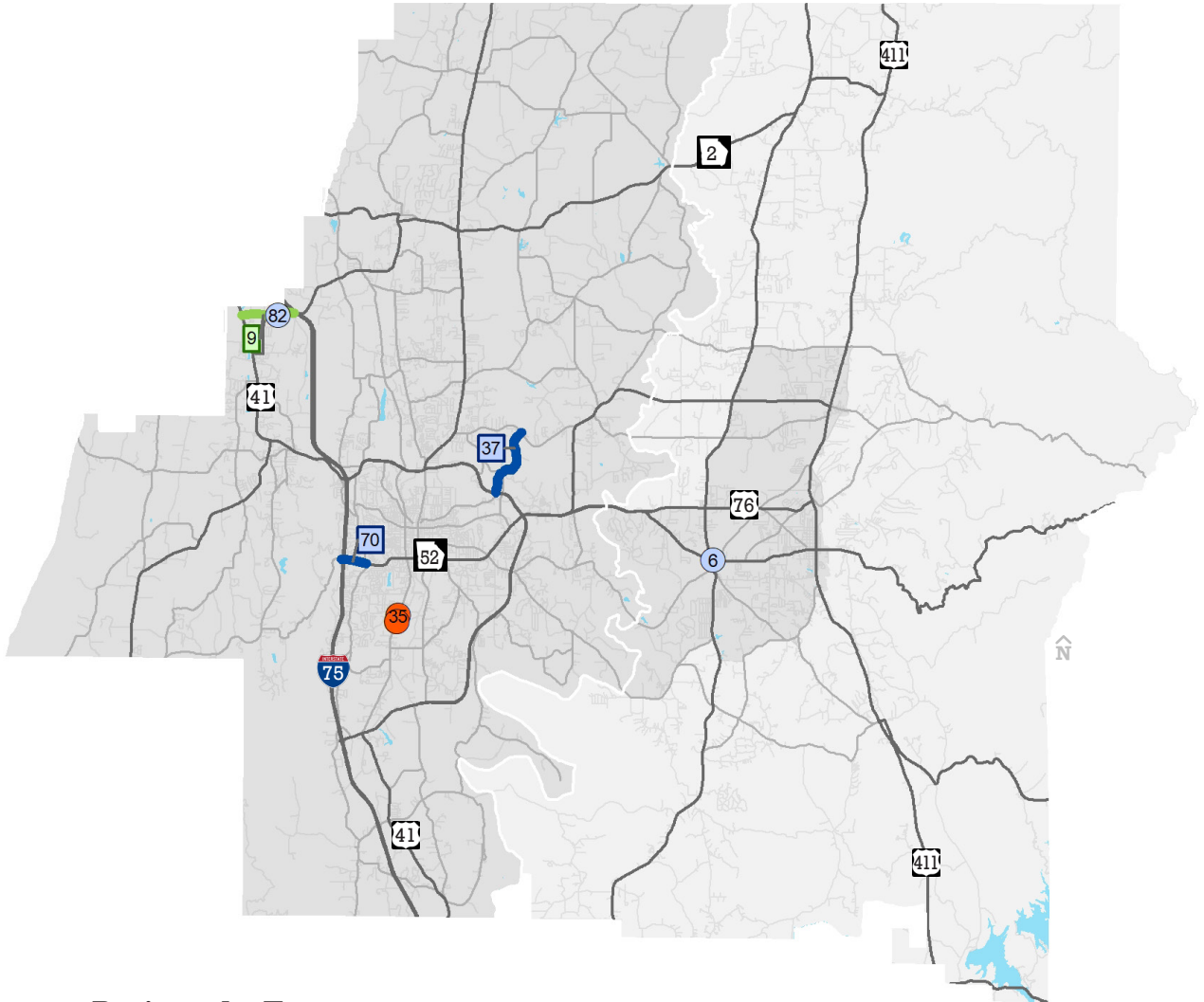
Public Meeting #1 Project Types Activity Results















Stakeholder Meeting #1 Project Types Activity Results



Short-Term Projects



Projects by Type

	Alignment			Operational
		Bicycle and/or Pedestrian		New Location
	Bridge			Study
	Grade Separation			Widening
		Intersection(s)		

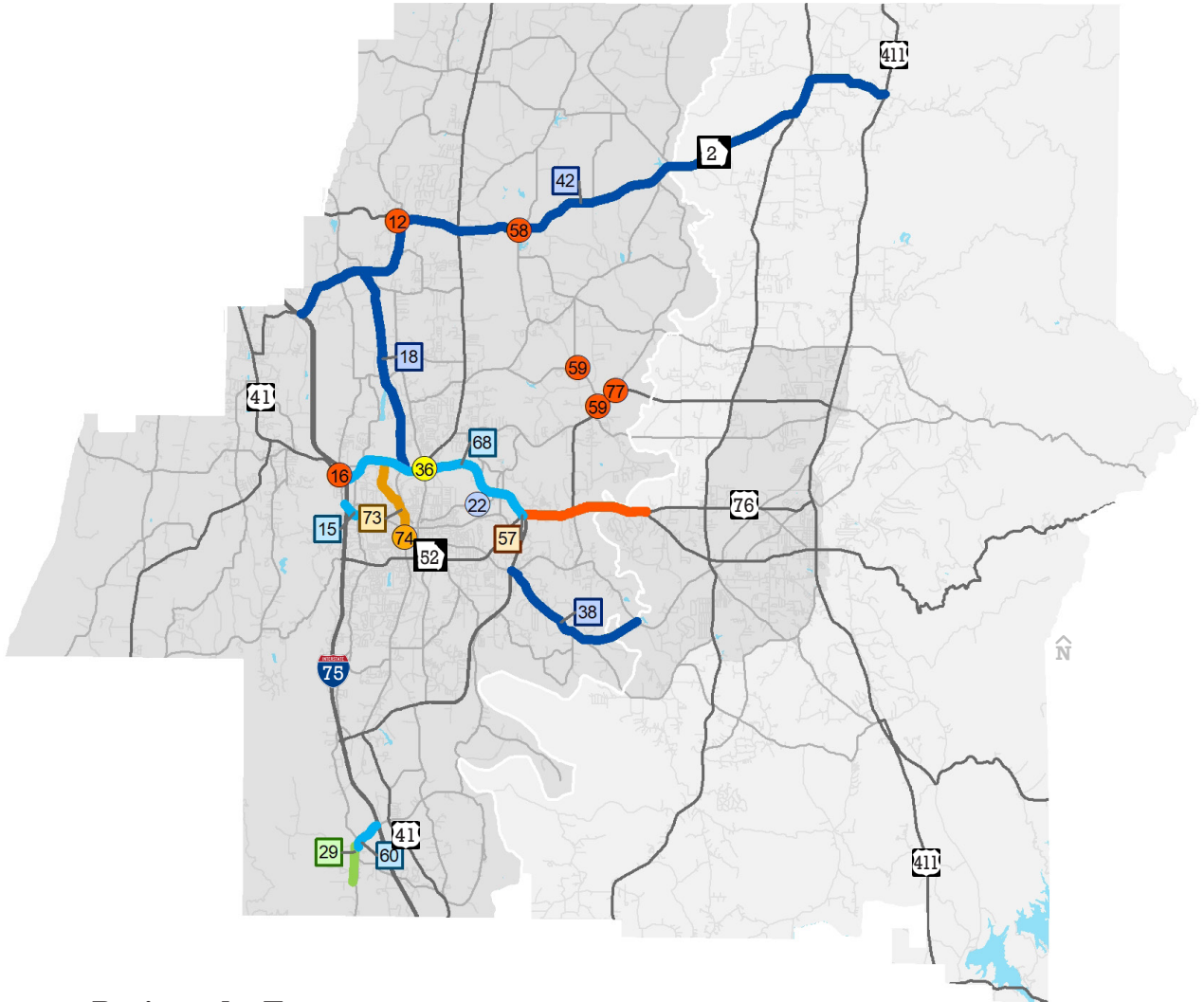


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Short-Term Projects

Project ID	Project Type	Name/Location	Extents	Total Cost (YOE)
6	Bridge	SR 52 ALT	Town Branch	\$2,190,402
9	New Location	SR 201 Realignment & Improve SR 201	US 41 to I-75 Interchange	\$5,300,000
35	Intersection	South Dixie Highway	W. Industrial Boulevard at Foster Road	\$1,644,048
37	Operational	Underwood Road	North Dalton Bypass to Dawnville Road	\$1,061,467
70	Study	Walnut Avenue Access Management Study	I-75 to Dug Gap Road	\$200,000
82	Bridge	SR 201	Tanyard Creek	\$1,989,839

Mid-Term Projects



Projects by Type

	Alignment			Operational
		Bicycle and/or Pedestrian		New Location
	Bridge			Study
	Grade Separation			Widening
		Intersection(s)		

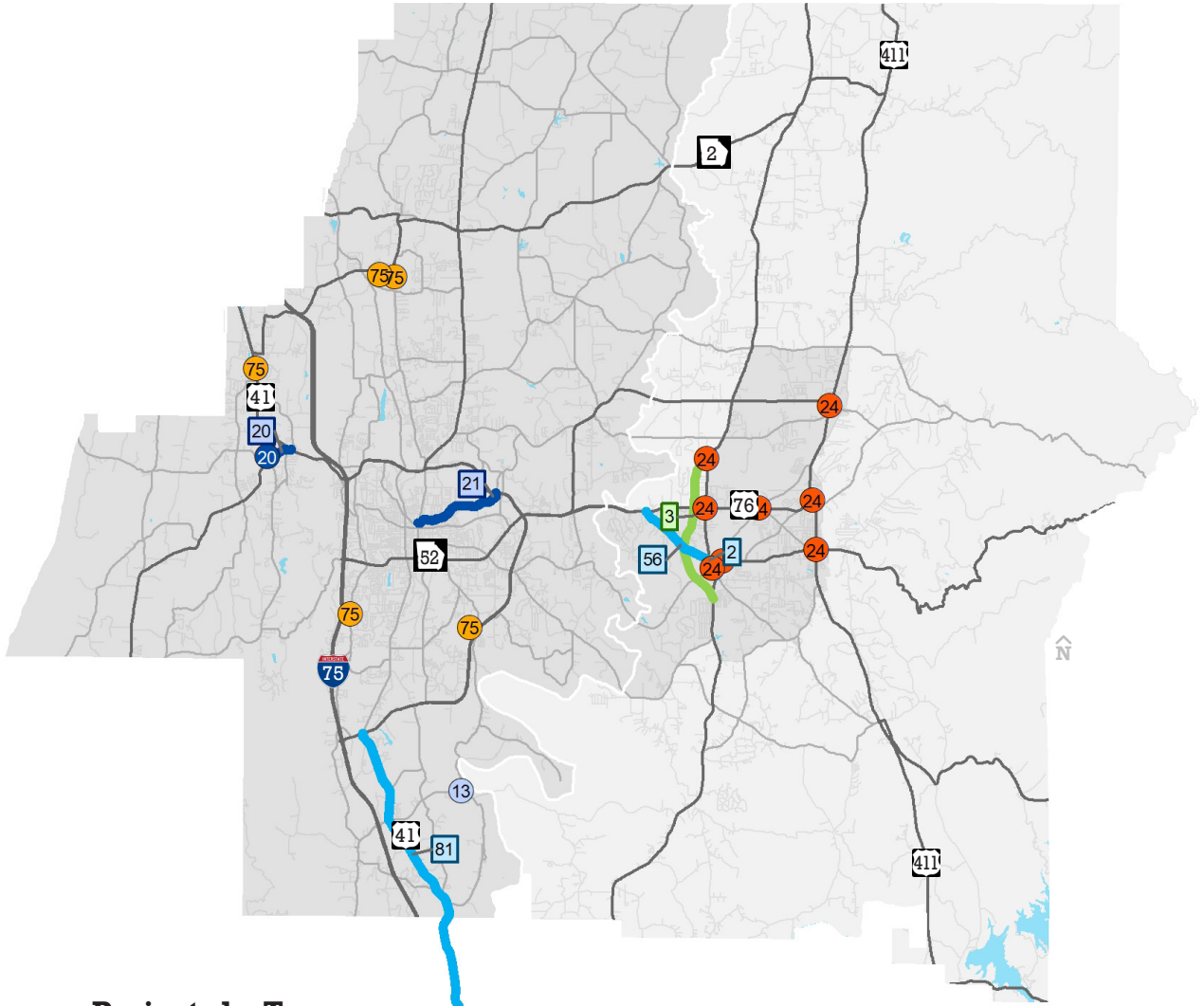


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Mid-Term Projects

Project ID	Project Type	Name/Location	Extents	Total Cost (YOE)
12	Intersection	SR 2 at SR 201	SR 201	\$1,059,748
15	Widening	North Tibbs Road	College Drive to Shugart Road	\$6,730,090
16	Intersection	SR 3 (Chattanooga Road)	North Tibbs Road	\$1,957,957
18	Multiple Intersections	Reed Road	SR 3 to SR 201	\$9,851,959
22	Bridge	Underwood Street	Mill Creek	\$2,746,011
29	New Location	CR 688/Louise Lane Extension	Eber Road to Redwine Cove	\$5,854,343
36	Grade Separation	North Dalton Bypass	At Cleveland Highway	\$12,115,484
38	Operational	Airport Road	South Dalton Bypass to Tibbs Bridge	\$8,314,758
42	Operational	SR 201	I-75 Interchange to US 411	\$4,252,732
57	Intersection	US 76/Chatsworth Highway	SR 3 Bypass to US 76	\$3,033,975
58	Intersection	Lake Francis Road	SR 2/Prater Mill Road	\$2,061,050
59	Intersection	Dawnville-Beaverdale Road	SR 286 & Cherokee Estate Road	\$3,050,771
60	Widening	Carbondale Road	Redwine Cove Road to I-75 Interchange	\$5,421,699
68	Widening	SR 560/East-West Highway	I-75 to SR 2	\$68,451,889
73	Bike & Ped	Thorton Avenue Sidewalks	SR 3 to Waugh Street	\$2,446,854
74	Bike & Ped	Downtown Sidewalk	Various	\$6,557,923
77	Intersection	Dawnville Rd	At SR 286	\$571,819

Long-Term Projects



Projects by Type

	Alignment			Operational
		Bicycle and/or Pedestrian		New Location
	Bridge			Study
	Grade Separation			Widening
		Intersection(s)		

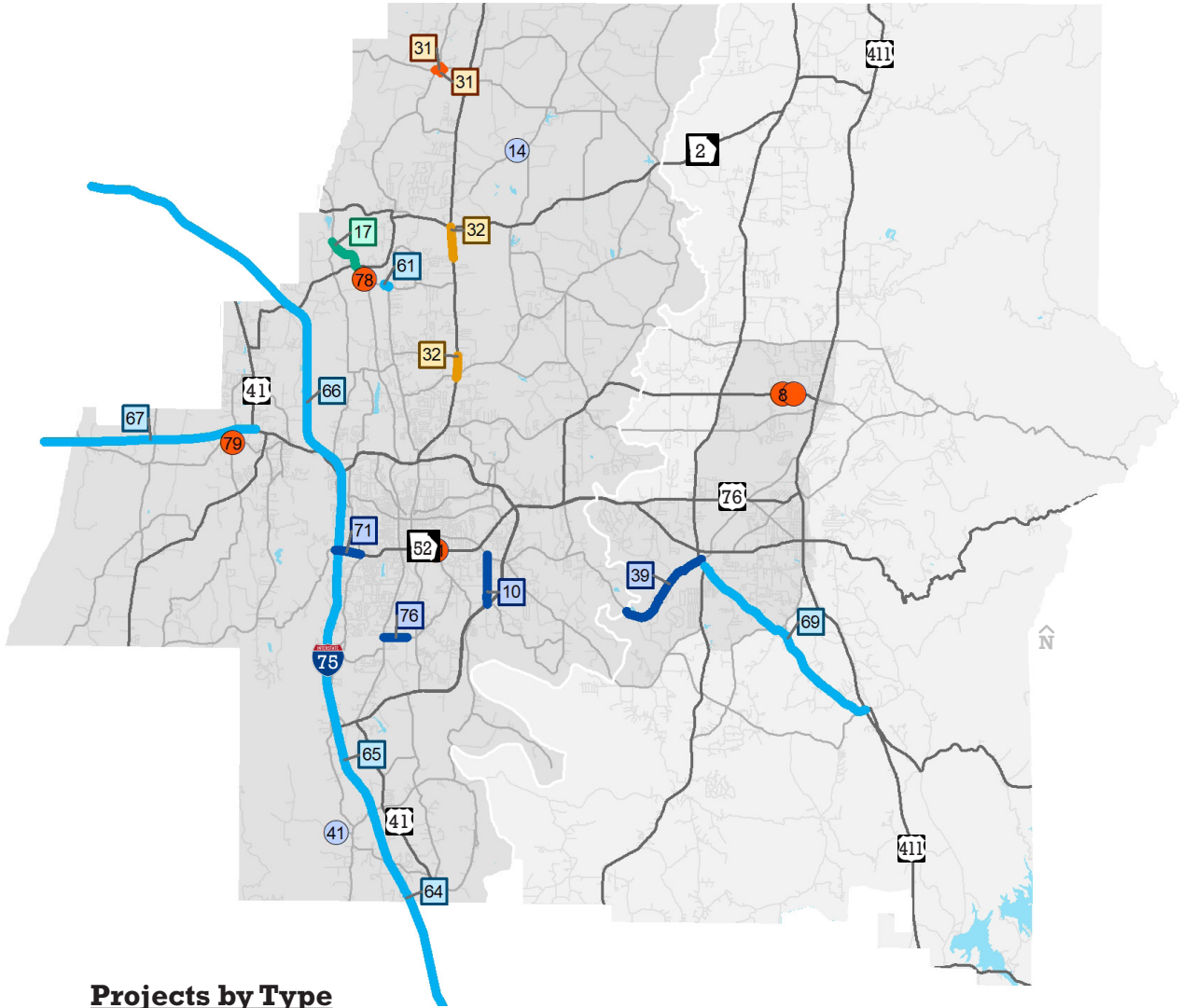


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Long-Term Projects

Project ID	Project Type	Name/Location	Extents	Total Cost (YOE)
2	Widening	SR 225	SR 52 ALT to Spring Place Smyrna Road	\$10,896,360
3	New Location	SR 225 Bypass (North & South)	SR 225 @ Imperial Blvd to SR 52/US76 & N to SR 225	\$11,506,104
13	Bridge	Old Tilton Road	Swamp Creek	\$1,679,121
19	Operational	SR 201	SR 3 to Old LaFayette Road	\$3,233,422
20	Operational	Old LaFayette Road & Intersection w/ SR 201	SR 201 to SR 3	\$4,888,767
21	Operational	Underwood Street	Glenwood to Bypass	\$2,455,960
24	Intersection	Intersection Improvements - 8 locations	Various	\$9,881,550
56	Widening	SR 52 Alt	SR 225 to SR 52/US 76	\$27,446,483
75	Bike & Ped	School Sidewalk Program	Various	\$3,863,463
81	Widening	SR 3/South Dixie Road	SR 136/Gordon to South Dalton Bypass	\$69,102,750

Aspirational Projects



Projects by Type

	Alignment			Operational
		Bicycle and/or Pedestrian		New Location
	Bridge			Study
	Grade Separation			Widening
		Intersection(s)		



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Aspirational Projects

Project ID	Project Type	Name/Location	Extents	Total Cost (Year 2045)
8	Intersection	SR 286	Cobb Road and at Tom Gregory Road	\$1,756,666
10	Operational	Hill Road	Eastbrook Road to Airport Road	\$3,691,363
11	Intersection	Riverbend Road	Walnut Avenue/US 76	\$196,873
14	Bridge	McGaughey Chapel Road	Coahulla Creek	\$1,853,885
17	Alignment	Reed Road	SR 201 to Lake Kathy	\$4,396,824
31	Intersection	Chattanooga Road/Wolfe Street & Red Clay Road	City of Cohutta	\$5,742,121
32	Bike & Ped	SR 71	Beaverdale Road to Williams Road & Frontier Trail to Prater Mill Road	\$3,117,151
39	Operational	Airport Road/Brown Bridge Road/New Hope Road	Tibbs Bridge to SR 225	\$10,137,097
41	Bridge	Redwine Cove Road	Swamp Creek	\$1,679,121
61	Widening	Rauschengerg Road	Sonya Drive to Waring Road	\$2,194,190
67	Widening	SR 560/East-West Highway	SR 151 to SR 3	\$118,011,397
69	Widening	SR 560/East-West Highway	SR 3 to US 411	\$51,591,137
71	Operational	Walnut Avenue Access Management Improvements	I-75 to Dug Gap Road	\$7,546,788

Plan Conclusions

While the ultimate goal of the MTP is the development of the fiscally constrained project list, it also provides the framework for meeting a fundamental community need: effective and efficient transportation. As shown in the previous section, the plan combines the community vision, preferences, and goals with technical assessments of needs and anticipated performance to provide a plan that delivers the mobility needed to support the community, while increasing transportation mode options and supporting economic development initiatives.

As reproduced in the tables and graphs below, a comparison of the performance of a 2045 Do-Nothing Scenario with the 2045 Fiscally Constrained Plan reveals a tremendous amount of benefit, including a large decrease both the number of lane miles with congested conditions and the amount of cumulative time spent traveling within the region. Though vehicle miles traveled will increase, the overall results indicate better traffic flow.

Travel Demand Model Scenario Statistics

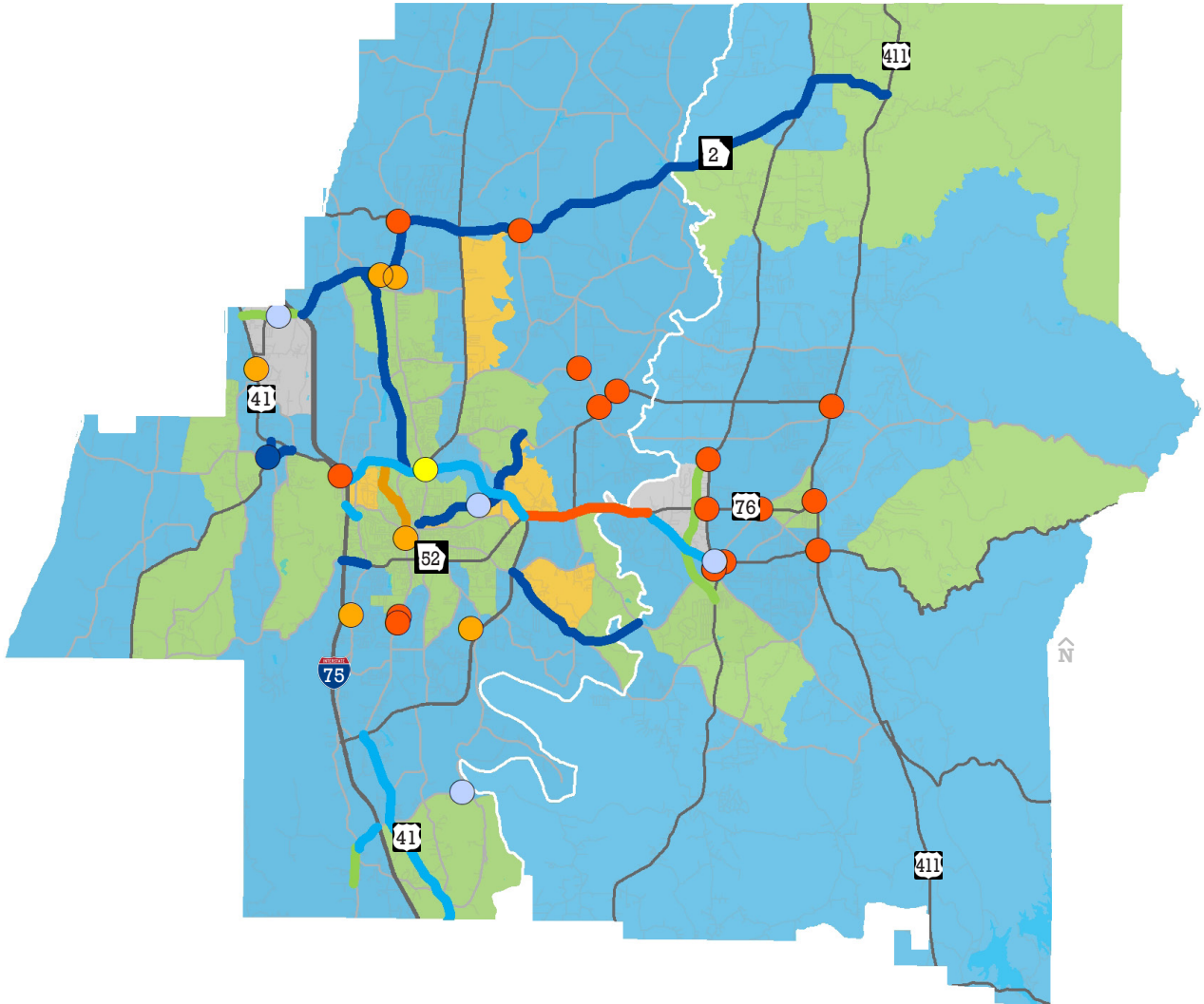
	2015 Base	2045 Do Nothing	2045 Existing + Committed	2045 with STIP Projects	2045 Fiscally Constrained + Aspirations	2045 Fiscally Constrained
Total Lane Miles	1,441	1,445	1,445	1,444	1,571	1,490
Lane Miles as LOS D or Better	1,425	1,400	1,400	1,399	1,544	1,469
Lane Miles at LOS E or Worse	15	45	45	45	27	39
Vehicle Miles Traveled	3,751,008	4,847,121	4,847,121	4,848,568	4,989,364	4,860,993
Vehicle Hours Traveled	106,916	168,326	168,326	168,415	147,941	164,801

Lane Miles by Level of Service by Travel Demand Model Scenario



Furthermore, the fiscally constrained plan is overlaid with the Environmental Justice communities previously identified in Chapter 2. The projects within and adjacent to these communities are all anticipated to include bicycle and pedestrian facilities where possible and feasible as well as introduce design elements to enhance safety.

Environmental Justice Communities and Fiscally-Constrained Projects



Projects by Type

	Alignment
	Bicycle and/or Pedestrian
	Bridge
	Grade Separation
	Intersection(s)

		Operational
		New Location
		Study
		Widening

Title VI Communities Present

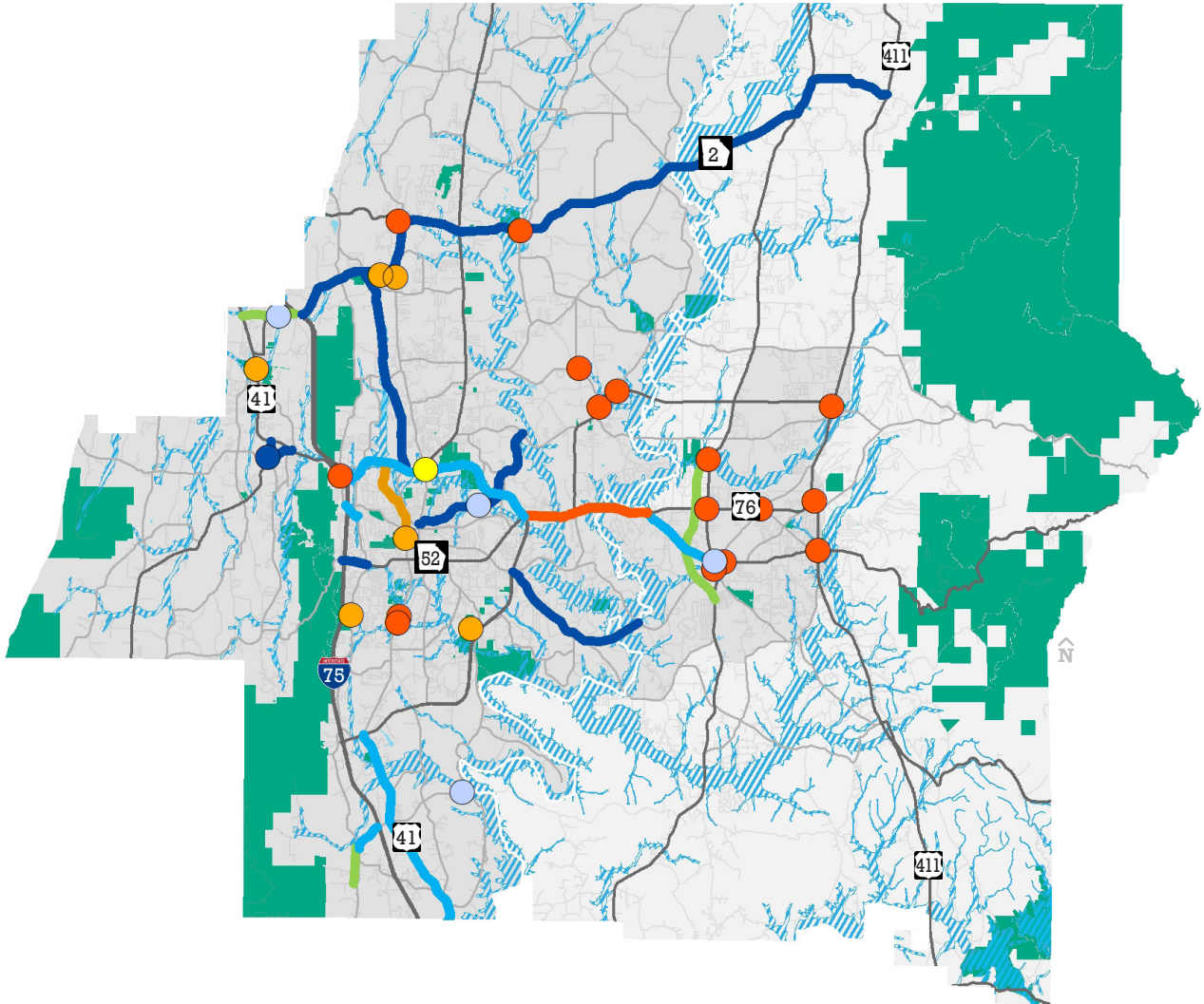
	0 Title VI Communities
	1-3 Title VI Communities
	4-5 Title VI Communities
	6-7 Title VI Communities



5 | Evaluation and Implementation Plan

Reflecting the region's commitment to environmental sustainability, the fiscally constrained plan is also compared to several environmental and cultural features. The following maps indicate environmental conditions that may need to be addressed and mitigated as projects are implemented

Natural Resources and Fiscally-Constrained Projects



Projects by Type

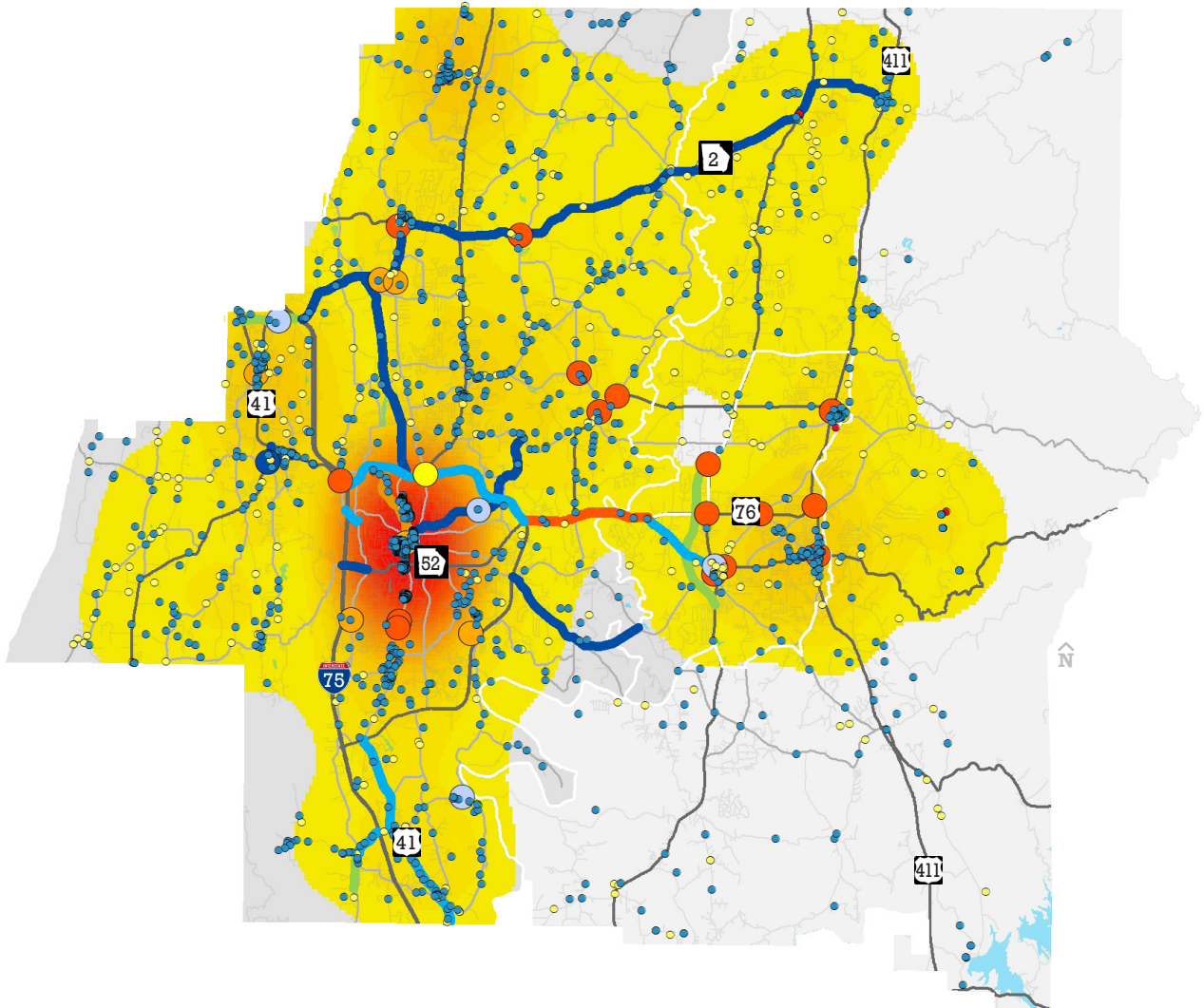
	Alignment
	Bicycle and/or Pedestrian
	Bridge
	Grade Separation
	Intersection(s)

	Operational
	New Location
	Study
	Widening

Environmental Resources

- Land designated for parks, recreation, and/or conservation
- FEMA-designated Flood Zones


Historic Resources and Fiscally-Constrained Projects



Projects by Type

	Alignment		Operational
	Bicycle and/or Pedestrian		New Location
	Bridge		Study
	Grade Separation		Widening
	Intersection(s)		

Historic Properties

Construction Date:
 Earlier than 1800 or Unknown

 1800s

 1900s

Concentration of Historic Properties:

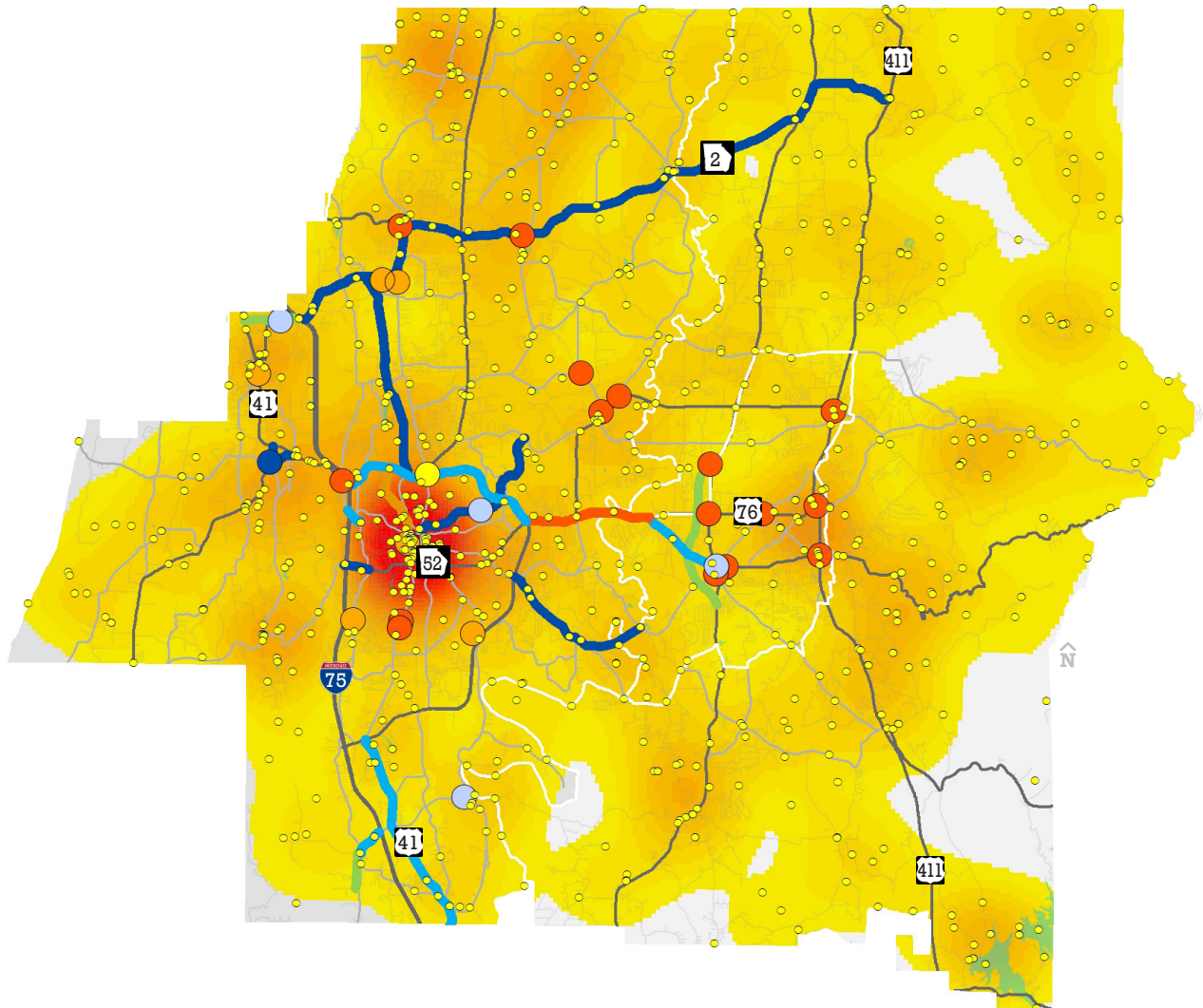


Source: Georgia's Natural, Archaeological, and Historic Resources GIS



5 | Evaluation and Implementation Plan

Cultural Resources and Fiscally-Constrained Projects



Projects by Type

	Alignment		Operational
	Bicycle and/or Pedestrian		New Location
	Bridge		Study
	Grade Separation		Widening
	Intersection(s)		

Cultural Resources



Source: Georgia's Natural, Archaeological, and Historic Resources GIS

The MTP reflects a balance in addressing the strategic systematic goal categories discussed with the community and reflects the comments and vision of the community through the individual projects recommended, which were expressly supported through community engagement.

Additionally, the fiscally constrained plan includes a remaining balance of \$331,721. This remaining balance should be preserved in order to allow flexibility and contingency as funding and cost assumptions change, or the need arises to fund different transportation projects through administrative adjustments.

Funding and Expenditures by Time Period, 2020-2045

Time Period	Funding	Expenditures	Ending Balance
2020	\$10,287,289	\$8,410,402	\$1,876,887
2021	\$10,390,162	\$7,932,828	\$4,334,221
2022	\$10,494,064	\$2,635,839	\$12,192,447
2023	\$10,599,004	\$1,114,268	\$21,677,183
2024	\$10,704,994	\$31,477,103	\$905,074
2025	\$10,812,044	\$3,579,132	\$8,137,986
2026-2035	\$113,635,673	\$114,938,961	\$6,834,698
2036-2045	\$125,524,478	\$132,027,455	\$331,721



