BGMPO

Burlington - Graham Metropolitan Planning Organization

2050 MTP

Metropolitan Transportation Plan

Public Review Draft | ***May 2025***

Adoption resolution(s) to be inserted.

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Acknowledgments

The Burlington-Graham Metropolitan Planning Organization (BGMPO) thanks the many participants who offered their time and input in the development of the BGMPO 2050 Metropolitan Transportation Plan (MTP). The BGMPO 2050 MTP reflects the collaborative efforts of the public, stakeholders, local staff and officials, the North Carolina Department of Transportation (NCDOT), and the Federal Highway Administration (FHWA). The efforts of everyone are greatly appreciated.

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Transportation Acronyms

Text / Acronym	Definition
AADT	Annual Average Daily Traffic
ACTA	Alamance County Transportation Authority
ADA	Americans with Disabilities Act of 1990
ARRA	American Recovery and Reinvestment Act
ATLAS	Advancing Transportation through Linkages, Automation, and Screening
BGMPO	Burlington-Graham Metropolitan Planning Organization
BUY	Burlington-Alamance Regional Airport
CTP	Comprehensive Transportation Plan
DOI	Degree of Impact
E+C	Existing Roads plus Committed Projects
EJ	Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development and implementation of particular plans and investment programs. In the context of transportation projects planning and delivery, environmental justice seeks to identify and address disproportionately high and adverse effects of proposed decisions on transportation-disadvantaged populations including low-income populations and minority populations as well as potentially disadvantaged groups based on color, national origin, sex, age, disability, and limited English proficiency.
FAST Act	Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015. The FAST Act was the first multi-year federal transportation funding law in over a decade and authorized $305 billion over fiscal years 2016 through 2020 for highway, safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.
FHWA	Federal Highway Administration
Fiscally-Constrained	Funding sources are reasonably available over the life of the plan to cover the capital and operating cost of the proposed improvement
FTA	Federal Transit Administration
HERE	Real-time cell phone data
HSIP	Highway Safety Improvement Plan
ICM	Integrated Corridor Management
ITRE	Institute for Transportation Research and Education
ITS	Intelligent Transportation Systems
LEP	Limited English Proficiency
Link Transit	Link Transit is the local fixed route transit service provider for the City of Burlington and surrounding area, with five bus routes serving Burlington, Gibsonville and Alamance Community College.
LTV	Light Transit Vehicle
MAP-21	Moving Ahead for Progress in the 21st Century, MAP-21 is the federal transportation bill signed into law July 6, 2012. MAP-21 outlined funding for surface transportation programs for fiscal years 2013 and 2014.
MIS	Major Investment Study
MPO	Metropolitan Planning Organization

Text / Acronym	Definition
MTP	Metropolitan Transportation Plan
NCDOT	North Carolina Department of Transportation
NCRR	North Carolina Railroad
OPT	Orange County Public Transportation
PART	Piedmont Authority for Regional Transportation
PBIN	Pedestrian and Bicycle Infrastructure Network
PE	Preliminary Engineering
PIP	Public Involvement Plan
POP	Program of Projects
Powell Bill Funds	State of North Carolina funds to build and maintain major city streets
PSA	Pedestrian Safety Audit
PTRM	Piedmont Triad Regional Travel Demand Model
ROW	Right-Of-Way
RPO	Rural Planning Organization
RSA	Roadway Safety Audit
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, SAFETEA-LU was the federal legislation authorizing U.S. highway and transit programs signed into law on August 10, 2005. SAFETEA-LU provided $244.1 billion in funds over a five-year period through 2009. Numerous extensions to the SAFETEA-LU were adopted prior to the adoption of MAP- 21 in 2012..
SPOT	Strategic Planning Office of Transportation (NCDOT)
STBG-DA	Surface Transportation Block Group – Direct Attributable
STI	Strategic Investments
STIP	State Transportation Improvement Program
SUP	Shared Use Path, also known as Multi-Use Path
TAC	Transportation Advisory Committee
TAZ	Traffic Analysis Zone
TIP	Transportation Improvement Plan
Title VI	Part of the Civil Rights Act of 1964, prohibits discrimination in any program receiving federal assistance
TMA	Transportation Management Area
TOD	Transit Oriented Development
TPM	Transportation Performance Management
TTI	Travel Time Index
UPWP	Unified Planning Work Program
USDOT	United Stated Department of Transportation
V/C	Volume-to-Capacity Ratio

01

Introduction

The Burlington-Graham Metropolitan Planning Organization

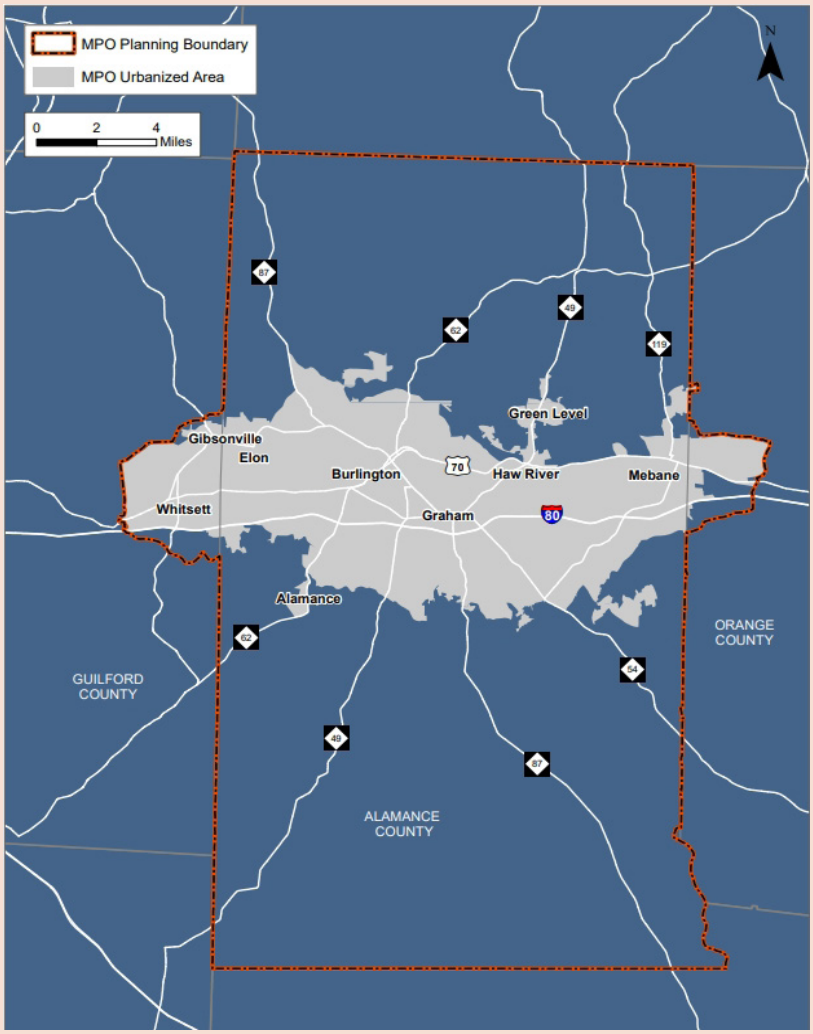
A Metropolitan Planning Organizations (MPO) is federally mandated regional planning agency responsible for delivering a continuing, cooperative, and comprehensive transportation planning process. An MPO is required in all urbanized areas with populations over 50,000 to carry out the transportation planning process within a boundary that includes the Census-designated urbanized area plus contiguous geographic areas expected to urbanize over the next twenty years.

The Burlington-Graham MPO (BGMPO) is the transportation policy-making organization that includes local elected representatives and representatives from agencies involved in transportation planning activities within the Burlington-Graham urbanized area.

The planning area captures all of Alamance County and small portions of Guilford and Orange Counties and includes nine municipalities:

- City of Burlington
- City of Graham
- City of Mebane
- Town of Elon
- Town of Gibsonville
- Town of Green Level
- Town of Haw River
- Town of Whitsett
- Village of Alamance

The BGMPO is guided by two committees. The Transportation Advisory Committee (TAC) is the MPO's decision-making body, comprised of local elected officials, and regional, state, and federal transportation agencies from the communities the MPO serves. The Technical Coordinating Committee (TCC) brings together staff from local jurisdictions and stakeholder agencies to make technical recommendations for consideration by the TAC.



The 2050 Metropolitan Transportation Plan

The BGMPO 2050 MTP analyzes the transportation system to determine the area's transportation needs. Those needs are matched with recommended transportation projects and prioritized for funding. The result is a comprehensive blueprint for effective transportation decision-making and investment choices. The BGMPO 2050 Metropolitan Transportation Plan (MTP) is an update to the 2045 MTP adopted in 2020.

Implementing a transportation project requires navigating factors such as environmental conditions, community concerns, project complexity, and funding availability. Adopting a fiscally constrained long-range transportation plan is an important first step in the process that helps local jurisdictions and stakeholder agencies prioritize projects.

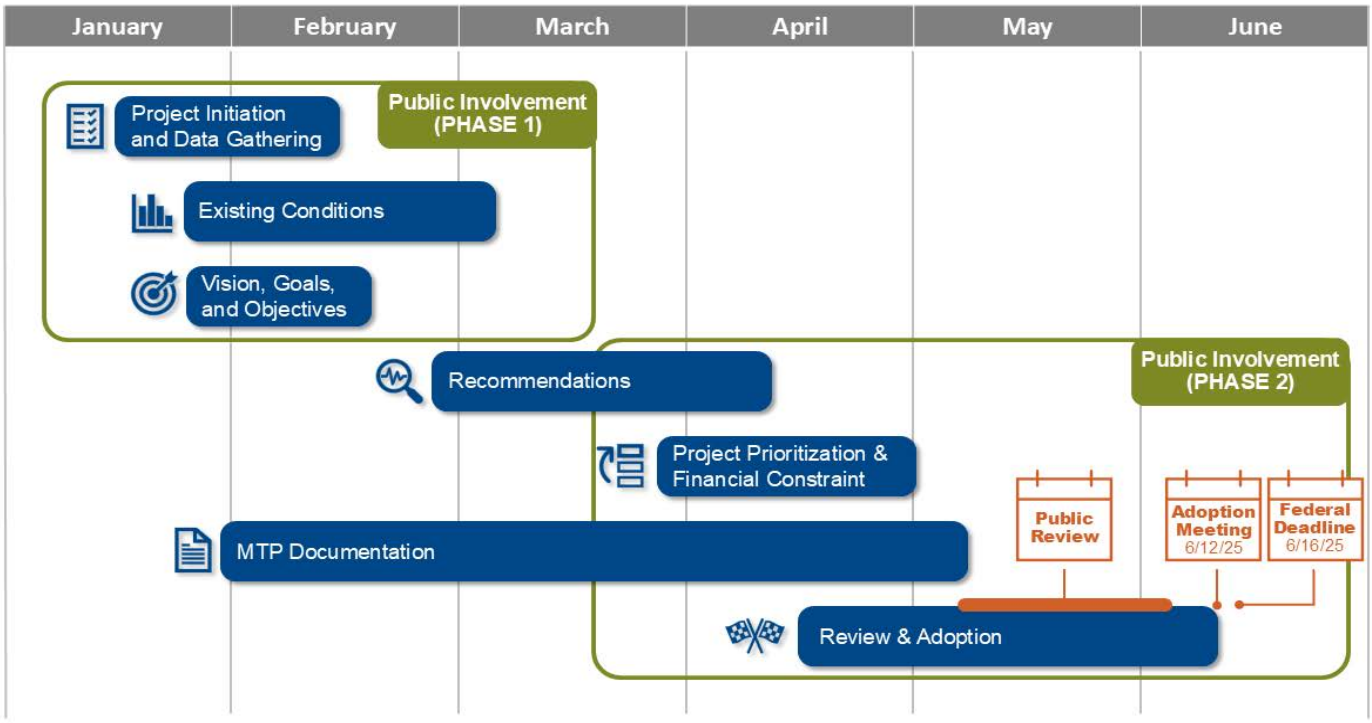
MTPs and Comprehensive Transportation Plans. A Comprehensive Transportation Plan (CTP) reflects the transportation needs of the region over a longer (30+ years) timeframe and is not fiscally constrained. Funded and unfunded projects identified as part of the BGMPO 2050 MTP will be considered during future updates to the region's CTP.

Strategic Prioritization. NCDOT advances projects from MPO long-range transportation plans and locally adopted plans for funding within the Statewide Transportation Improvement Program (STIP). The STIP takes shape by scoring projects using a data-driven approach. MPOs, Rural Planning Organizations (RPOs) and NCDOT Division offices contribute to the final project score by assigning local priority points. BGMPO selects projects for submission into the scoring process and then assigns local input points for projects.

Public Involvement. Public involvement for the BGMPO 2050 MTP occurred in two phases. A Steering Committee was formed, made up of MPO member jurisdictions staff and additional stakeholders. One round of public meetings was held and a plan website was created to host information and materials about the plan. Additional information regarding the process and input received through public and stakeholder involvement is detailed in Chapter 3.

Planning Process

The BGMPO 2050 MTP planning process occurred during the first half of 2025 and featured seven overlapping tasks. A public review period in May gave way to adoption in June.



Report Overview

The report is designed to be a brief summary that communicates the process and outcomes of the BGMPO 2050 MTP. It includes the following chapters:

Chapter 1 - Introduction
Provides an overview of the MPO, the plan; Introduces the vision, goals, and objectives

Chapter 2 - Planning Area Overview
Presents an inventory of existing conditions and an overview of relevant plans

Chapter 3 - Community Involvement
Summarizes the engagement activities that occurred throughout the planning process

Chapter 4 - Multimodal Recommendations
Describes recommended projects for all travel modes as well as policy and technology solutions

Chapter 5 - Implementation
Presents the financially constrained plan, describes the MPO's adopted performance measures, and brings the BGMPO 2050 MTP report to a close

Using the BGMPO 2050 MTP

The BGMPO 2050 MTP serves as a blueprint for directing federal, state, and local dollars toward projects that the community needs and values. It also supports adopted safety targets and system performance measures. On a broader level, the BGMPO 2050 MTP is governed by the Infrastructure Investment and Jobs Act (IIJA), transportation legislation that ensures that the plan meets federal requirements to: strengthen America's highways, establish a performance-based program, create jobs and supporting economic growth, support the United States Department of Transportation's (USDOT) aggressive safety agenda, streamline Federal Highway Administration (FHWA) transportation programs, accelerate project delivery, and promote innovation.

Implementing the BGMPO 2050 MTP

Completing the BGMPO 2050 MTP is the next step toward implementing a more comprehensive transportation system in the planning area. Implementation will occur over time, taking into consideration local priorities and funding availability.

Updating the BGMPO 2050 MTP

While some projects identified in the BGMPO 2050 MTP will be constructed in the next few years, a long-term approach is necessary to address unexpected changes in transportation needs and available funds. For this reason, federal regulations require the plan be updated every five years

Vision, Goals, and Objectives

The BGMPO 2050 MTP includes a vision and supporting goals and objectives to guide the planning process and align projects and performance metrics with topics of local, state, and federal importance. A direct line of influence exists from the vision to the selection and prioritization of transportation improvement projects.

2050 MTP Vision

The vision reflects the purpose and intent of the BGMPO 2050 MTP and offers a simple way to describe the MPO's approach to transportation improvements. The vision sets up the goals and objectives to guide the region through the year 2050.

The 2050 Metropolitan Transportation Plan continues to promote investment in a multimodal transportation network that supports a vibrant and prosperous Burlington-Graham region where all residents have access to opportunities, where an enviable quality of life endures, and where the economy thrives while our area's natural and cultural resources are protected and celebrated.

2050 MTP Goals and Objectives

The 2050 MTP goals and objectives are based on the guiding statements from the 2045 MTP and have been updated to reflect local and state areas of emphasis while adhering to the ten federally-required transportation planning factors. The goals offer an organizing structure for how the Burlington-Graham MPO and its partners can work toward achieving the 2050 MTP vision. The objectives provide more specific directives for each goal statement. During the development of the BGMPO 2050 MTP, the goals and objectives influenced recommendations, priorities, and funding strategies.



GOAL 1 ~ TRANSPORTATION EFFICIENCY

Provide a safe, secure, comprehensive, and effective transportation system to move people and goods within and through the area.

1A	Enhance mobility and accessibility and manage congestion across the transportation system and across modes of transportation
1B	Support projects, programs, and policies that advance safe and secure travel for all transportation system users
1C	Plan and support a freight transportation system that allows for the efficient movement of goods
1D	Improve reliability of the transportation system through increasing roadway network connectivity and supporting multiple route options

GOAL 2 ~ TRANSPORTATION CHOICES

Provide a transportation system that enables mobility choice

2A	Integrate walking and bicycling with vehicular travel and encourage the use of walking and bicycling
2B	Develop an integrated public transportation system that supports multimodal transportation options
2C	Maximize rail and air transportation opportunities
2D	Support transportation demand management strategies, including park and ride lots, carpooling, and vanpooling throughout the region

GOAL 3 ~ TRANSPORTATION OPTIMIZATION

Seek to create a more optimized and resilient transportation system

3A	Prioritize maintaining existing assets before exploring system expansion options
3B	Leverage new transportation technology and incorporate new infrastructure such as EV charging stations to enhance mobility, connectivity, and efficiency throughout the region
3C	Enhance and promote the resilience and adaptability of the transportation system to natural and man-made threats
3D	Address stormwater drainage and flooding concerns on roadways through transportation upgrades and improvements

GOAL 4 ~ TRANSPORTATION EQUITY

Promote equity and accessibility in transportation options for transportation- disadvantaged populations

4A	Improve opportunities to serve transportation-disadvantaged populations with convenient transportation to needed services and desired travel destinations
4B	Provide meaningful opportunities for public involvement in the transportation planning process
4C	Use Universal Design to make the system work for all users

GOAL 5 ~ TRANSPORTATION INTEGRATION

Integrate land use and transportation planning

5A	Support land use planning strategies that facilitate efficient transportation system use and development
5B	Align transportation infrastructure investment with the community vision of future growth
5C	Encourage density and destination clustering that increases accessibility and multimodal transportation options
5D	Support areas designated for additional economic development potential under programs such as Opportunity Zones and North Carolina Industrial Commission Certified Sites through transportation infrastructure investments

Federal Planning Factors

Because the BGMPO 2050 MTP is a federally-required plan, a direct link is needed between the plan's goals and federal planning factors carried forward in the Infrastructure Investment and Jobs Act (IIJA), the most recent federal transportation planning legislation. The following table illustrates the primary correlation for BGMPO 2050 MTP objectives to the ten federal planning factors.

FEDERAL PLANNING FACTORS	TRANSPORTATION EFFICIENCY			
	1A	1B	1C	1D
Accessibility | Increase accessibility and mobility of people and freight.	☑			
Connectivity | Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	☑			☑
Economic Vitality | Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.			☑	
Efficient Management | Promote efficient system management and operation.			☑	
Enhance Travel | Enhance travel and tourism.				
Environment | Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.				
Preservation | Emphasize the preservation of the existing transportation system.				
Resiliency | Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.				☑
Safety | Increase the safety of the transportation system for motorized and non-motorized users.		☑		
Security | Increase the security of the transportation system for motorized and non-motorized users.		☑		

BGMPO 2050 MTP GOALS AND OBJECTIVES

TRANSPORTATION CHOICES				TRANSPORTATION OPTIMIZATION				TRANSPORTATION EQUITY			TRANSPORTATION INTEGRATION			
2A	2B	2C	2D	3A	3B	3C	3D	4A	4B	4C	5A	5B	5C	5D
	☑							☑		☑			☑	☑
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Planning Area Overview

Creating a list of funded and vision transportation projects for the BGMPO area begins with an understanding of current and projected transportation conditions. This understanding centers on the people, places, and mobility, including demographic data, growth trends, natural and man-made features, and multimodal characteristics. The recommendations of the BGMPO 2050 MTP are based on previous planning efforts, community input, and the understanding of the planning area presented in this chapter.

Building Blocks

The Burlington-Graham MPO 2050 MTP is an opportunity to continue work from the 2045 MTP, laying out future transportation projects and initiatives. Building on previous planning efforts, a variety of plans from the MPO, Alamance County, and other regional plans were pulled for review. The plans identified below act as the building blocks for transportation decision-making and are important considerations for understanding previous investments and commitments. The findings from the inventory of relevant plans inform the development of the Burlington-Graham MPO 2050 MTP recommendations.

BGMPO Regional Transit Feasibility Study Final Report (2024)

The Burlington-Graham MPO Regional Transit Feasibility Study Final Report evaluates the current transit system and explores options for expansion to improve, coordinate, and expand both accessibility and connectivity. The study aims to address community needs and gather input from area decision-makers and the public. Recommendations include extending service hours, increasing route coverage, and integrating advanced technologies. The plan prioritizes community engagement and sustainable transit solutions for long-term regional development.

North Carolina Strategic Highway Safety Plan (2024 Update)

The NC Strategic Highway Safety Plan (SHSP) 2024 Update focuses on reducing fatalities and serious injuries on roads across the state. Key strategies include expanding the use of speed safety cameras in school zones and work zones and analyzing speed-related crashes on two-lane rural roads. Major emphasis areas include improving safety for vulnerable road users, intersections, lane departures, and addressing impaired driving.

North Carolina Clean Transportation Plan Final Report (2023)

The North Carolina Clean Transportation Plan Final Report is a guiding document for local, regional, and state agencies, organizations, and groups to coordinate on decarbonizing the transportation sector across North Carolina. The plan recommends increasing the adoption of electric vehicles, expanding public transit options, and enhancing infrastructure for walking and cycling. The plan emphasizes public-private partnerships and community engagement to achieve these goals. It also highlights the importance of technological advancements and policy changes to support clean transportation initiatives. The report aims to create a healthier environment and a more resilient transportation system for the state's future.

The Great Trails State Final Report (2022)

The Great Trails State Final Report 2022 aims to promote active transportation, conservation, recreation, and tourism, enhancing overall community health and economic prosperity throughout North Carolina. The plan proposes a network of greenways to connect all 100 counties in NC with well-maintained trails that provide safe and accessible routes for walking, biking, and other outdoor activities. The report underscores the importance of collaboration between public and private sectors to achieve these objectives.



Triad Regional Intelligent Transportation Systems (ITS) Consolidated Strategic Deployment Plan (2022)

The Triad Regional ITS Strategic Deployment Plan helps local leaders identify and start transportation projects that meet regional needs. The plan fosters better communication and data sharing among various transportation agencies and stakeholders. The plan is flexible, allowing adjustments to future budgets without committing to specific technologies. It also includes updates to infrastructure, personnel training, and ongoing maintenance of the ITS systems.

Triangle 2050 Conformity Determination Plan (2022)

The Regional Conformity Determination Plan for the Triad Region ensures future transportation projects in the Triangle region comply with air quality standards set by the 1997 ozone National Ambient Air Quality Standards (NAAQS). The plan covers the Capital Area Metropolitan Planning Organization, the Durham-Chapel Hill-Carrboro MPO, and the Burlington-Graham MPO. It assesses projected emissions from proposed transportation projects to ensure they remain within allowed limits to protect public health and the environment. The plan includes strategies to reduce air pollution and promote sustainable and efficient transportation options.

BGMPO Transportation Safety Plan (TSP) (2022)

The Transportation Safety Plan (TSP) for the Burlington-Graham MPO outlines a six-step local road safety planning process framework to create a list of issues, risks, actions, and improvements to eliminate fatal and severe injuries on local roads for all road users. The TSP emphasizes the importance of data-driven approaches and community involvement in improving road safety. This plan marks the MPO's first regional safety initiative in North Carolina.

North Carolina Moves 2050 Plan (2021)

NC Moves 2050 is a strategic, 30-year multimodal, transportation plan for North Carolina by the North Carolina Department of Transportation (NCDOT). The plan aims to address the anticipated growth of the state's population from 10 million to 14 million by 2050. It focuses on creating a more responsive, diverse, and inclusive transportation system to sustain economic growth, improve quality of life, and address future challenges. The plan includes strategies to enhance transportation connectivity, safety, and efficiency to support North Carolina's evolving transportation needs.

BGMPO Transit Demand Management (TDM) Program (2021)

BGMPO TDM Program provides strategies for reducing or relocating transportation demands elsewhere. The program focuses on enhancing the regional transit network to match the growing population and transportation demand and improve transportation efficiency, safety, and accessibility within the Burlington-Graham urban area. It outlines coordinated efforts with regional stakeholders and includes strategies like implementing fixed-route transit systems and improving existing transit infrastructure.

BGMPO Public Involvement Plan Amended, (2020)

The Public Involvement Plan for BGMPO, amended in 2020, is an umbrella document containing all plans and programs of BGMPO's transportation planning process. The plan provides clear guidelines for public involvement in all stages of the transportation planning decision-making process. The outcome of the plan is to enhance public knowledge regarding the BGMPO's multimodal transportation system, associated costs, and funding sources.

BGMPO 2045 Metropolitan Transportation Plan (2020)

BGMPO MTP2045 is a federally required, comprehensive long-range transportation planning document serving as the vision for transportation needs for the region up to 2045. The MTP provides a fiscally constrained list of recommended multimodal transportation improvements aimed to improve overall mobility, reduce congestion, enhance safety, and support sustainable growth within Alamance County and parts of Guilford and Orange Counties.

BGMPO Title VI Program Plan (2019)

Title VI Program Plan for BGMPO is a policy prohibiting discrimination based on race, color, national origin, English proficiency, sex, age, or disability for programs that receive federal funding. The plan ensures compliance with federal non-discrimination laws and includes procedures for handling complaints, conducting regular reviews, and ongoing staff training.

North Carolina 54 West Corridor Study (2019)

The NC 54 West Corridor Study reviews the 20.4-mile stretch of NC 54 between Old Fayetteville Road in Carrboro and the I-85/I-40 interchange in Graham. The study provides the long-term vision for the corridor through 2045, addressing future growth, development, and traffic patterns along the corridor. It evaluates various transportation improvements including roadway widening, intersection enhancements, and transit, bicycle, and pedestrian facilities. The study's recommendations are designed to improve traffic flow, safety, and connectivity in response to local and regional growth, considering significant destinations such as Chapel Hill and related University of North Carolina traffic.

City of Mebane 2040 Comprehensive Transportation Plan (CTP) (2018)

The CTP for the City of Mebane, adopted in 2018, is a long-range, multimodal strategy providing recommendations for multimodal transportation projects that are not fiscally constrained. The plan serves as a foundational document for making informed transportation investments and policy decisions to support the city's growth and development through 2040.

Mebane Train Traffic Separation Study (2018)

The Train Traffic Separation Study, conducted in cooperation with the City of Mebane and Norfolk Southern, evaluated eight existing at-grade roadway-railroad crossings along a 5-mile span and their pedestrian, vehicular, and train patterns. The plan determines the need for improvements or elimination of crossings to improve safety and efficiency. The study included crossings at Buckhorn Road, Mattress Factory, N.C. 119 (Fifth Street), and Fourth Street, among others. Recommendations from the study were presented to the Mebane City Council, focusing on potential pedestrian improvements and measures to reduce rail-highway conflicts.

Alamance County Transportation Authority (ACTA) Community Connectivity Plan (2018)

The Community Connectivity Plan for ACTA is a five-year strategic document developed in collaboration with the North Carolina Department of Transportation's Public Transportation Division. The plan aims to document and outline the projects necessary for improving community connectivity and identifies the resources required to fund these initiatives. ACTA focuses on demand response transit services within Alamance County, aiming to enhance transportation accessibility and efficiency. The plan includes relocating ACTA's headquarters and improving coordination among existing transportation programs.





Burlington Greenways Bikeways Plan (2017)

Burlington Greenways Bikeways Plan outlines and builds upon recommendations for improving greenways, trails, bike lanes, and sidewalks for increased city-wide and regional connectivity. This long-range plan focuses on enhancing the quality of life and provides a framework for local and regional agencies to collaborate on creating safe, accessible, and sustainable pathways.

Burlington Train Station Connectivity Study (2017)

The Burlington Train Station Connectivity Study, completed in 2017, aims to improve access and connectivity to the Burlington Train Station to attract more riders. The study examines obstacles and opportunities for all transportation modes getting to and from the Burlington Train Station, focusing on the “first mile” and “last mile” of trips. Recommendations include strategies for better integration with local transit, pedestrian routes, and bike paths to ensure seamless travel experiences for passengers.

North Carolina Statewide Multimodal Freight Plan (2017)

NC Statewide Multimodal Freight Plan aims to enhance the state’s economic competitiveness, create jobs, and improve quality of life by optimizing freight transportation. The plan outlines a comprehensive multimodal freight network, addressing current and future needs. It focuses on improving connectivity and efficiency across various modes of transportation, including highways, rail, air, and ports. This plan is required by Fixing America’s Surface Transportation (FAST) Act to allow NC to capitalize on the National Highway Freight Program.

Town of Elon Bicycle Pedestrian Lighting Plan Update (2017)

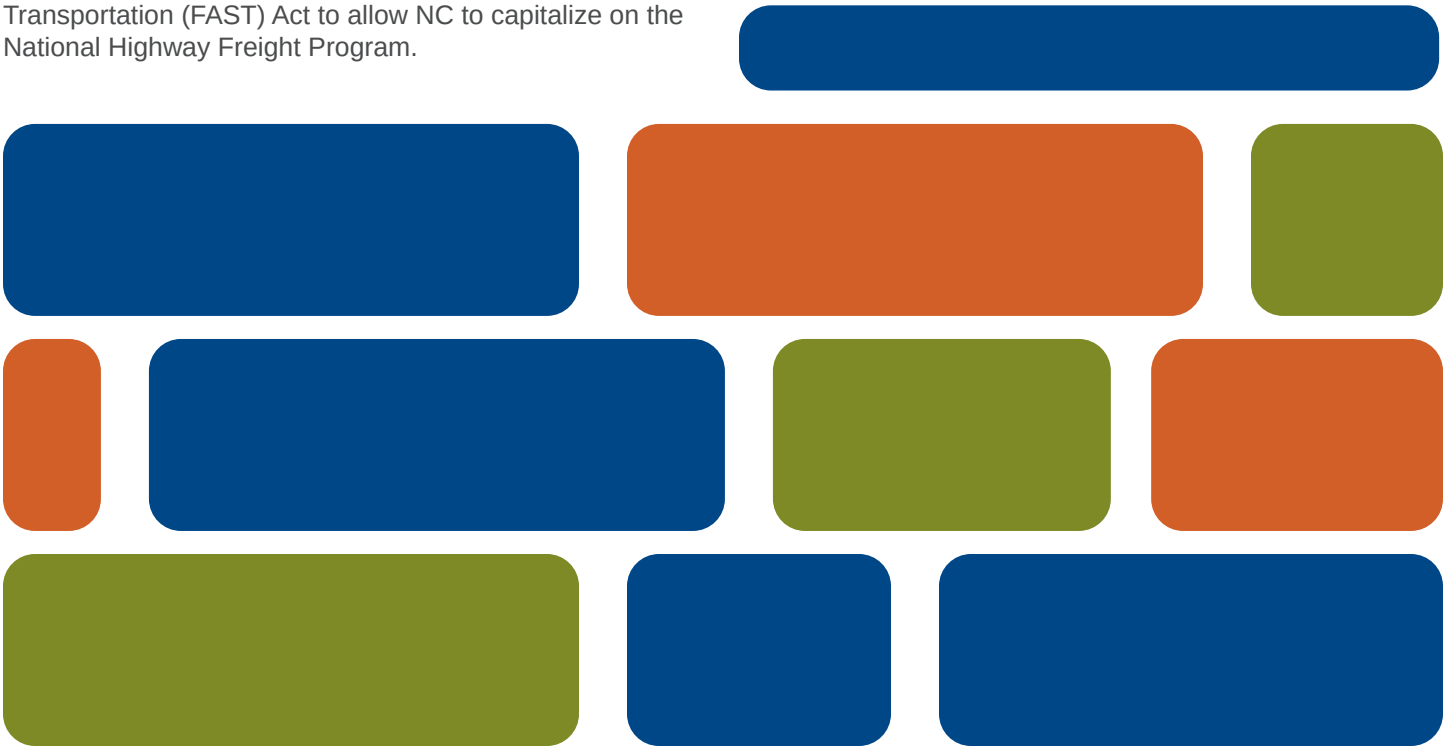
Elon’s Bicycle Pedestrian Lighting Plan update examines and prioritizes opportunities to improve active transportation, such as bicycle, pedestrian, and lighting systems, over the next twenty years. The plan encourages citizen participation in walking and biking while providing well-lit and safe access to key areas, such as residential zones, campus facilities, and downtown.

City of Mebane Bicycle and Pedestrian Transportation Plan (2015)

Mebane’s Bicycle and Pedestrian Transportation Plan, adopted in 2015 and updated in subsequent years, outlines Mebane’s vision, strategies, and actions needed to improve the connectivity of local bicycle and pedestrian infrastructure. The plan aims to expand existing networks in Mebane by developing new sidewalks, bike paths, and pedestrian-friendly routes, with specific projects prioritized based on community needs and feedback.

Alamance County Trails Plan (2014)

The Alamance County Trails Plan is a long-range strategy aimed at developing and enhancing trails and greenways throughout Alamance County. This plan focuses on identifying and prioritizing opportunities to create recreational trails, working in collaboration with municipalities, citizens, businesses, and landowners. It aims to improve access to recreational spaces, promote outdoor activities, and support environmental conservation



Gibsonville Comprehensive Pedestrian Plan (2014)

The Comprehensive Pedestrian Plan for Gibsonville outlines the town's vision for enhancing pedestrian transportation. The plan assesses the existing pedestrian environment and proposes recommendations for improving the pedestrian network, focusing particularly on the downtown area. It includes a review of town policies and programs and provides strategies for implementation and funding of proposed improvements.

Piedmont Together Comprehensive Regional Plan (2014)

The Piedmont Together Comprehensive Regional Plan, developed in partnership with the Piedmont Authority for Regional Transportation (PART) and supported by a HUD grant, focuses on achieving equitable prosperity for the Piedmont Triad region, including Alamance and Guilford counties. The plan aims to build a resilient and prosperous economy to enhance the quality of life for all residents through strategic planning in five key areas: jobs, housing, transportation, health, and places and spaces.

Orange County Comprehensive Transportation Plan (CTP) (2013)

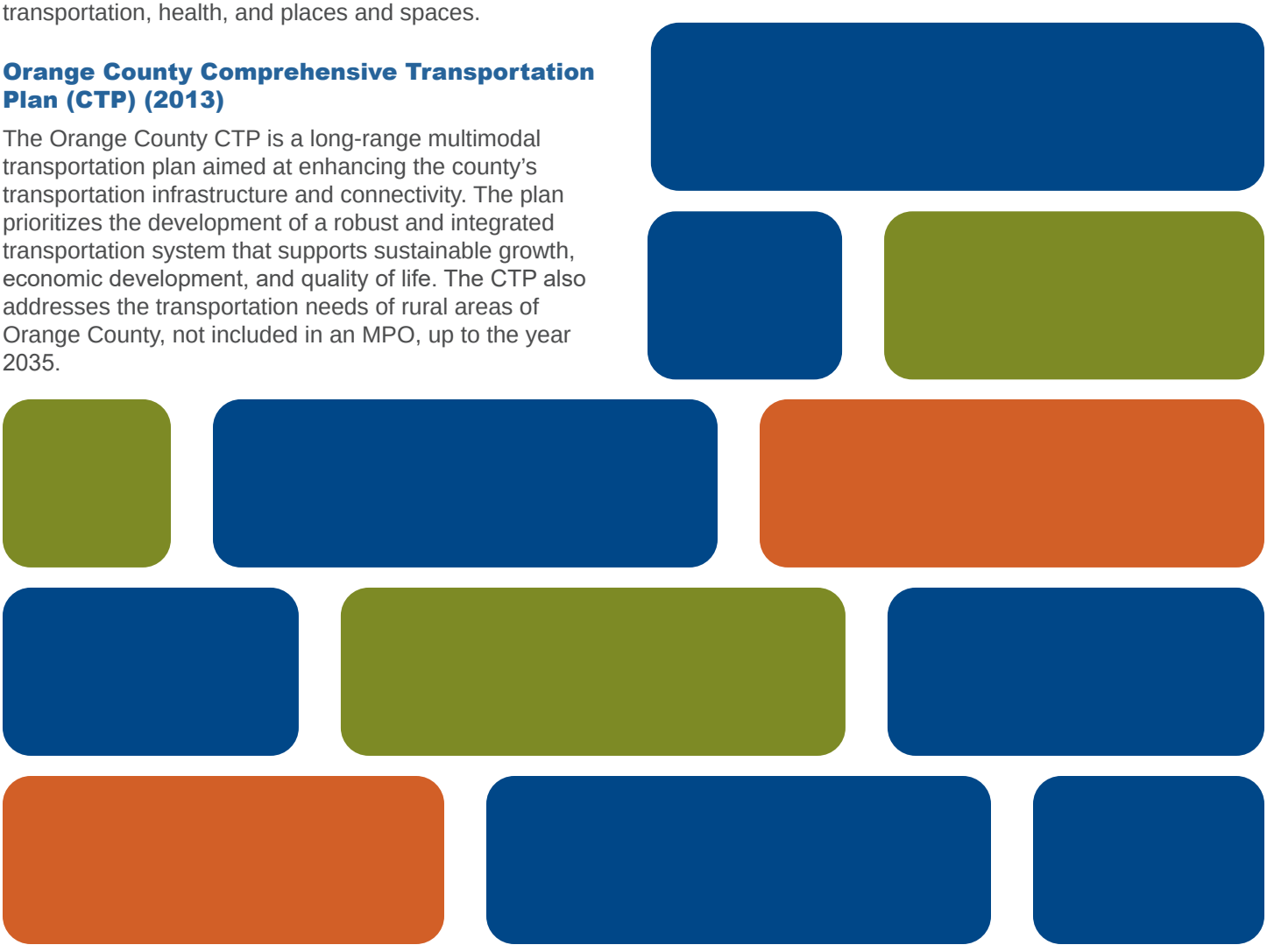
The Orange County CTP is a long-range multimodal transportation plan aimed at enhancing the county's transportation infrastructure and connectivity. The plan prioritizes the development of a robust and integrated transportation system that supports sustainable growth, economic development, and quality of life. The CTP also addresses the transportation needs of rural areas of Orange County, not included in an MPO, up to the year 2035.

Burlington Pedestrian Plan (2012)

The Burlington Pedestrian Plan is a joint effort between the City of Burlington and the BGMPO to help create a more walkable community. The plan provides a comprehensive framework for improving the pedestrian network and access to key destinations through guidance, tools, and programs. It emphasizes the importance of filling gaps in the existing sidewalk network, increasing connectivity, and promoting safe and efficient pedestrian travel..

City of Graham Pedestrian Transportation Plan (2006)

Graham's Pedestrian Transportation Plan aims to create a more pedestrian-friendly environment to enhance the city's livability. The plan presents findings of existing facilities and public input used to set phased recommendations and prioritize projects to improve their pedestrian system. Pedestrian infrastructure, such as sidewalks and crosswalks, is the focus of the plan to ensure safe pedestrian access across busy roadways, particularly near schools and high-traffic areas.



People

Population

197,232 ▼
Total Population

186,363 in 2022
201,475 in 2030
240,068 in 2050

Diversity and Age

63.5%
White

20%
Black or African American

14.23%
Other Race or Mixed

13.69%
Hispanic or Latino

Median Age
40.5

Median Male Age
38.4

Median Female Age
42.5

Income and Poverty

	Burlington-Graham MPO	North Carolina
Median Household Income	$64,759	$70,804
Households in Poverty	13.5%	12.8%

Education

45.8%
High School Grad or higher

18.4%
Bachelor's or higher

Commuting Patterns

37,242
commute INTO the planning area for work

33,707
live and work in the planning area

50,619
commute OUT of the planning area for work

Mode to Work

88.2%
by car, truck, or van

79.9%
drive alone

8.3%
carpool

9.5%
work from home

1.3%
by walking

~0.0%
by public transit

~0.0%
by taxi

~0.0%
by motorcycle

~0.0%
by bike

Vehicle Access

4.3%
of households have no access to a vehicle

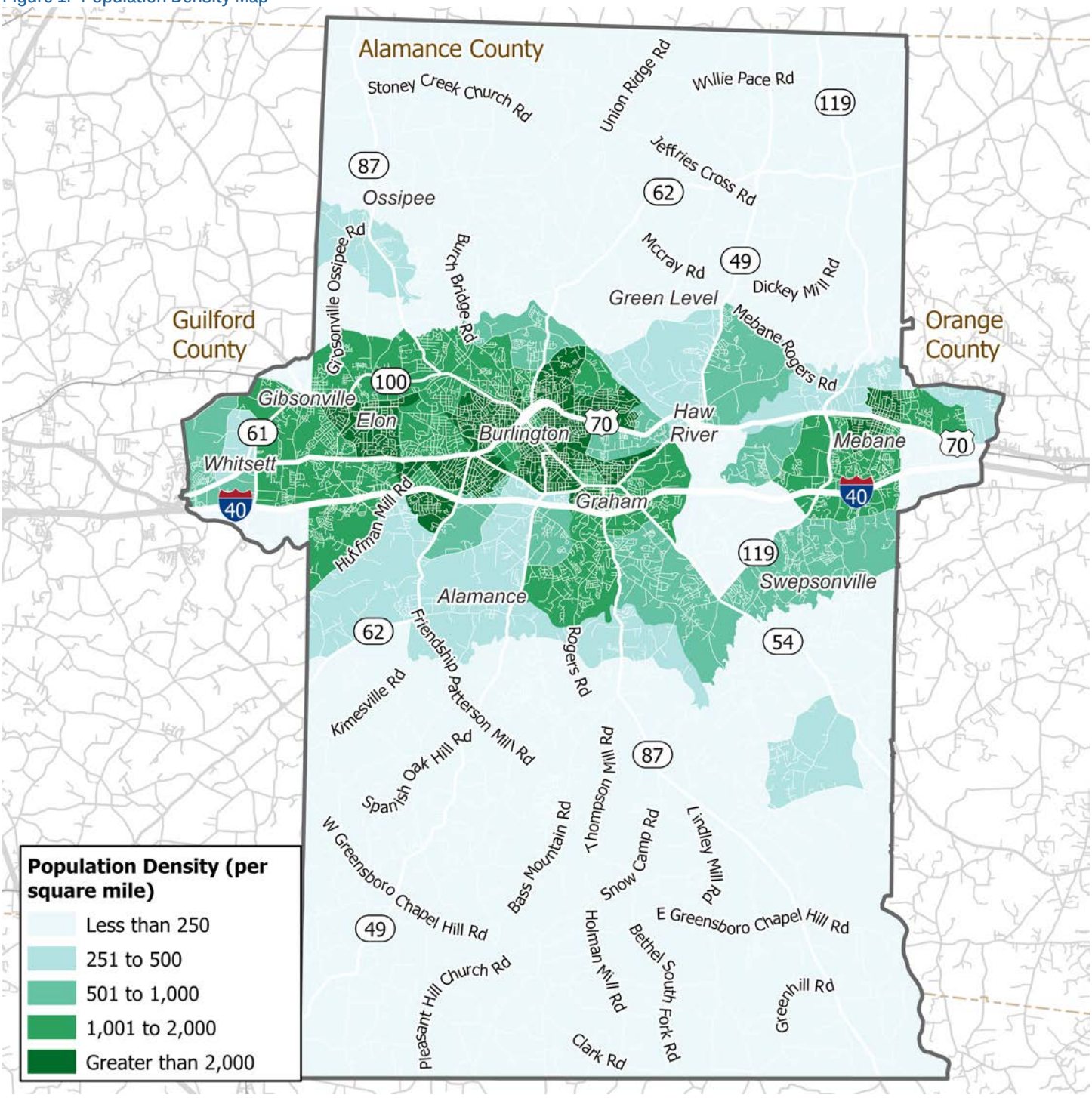
31.6%
of households can only access one vehicle

Numbers sourced from 2023 ACS 5-year estimates by block group. Block groups were included if within or partially within the current MPO boundary. Population change over time numbers sourced from BGMPO TAZ Block Groups from the Travel Demand Model.

Population Density

Population density measures the concentration of individuals living in a given geographical area. Figure 1 shows the areas surrounding I-40 and US-70 have the highest population densities; more specifically, sections of Burlington, Elon, and Mebane have blocks with greater than 2,000 people per square mile. Both the northern and southern parts of Alamance County are largely rural districts, with several heavy industrial developments throughout these areas. Residents are more spread out in these areas equating to less than 250 people per square mile.

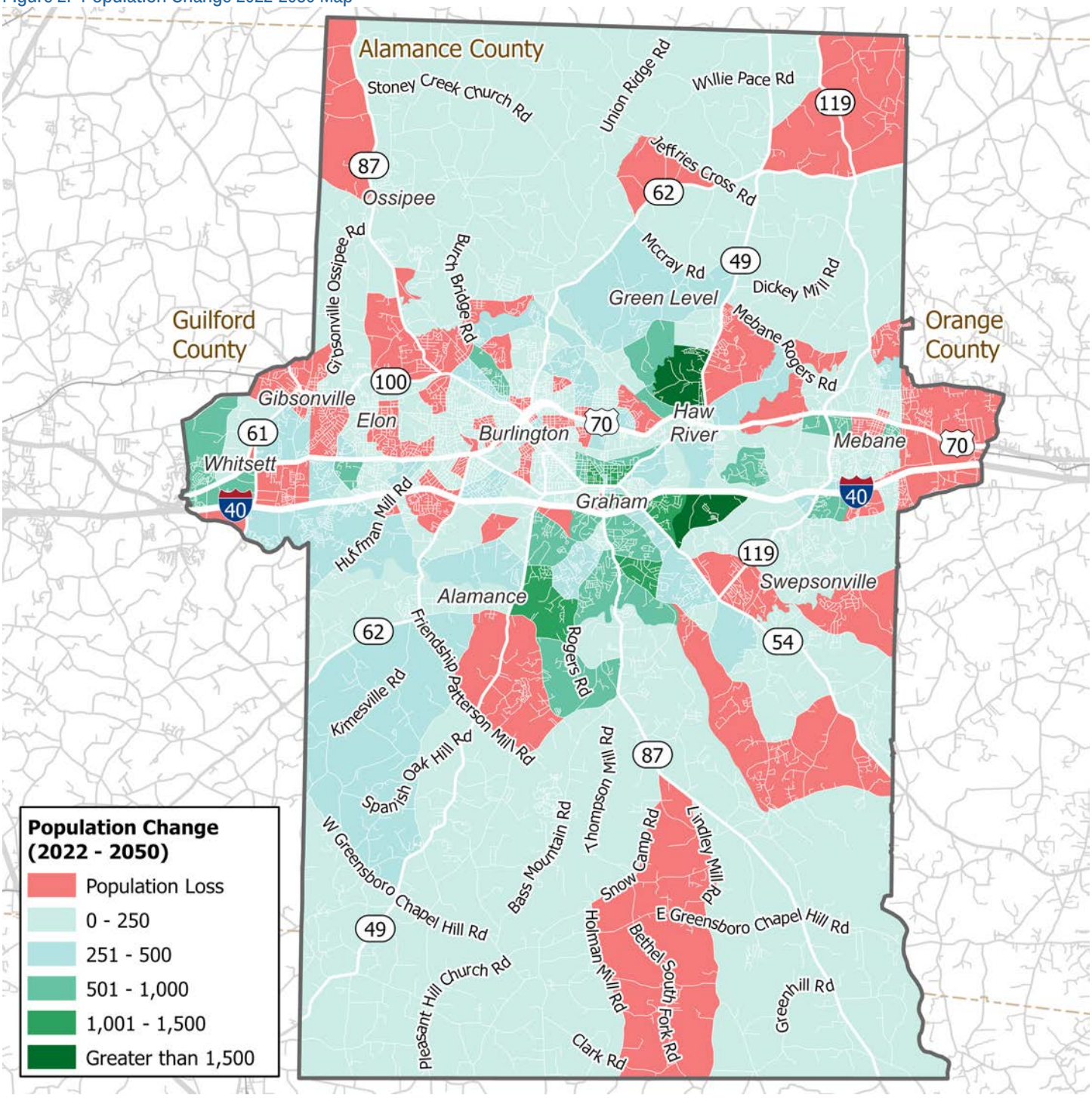
Figure 1. Population Density Map



Population Change

Population change measures population growth or decline of individuals living in the study area between the years 2022 and 2050. This measure helps to represent areas that may need investment in infrastructure and other amenities to keep up with future demands. Figure 2 shows two areas (dark green) that are estimated to grow by more than 1,500 people by 2050. These two areas currently have lower than average population densities. For the majority of the BGMPO area, gradual growth will occur, with populating increasing between 0 and 500 people. Several parts of the study area will experience population loss between 2022 and 2050. These areas are both in outskirts of the study area and closer to the denser core of the BGMPO area.

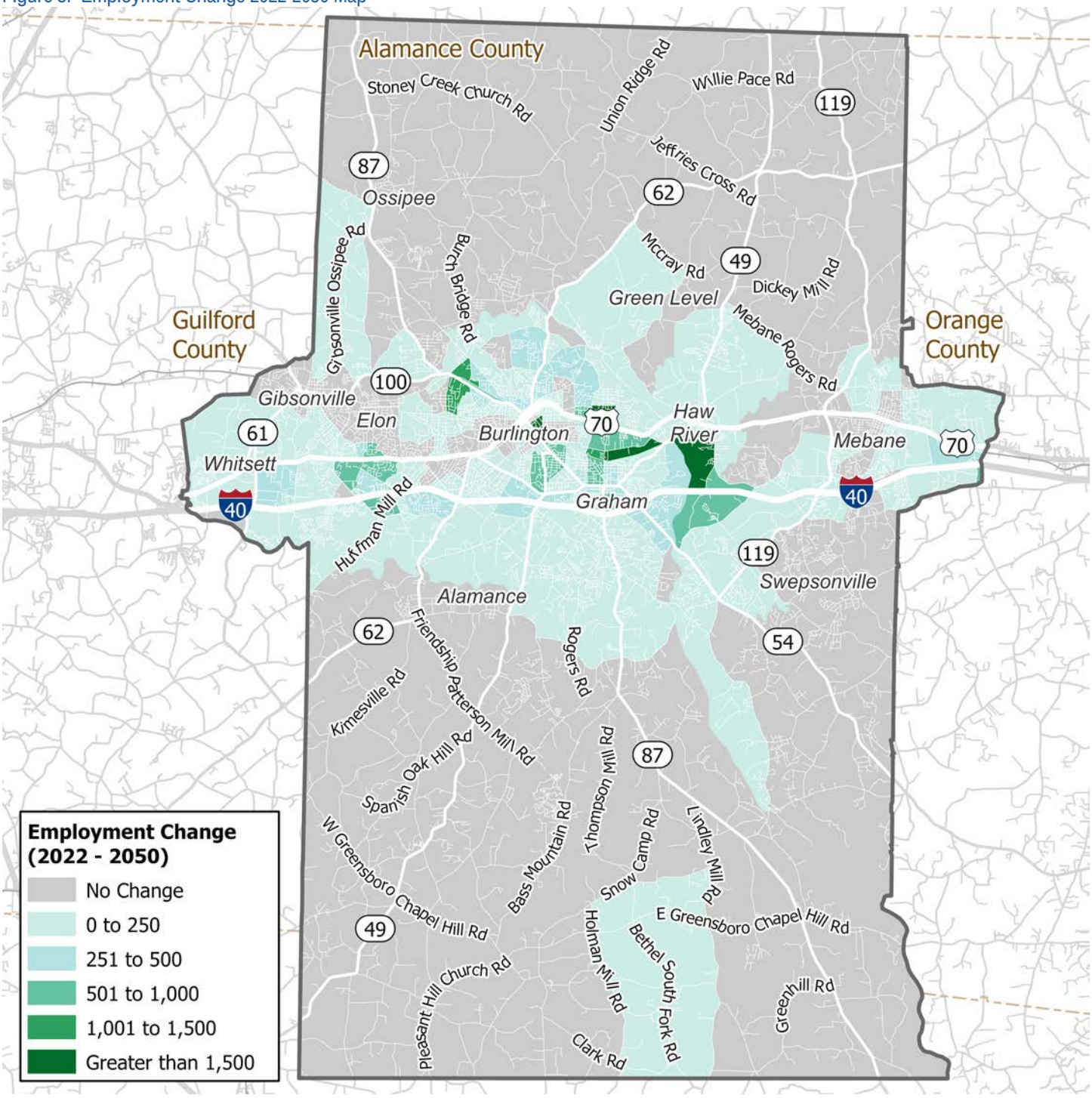
Figure 2. Population Change 2022-2050 Map



Employment Change

Employment change measures change in the amount of people employed. Figure 3 shows two areas (dark green) that are expected to increase its workforce by more than 1,500 people. Several areas near the core of the BGMPO study area, near I-40 and US-70, are expected to see up to 250 people become employed between 2022 and 2050. Another area excepted to see an increase in employment is the area (light green) surrounding Bethel South Fork Road, which according to Figure 2 is expected to experience population loss. More rural areas of the study area show no change in employment (gray) between 2022 and 2050.

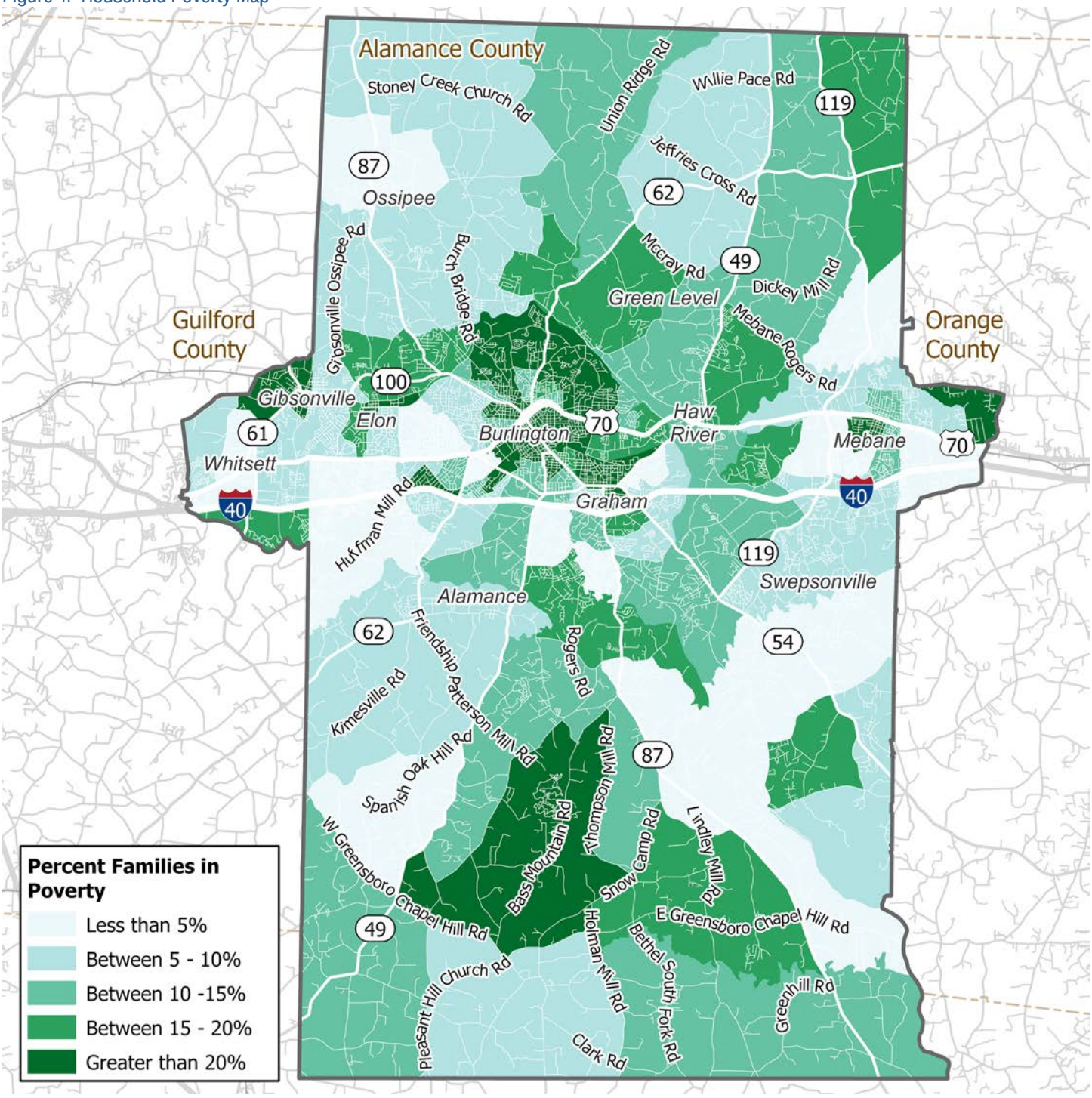
Figure 3. Employment Change 2022-2050 Map



Household Poverty

Household poverty measures the percent of families whose income falls below a certain threshold as determined by BGMPO's Title VI guidelines. As portrayed in Figure 4, some areas saw greater than 20% of households in living in poverty (dark green), including some areas surrounding Burlington, north of Gibsonville, north of US-70 in Orange County, and in southern Alamance County. The majority of the BGMPO area has between 5% and 20% of households in poverty with very few areas having less than 5% of households living in poverty,

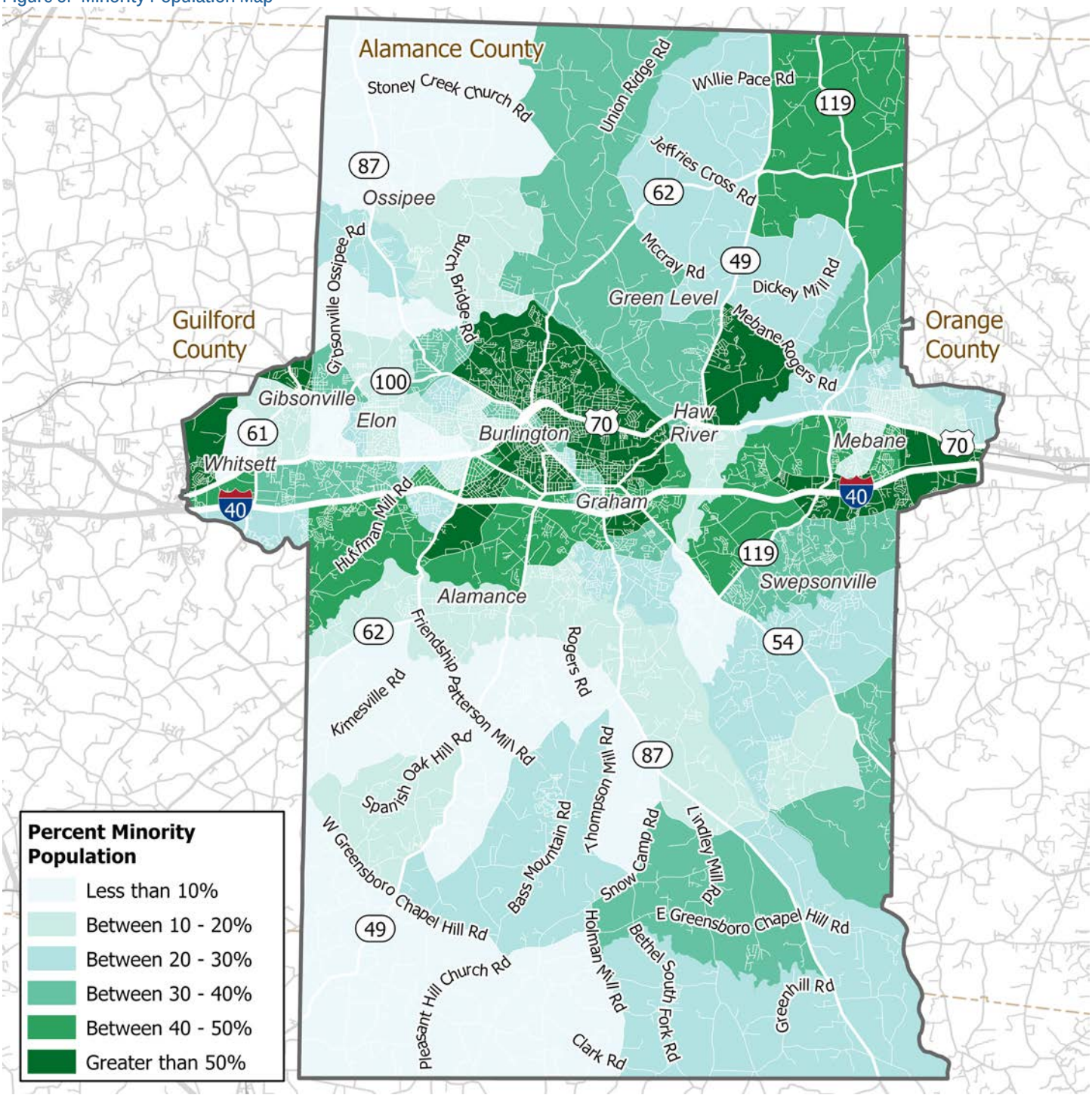
Figure 4. Household Poverty Map



Minority Population

Minority population measures the racial and ethnic diversity of residents in geographic areas. This measure is important for influencing policy-making and economic-outcomes. Figure 5 shows that areas closer to the core of the BGMPO area tend to have larger amounts of minority populations. Comparisons between Figure 4 and Figure 5 show some correlation between areas of higher percentages of families in poverty and areas of higher percentages of minority populations. However, this is not always the case.

Figure 5. Minority Population Map

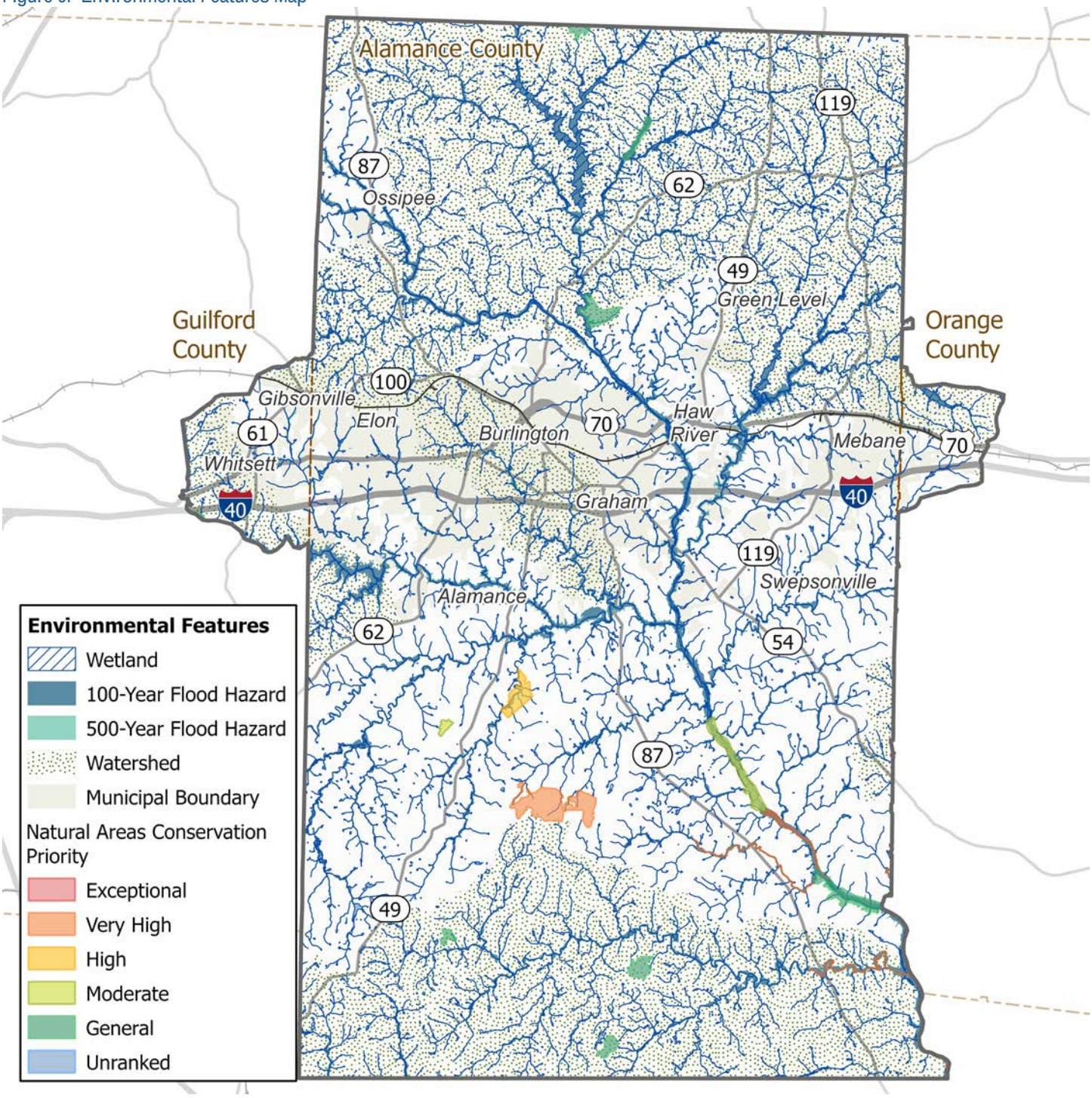


Places

Environmental Features

Figure 6 shows environmental features, including wetlands, flood plains, watersheds. The map also features priority rankings for the conservation of Natural Heritage Natural Areas (NHNA). Of the 11 NHNA in the BGMPO area, nine are considered general to moderate priority areas for conservation while Cedarock Park and Cane Creek Mountains/ Observatory Woods are considered high to very high priority areas for conservation.

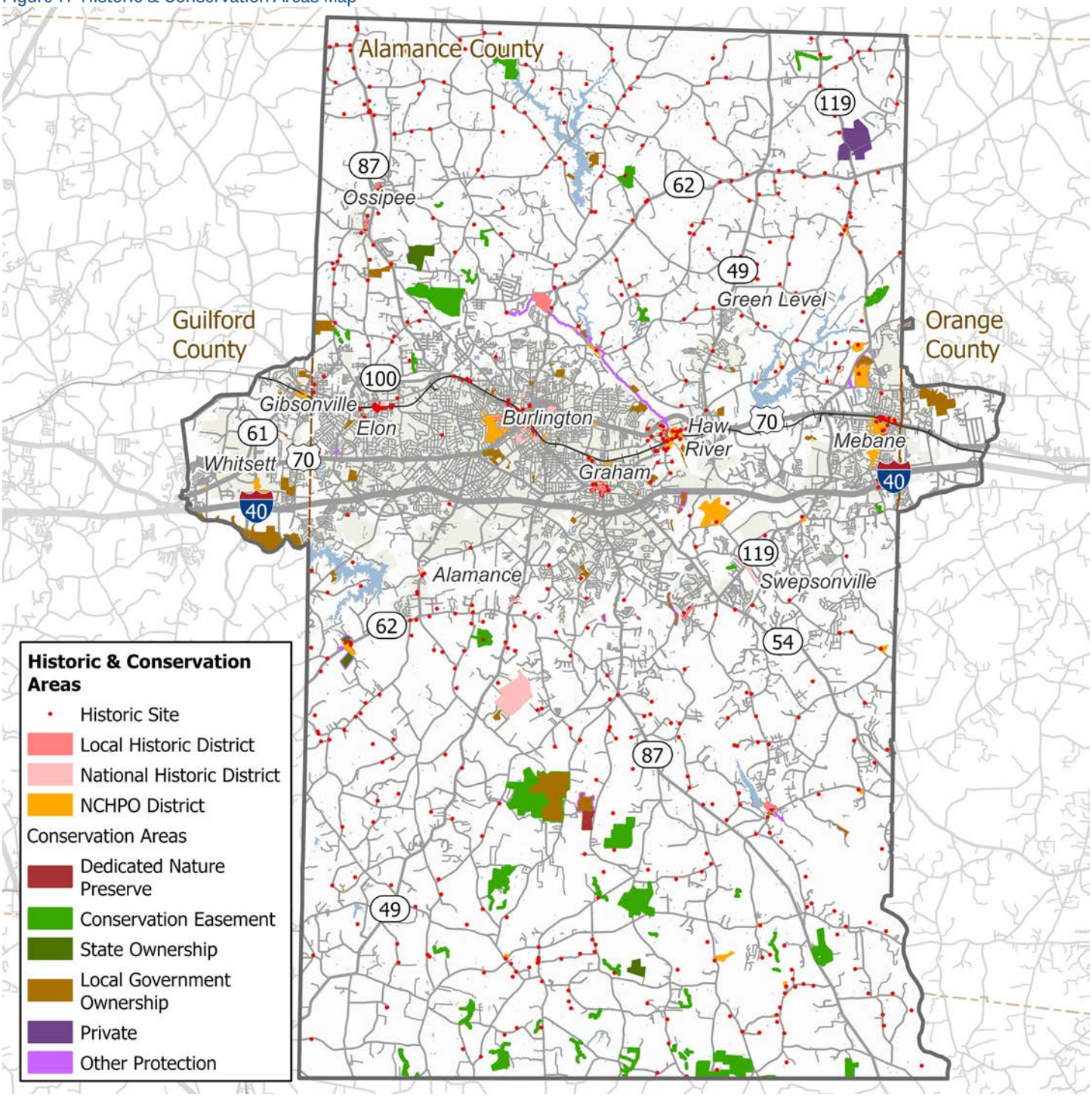
Figure 6. Environmental Features Map



Historic & Conservation Areas

Historic and conservation areas are important to map for planning future development and understanding land ownership and its usage. As seen in Figure 7, a total of 593 identified historic sites exist throughout the BGMPO area, along with five Local Historic Districts, 14 National Historic Districts, and 96 NCHPO Districts. The area has several conservation areas that place restrictions on the property to protect its conservation values. In southern Alamance County, approximately 60 acres of land belong to a dedicated nature preserve at Three College Observatory. A total of 64 easements exist, typically managed for multiple uses (subject to extractive or OHV use) or to suppress disturbances to protect biodiversity. The state owns six conservation areas, local governments own 72, and one is privately owned. Nineteen are under other protection.

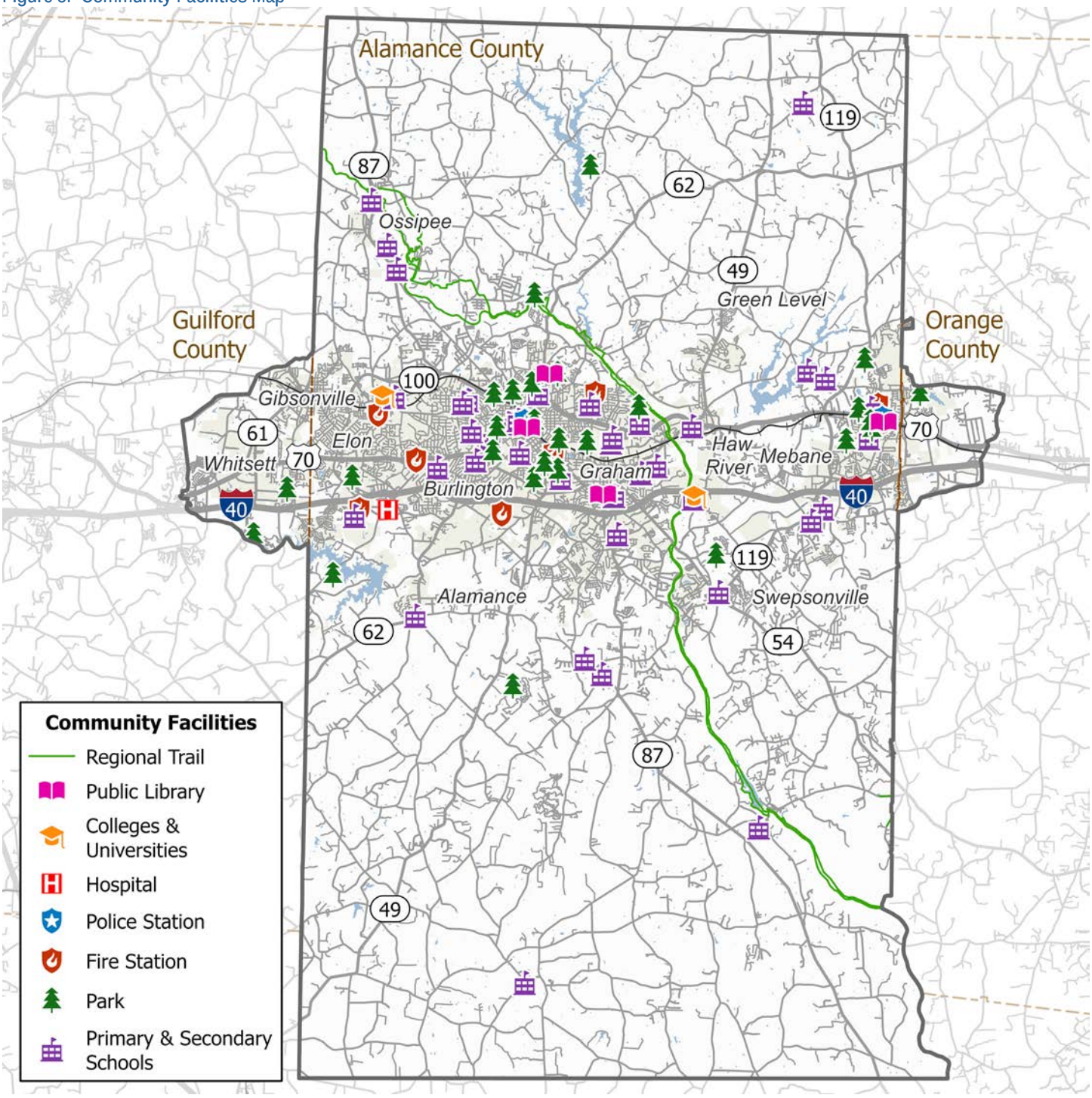
Figure 7. Historic & Conservation Areas Map



Community Facilities

Community facilities are crucial points to represent when analyzing current conditions of the BGMPO area. Community facilities should be related to population densities to ensure the facilities and services are meeting the needs of an area. Alamance County has 39 primary and secondary schools, most of which are closer to the core of the County. Several parks are within the more dense, urban areas, as well as seven fire stations and Cone Health Alamance Regional Hospital off of I-40. Figure 8 represents community facilities within the BGMPO area.

Figure 8. Community Facilities Map

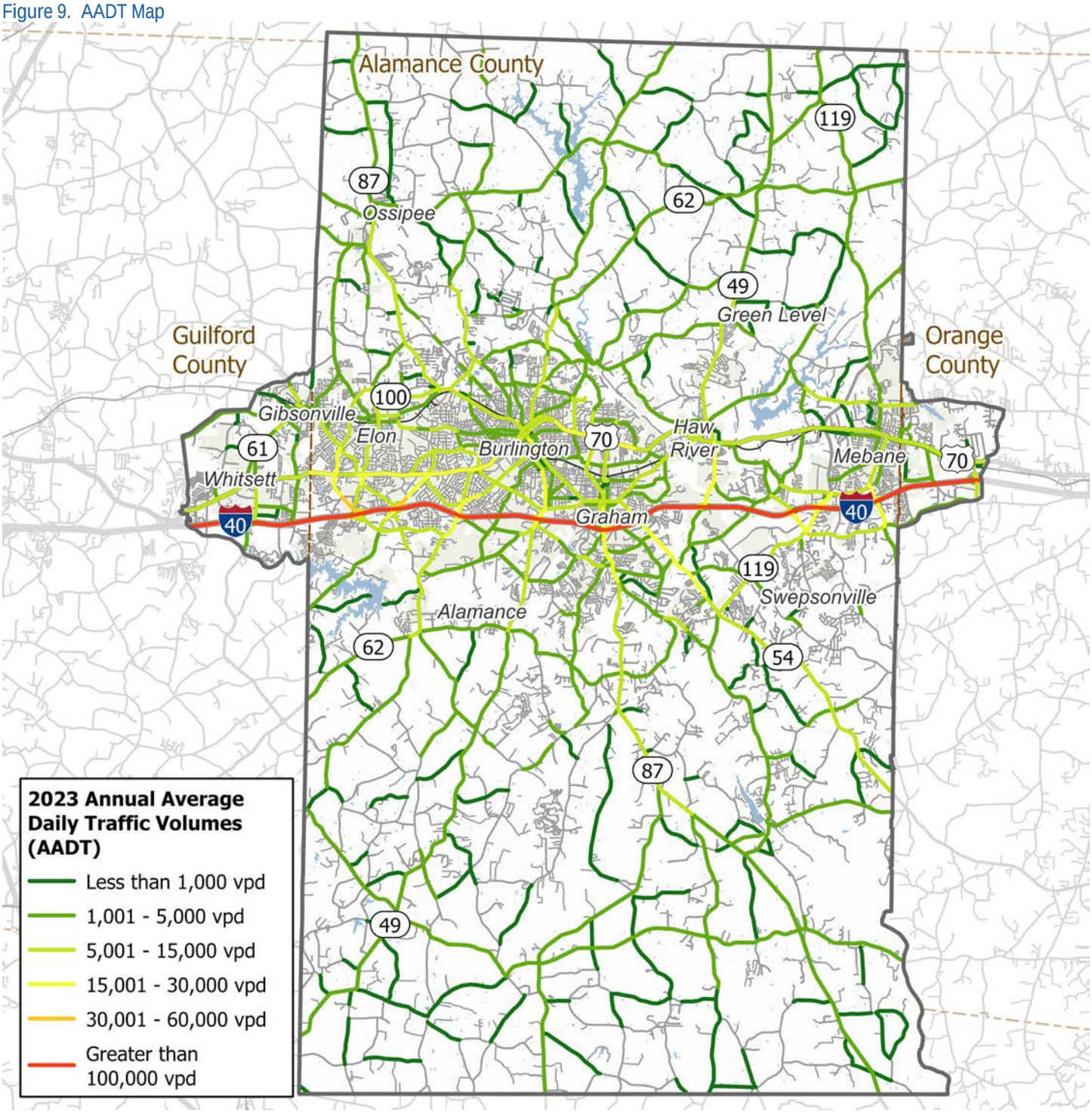


Mobility

Average Annual Daily Traffic

Average Annual Daily Traffic, or AADT, is a measure of the average number of vehicles to cross a certain point of a roadway over the course of a year. This measure helps to show regional importance of roads, plan for maintenance, and better understand traffic levels. Figure 9 shows the AADT for major roads throughout the BGMPO area. Unsurprisingly, I-40 has the highest AADT with over 100,000 vehicles per day. Major roads in the center of the MPO near urban areas along the I-40 corridor have the next largest share of AADT. Roads further from major population centers tend to have lower AADT values. Figure 9 displays AADT levels within the BGMPO area.

Figure 9. AADT Map

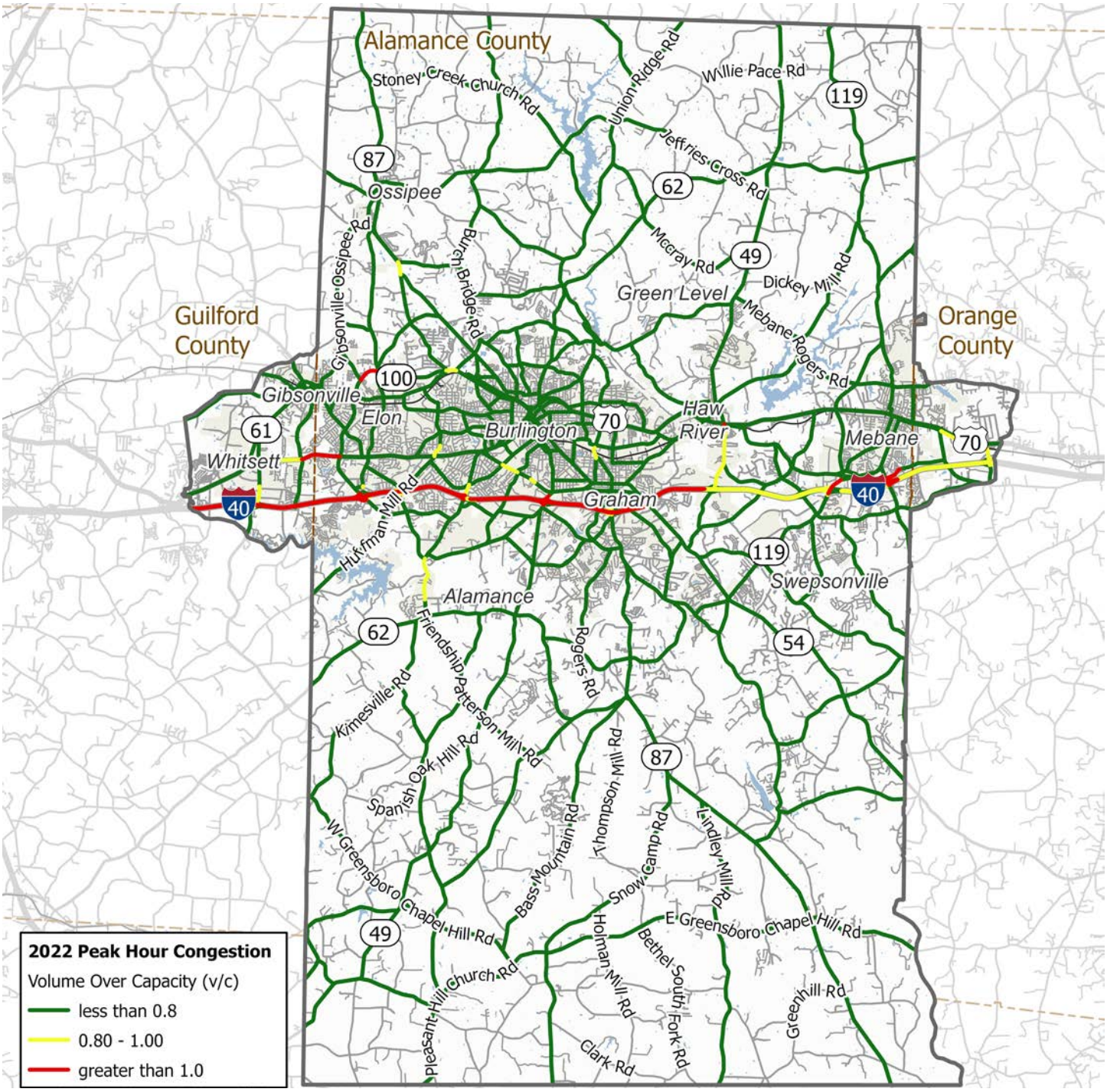


Traffic Congestion - Base year 2022

Traffic volumes alone cannot be the sole determinant of congesiton. The available roadway capacity is equally important in understanding network congestion. An effective means to measure congestion is determing the volume-to-capacity ration. A V/C ratio is calculated by dividing the traffic voume of a raodway segement by the roadway's capacity. In Figure 10, the roadways were grouped into the follow categories:

- **Below Capacity**: Facilities with a V/C less than 0.80. Roadways operating below capacity experience little to no congestion during peak travel periods.
- **At Capacity**: Facilities with a V/C between 0.81 and 1.00. Roadways operating at capacity are somewhat congested during non-peak periods and congested during peak hours
- **Above Capacity**: Facilities with a V/C greater than 1.00. Roadways operating above capacity expereince congestion during both peak and non-peak periods.

Figure 10. Base Year Model PM Peak Hour Congestion (V/C)

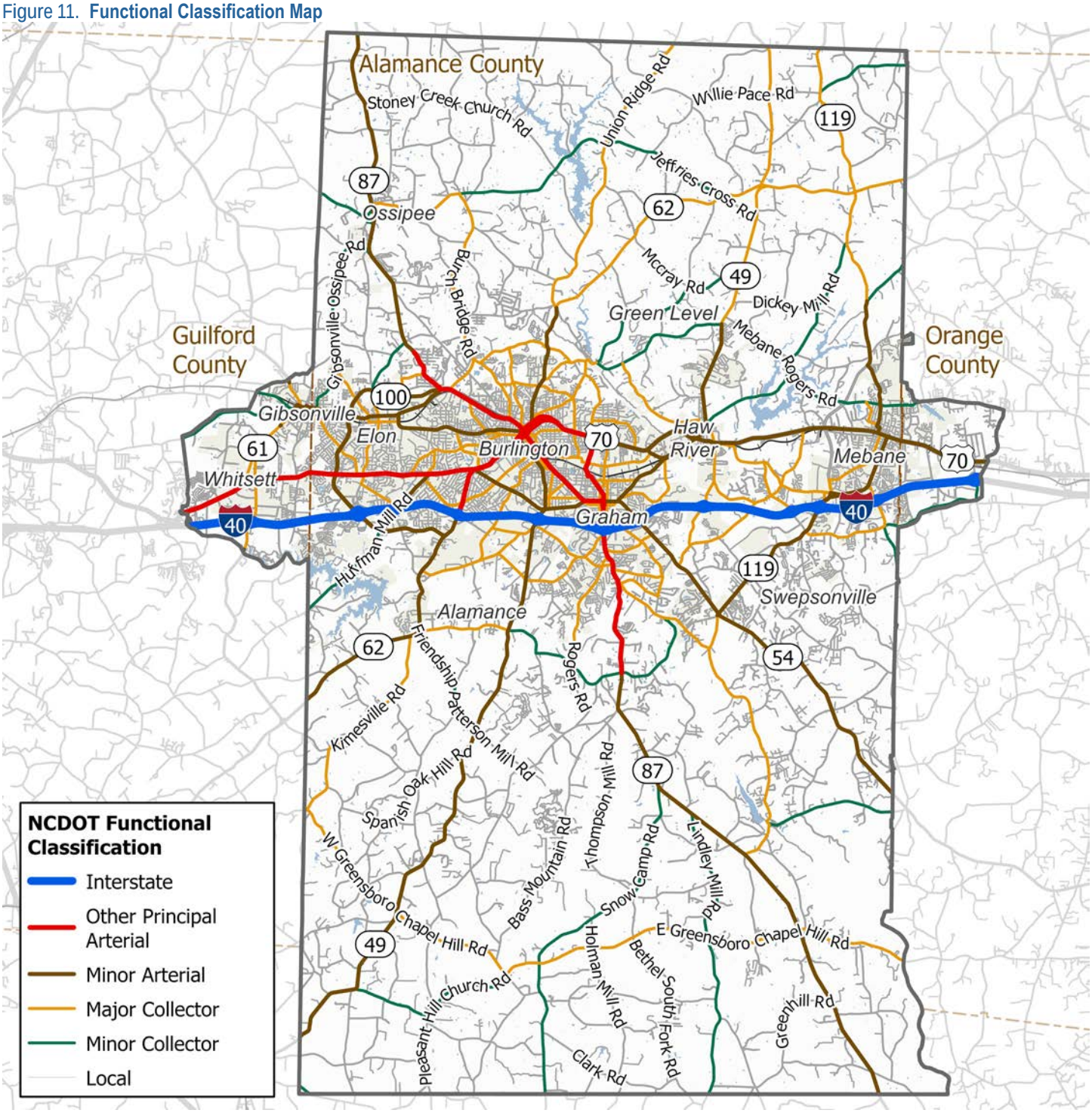


Functional Classification

Functional classifications categorize roadways based on speeds, vehicular capacities, and relationships with adjacent land use. It defines the street in terms of roadway design and features to service the movement primarily of vehicles. Functional classifications found in the study area include:

- **Interstate**: Designed and constructed with mobility and long-distance travel in mind
- **Other Principal Arterial**: Serves major activity centers and provides higher mobility through urban and rural areas
- **Minor Arterial**: Connects with principal arterials and serves trips of moderate length
- **Major & Minor Collector**: Provides access and traffic circulation within neighborhoods and commercial areas
- **Local**: Provides access with little or no through movement and consists of roads not defined as arterials or collectors

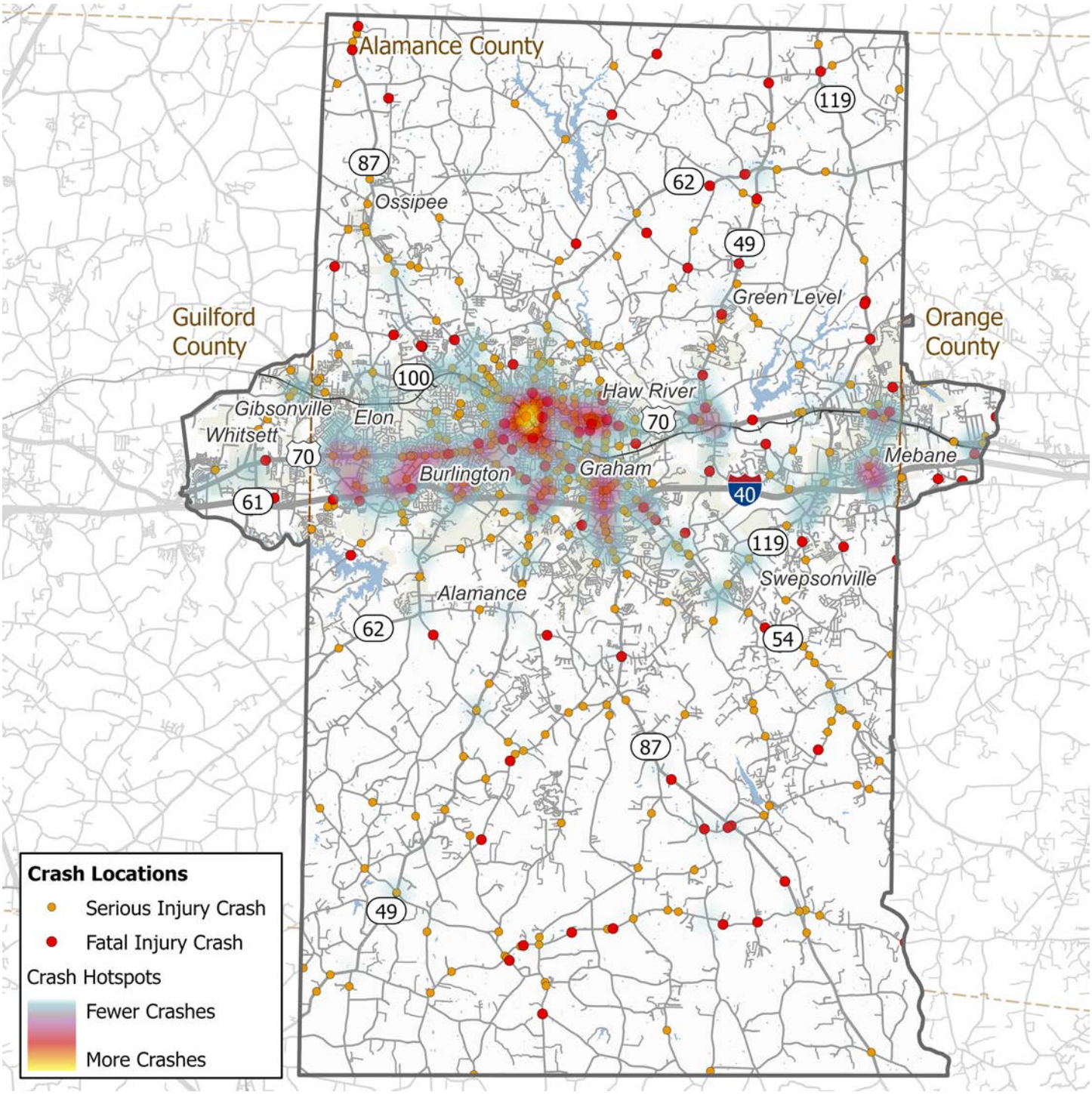
Figure 11. **Functional Classification Map**



Crashes

Crash data provided in Figure 12 measures hotspots of reported crashes as well as serious injury crashes which indicate a life altering incident, and fatal injury crashes. The map shows the most crashes occurring in the same area near the intersection of North Park Avenue and I-40, in the northeastern part of Burlington. Between 2019 and 2023, a total of 453 severe injury crashes and 93 fatal injury crashes have been reported in the BGMPO area.

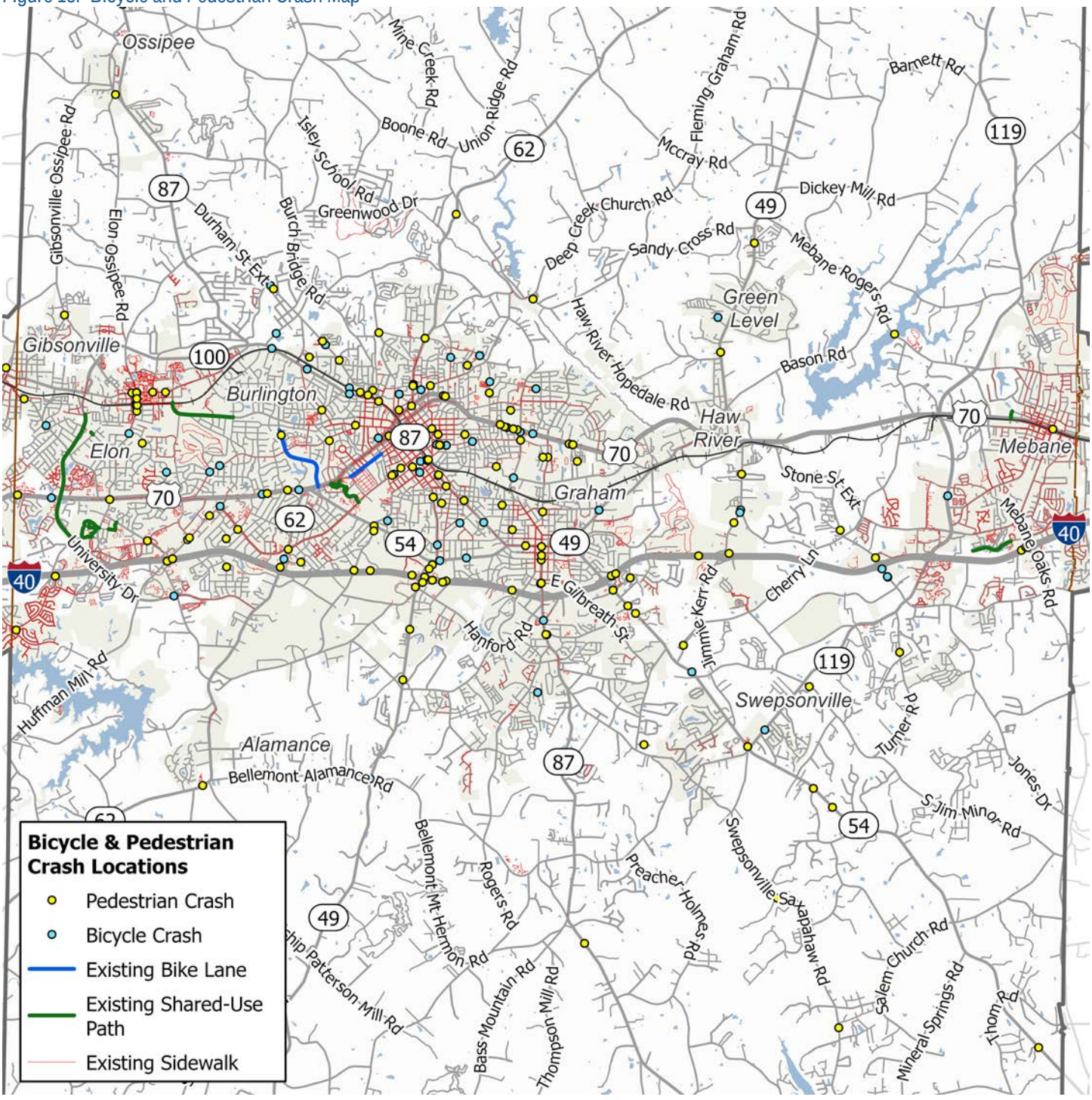
Figure 12. Crash Map



Bicycle and Pedestrian Crashes

Figure 13 shows reported crashes that involved a bicycle or pedestrian. The map is overlaid with existing active transportation infrastructure (bike lanes, shared-use paths, and sidewalks) to illustrate the relationships between crash locations and existing bicycle and pedestrian infrastructure. A total of 67 bicycle crashes and 157 pedestrian crashes were reported between 2019 and 2023. A high number of bicycle and pedestrian related crashes occurred closer to the core of the study area. While one pedestrian crash was reported near a bike lane, no bicycle or pedestrian crashes have occurred on a shared use path.

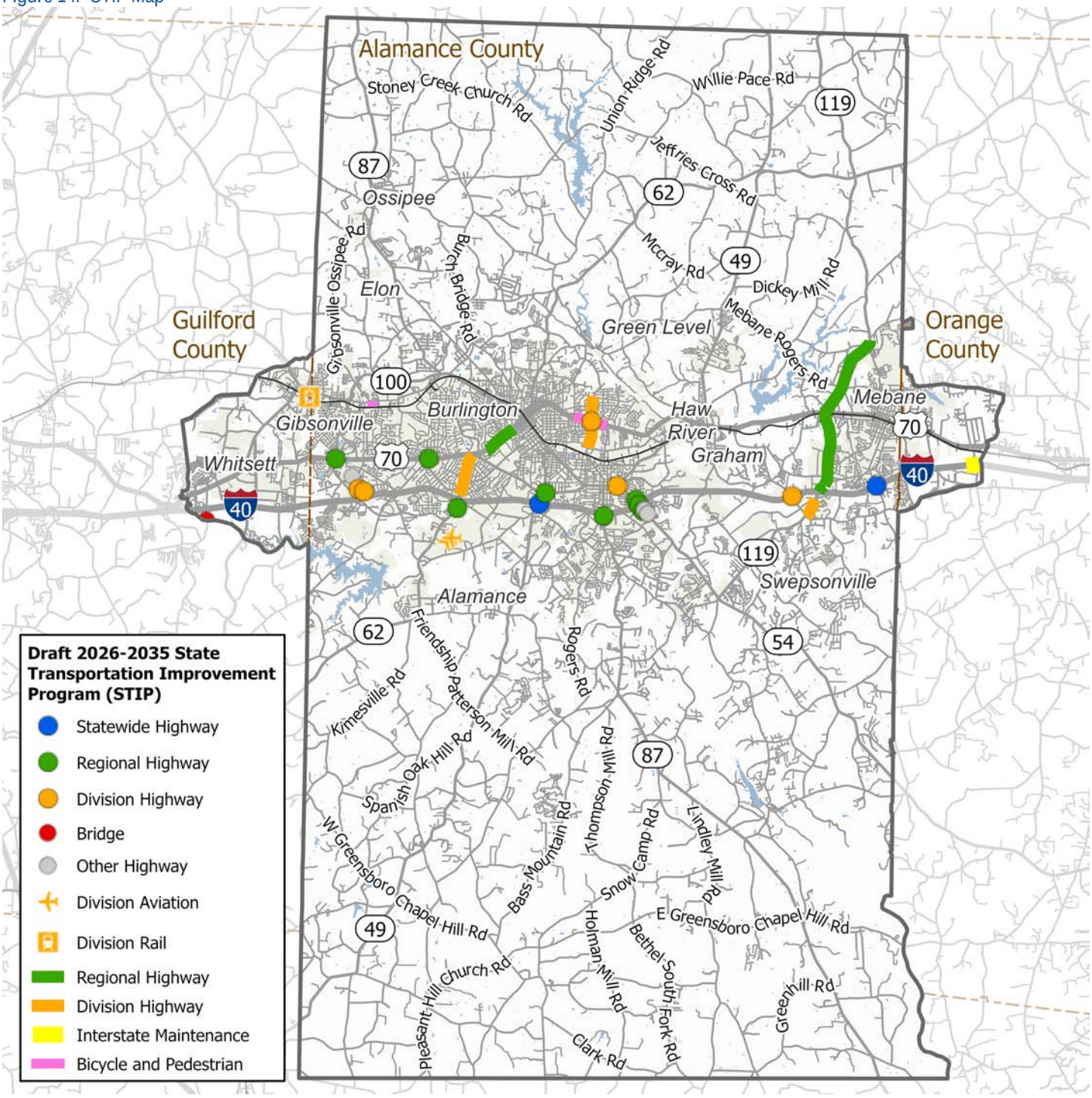
Figure 13. Bicycle and Pedestrian Crash Map



State Transportation Improvement Program

The State Transportation Improvement Program (STIP) provides state and federal funding for transportation projects. Most transportation projects in North Carolina utilize the STIP for funding. The Draft 2026-2035 STIP has identified several projects, including improvements to statewide highways (I-40), regional highways (US-70, etc.), and other arterials. Figure 14 displays STIP projects within the BGMPO area.

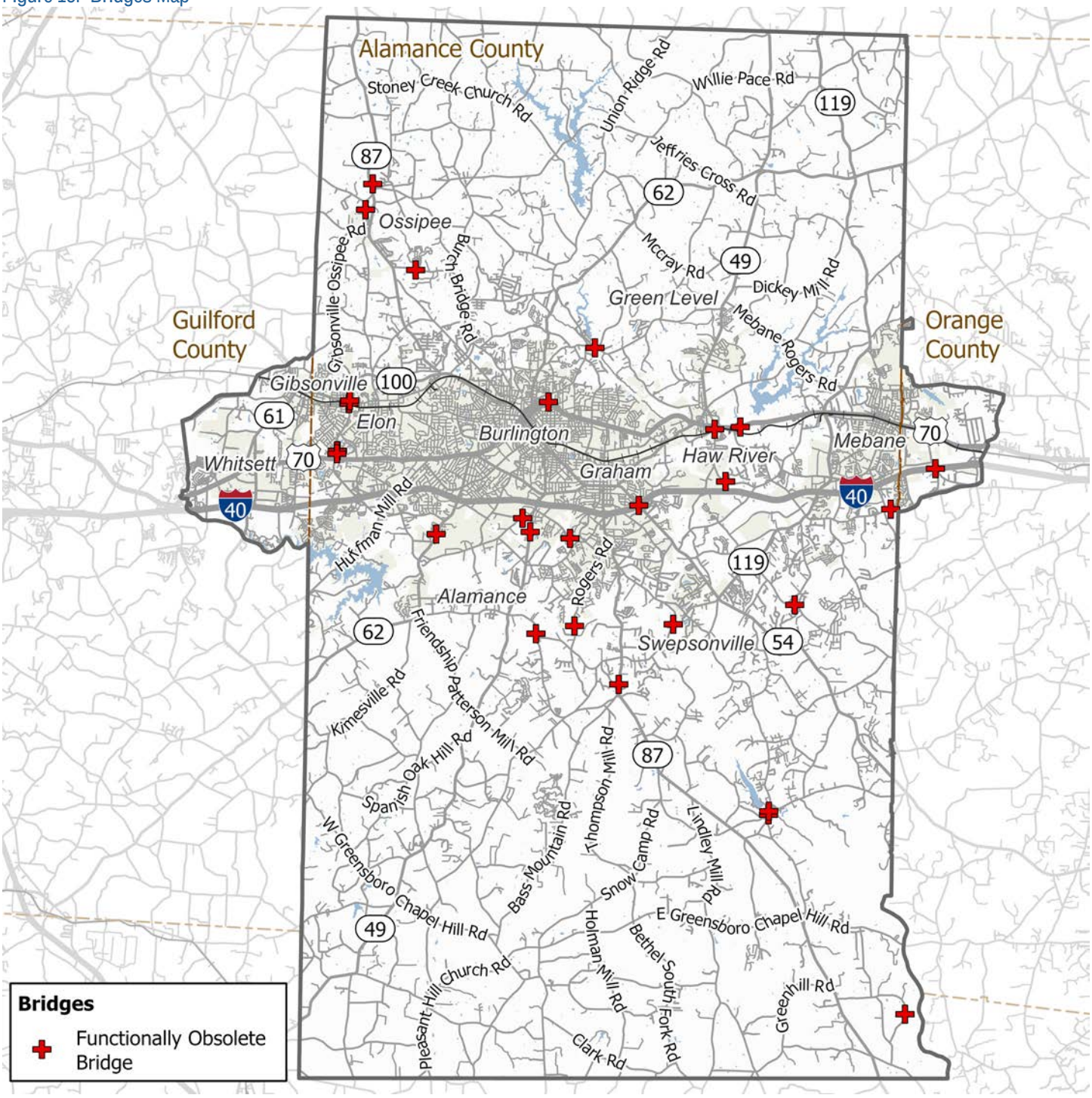
Figure 14. STIP Map



Bridges

Figure 15 shows the functional obsolete bridges within the BGMPO area. The 30 functionally obsolete bridges have outdated building standards and lack the necessary lane widths, shoulder widths, or vertical clearances needed to serve today's traffic needs.

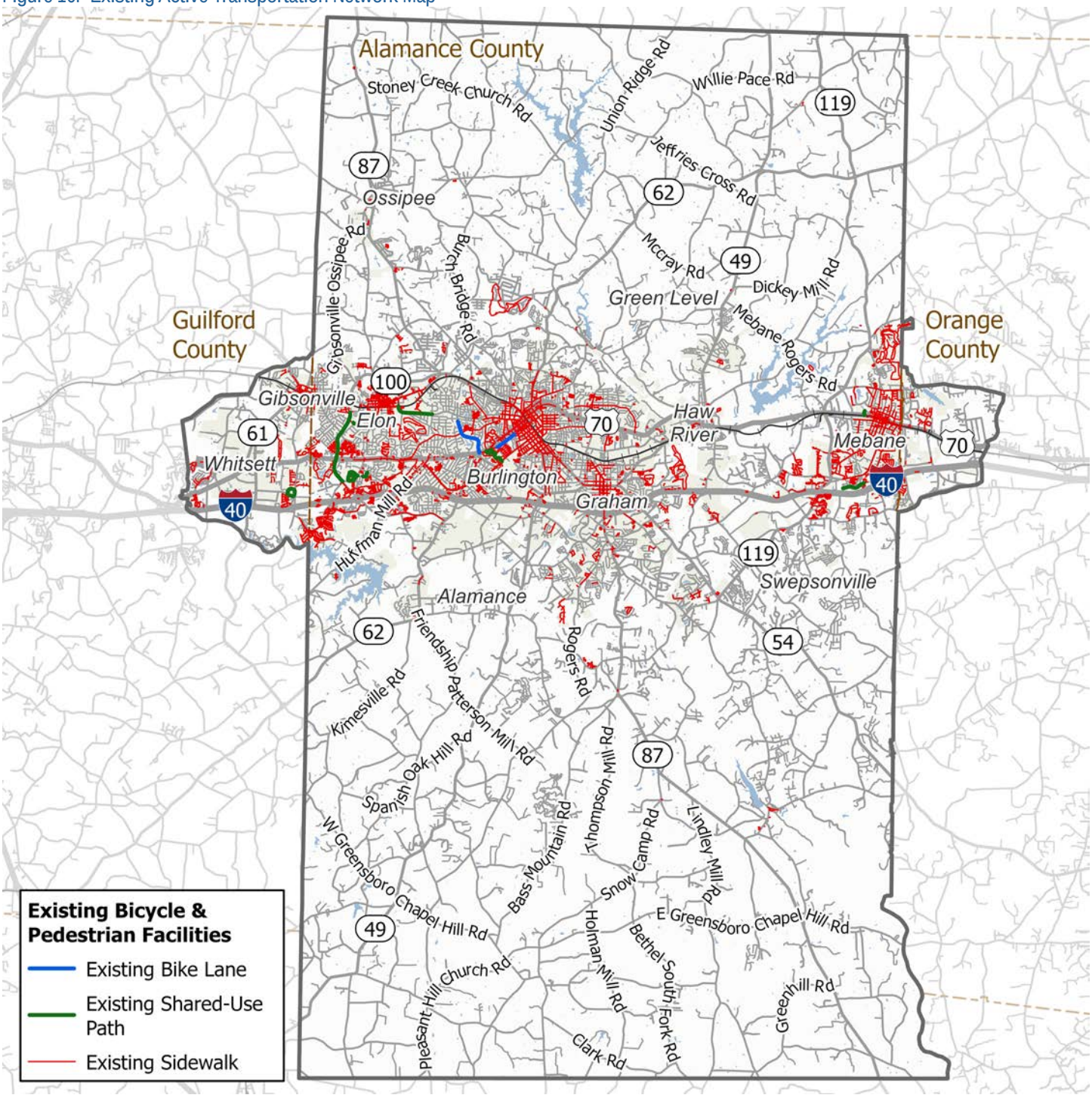
Figure 15. Bridges Map



Existing Bicycle and Pedestrian Infrastructure

Figure 16 highlights the existing bicycle and pedestrian infrastructure in the BGMPO area. The bicycle and pedestrian network is important for allowing safe and accessible active transportation connections. These routes include bike lanes, sidewalks, and shared-use paths. The existing network of active transportation is limited to the urban portions of the BGMPO area, with very limited infrastructure in the more rural areas. Very few bike lanes and shared-use paths are available for users to use and enjoy.

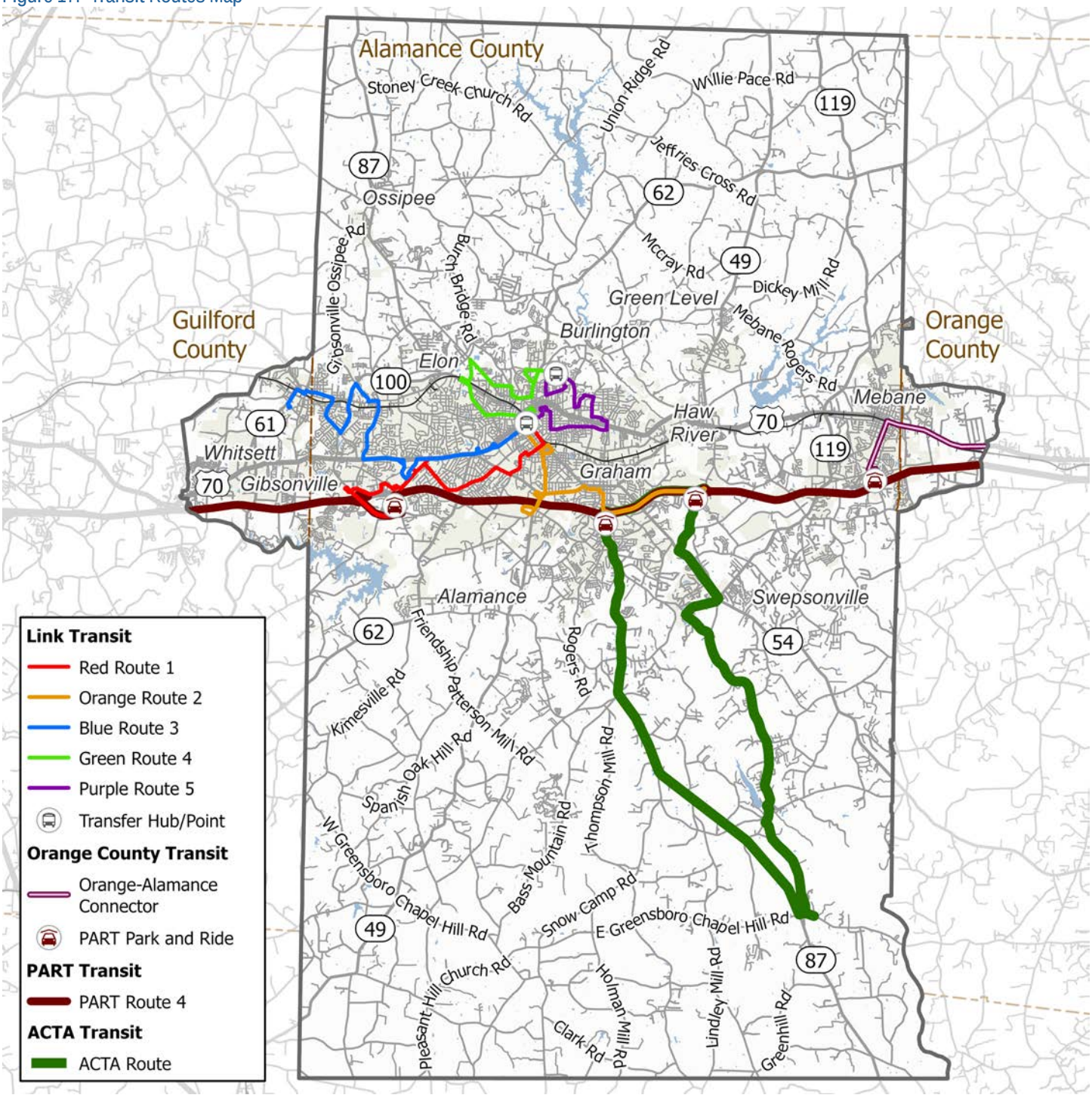
Figure 16. Existing Active Transportation Network Map



Existing Transit

The BGMPO area is served by four transit agencies. Alamance County Transportation Authority (ACTA) provides a fixed route between Graham and Saxapahaw and on-demand van pickup and drop-off between 8:00 a.m. and 5:00 p.m. on weekdays. Rides must be scheduled the day before. Piedmont Authority for Regional Transportation (PART) runs Route 4 through the BGMPO area and connects four park and ride lots along I-40. Link Transit connects Burlington to major population and job centers. Link Routes serve Burlington, Elon, Gibsonville, Alamance County Offices in Graham, Alamance Community College, and Mebane. Link Transit also provides paratransit service within 0.75 miles of fixed route transit. Orange County Transit services the Orange-Alamance Connector, which links Mebane to Efland and Hillsborough. The Link Transit routes, PART Route 4, ACTA route, and Orange-Alamance Connector can be seen in Figure 17.

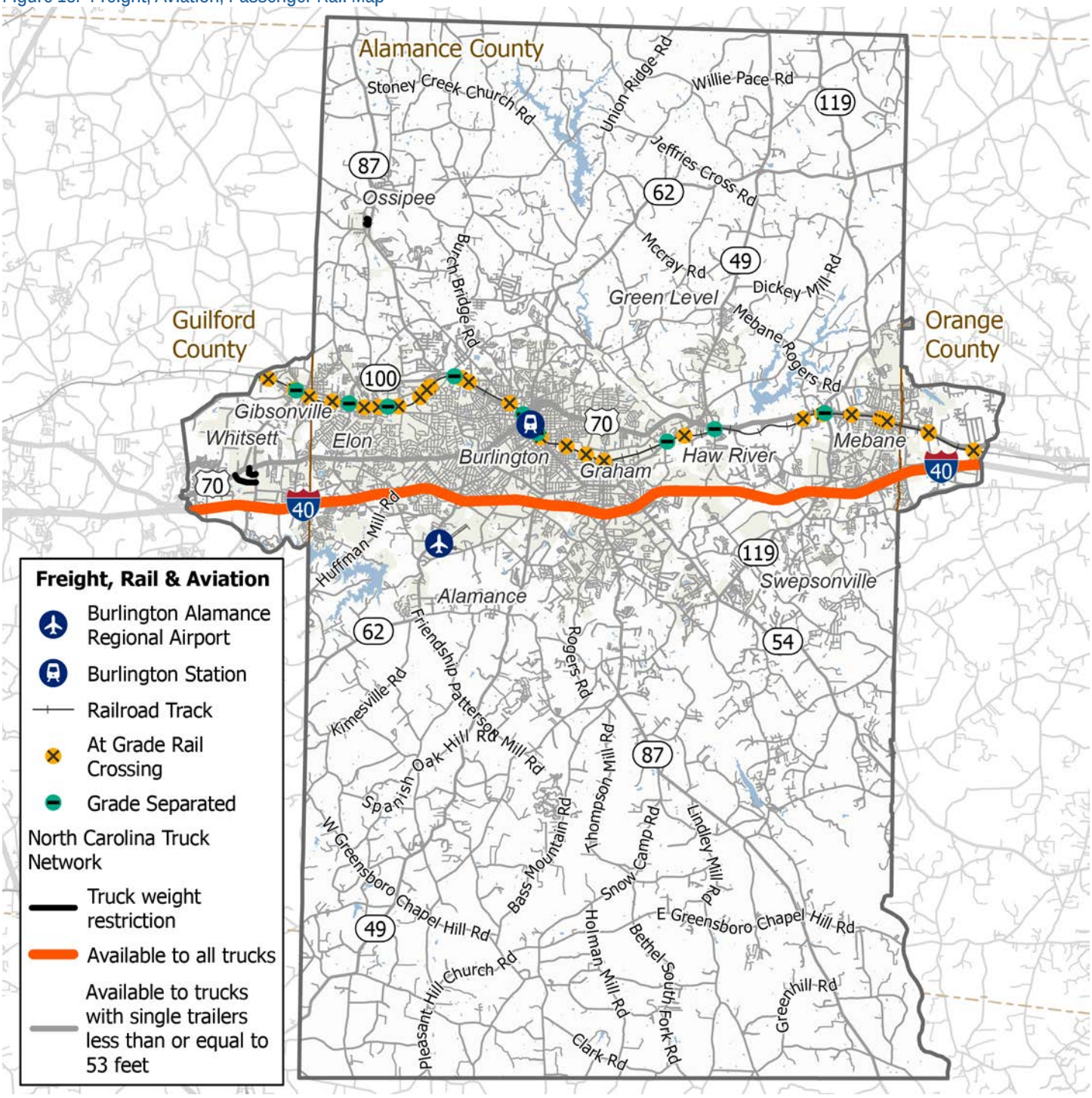
Figure 17. Transit Routes Map



Freight, Aviation, Passenger Rail

Figure 18 highlights the freight, rail, and aviation network. I-40 represents a major freight network within North Carolina and across the United States. The route is available to all trucks with no restrictions and is shown in orange below. Other major freight networks such as US-70 move goods throughout the region and connect the freight network to major economic hubs. The BGMPO area is served by the Burlington Alamance Regional Airport. The North Carolina Railroad travels through the BGMPO. This state-owned railroad is operated by an Amtrak route, connecting the region with major cities in North Carolina through the Burlington Station stop.

Figure 18. Freight, Aviation, Passenger Rail Map



03

Community involvement

Community involvement, including conversations with residents, stakeholders, elected officials, and other community representatives, played a critical role in the development of the BGMPO 2050 MTP. This collaborative approach helped to ensure a fuller understanding of the community's desires for the region's transportation vision and priorities.

Objectives

Community involvement for the BGMPO 2050 MTP focused on the following objectives:

Educate and Empower

- Increase familiarity with the MPO processes, including the MTP
- Allow people to identify issues and needs, express their vision and goals, and review recommendations and priorities

Participate and Collaborate

- Interact with and gather input and opinions from those who live, work, study, or visit the MPO area
- Encourage partnership in identifying local needs and priorities

Phases

The engagement process occurred across two phases in 2025. The first phase lasted from early January to late March at which point the second phase began and lasted until the adoption of the plan.

Phase 1 | Vision and Needs

- Raise awareness of the MTP process
- Identify existing transportation challenges and future opportunities
- Refine the goals and objectives from the 2045 MTP

Phase 2 | Recommendations and Priorities

- Validate transportation recommendations
- Review and understand the prioritization process
- Adopt the final MTP

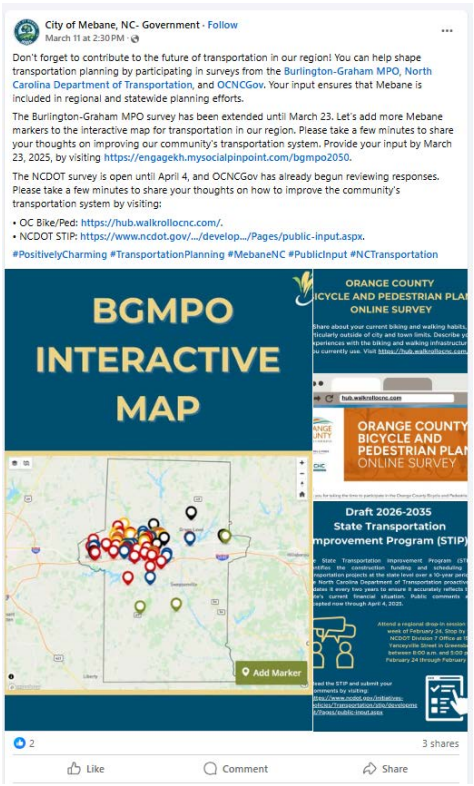


Promoting the Plan

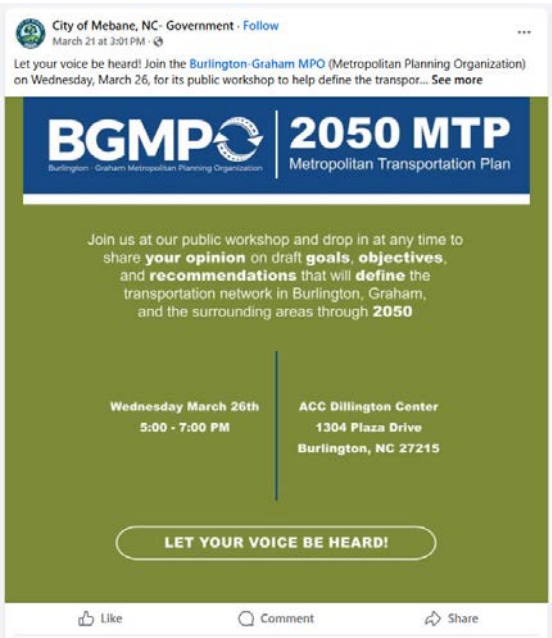
The engagement process for the BGMPO 2050 MTP included an inclusive process that invited residents, stakeholders, and the BGMPO's Transportation Advisory Committee (TAC) and Transportation Technical Committee (TCC) to participate in a variety of engagement activities. Promoting the plan occurred through traditional outreach channels from the BGMPO and its member jurisidictions. Local media also helped promote the process.











Engagement Activities

Steering Commtitee

The BGMPO 2050 MTP steering committee included representatives from member jurisdictions and agency partners. The 18-member committee was tasked with:

- Guiding the development of the MTP
- Offering local insight into transportation deficiencies and needs
- Promoting engagement opportunities to residents, colleagues, and stakeholders
- Reviewing multimodal recommendations and offering direction on prioritization metrics
- Review the plan's final content

Over the course of the planning process, the steering committee met four times.

1 Meeting #1 | February 6, 2025

Agenda

- Project Overview
- Community Engagement Strategy
- Vision, Goals, and Objectives

2 Meeting #2 | March 5, 2025

Agenda

- Community Engagement Update
- Existing Conditions Preview
- Small Group Work Session - Recommendations

3 Meeting #3 | April 9, 2025

Agenda

- Community Engagement Update
- Recommendations Recap
- Prioritization and Financial Constraint Overview

4 Meeting #4 | May 8, 2025

Agenda

- Community Engagement Update
- Draft Report
- Adoption Process

MPO Committees

Plan update presentations were given to the BGMPO's Transportation Advisory Committee and Technical Coordination Committee throughout the planning process during 2025: January 21, March 18, May 20, and June 12.

Transportation Advisory Committee

The Transportation Advisory Committee (TAC) is the primary decision-making body for the BGMPO. The TAC consists of elected representatives from local jurisdictions and a member of the North Carolina Board of Transportation. The TAC meets regularly to review and approve BGMPO policies and programs.

Technical Coordinating Committee (TCC)

The Technical Coordinating Committee (TCC) helps supervise, guide, and coordinate the continuing planning process in the MPO area. The TCC makes recommendations regarding any necessary action to the TAC and other local and state governmental agencies.



Engagement Activities

Project Website

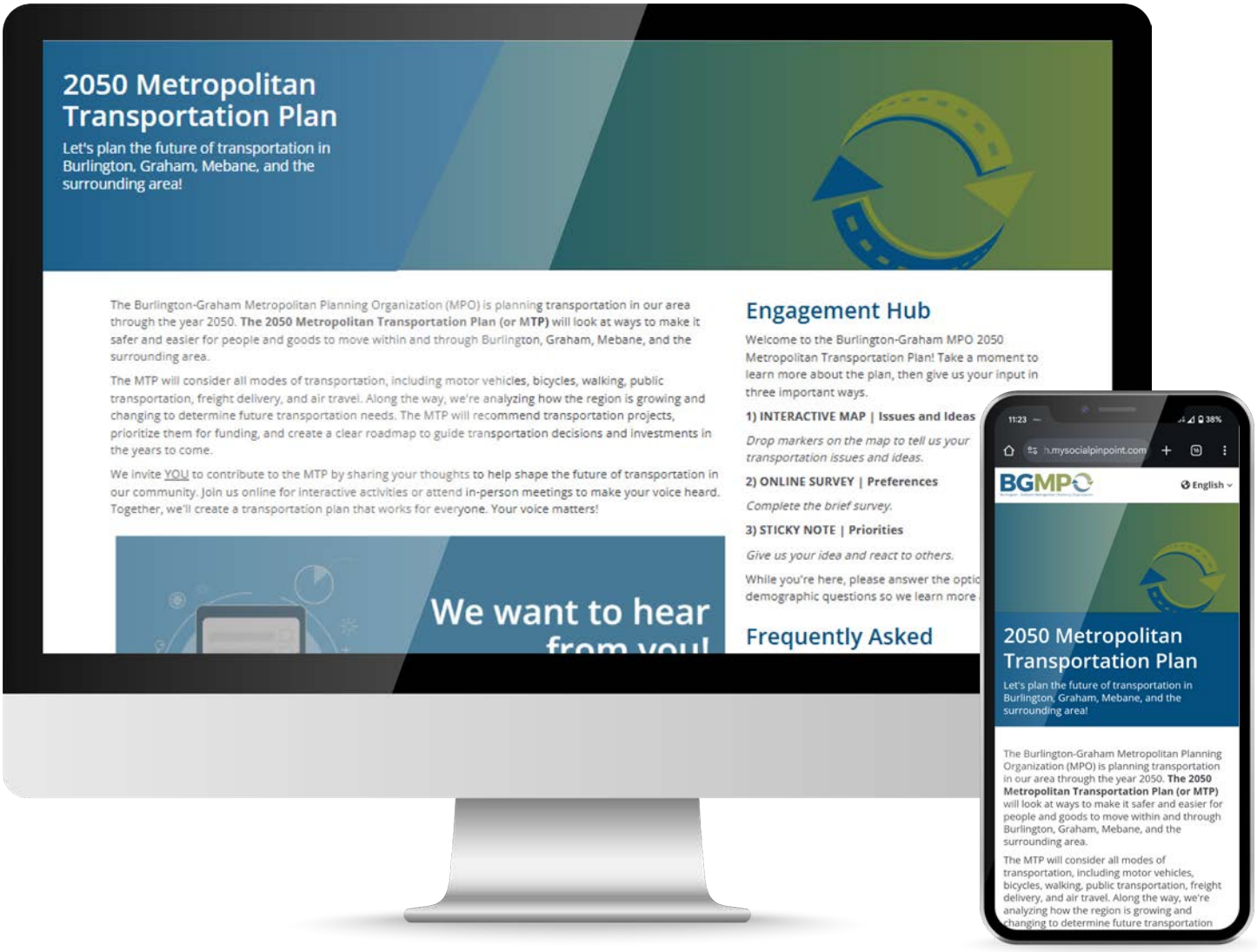
A project website was maintained throughout the planning process. The website, built on the Social Pinpoint platform, served as a one-stop digital engagement hub with an overview of the planning process, FAQs, MTP documents and resources, and an up-to-date project status. The website was used to promote outreach events and to launch digital engagement tools such as surveys, interactive maps, and digital comment forms.

Online Engagement

Online engagement activities launched from the project website were designed to educate the public about the project and collect input to inform the plan's vision, goals, and needs. The activities were live from January 8, 2025 to March 23, 2025. The website generated 556 views from 387 unique visitors during the survey period, and feedback was collected through three feedback channels:

- **INTERACTIVE MAP** | Dropping markers on an interactive online map to identify transportation issues and ideas
- **SURVEY** | Completing a brief online survey
- **IDEAS WALL** | Posting digital sticky notes to an ideas wall and react to ideas posted by others.

Project Website At Launch

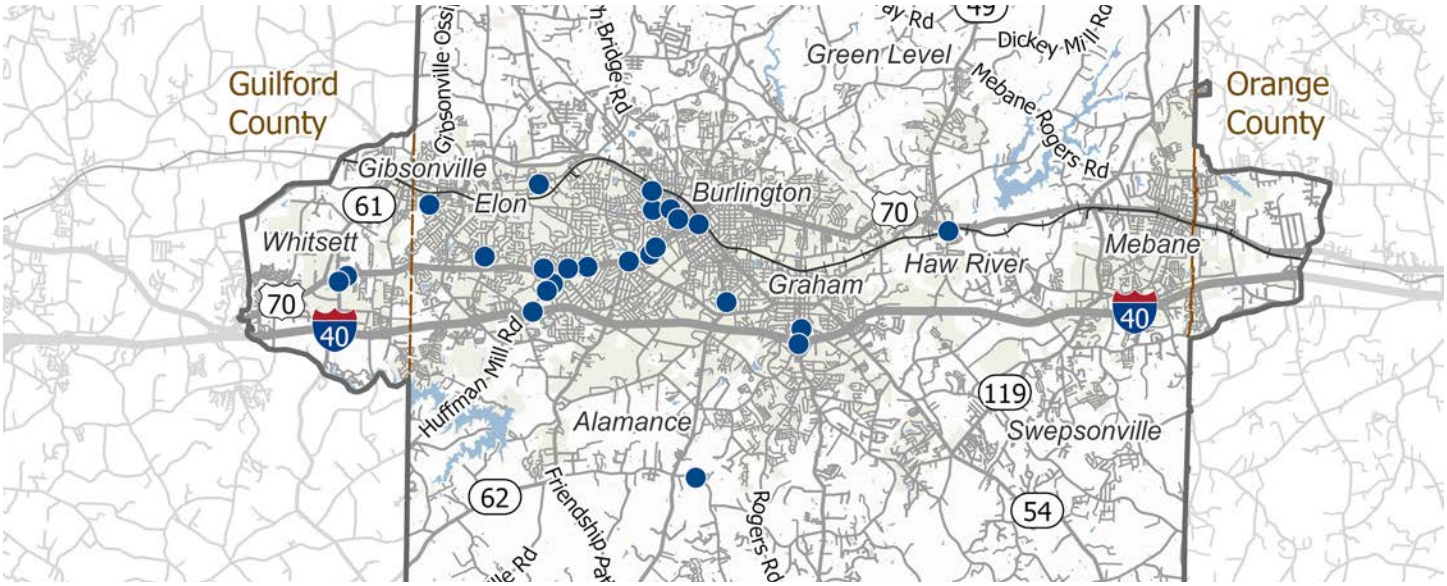


Interactive Map

Participants dropped pins on an interactive online map to identify project needs.

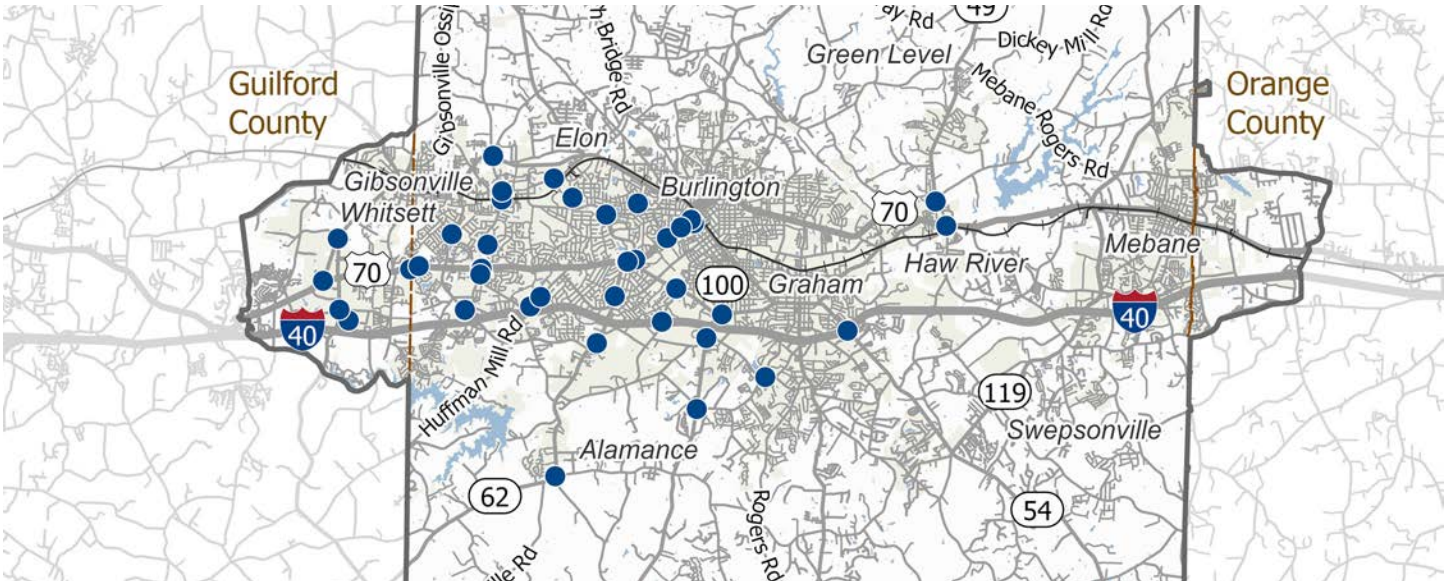
ROADWAY

Pins were densely located along US 70 between Whitsett and Burlington. Other clusters were located along Huffman Mill Rd and Front St in Burlington. Pins were also concentrated on Main St in Graham.



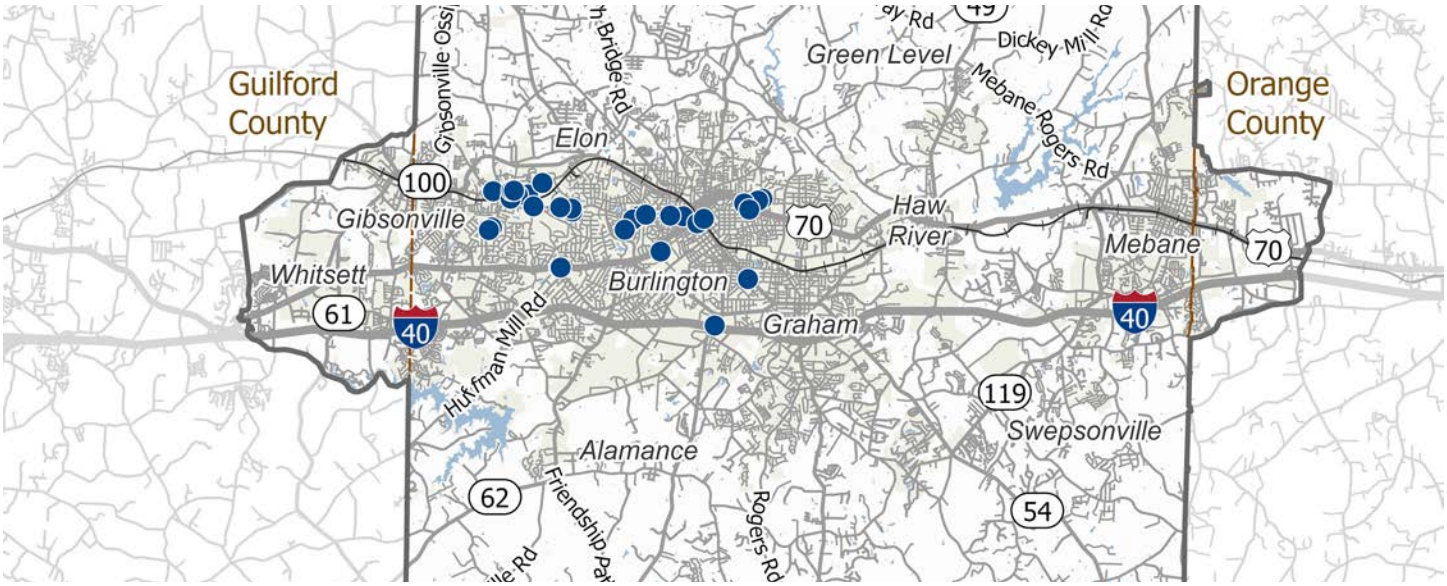
INTERSECTIONS

Pins were densely located along US 70 between Whitsett and Burlington. Other clusters were located along Williamson Ave in Elon and NC 54 in Burlington. Various other points are dispersed between Elon, Burlington, and Graham.



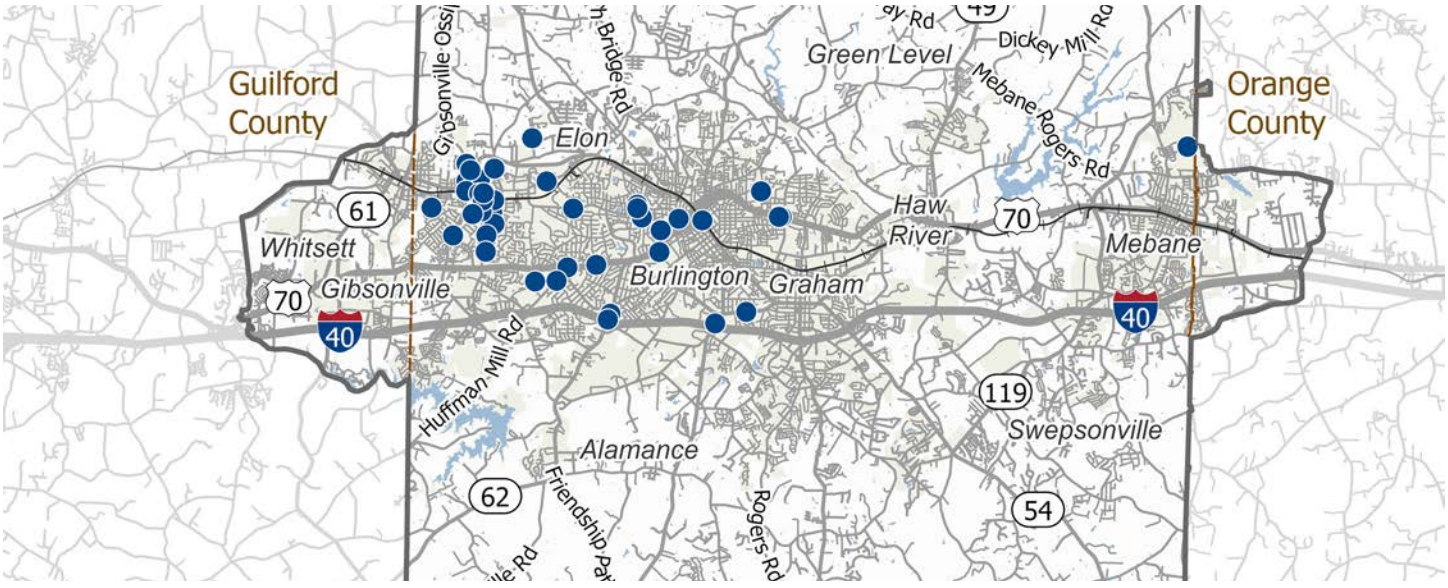
BICYCLE

Pins were densely located in Burlington along Davis St, Vaughn Rd, and Woodland Ave. Other clusters were located in Elon along Font St, Williamson Ave, and Haggard Ave.



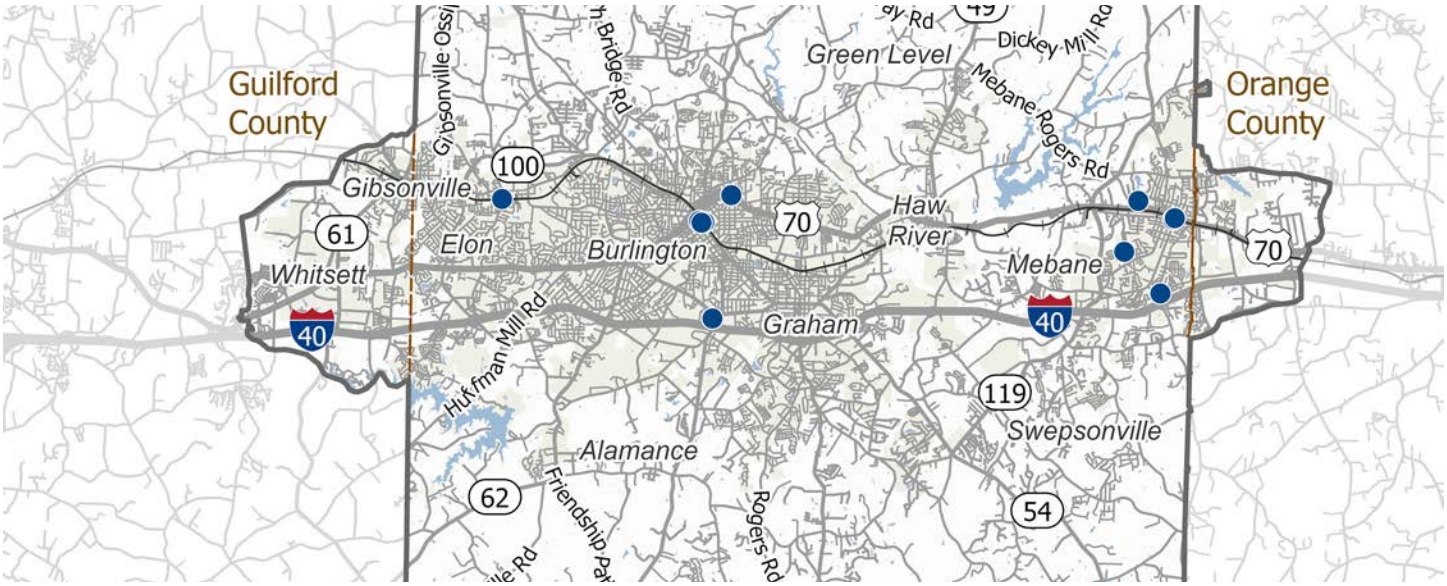
SIDEWALKS

Pins were densely located in Elon along Haggard Ave and Williamson Ave. Other clusters were located in Burlington along US 70 and Front St. Other pins were concentrated along I-40.



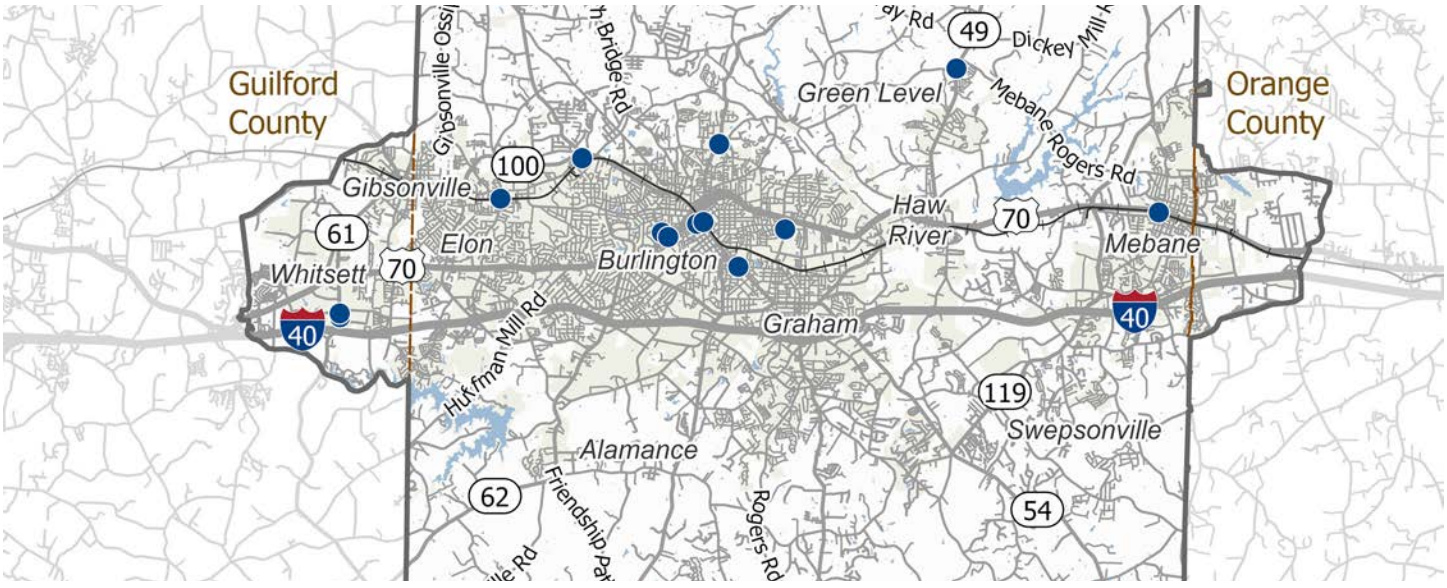
TRANSIT

Pins were densely located in Burlington along NC 87. Another cluster was located in Mebane along US 70. Other pins were dispersed between Elon, Graham, and in unincorporated areas along NC 87 and NC 49.



OTHER

Pins were concentrated in Burlington along US 70 and NC 87. Another cluster of pins was located in Whitsett along NC 61. Other points are dispersed between Elon, Mebane and Green Level.



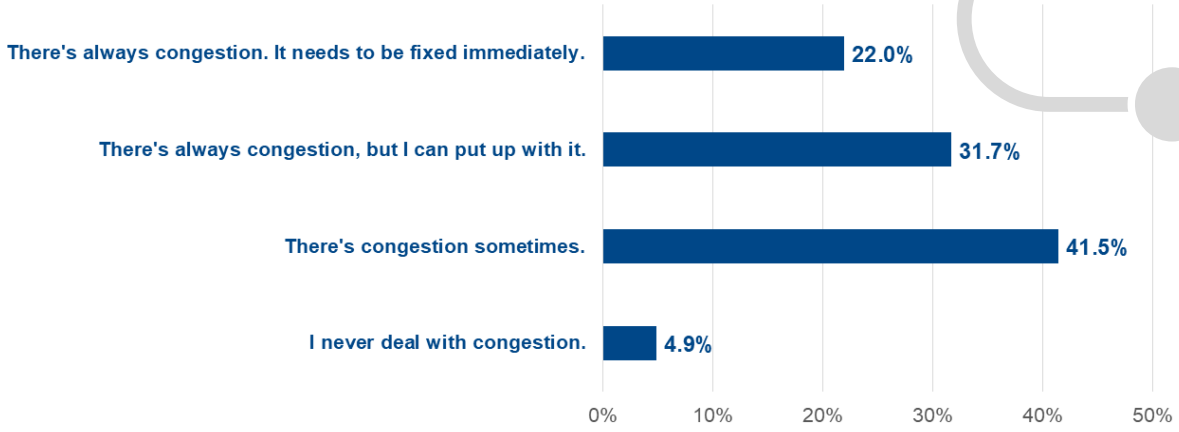
Survey

Participants answered questions about existing conditions and priorities.

Over the past five years, has traveling in the study area worsened, stayed the same, or improved?



How would you describe congestion when traveling within and through the Burlington-Graham area?

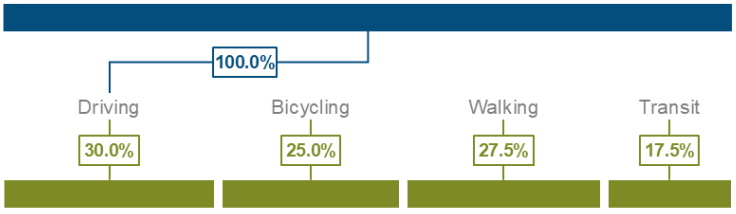


How would you describe congestion when traveling within and through the Burlington-Graham area?

Average Ranking

- **2.56** **Connectivity** | Improve access to daily needs (jobs, schools, grocery stores, and health care)
- **2.69** **Preserve Community Character** | Balance rapid growth while preserving community character (i.e., downtowns, gathering places)
- **3.94** **Mode Choices** | Variety of ways to travel
- **4.00** **Complete Streets** | Streets have full amenities
- **4.11** **Optimize Infrastructure** | Limit widenings, multi-modalism, maintenance
- **4.55** **Emerging Technologies** | ITS, transit system signal priorities, etc.
- **5.79** **Infill Development** | Increased density
- **6.64** **Freight Movement** | Movement of goods through the MPO

Most of the time, I travel by:



I would prefer to travel more often by:

In one word, describe traveling in the study area...

TODAY.	IN THE FUTURE.
Chaotic	Peaceful
Dense	Proactive
Car-bound	Flexible
Horrendous	Brutal
Busy	Sustainable
Unimaginative	Multimodal
Slow	Really?
Car-dependent	Accessible
Congested	Simplified
Transit	Great

Ideas Wall

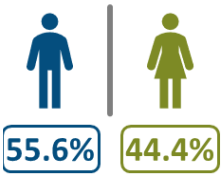
Participants answered questions about existing conditions and priorities.

- Would love to see sidewalks connecting throughout the park off University and a direct connection from Beth Schmidt to Slade Park.
- Restore the axed train stops in Burlington (71 and 76), expand bus service, and expand greenway system to promote more sustainable transit!
- Understanding there are a lot of moving parts especially when it comes to funding projects. A proactive approach may help motorists.
- I would love to see more bike lanes and more sidewalks! Especially a sidewalk connecting Downtown Burlington to graham via East Webb
- Please do not stop the improvements to Hwy. 70 at the Alamance/Guilford County line. Be proactive and plan for future growth.
- The entire area lacks sidewalks and bike lanes. People might get out of their car if you provide them with another option.
- Improve the Harden Street corridor, prioritizing pedestrian infrastructure. Add a median/barrier to Maple Ave between I-40 and Harden St.
- Close multiple driveways on major roads. Connected sidewalks. Street trees. Safer ped crossings. Lower speeds
- More forms of accessible transportation to those who are disabled. (more reliant paratransit)
- More traffic calming methods that promote pedestrian safety (raised crosswalks and intersections).
- It would be great to have more connectivity with active forms for transportation. In Elon there is a lack of sidewalks and multiuse paths.
- Limit residential trucking (railroads are better!) freights, install traffic circles/speed tables, reroute Wilkins/Basin/49 intersection

Participant Profile

Participants answered optional demographic questions.

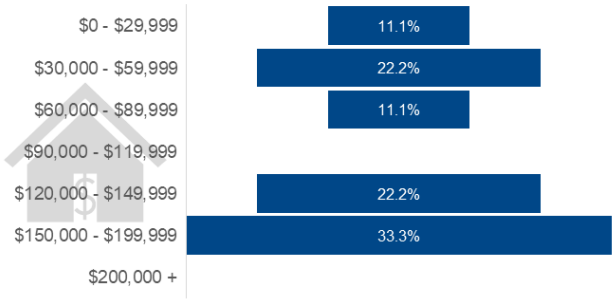
Gender



Age



Household Income



Race



St. Paddy's Day Bash

Burlington-Graham MPO staff also attended the St. Paddy's Day Bash in Downtown Burlington on March 14, 2025, to showcase the plan and encourage participation.





Public Workshop

The draft recommendations were presented to the Advisory Committee at meetings held on March 18, 2025 and April 9, 2025. A public workshop was held on March 26, 2025 from 5:00 p.m. to 7:00 p.m. at the Dillingham Center in Burlington. The workshop was organized as a drop-in open house to provide an overview of the planning process, summarize existing conditions, recap public input received to date, and introduce the multimodal recommendations. Feedback received during the many conversations on the draft recommendations helped inform the recommendations and priorities.



Public Review Period

The BGMPO's Public Involvement Plan, adopted on August 28, 2015 and last amended on May 19, 2020, guides the MPOs engagement efforts for all plans and programs including the MTP. The Public Involvement Plan requires a 30-day public comment period for draft plan review. The public review period for the BGMPO 2050 MTP ended on June 12, 2025. Interested persons were able to view teh draft report on the project website and provide input using an online comment form. Comments received included:

- Comments to be inserted following the public review period, if necessary.

04

Recommendations

A well functioning transportation system connects people to various amenities such as stores, job opportunities, and recreational activities while also making it more efficient to move goods within and through the area. An effective transportation system also makes positive contributions to quality of life when it minimizes traffic congestion and promotes healthy lifestyles. The BGMPO 2050 MTP forwards a transportation strategy that builds upon the broader regional initiatives with particular focus on mobility, safety, choice of travel modes, and economic vitality.

Transportation Planning Process

In the development of the BGMPO 2050 MTP, the vision, goals, and objectives combined with key outcomes of the existing conditions were integrated into the recommendations. The creation of balanced recommendations typically follows an iterative process as illustrated in the graphic below.



Multimodal Recommendations

The MTP's coordinated recommendations are shown with maps for the different modes of transportation. While presented as individual pieces, thoughtful consideration during planning and design can help ensure coordination among different travel modes and alignment with the greater vision of the region.

- Roadway Corridors - Illustrates the network of roadway recommendations intended to enhance mobility and safety for all users
- Intersections - Illustrates targeted intersection improvements intended to reduce conflict points and enhance safety for all users
- Bicycle - Illustrates a variety of on-and off-street bicycle facilities to create a network that serves a variety of users and trip purposes
- Pedestrian - Illustrates the pedestrian network that fills gaps in the existing network and promotes new ways to encourage active transportation
- Transit - Pulls forward recommendations from partner transit agencies to illustrate opportunities for enhanced transit service
- Freight, Aviation, and Rail - Consolidates recommendations to improvement the movement of goods within and through the MPO area

Roadway Corridors

Figure 19 highlights the roadway corridor projects identified through previous planning efforts, community engagement, and a needs assessment focused on current and future traffic volumes, the latest crash data, and the consideration of key destinations. The BGMPO 2050 MTP features the following roadway corridor improvements.

Existing & Committed

Reflecting projects with committed funding for improvements

New Location

Constructing a new roadway to provide more travel options and better distribute vehicular traffic

Widening

Adding at least one lane of travel in each direction, typically to address congestion concerns

Access Management

Improving mobility and safety by restricting some turning movements and consolidating driveways

Modernization

Enhancing existing corridors by reconfiguring travel lanes, smothing curves, or installing curb and gutter

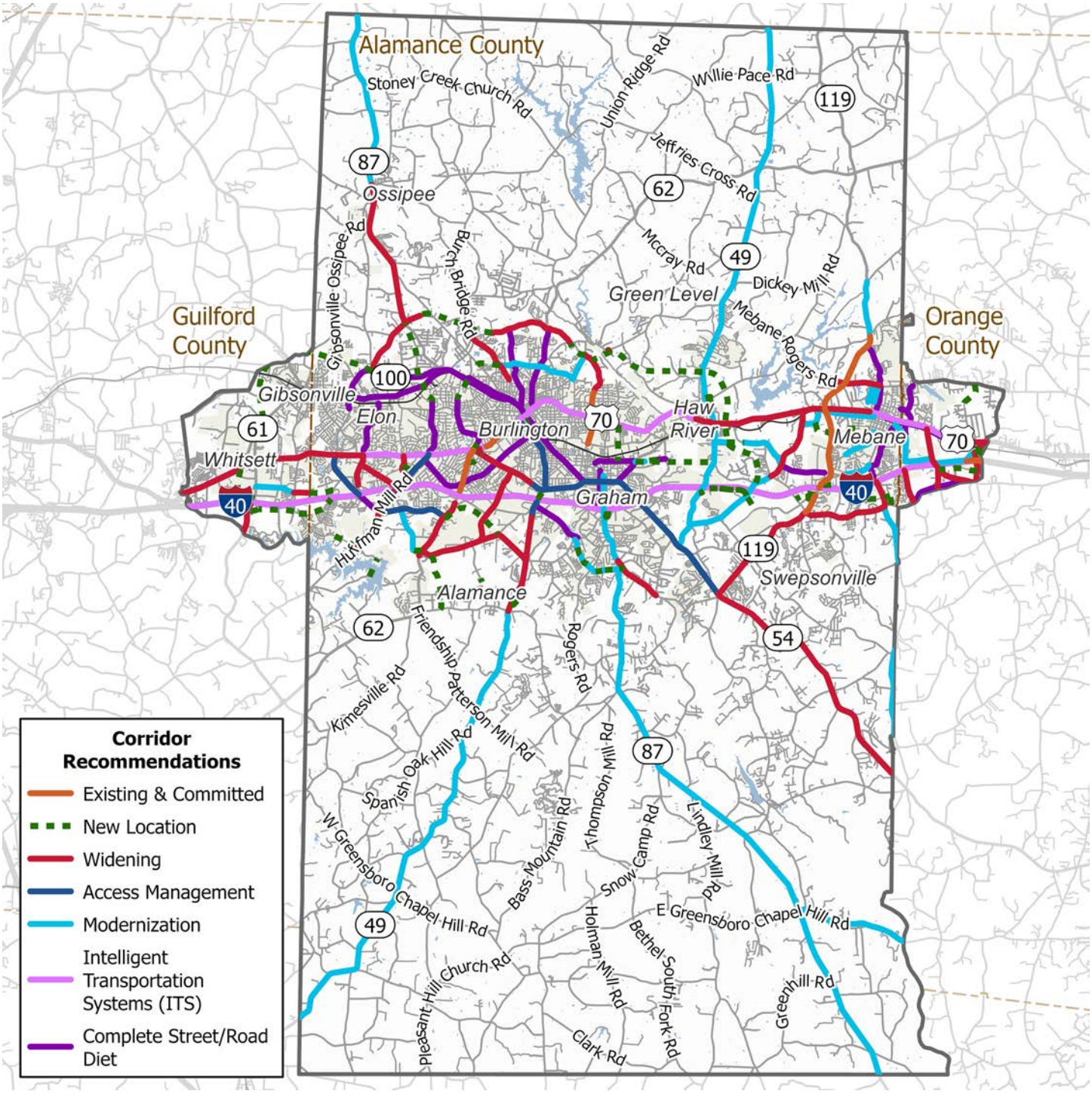
Intelligent Transportation Systems

Leveraging technology to enhance transportation safety, efficiency, and overall user experience

Complete Street/Road Diet

Reallocating existing pavement or right-of-way to add space for pedestrians, bicyclists, or transit users

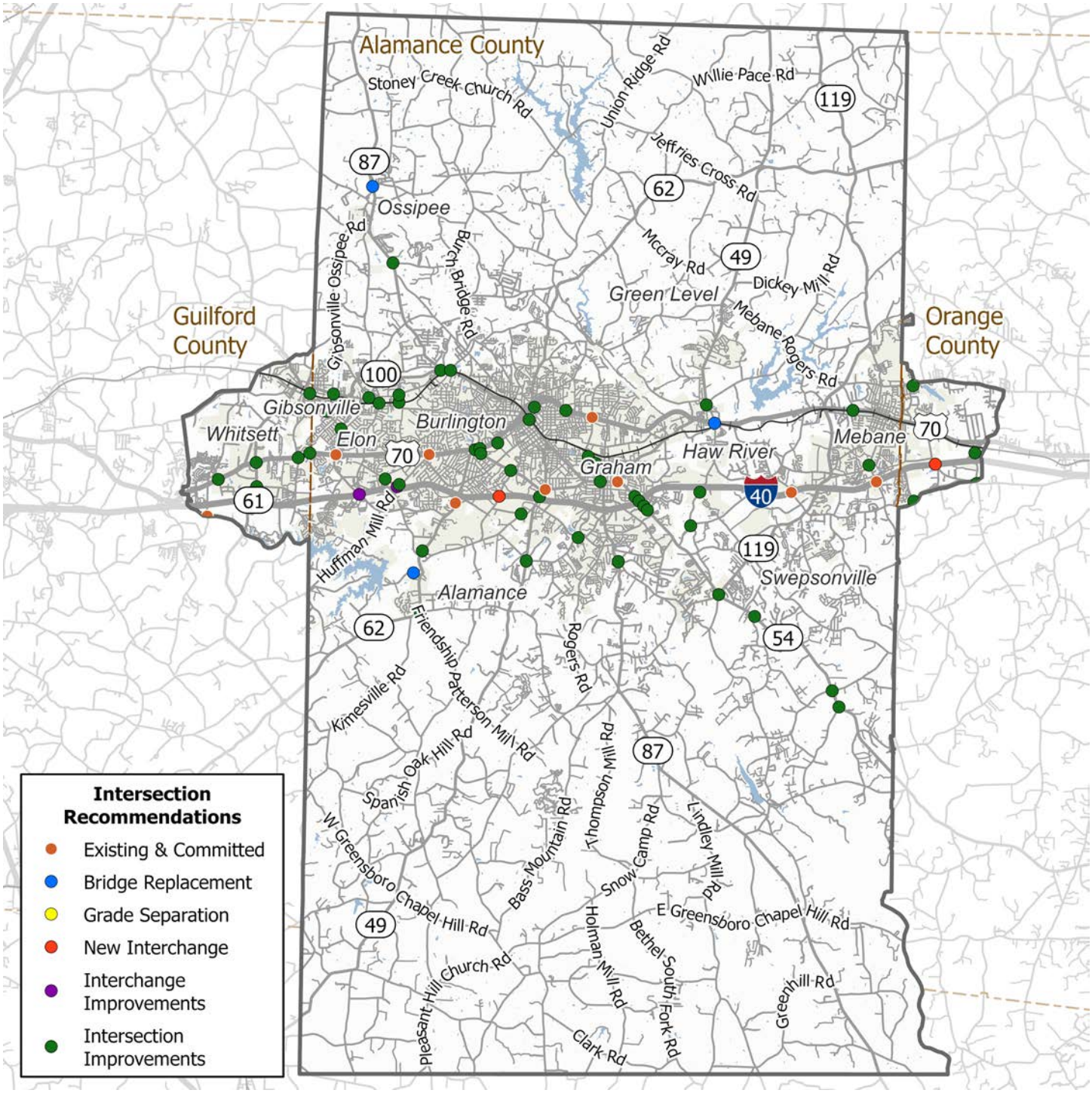
Figure 19. Roadway Corridor Recommendations



Intersections

Recommended improvements at intersections compliment the corridor recommendations. The BGMPO 2050 MTP process captured safety concerns and mobility issues for motorists, bicyclists, and pedestrians at intersections throughout the MPO area. Improvements at these locations often are one of the most cost-effective ways to improve how people and goods move through the area. This category of improvements address a variety of other issues including bridges, grade separations, and interchanges. The intersection projects were evaluated through the project prioritization process described in Chapter 5. Figure 20 displays the 2050 MTP intersection recommendations.

Figure 20. Intersection Recommendations



Bicycle and Pedestrian

The transportation system in a community has a strong influence on quality of life. Places with limited travel choices often negatively impact health by limiting opportunities for exercise, increasing stress, and decreasing air quality. Creating a more active transportation network can lower negative health impacts that come from automobile-centric designs, especially for populations that are disproportionately impacted by them.

Strategies to help ensure a more active transportation network include providing bicycle facilities (e.g., bike lanes, sharrows, shared use paths, etc.), sidewalks, and safe crossings. These facilities must be strategically placed and designed with safety in mind.

Figure 21 and Figure 22 show the bicycle and pedestrian recommendations, respectively. The bicycle and pedestrian recommendations were drawn from previous planning efforts and public outreach. The recommendations for each mode were reviewed to ensure they the address the vision, goals, and objectives of the BGMPO 2050 MTP. These recommendations should be constructed in tandem with the proposed roadway recommendations, where possible. The BGMPO and local jurisdictions are also encouraged to pursue projects as funding becomes available to fill in network gaps.

Bike Boulevard or Sharrow

Bike boulevards and sharrows prioritize bikes on the road with pavement markings, signage, and/or traffic calming elements.



Shared Use Path

A multiuse path is a separated facility from the roadway and may be used by bicyclists, pedestrians, and other non-motorized users.



Bike Lane

A bicycle lane is a marked travel lane along a portion of the roadway that has been designated for preferential or exclusive use for bicyclists.



Sidewalk

A sidewalk is a paved pathway for pedestrians, typically located on one or both sides of a road.



Bicycle Signage

Signage that alerts motorists that bicyclists are likely to be present on a roadway.



Figure 21. Bicycle Recommendations

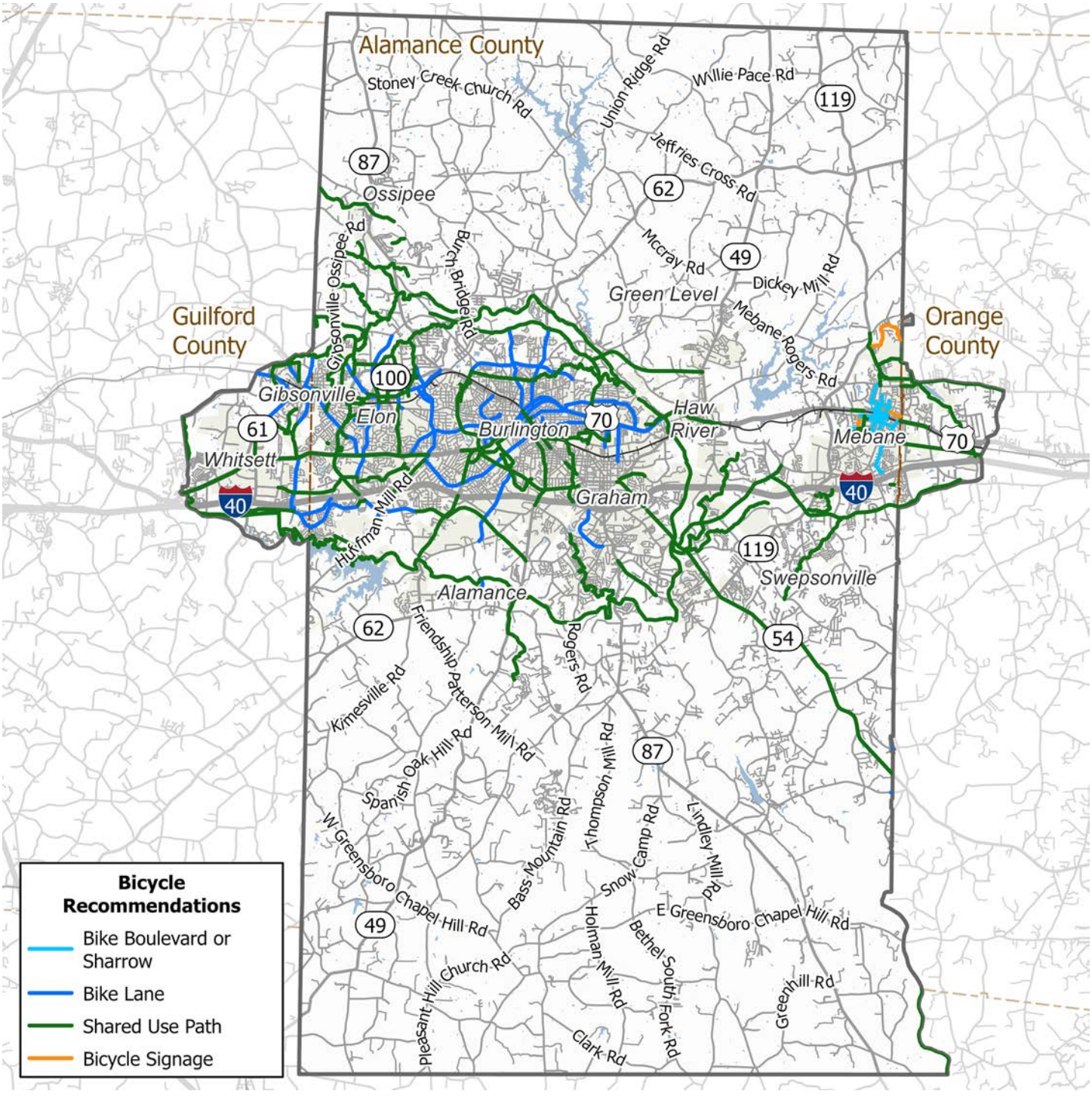
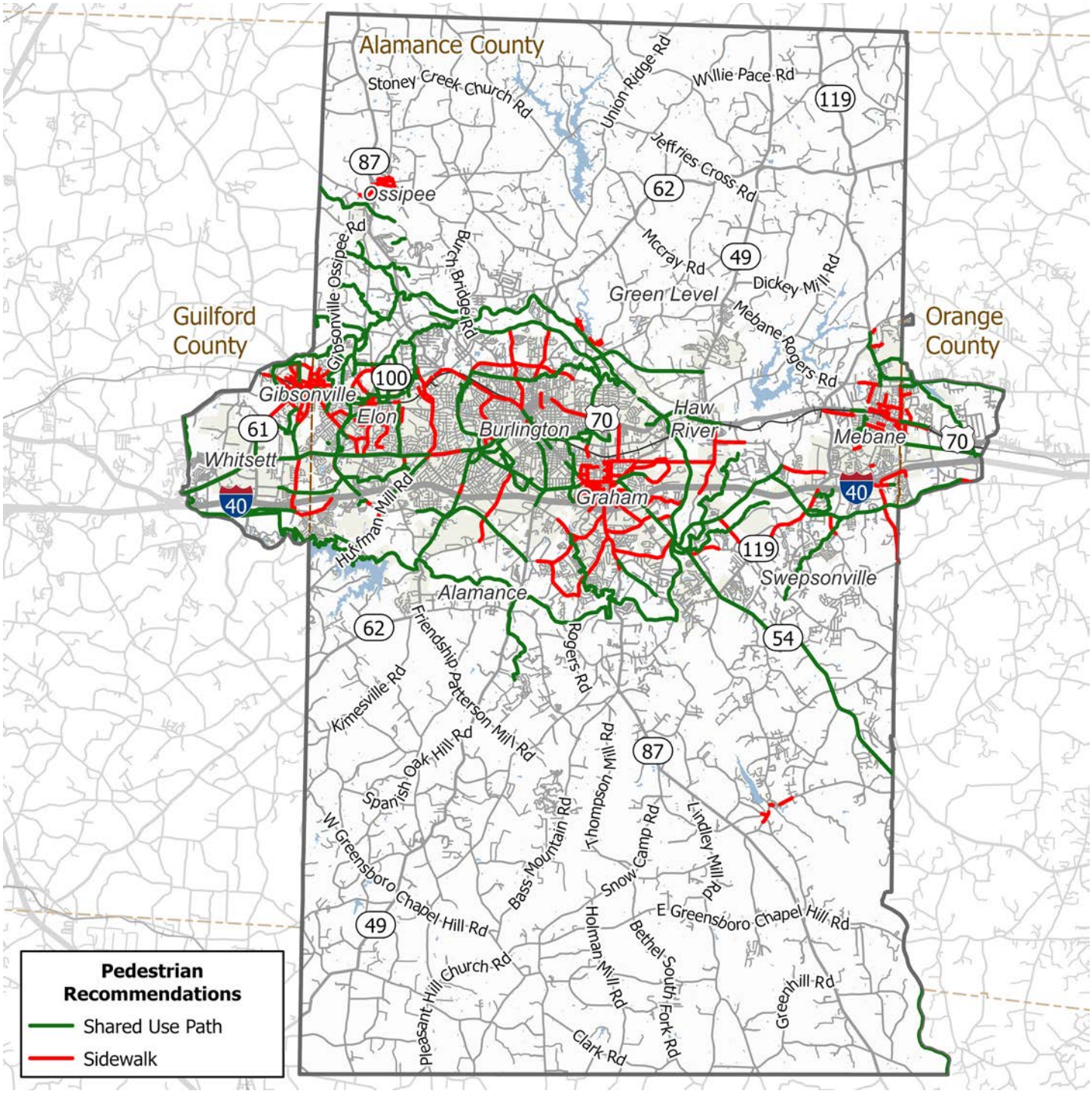


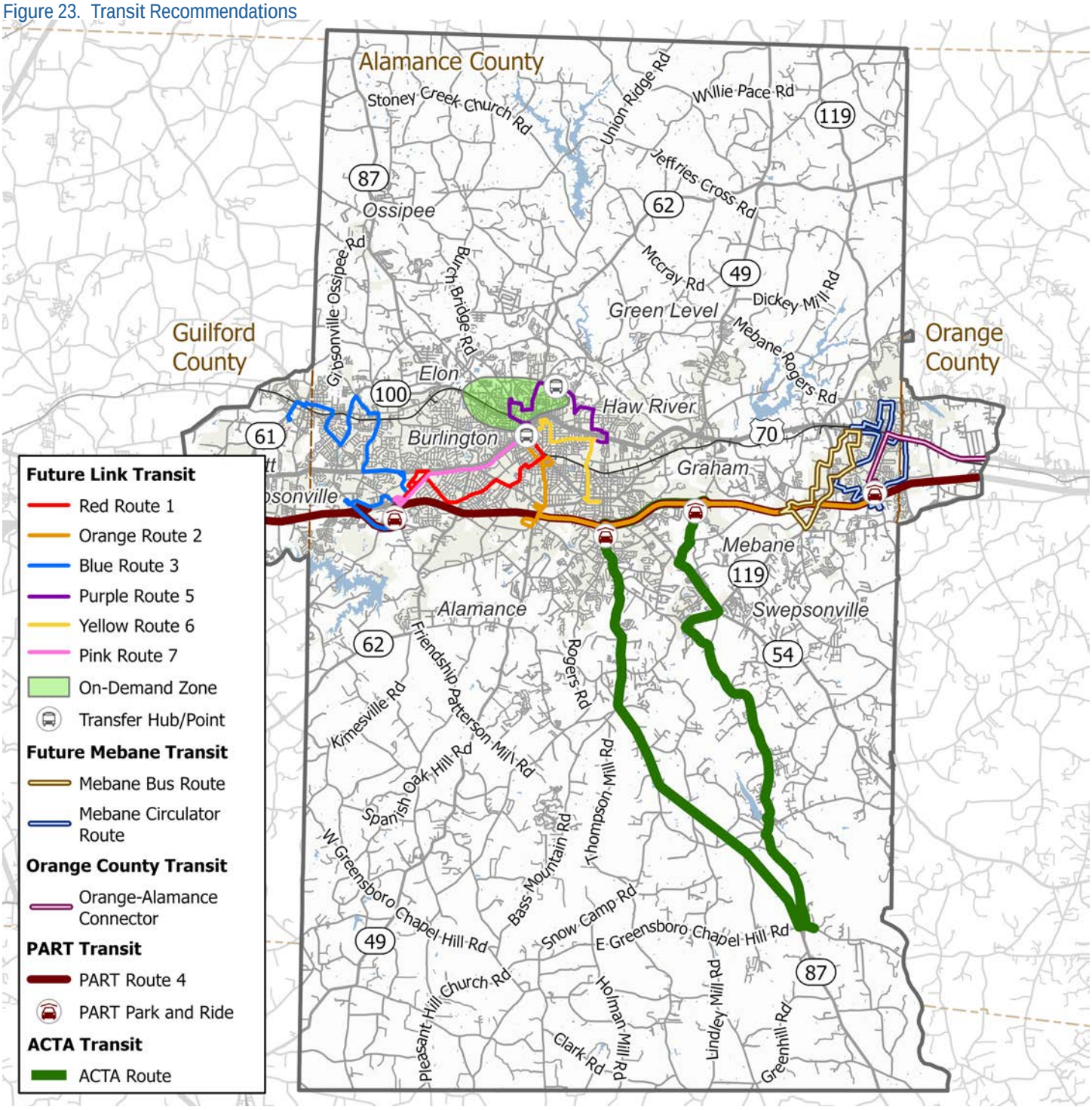
Figure 22. Pedestrian Recommendations



Transit

Public transportation must be reliable and convenient, with the goal of providing service that gets people where they need to go when they need or want to get there. By working to make transit both useful and convenient, it will better accommodate all users—captive, choice, and all others. The BGMPO 2050 MTP recognizes the efforts of transit operators in the MPO area and reflects the recommendations from previous and ongoing plans spearheaded by these organizations. The MTP also offers support by recommending multimodal connections to and along transit routes throughout the MPO area. As seen in Figure 23, recommendations include route improvements for LINK Transit that feature increased frequency and connection opportunities. Mebane's 2040 CTP proposes two fixed routes within the city. Service improvements are also recommended for PART's Route 4, Orange County's Orange-Alamance Connector, and ACTA's Southern Alamance fixed route.

Figure 23. Transit Recommendations



Freight, Aviation, and Rail

The BGMPO area's economy continues to strengthen. As a result, more demand is placed on the highway and rail freight network. NCDOT published the Statewide Multimodal Freight Plan (SMFP) in 2023 as an update to the 2017 Statewide Multimodal Freight Plan. The North Carolina SMFP was developed in compliance with IIJA requirements for state freight plans to ensure North Carolina has access to future federal and grant funding opportunities. Through IIJA, the formula for freight projects on the National Highway Freight Network (NHFN) includes $7.2 billion and another $10.9 billion in discretionary funds for freight-focused grants for states, MPOs, and local governments. Meanwhile, many communities across North Carolina, including places in the BGMPO area, are placing more emphasis on passenger rail with an eye toward a high speed rail .

The current STIP (2026-2035) includes the following aviation and rail projects:

- **AV-5737** | Clear obstructions in the Runway 24 approach
- **AV-5851** | Construct 100ft paved overrun and make safety improvements
- **RX-2007A** | Install active warning devices at Norfolk Southern Railroad Crossing on Springwood Avenue in Gibsonville

The aviation- and rail-supportive projects identified in the BGMPO 2050 MTP include the following:

- **AV-01** | Construct new terminal and flight operations
- **RR-01** | Improvements to Burlington Amtrak Station
- **RR-02** | Construct new intercity passenger rail station for Piedmont service in Mebane
- **RR-03** | Construct new at-grade crossing at Mattress Factory Road and extension to US 70 with closure of existing crossing at E Washington St and US 70 near Mebane
- **RR-04** | Construct grade separation at Buckhorn Road and closure of existing at-grade crossing on Buckhorn Road in Mebane
- **RR-05** | Upgrade railway to fixed guideway
- **RR-06** | Construct horizontal curve improvements to increase passenger train speeds up to or near a maximum allowable speed of 79 MPH.
- **RR-07** | Upgrade infrastructure to support new intercity passenger service from Charlotte to NC/VA border.

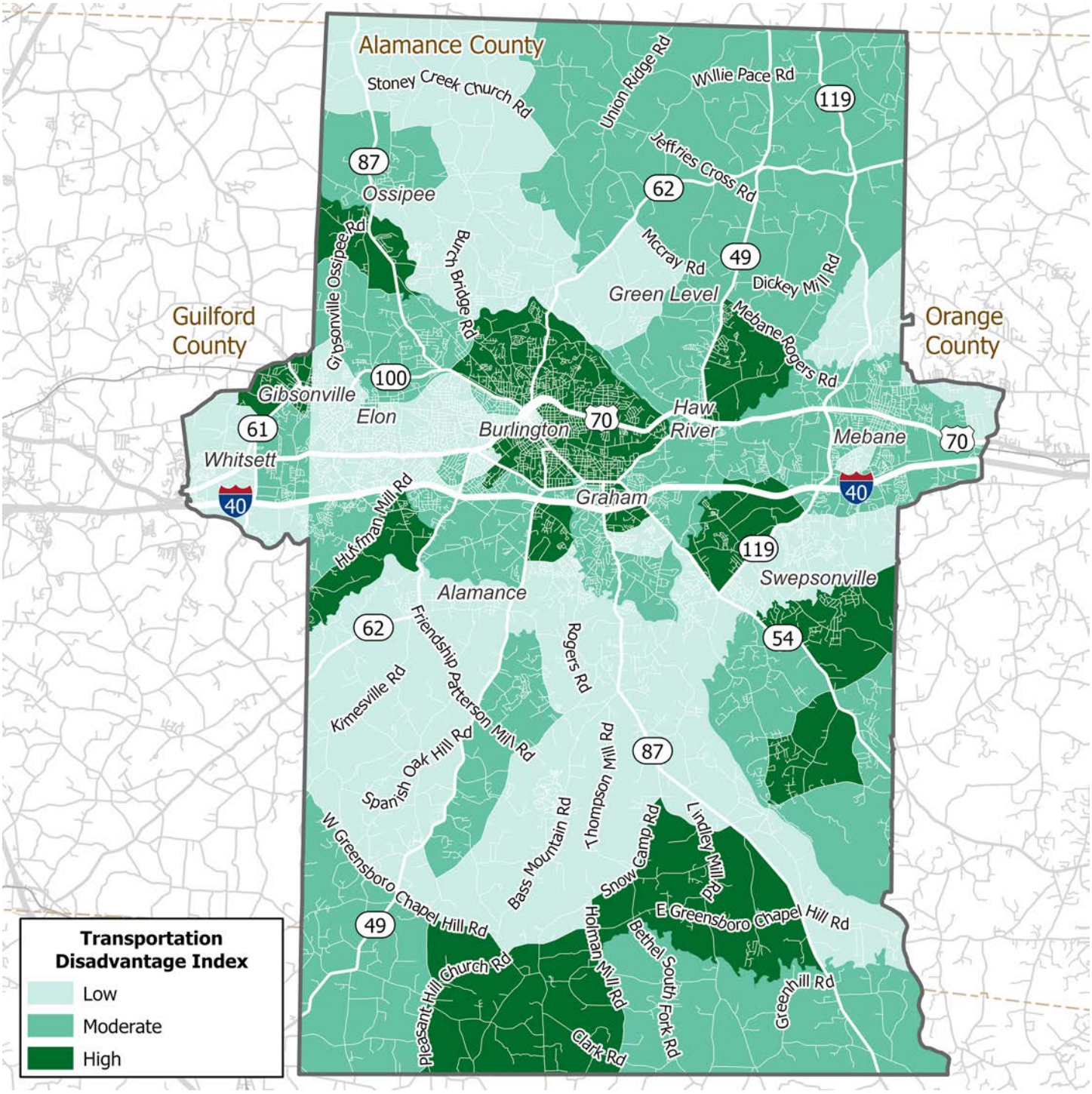
Figure 24. Freight, Aviation, and Rail Recommendations



Transportation Needs Index

The equitable planning analysis assesses transportation disadvantages and needs to pinpoint priority areas for investment within the Burlington-Graham region. The Transportation Disadvantage Index highlights areas with individuals facing unique mobility barriers and those historically marginalized by past transportation investments. Meanwhile, the Transportation Need Index identifies regions with a higher demand for transportation infrastructure based on local circumstances and trip generators. Together, these indices help identify areas where transportation investments can improve residents' access to jobs, schools, doctors, grocery stores, parks, places of worship, and other essential destinations. Figure 25 displays the Transportation Disadvantage Index.

Figure 25. Transportation Needs Index



Transportation Disadvantage

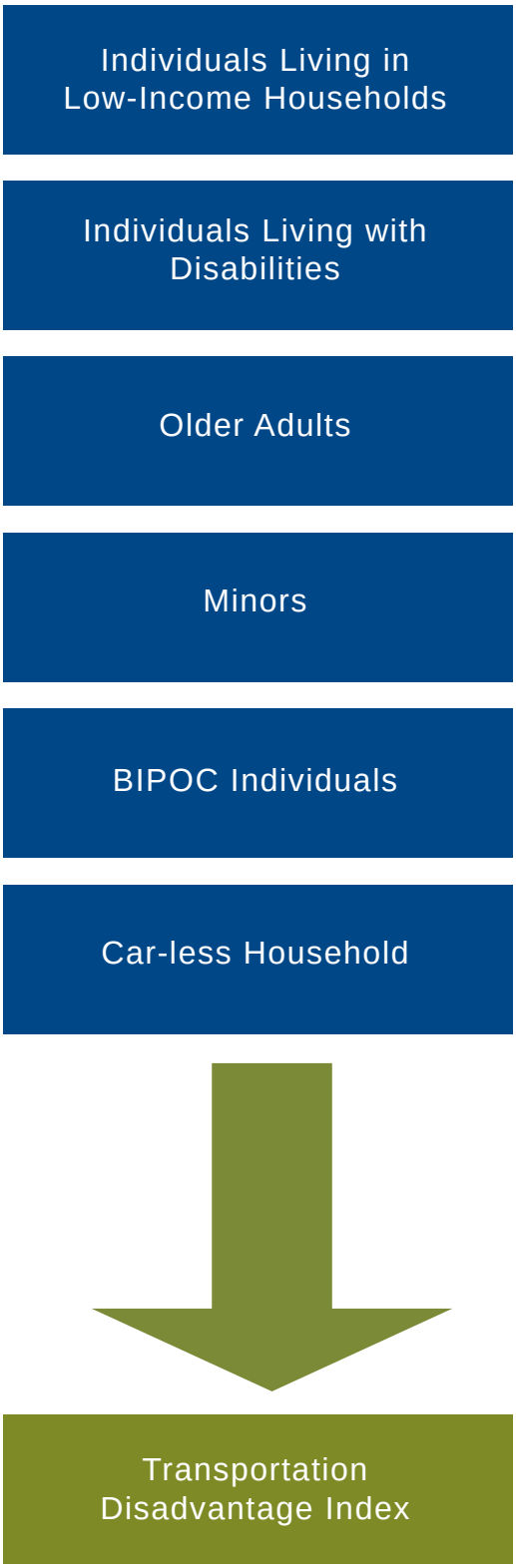
This analysis uses the NCDOT Transportation Disadvantage Index, tailored to the BGMPO boundary, to identify areas with higher concentrations of disadvantaged populations and where special attention is needed to ensure equitable access to jobs and services. Essentially, the index identifies, describes, and quantifies the relative barriers that may restrict access to transportation. It achieves this by scoring Census block groups based on their relative proportions of the following factors:

- **Individuals living in low-income households**, who are more likely to rely on walking, bicycling, and transit to meet their transportation needs, because as income falls, the cost of owning and operating a private vehicle becomes more burdensome.
- **Individuals living with disabilities**, whose unique transportation needs necessitate deliberate planning.
- **Older adults**, aged 65 years and older, who may choose not to or are unable to drive, resulting in their reliance on other modes of transportation.
- Minors, aged 15 years and younger, who are more likely to rely on walking, bicycling, and transit because they cannot drive.
- **BIPOC individuals**, whose transportation requirements deserve additional consideration, reflecting a legacy of racism and ongoing marginalization.
- **Car-less households**, whose transportation needs particularly in regions characterized by auto-oriented development, are likely significant.

Scoring

This diagram illustrates the methodology used to calculate the Transportation Disadvantage Index. Block groups receive a score of one, two, or three for each variable, with higher scores indicating a higher potential disadvantage.[1] All Variables area eqally weighted and summed generating a relative Transportation Disadvantage Index for each block group.

Transportation Disadvantage Index Methodology



1 *Scores are assigned using the Jenks optimization method, which classifies features based on naturally occurring breaks in the data*

BIPOC - Black, indigenous, and People of Color

Transportation Policy Framework

The BGMPO 2050 MTP goals and objectives reflect local and state areas of emphasis while adhering to the ten federally required transportation planning factors. As an organizing mechanism for the BGMPO and its partners, these statements provide helpful guidance for the region's transportation policy framework.

GOAL 1 ~ TRANSPORTATION EFFICIENCY

Provide a safe, secure, comprehensive, and effective transportation system to move people and goods within and through the area.

GOAL 2 ~ TRANSPORTATION CHOICES

Provide a transportation system that enables mobility choice

GOAL 3 ~ TRANSPORTATION OPTIMIZATION

Seek to create a more optimized and resilient transportation system

GOAL 4 ~ TRANSPORTATION EQUITY

Promote equity and accessibility in transportation options for transportation- disadvantaged populations

GOAL 5 ~ TRANSPORTATION INTEGRATION

Integrate land use and transportation planning

Land Use and Transportation

Associated MTP Goals: 1, 2, 3, 4, 5

Guiding Framework: Local Land Use Plans

Land use development patterns and the transportation system have a direct influence on each other and how people and goods move safely and efficiently. Therefore, understanding future transportation needs requires a focus on the relationship between economic activity, demographic trends, land use patterns, and travel behavior.

Much of the data presented in this chapter is organized around traffic analysis zones (TAZs) from the travel demand model (TDM), which is the MPOs best tool for forecasting future travel demand based on trends related to the growth and development.

Housing and Transportation

Associated MTP Goals: 1, 4, 5

Guiding Framework: Local Land Use Plans

The relationship between housing and transportation shapes a person's everyday experience and livelihood. The increasing disconnect between available housing and job location places a greater, potentially adverse demand on the transportation network. Consequently, people spend most of their income on housing and transportation. The synergies between housing and transportation can improve affordability, accessibility, and availability.

Understanding the various ways in which people choose to live and travel can help inform important planning decisions. Expensive housing can relocate or push people further away from employment, education, and healthcare opportunities. To create healthy, vibrant communities, the intentional and collaborative coordination of housing and transportation decision making is essential.

Transportation Demand Management

Associated MTP Goals: 1, 2, 5

Guiding Framework: BGMPO Transportation Demand Management Program (October 2021)

Transportation Demand Management (TDM) focuses on reducing or reallocating transportation demand either in space or time using programs, policies and strategies that reduce the number of single-occupancy vehicle (SOV) trips. Such initiatives prioritize other transportation modes (public transit, carpooling, vanpooling, active transportation), implement systemic land use or parking policy enhancements, encourage changes to the schedule and location of employment (telework or alternative work schedules), and offer incentives for employers and employees.

The BGMPO Transportation Demand Management Program prioritizes specific strategies for implementation. As the region continues to explore TDM options, a coordinated effort could include but not be limited to the following:

- Improving existing park and ride lot locations and planning for additional park and ride lot locations
- Improving multimodal access to existing transit stops
- Deploying micro-transit service
- Enhancing express/commuter service from the BGMPO area
- Encouraging major employers to embrace teleworking options where applicable

Curbside Management

Associated MTP Goals: 1, 2, 3, 5

The BGMPO area benefits from numerous vibrant downtowns and main streets with small, locally-owned businesses and restaurants. Encouraging safe and convenient access to these areas for a variety of travel modes is critical to enhancing the economic vitality for individual communities and the region. Meanwhile, demand for curb space among on-street parking, goods delivery, ride-hailing, transit stops, bike lanes, and other elements of complete street designs will increase. BGMPO member jurisdictions are encouraged to consider curbside management policy ideas and planning strategies in downtown areas including but not limited to the following:

- Enhancing off-street parking and wayfinding
- Encouraging higher turnover for on-street parking
- Coordinating time of day and type of use restrictions in loading zones
- Allocating space for different users based on the context of the street
- Setting priorities for curb space based on local preferences
- Using pilot programs to test new strategies

Intelligent Transportation Systems

Associated MTP Goals: 1, 2, 3, 5

Guiding Framework: Triad Regional ITS Strategic Deployment Plan (June 2020)

Intelligent Transportation Systems (ITS) solutions encourage more efficient use of existing transportation infrastructure and support improved travel time reliability. The Triad region has relied on ITS planning and implementation to enhance mobility, foster safety, minimize adverse effects to the environment, and promote innovation. The Triad Regional ITS Strategic Deployment Plan outlines numerous strategies including:

- Seeking to implement ITS solutions along I-40
- Increasing the coordination of ITS technologies withing the BGMPO area and beyond
- Continuing to support and update ITS technologies already in use

Electric Vehicles

Associated MTP Goals: 1, 2, 3, 5

Guiding Framework: NCDOT National Electric Vehicle Infrastructure (NEVI) Program

The IIJA introduced new or reinforced areas of focus for metropolitan transportation plans. An emerging emphasis area in transportation technology is electric vehicles or EVs. Through IIJA, the National Electric Vehicle Infrastructure (NEVI) Program provides nearly $5 billion to help states create a network of electric vehicle charging stations along designated corridors. The North Carolina Electric Vehicle (EV) Infrastructure Deployment Plan is the state's plan to accelerate equitable adoption of electric vehicles, reduce transportation related greenhouse gases, and position industry to lead transportation electrification efforts. I-40/I-85 through the BGMPO area is designated as an Alternative Fuel Corridor (AFC), which makes it eligible for NEVI funding as well as Charging and Fueling Infrastructure grant funding.

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05

Implementation

The vibrancy of the BGMPO area today and in the future depends heavily on the transportation network. The region benefits from existing connections between various modes of transportation that make it a desirable place to live, work, and recreate. A multimodal transportation network of the future requires careful consideration of priorities, available funding, and performance-driven results. This chapter concludes the BGMPO 2050 MTP by outlining a path for implementation.

Prioritization

Prioritization is a vital tool for the implementation of the identified transportation projects for BGMPO. The prioritization exercise accounts for a wide variety of factors and project characteristics, including planning-level costs, alignment with local and regional considerations, safety, and more. The following sections outline the prioritization methodology.

Methodology

The evaluation metrics used for the prioritization methodology leveraged the NCDOT Prioritization 7.0 (P7.0) methodology. The methodology used in this plan was further refined to reflect the guiding principles, availability of local data, and outreach efforts of the BGMPO 2050 MTP. In line with the statewide methodology, the roadway and intersection recommendations were analyzed in relation to their respective state funding categories: Statewide Mobility, Regional Impact, and Division Needs. Each of these categories is scored, weighted, and allocated funds differently. Figure 26 shows the Region and Divisions that BGMPO is within and competing for funds with. The following pages outline the assumptions and results of the prioritization methodology.

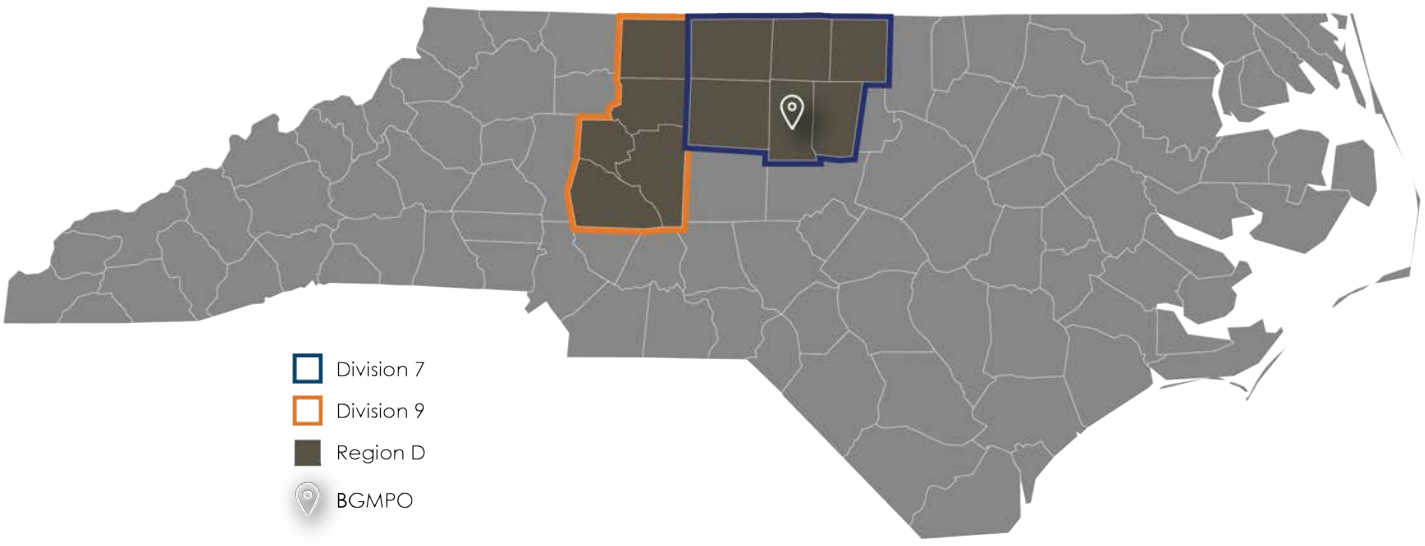
Strategic Transportation Investment

The Strategic Transportation Investments (STI) law allows NCDOT to fund transportation infrastructure to support economic growth, promote a higher quality of life, and create jobs. The STI law established the Strategic Mobility Formula, which allocates revenue based on a data-driven scoring and local input process.

The NCDOT prioritization process scores each project based on a unique methodology depending on the funding category. The three funding categories are:

- **Statewide Mobility.** Projects in this category receive 40% of available revenue. The projects in this category are scored solely on quantitative data, and there is no consideration for local preference.
- **Regional Impact.** Projects in this category receive 30% of available revenue. The projects are scored based on both quantitative and qualitative data; however, the quantitative score is 70% of the overall score, and local ranking makes up 30% of the total score.
- **Division Needs.** Projects in this category receive 30% of available revenue. The projects are scored based on both quantitative and qualitative inputs, which are valued equally in the total score.

Figure 26. NCDOT Division and Region for Prioritization



Roadway Corridor Project Scoring

The NCDOT Prioritization 7.0 prioritizes modernization and mobility projects differently. The BGMPO 2050 MTP project scoring methodology reflects the nuances of this statewide approach by using nine criteria based on project type and three categories based on funding. Projects are to sort projects into near-, mid-, and long-term horizon tiers using the criteria defined below and the weights shown in Table 1.

- Freight - Identify existing key freight movements
- Safety - Measure existing high frequency and high severity crash locations
- Congestion - Measure existing and anticipated mobility
- Benefit-Cost - Measure the expected benefits of the project with respect to its cost over a 10-year period
- Economic Impact - Support a positive economic climate with a transportation system that makes it easier to move people and freight
- Lane Width - Measure the existing lane width versus the DOT design standard
- Shoulder Width - Measure the existing shoulder width versus the DOT design standard
- Accessibility - Enhance access to jobs, schools, and social services in rural and marginalized areas
- Previous Planning Effort - Ensure local priorities are identified

Intersection Project Scoring

Similar to roadway prioritization, the intersection prioritization placed a larger emphasis on safety. The SPOT process attributes 50% to safety as a criterion. The other metrics used for intersection criteria can be found in Table 2.

Table 2. Intersection Prioritization Weights

Metric	Weight
Safety	50%
Cost-Benefit	20%
Freight	15%
Accessibility	15%

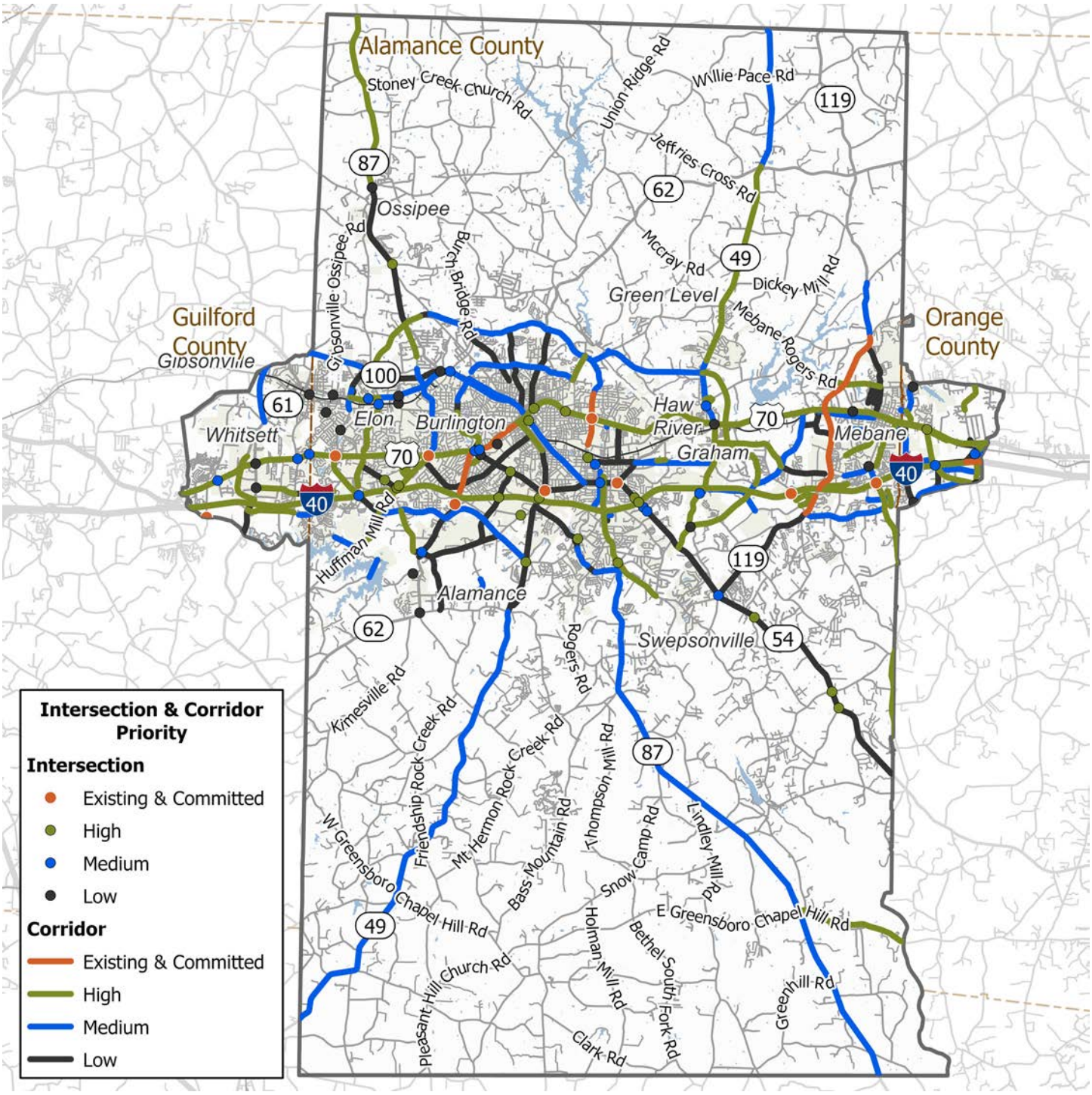
Table 1. Roadway Corridor Prioritization Weights

Criteria	Mobility			Modernization		
	Statewide	Regional	Division	Statewide	Regional	Division
Freight	25%	10%	5%	25%	15%	5%
Safety	10%	10%	10%	35%	35%	35%
Congestion	30%	20%	15%	10%	5%	5%
Benefit-Cost	25%	20%	15%			
Economic Impact	10%					
Lane Width				15%	7.5%	2.5%
Shoulder Width				15%	7.5%	2.5%
Accessibility		10%	5%			
Quantitative Total	100%	70%	50%	100%	70%	50%
Previous Planning Effort		30%	50%		30%	50%
Total Score	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Scoring Results

Figure 27 displays the prioritization results. High priority projects can be found in a majority of the municipalities within the region, including Burlington, Mebane, Graham, Elon, Whitsett, and Haw River. Additionally, projects along NC 87 and NC 49 scored high. Overall, modernization projects tended to score higher than projects that fit into the mobility category. This highlights the benefits of projects that improve alternative transportation modes, such as complete streets, over more traditional project types, such as widening that usually most benefit cars. How the results of the prioritization process inform the financial plan is explained in the following sections of Chapter 5. See the appendix for prioritization results.

Figure 27. Roadway Project Prioritization



Roadway Financial Plan

To meet the needs of the region over the next 25 years, BGMPO 2050 MTP proposes a mixture of transportation recommendations that are financially constrained. A requirement of any long range transportation plan is to demonstrate that the proposed investments are realistic throughout the duration of the plan's horizon year (2050). The financial plan uses the anticipated revenue to constrain the list of recommendations. To demonstrate financial constraint, the long range plan must fulfill these requirements.

The following section details the proposed investments and identifies the anticipated revenues for the life of the plan.

Roadway Prioritization

Chapter 4 introduced the plan's proposed recommendations and the previous section of Chapter 5 defined the prioritization methodology. By using a combination of quantitative and qualitative metrics, the planning team assessed the performance of each roadway corridor and intersection project.

All of the roadway projects are initially grouped into near-, mid-, and long-term improvements. Rather than a strict ranking order, the prioritization process allows for flexibility in funding and implementation so the BGMPO can efficiently use the anticipated funding. The prioritization acted as the starting point for the financially-constrained plan.

Standalone bicycle, pedestrian, and transit projects were not independently prioritized. The BGMPO will attempt to implement these improvements concurrently with roadway enhancements. This approach is the most cost-effective while also minimizing construction impacts to the surrounding network.

Financial Plan Development Overview

The financially-constrained plan, required by federal legislation for regional long-range transportation plans, demonstrates that proposed investments are based on reasonably expected future funding availability throughout the duration of the plan. It does so by identifying a series of funding periods:

- 2026 - 2030
- 2031 - 2035
- 2036 - 2040
- 2041 - 2050
- Unfunded Vision (post 2050)

After a review of previous local and state expenditures, current funding trends, and future funding levels, a revenue forecast was developed. The development of the revenue forecast involved coordination between BGMPO, NCDOT, and the Federal Highway Administration (FHWA). The dollar figures discussed in this chapter were analyzed in current year dollars (2025) and then inflated to reflect the midpoint of the funding periods.

Based on the assessment of recent trends and guidance from BGMPO, the annual inflation rate of 2% was used to forecast revenues. An annual inflation rate of 4% was used to forecast costs based on conversations with federal and state partners. The differing projections suggest that the cost will increase at a greater rate than available revenues. This chapter provides an overview of the revenue assumptions, planning-level cost estimates, and financial strategies. Since this is a planning-level exercise, all funding projects, programs, and assumptions should be reevaluated in subsequent plan updates.

Roadway Funding

The projections of funding for capital roadway projects are based on the NCDOT TIP budget for FY 2026 - 2035. The NCDOT TIP budget establishes statewide totals for statewide, regional, and division funding. To assess the amount available to the BGMPO, the project team assessed the relative proportion of population within each category. After the proportion of funding in each category was assessed, the percentage of funding dedicated to roadway in the current STIP was calculated to determine the amount of funding dedicated to roadway capital. In the 2026-3035 STIP, 89% of all programmed funding in the BGMPO is roadway capital, roughly $170 million. The revenue forecast was adjusted within the MTP's projection period to reflect a 2% inflation rate.

Using this forecasting methodology, the available capital roadway funding for BGMPO totals $1.4 billion over the life of the MTP. Table 3 summarize the anticipated capital roadway funding by federal/state and local funding sources.

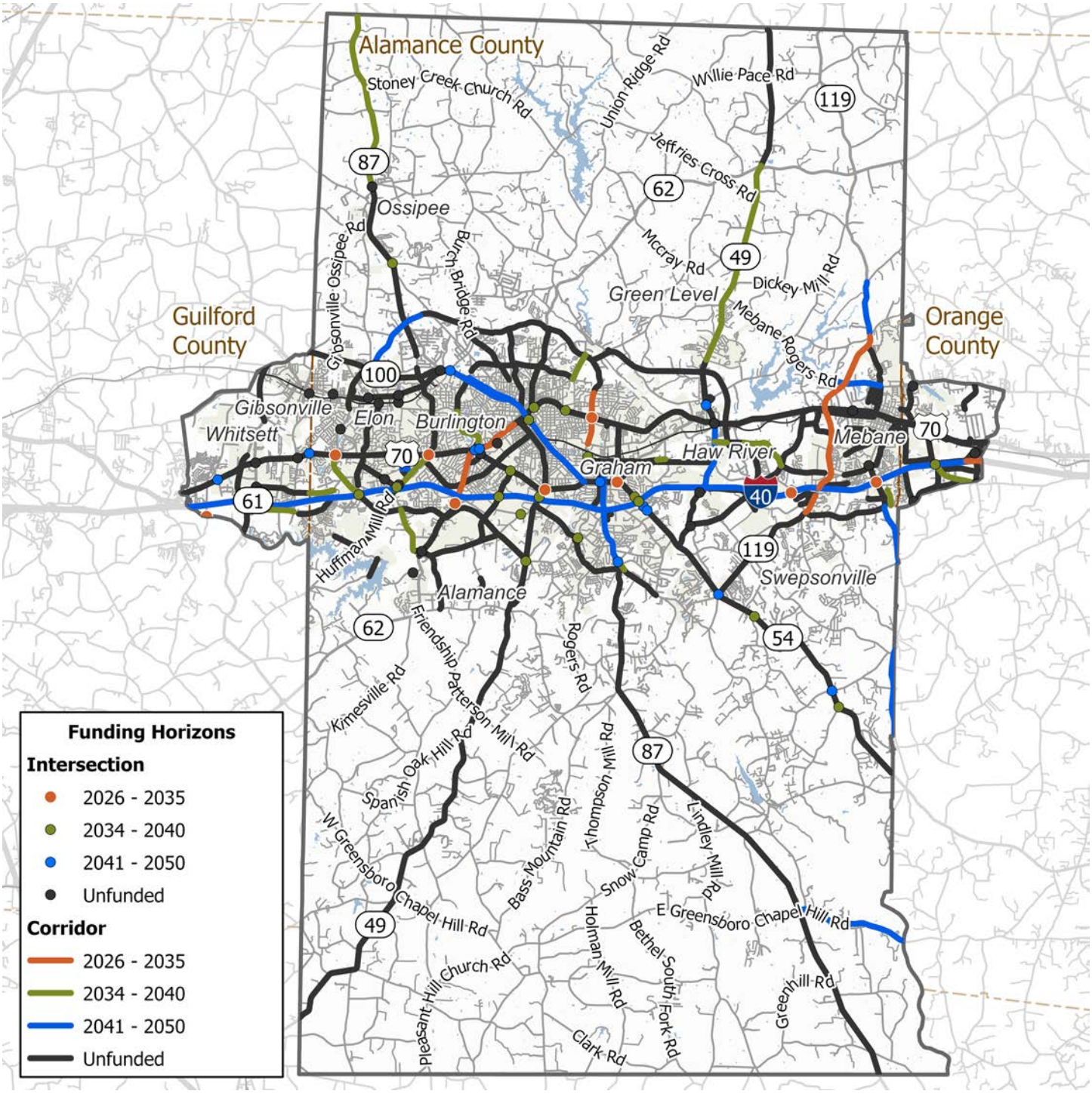
Maintenance Funding

While the BGMPO 2050 MTP is primarily focused on capital improvements, it is imperative to consider maintenance funding. The maintenance funding in the region is applied to areas including roadway maintenance, bridge replacements, or infrastructure, maintenance. These funds can be a combination of local, state, or federal funding sources depending on the ownership of the facility being considered. Future-year maintenance funding was not projected; however, it is reasonable to assume that all maintenance funding that is available to the MPO will be utilized.

Table 3. Anticipated Capital Roadway Funding by Revenue Band

Revenue Band	Statewide Mobility	Region D	Division 7
2026 - 2030	-	$55,515,000	$67,939,000
2031 - 2035	-	$35,971,000	$10,600,000
2036 - 2040	$118,553,600	$112,183,600	$154,410,400
2041 - 2050	$275,409,000	$260,610,900	$358,707,000
Total	$393,962,600	$464,280,500	$591,656,400

Figure 28. Financially Constrained Roadway and Intersection Projects by Revenue Band



Future Year Congestion

Content to be added after the fiscal constraint model run.

Figure 29. Future Maximum Roadway Congestion with Existing and Committed Project and Financially Constrain Projects (2050)



Multimodal Transportation Funding

Active Transportation Funding

Currently, new bicycle and pedestrian facilities are funding using local sources, discretionary funds, or federal programs. There are three independent pedestrian and bicycle projects included in the 2026-2035 STIP, accounting for approximately 3% of total funding. This value was assessed against the total revenue available to determine the amount likely available for bicycle and pedestrian projects based on historic trends. Forecasted available revenues are estimated to account for $18.5 million for pedestrian and bicycle infrastructure.

Table 4. Anticipated Capital Active Transportation Funding by Revenue Band

Revenue Band	Division 7
2026 - 2030	$630,000
2031 - 2035	-
2036 - 2040	$5,401,300
2041 - 2050	$12,547,000
Total	$18,578,300

Public Transportation Funding

Data from the Federal Transit Administration's National Transit Database was used to gather information about historic capital and operations and maintenance spending of the two transit providers within BGMPO - Alamance County Transportation Authority and Burlington LINK Transit. Historic data was gathered for FY 2017-2023 and then forecast through 2050 using a 2% inflation.

Table 5. Anticipated Capital Transit Funding by Revenue Band for Alamance County Transportation Authority

Revenue Band	Capital	O&M
2026 - 2030	$1,583,000	$9,870,000
2031 - 2035	$1,748,000	$10,898,000
2036 - 2040	$1,930,000	$12,032,000
2041 - 2050	$4,483,000	$27,951,000
Total	$9,744,000	$60,751,000

Table 7. Anticipated Capital Transit Funding by Revenue Band for Burlington LINK Transit

Revenue Band	Capital	O&M
2026 - 2030	$521,000	$9,097,000
2031 - 2035	$575,000	$10,043,000
2036 - 2040	$635,000	$11,089,000
2041 - 2050	$1,474,000	$25,760,000
Total	$3,205,000	$55,989,000

Aviation and Rail Funding

Table 7 highlights the potentially available funding for aviation and rail projects. In the 2026-2035 STIP, there are two aviation projects programmed and two rail projects. The aviation projects are at the Burlington Alamance Regional Airport, as such the full amount was considered as part of the revenue projections. The two rail projects are in support of the Piedmont Corridor and funding is inclusive of several NCDOT divisions and regions, as such the proportion of population within BGMPO was used to determine a reasonable and conservative revenue estimate for rail projects within the region.

Table 6. Anticipated Capital Aviation and Rail Funding by Revenue Band

Revenue Band	Total
2026 - 2030	$11,559,000
2031 - 2035	-
2036 - 2040	10,702,000
2041 - 2050	24,861,000
Total	$47,122,000

Performance Measures

The MAP-21 legislation (2010) transformed the transportation federal aid program by establishing new requirements for performance management and performance-based planning and programming. This legislation was designed to ensure the most efficient investment of federal transportation funds.

In 2015, the FAST Act continued the performance-based planning approach of MAP-21 with some modifications. Consistent with the legislation, state Departments of Transportation (DOTs) and Metropolitan Planning Organizations must apply a transportation performance-based planning approach when implementing their federally-required transportation programming and planning activities.

Performance-based planning and programming—or "performance management"—is a strategic approach that uses system-generated information to confirm investment and policy decisions achieve the goals set for the transportation network. More specifically, Performance-Based Planning & Programming (PBPP) is the application of performance management as a standard practice in the planning and programming decision-making process. These requirements support national goals by outlining a systematic and objectives-driven approach.

In May 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Final Rule on Statewide and Non-metropolitan Transportation Planning and Metropolitan Planning - also known as The Planning Rule. This regulation requires state and MPOs to adhere to the planning and transportation performance management provision of both MAP-21 and the FAST Act. More recently, the Infrastructure Investment and Jobs Act (IIJA) - or the Bipartisan Infrastructure Law (BIL) - continues the commitment to performance-based planning set forth by MAY-21 and FAST Act.

BGMPO adopts measures as provided by the NCDOT. In accordance with The Planning Rule, the selection of performance measures and targets must be coordinated and agreed upon between an MPO and NCDOT. As part of the metropolitan planning process, BGMPO must also publish a System Performance Report that presents current conditions and performance of the transportation system with respect to the performance measures and targets.

System Performance Report

The System Performance Report is an essential component of the Transportation Performance Management (TPM) approach set forth by FHWA and FTA. By maintaining a systematic performance management approach, the BGMPO can evaluate how well its transportation system addresses current needs and determine how to meet future challenges. Since funding for transportation projects is limited, it is important that the right projects and programs are implemented in order to address the current and projected needs of the greater region.

This System Performance Report establishes a baseline document that the MPO will update with each successive long-range plan update. The System Performance Report and subsequent updates will evaluate the conditions and performance of the transportation system in regard to the required performance targets:

- Highway Safety
- Pavement and Bridges
- System Performance

In addition to these performance targets, the report will document transit assets, safety, and reliability that are reported on an annual basis to FTA.

National Goals and Measures

PM 1 | Highway Safety

The Safety Performance Measures Final supports the Highway Safety Improvement Program (HSIP) by requiring MPOs to set targets for safety-related performance measures and report progress.

The Safety Performance Management Final Rule establishes five performance measures for all types of public roadways:

- Number of fatalities
- Rate of fatalities per 100 million vehicle miles traveled
- Number of serious injuries
- Rate of serious injuries per 100 million vehicle miles traveled
- Number of combined non-motorized fatalities and non-motorized serious injuries

These safety performance targets are provided annually by States to FHWA as five-year rolling averages for each safety performance measure.

Safety Performance

The BGMPO adopted the most recent safety performance targets at the January 21, 2025 Transportation Advisory Committee meeting.

The BGMPO safety targets are shown in the table below. The BGMPO supports the state's safety performance targets through its planning and programming of transportation activities.

Table 8. BGMPO MPO PM1 Performance Targets

Performance Measure	2019-2023 Average	Target 2025
Number of Fatalities	1,585.2	1,103.3
Fatality Rate	1.353	0.925
Number of Serious Injuries	5,236.8	3,204.8
Serious Injury Rate	4.467	2.675
Number of Non-motorized and Serious Injuries	712.6	434.6

PM2 | Pavement and Bridge Condition

In 2017, FHWA published a final rule establishing performance measures for state DOTs to use in managing pavement and bridge performance on the National Highway System (NHS). State DOT targets are set based on asset management analyses and reflect investment strategies that seek to achieve a state of good repair over the life cycle of transportation facilities. State DOTs may establish additional measures and targets that reflect asset management objectives.

The Final Rule establishes the following Pavement Performance Measures:

- Percent of the Interstate pavement in Good condition
- Percent of Interstate pavement in Poor condition
- Percent of non-Interstate NHS pavement in Good condition
- Percent of non-Interstate NHS pavement in Poor condition

The Final Rule also establishes the following Bridge Performance Measures:

- Percent of NHS bridges by deck area classified as Good condition
- Percent of NHS bridges by deck area classified as Poor condition

The pavement and bridge condition performance is assessed and reported over a four-year performance period. States must establish two-year and four-year performance targets for each PM2 measure. The current two-year targets represent desired pavement and bridge condition at the end of calendar year 2023. The current four-year target represent desired condition at the end of calendar year 2025.

Pavement and Bridge Performance

The BGMPO has chosen to support NCDOT's pavement and bridge targets and will continue to coordinate with NCDOT in the development of pavement and bridge targets. The Pavement and Bridge Condition Performance Targets were adopted by the BGMPO on May 17, 2023. The BGMPO Pavement and Bridge Condition Performance Targets are shown in the Table 9.

Table 9. BGMPO MPO PM2 Performance Targets

Performance Measure	2023 Target	2025 Target
Interstate Pavement Condition (Good)	60.0%	62.0%
Interstate Pavement Condition (Poor)	1.8%	1.5%
Non-Interstate NHS Pavement Condition (Good)	30.0%	31.0%
Non-Interstate NHS Pavement Condition (Poor)	3.5%	3.0%
NHS Bridge Conditions (Good)	38.0%	36.0%
NHS Bridge Conditions (Poor)	5.0%	5.0%

PM3 | System Performance

In 2017, FHWA published a final rule establishing performance measures that report on the performance of Interstates and non-Interstate NHS to carry out the National Highway Performance Program (NHPP) and freight movement on the Interstate system to carry out the National Highway Freight Program (NHFP).

The Final Rule establishes the following system performance measures:

- Percent of reliable person-miles traveled on the Interstate
- Percent of reliable person-miles traveled on the non-Interstate NHS
- Percent of Interstate system mileage providing for reliable truck travel time—Truck Travel Time Reliability Index (TTTR)

The performance for PM3 is reported over a four-year performance period. The PM3 rule requires states to establish two-year and four-year performance targets for each PM3 measure. The current two-year targets represent the expected performance at the end of calendar year 2023. The current four-year targets represent the expected performance at the end of calendar year 2025.

State DOTs requirements for setting system performance targets include:

- Percent of person-miles on the Interstate system that are reliable: **Two-year and four-year targets required**
- Percent of reliable person-miles traveled on the non-NHS that are reliable: **Four-year targets required**
- TTTR: **Two-year and four-year targets required**

System Performance

The BGMPO has chosen to support NCDOT's system performance targets and will continue to coordinate with NCDOT in the development of system performance targets. The System Performance Targets were adopted by the BGMPO on May 17, 2023. The BGMPO System Performance Targets are shown in the Table 10.

Table 10. BGMPO MPO PM3 Performance Targets

Performance Measure	2023 Target	2025 Target
Interstate Level of Travel Time Reliability	75.0%	75.0%
Non-Interstate NHS Level of Travel Time Reliability	70.0%	70.0%
Interstate Truck Travel Time Reliability	1.70	1.70
CMAQ - On-Road Emission Reduction from CMAQ Projects	VOC: 0.557 kg/day NOx: 2.229 kg/day	VOC: 1.114 kg/day NOx: 4.458 kg/day

Transit Asset Management

This section presents the Transit Asset Management (TAM) targets adopted by GWTA and the State of Good Repair (SGR) performance of their capital assets. The final TAM rule, which became effective in October 2016, defines transit asset management as a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets.

Federal regulation requires the MTP to include Transit Safety and Transit Asset Management performance targets for urbanized areas. On March 5, 2021, the BGMPO adopted transit safety and asset management performance measures. The BGMPO supports these targets through its planning and programming activities.

Transit Safety and Reliability

This section shows the transit safety targets adopted by the BGMPO in 2021. The final Transit Safety Rule became effective in July 2018 and require public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include processes and procedures to implement Safety Management Systems, including transit safety performance targets for:

- Fatalities
- Injuries
- Safety Events
- System Reliability

Public transit agencies are required to set fiscal year performance targets and report performance for each category to FTA on a triennial basis. The BGMPO supports these targets through its planning and programming activities. The Transit Safety Targets from the 2021 Regional Transit Safety Performance Targets carry forward in the BGMPO 2050 MTP and are shown in Table 11.

Table 11. BGMPO MPO PM3 Performance Targets

Transit Agency	Mode	Fatalities (per million VRM)*		Fatalities(Total)		Injuries (per million VRM)*		Injuries (Total)		Safety Events (per million VRM)*		Safety Events (Total)		System Reliability (VRM/failures)**	
		2020	MPO 2021 Targets	2020	MPO 2021 Targets	2020	MPO 2021 Targets	2020	MPO 2021 Targets	2020	MPO 2021 Targets	2020	MPO 2021 Targets	2020	MPO 2021 Targets
ACTA	ADA/ Paratransit	0	0	0	0	7	2	1	2	3	3	22	3	125,000	75,000
Link Transit	Fixed Route	0	0	0	0	2.2	2	5	2	3.11	3	7	3	56,068	75,000
	ADA/ Paratransit	0	0	0	0	3.8	2	2	2	5.7	3	3	3	13,113	75,000
Orange County Public Transportation	Fixed Route	0	0	0	0	1	2	1	2	1	3	1	3	59,500	75,000
	ADA/ Paratransit	0	0	0	0	1	2	1	2	1	3	1	3	59,500	75,000
GoTriangle	Fixed Route	0	0		0	0.125	2	3	2	0.125	3	3	3	25,577	75,000
	Non-Fixed	0	0	0	0	0.125	2	3	2	0.125	3	3	3	99,902	75,000
PART	Fixed Route	0	0	0	0	0	0	0	0	54	54	38.4	38.4	43,300	75,000
	Non-Fixed	0	0	0	0	0	0	0	0	0	0	0	0	140,477	75,000

*Rates are per vehicle revenue miles
** Mean distance between failure (miles)

Conclusion

The BGMPO 2050 MTP sets forth a path to more reliable travel conditions, additional choices in how people travel, the efficient movement of goods, and a transportation system that makes positive contributions to the region's enviable quality of life. The MTP is the latest effort to craft a regional guidebook for mobility that supports local growth and economic development while minimizing adverse effects to natural features.

The BGMPO 2050 MTP identifies multimodal transportation projects that consider the existing and future needs of residents, employers, and visitors. The systematic selection of project priorities were expressed within the public involvement process to positively influence the region's transportation planning decisions. These priorities feed a financially constrained plan that shows projects that can be reasonably funded during the life of the MTP.

But the BGMPO 2050 MTP offers more than a framework for funding transportation improvements. It documents how transportation needs can be accommodated in the coming decades in ways that advance goals related to transportation efficiency, choices, optimization, equity and integration. As projects approach construction or circumstances change, the BGMPO in partnership with member jurisdictions and partner agencies can work collaboratively to adjust priority improvements and advance recommended projects. In the end, this collaborative spirit will provide new ways to achieve a safe and balanced multimodal transportation system that makes the region an even greater place to live, work, and recreate.

BGMPO

Burlington - Graham Metropolitan Planning Organization

2050 MTP