



Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
City of Durham, Transportation Division
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 Durham, NC 27701
 www.dchcmo.org



MPO MEMBER GOVERNMENTS & ORGANIZATIONS

Our member jurisdictions are the City of Durham (MPO Lead Planning Agency), Town of Chapel Hill, Town of Carrboro, Town of Hillsborough, Durham County, Orange County, Chatham County, and the North Carolina Board of Transportation. Technical member agencies are the North Carolina Department of Transportation (NCDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Environmental Protection Agency (EPA), North Carolina Department of Environment and Natural Resources (NCDENR), Triangle J Council of Governments (TJCOG), Raleigh-Durham Airport Authority, Triangle Transit Authority (TTA), Duke University, University of North Carolina at Chapel Hill, North Carolina Central University, Carolina Trailways, and Research Triangle Foundation of North Carolina.

LONG-RANGE TRANSPORTATION STRATEGY AND PROGRAM

DCHC 2030 TRANSPORTATION PLAN

FOR THE DURHAM-CHAPEL HILL-CARRBORO URBAN AREA

Adopted April 13, 2005

TOWARD A BALANCED TRANSPORTATION SYSTEM

Federal regulations require Metropolitan Planning Organizations (MPO) to develop a Long Range Transportation Plan (LRTP) that accommodates a twenty-year planning period, implements the local community vision and goals, and responds to environmental and financial constraints.

As an integral part of the greater Triangle region, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) developed the 2030 Long Range Transportation Plan that was approved by the MPO in September, 2004. The Plan received federal approval (effective June 15, 2005) since the Plan was shown to conform to federal air quality standards.

The DCHC MPO 2030 LRTP was developed through the collaborative effort of multiple local and State planning agencies, local citizens, elected officials and community leaders. The DCHC MPO planners developed the plan by translating citizen ideas into feasible project options and carefully evaluating over fifty alternative options dealing with roadway, rail and bus transit, bicycle and pedestrian, transportation system management (TSM) and travel demand management (TDM) improvements. These alternatives were tested for their performance in mobility and safety enhancement, effect on mode choice, compatibility with the built and natural environment, and impacts on society and the environment.

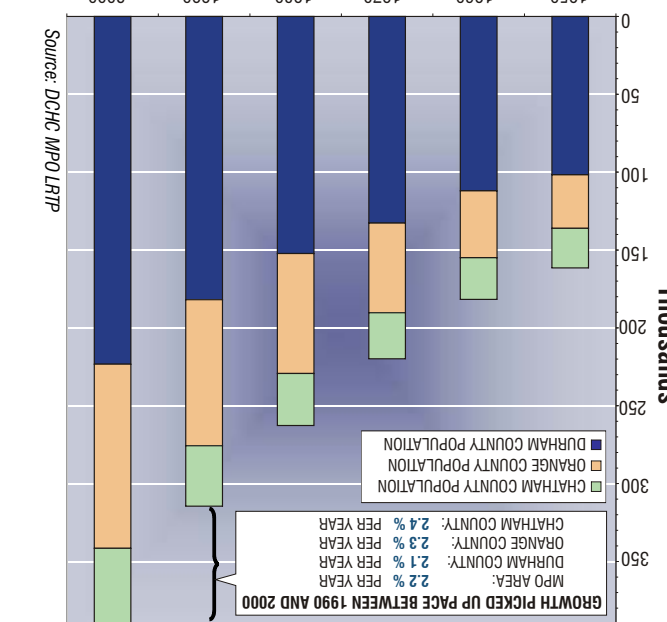
The goal of this Plan is to build a transportation system that is balanced – a system that is safe, efficient, multi-modal, affordable, and sustainable.

WHO ARE WE PLANNING FOR?

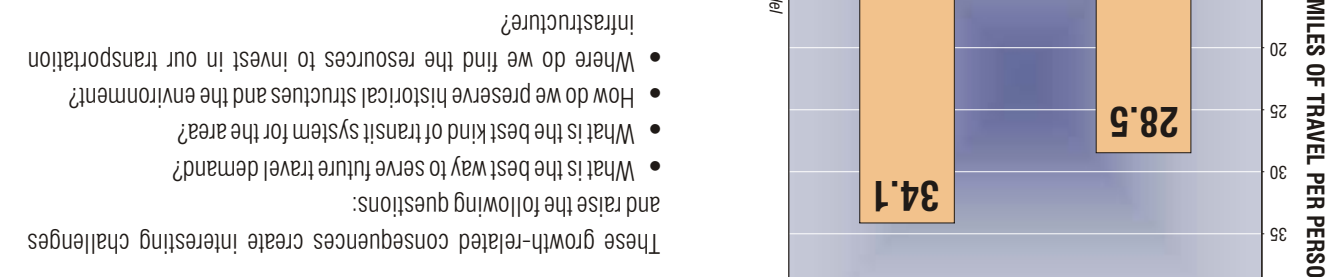
The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) is responsible for transportation planning in the urbanized areas of Durham and Orange Counties, and portions of northern Chatham County.

Based on 2002 data, approximately 568,000 people live within the boundaries of the DCHC MPO area. The demographic data shows that the MPO area is changing rapidly. The area has experienced a steady population increase during the last five decades, with annual growth accelerating to 2.2 percent during the last ten years. Among the municipalities, the Town of Carrboro has experienced the highest rate of population growth at 3.2 percent per year. These population growth patterns are a result of the rapidly growing regional economy, a favorable cost of living, and the high quality of life that residents enjoy in the Triangle region. The MPO area is forecast to add over 195,000 people between 2002 and 2030.

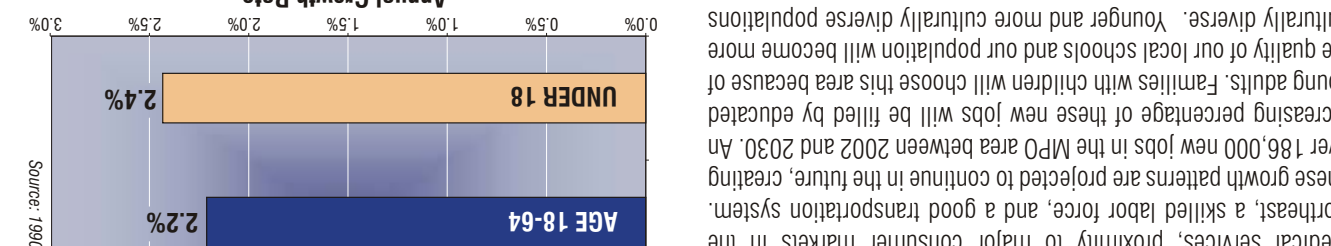
The Triangle economy expanded at a 3.8 percent annual job growth rate in the last decade. This high growth rate is attributable to several economic characteristics, including the clustering of technology and medical services, proximity to major consumer markets in the Northeast, a skilled labor force, and a good transportation system. These growth patterns are projected to continue in the future, creating over 186,000 new jobs in the MPO area between 2002 and 2030. An increasing percentage of these new jobs will be filled by educated young adults. Families with children will choose this area because of the quality of our local schools and our population will become more culturally diverse. Younger and more culturally diverse populations tend to require more alternative transportation modes such as transit, walking and bicycling.



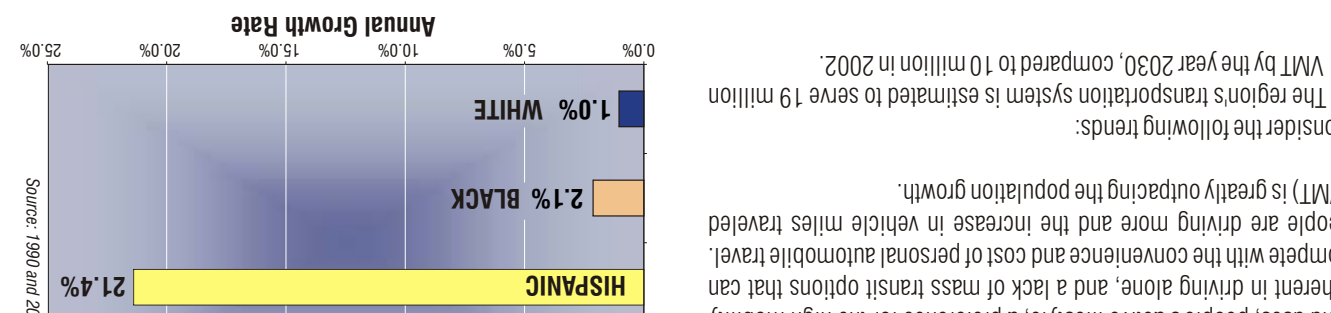
- The level of roadway congestion will roughly double from 2002 to 2030.
- The per capita number of trips will continue to increase, and those trips will be longer both in terms of distance and time.
- How do we design a transportation network that serves the needs of our diverse economy, workforce and culture, but is attractive as well?



By addressing congestion issues, this Plan also addresses air quality concerns. Specifically, ozone pollution is a growing health threat in the region. The area is designated as an ozone non-attainment area and carbon monoxide maintenance area, based on federal regulations and standards as prescribed in the National Ambient Air Quality Standards (NAAQS). The solutions laid out in this Plan are forecast to reduce pollutant emissions. Air quality conforms with current air quality emissions standards. Air quality on the community's economic development efforts and forfeiture of federal dollars for transportation improvements.

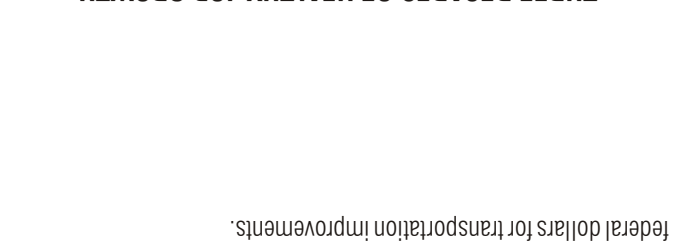


These high growth trends and the underlying changes in demographics and business patterns put a high demand on the current transportation system. The region's increasingly congested freeways and arterials are the result of low-density growth, segregated land uses, people's active lifestyle, a preference for the high mobility inherent in driving alone, and a lack of mass transit options that can compete with the convenience and cost of personal automobile travel. People are driving more and the increase in vehicle miles traveled (VMT) is greatly outpacing the population growth.



- The 2030 Plan answers these questions by putting forward a twenty-six year plan of investment in highways, rail and light-rail transit systems, bus services, and pedestrian and bicycle facilities. The Plan addresses congestion issues by promoting a balanced multi-modal transportation system so that more people can leave their cars at home and enjoy a ride to work, or other destinations.

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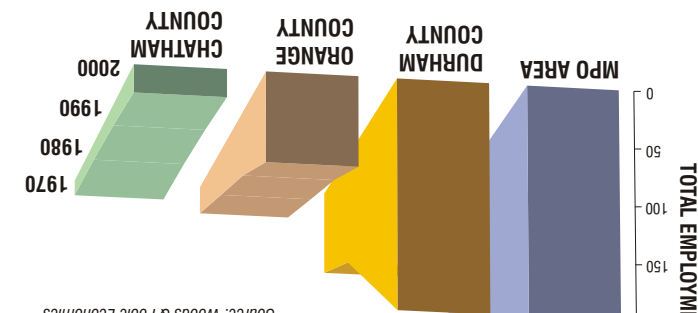


Three decades of healthy job growth in the MPO area

EMPLOYMENT GROWTH RATE (1990-2000)

Area	Annual Growth Rate
MPO AREA	3.1% PER YEAR
DURHAM COUNTY	2.2% PER YEAR
ORANGE COUNTY	2.3% PER YEAR
CHAPEL HILL COUNTY	2.2% PER YEAR

Source: Woods & Fraze Economics

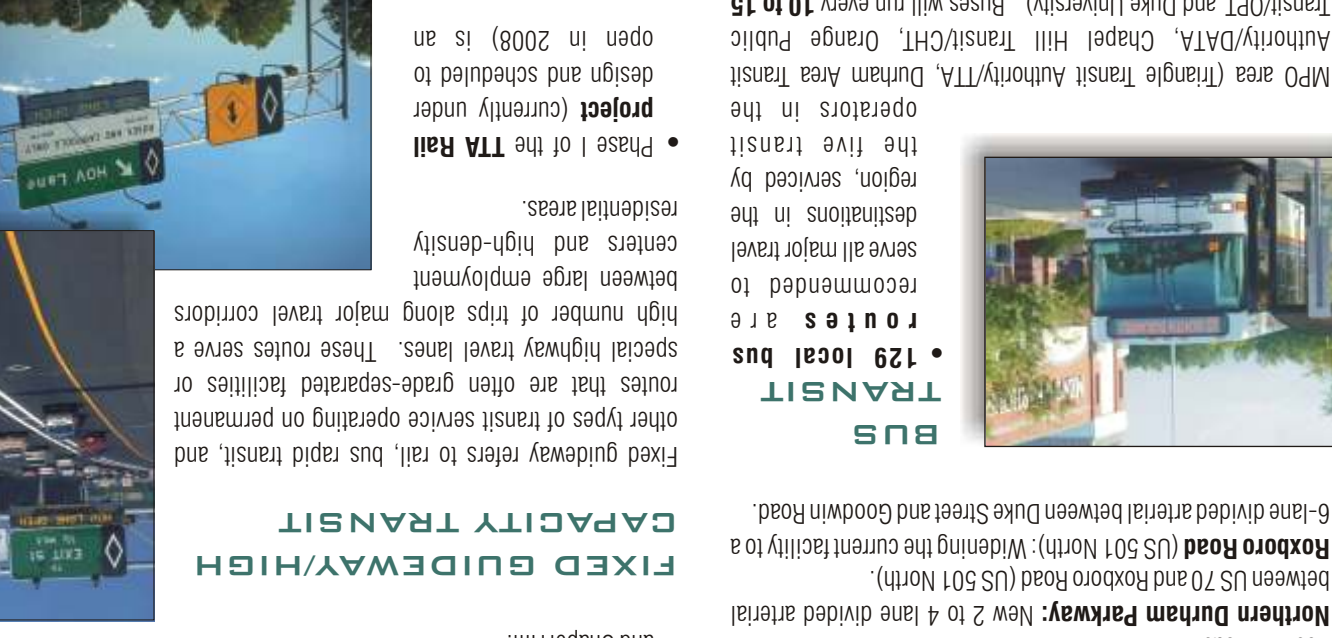


PLAN HIGHLIGHTS

- 58 percent of roadway projects, or 158 roadway miles, increase the capacity of existing roadways.
- 47 percent of the projects, or 76 miles of roadway, are new roads.
- 1-40 High-Occupancy Vehicle (HOV) lanes along I-40 (between NC 86 and the Wake County line). The HOV-3 lanes provide an additional 6-lane freeway between US 70 and the Wake County line.
- US 70: Widening the current freeway to a 6-lane freeway between US 70 and Lyn Road and the Wake County line.
- 1-85: Widening the current freeway to 6 lanes between US 70 and Red Mill Road.
- Northern Durham Parkway: New 2 to 4 lane divided arterial between US 70 and Roxboro Road (US 501 North).
- Roxboro Road (US 501 North): Widening the current facility to a 6-lane divided arterial between Duke Street and Goodwin Road.

Fixed guideway refers to rail, bus rapid transit, and other types of transit service operating on permanent routes that are often grade-separated facilities or special highway travel lanes. These routes serve a high number of trips along major travel corridors between large employment centers and high-density residential areas.

- Phase 1 of the **TTA Rail project** (currently under design and scheduled to open in 2008) is an MPO area (Triangle Transit Authority/TTA, Durham Area Transit Authority/DATA, Chapel Hill Transit/CHT, Orange Public Transit/OPT, and Duke University). Buses will run every 10 to 15 minutes during peak travel hours.



Travel Demand Management (TDM) includes strategies and actions that reduce the demand for single-occupant vehicle (SOV) trips and spread traffic volumes away from peak travel periods. These solutions address roadway access and parking management policy, and include real-time traffic data systems, programs, and congestion surveillance.

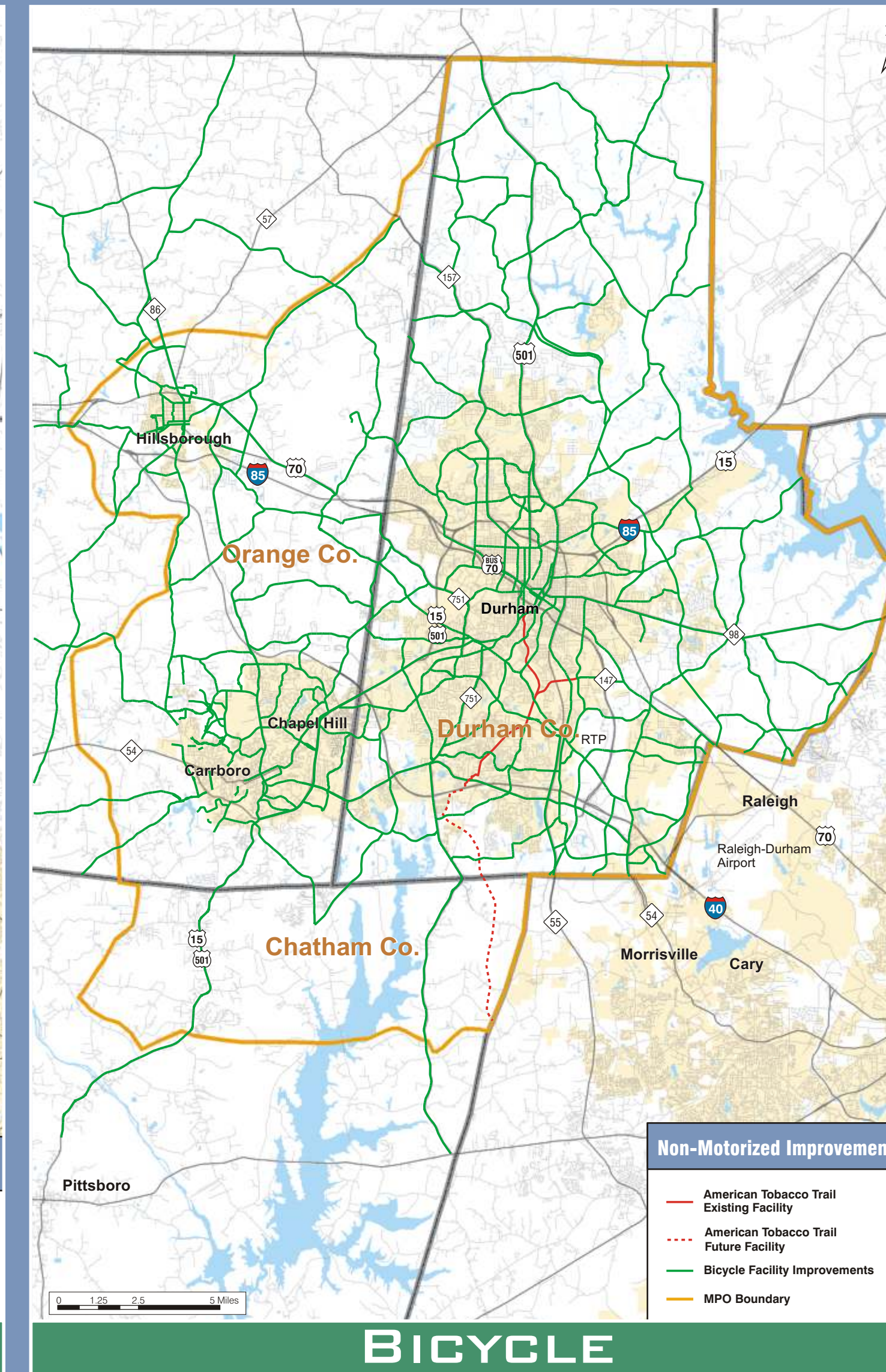
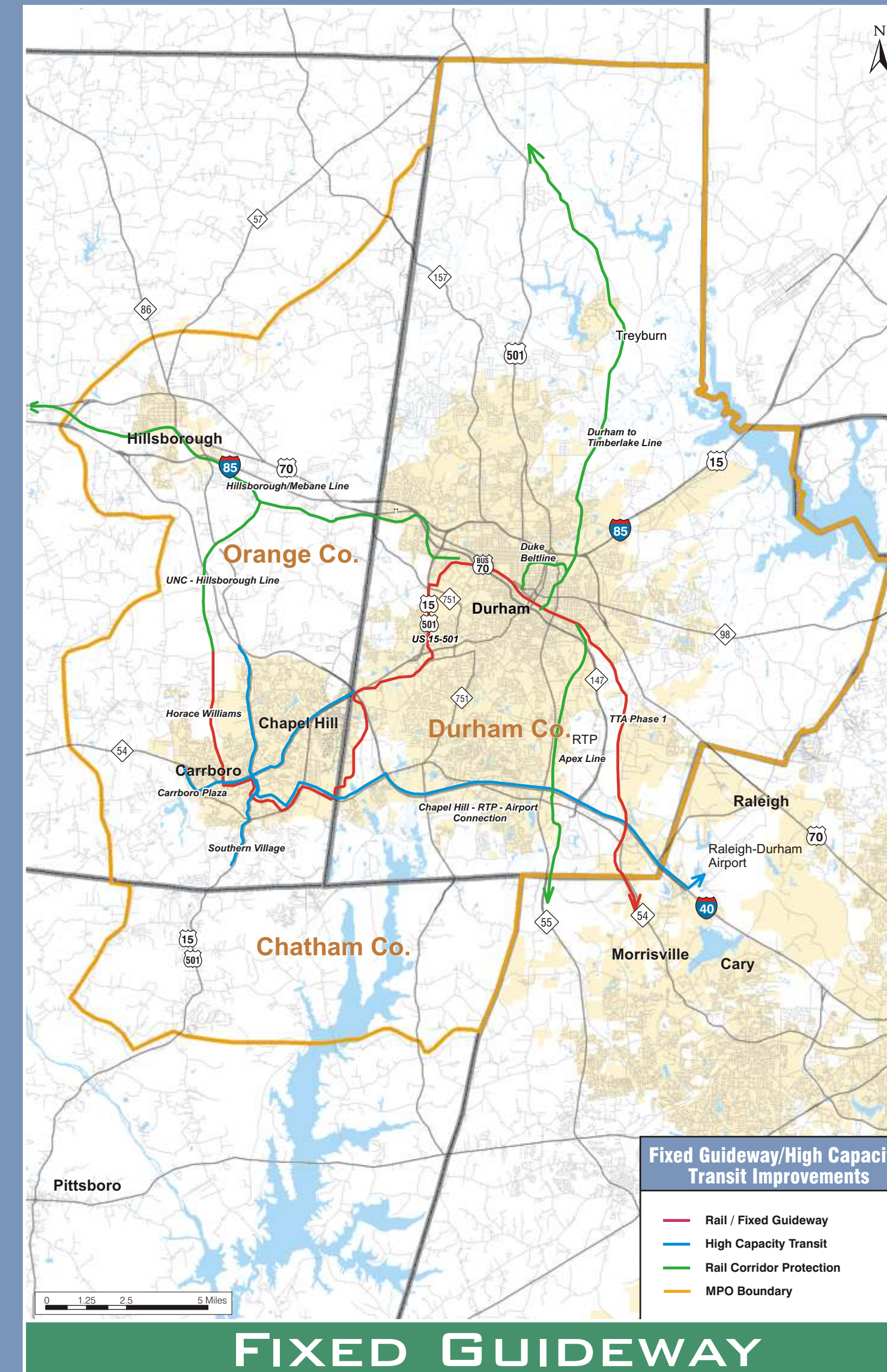
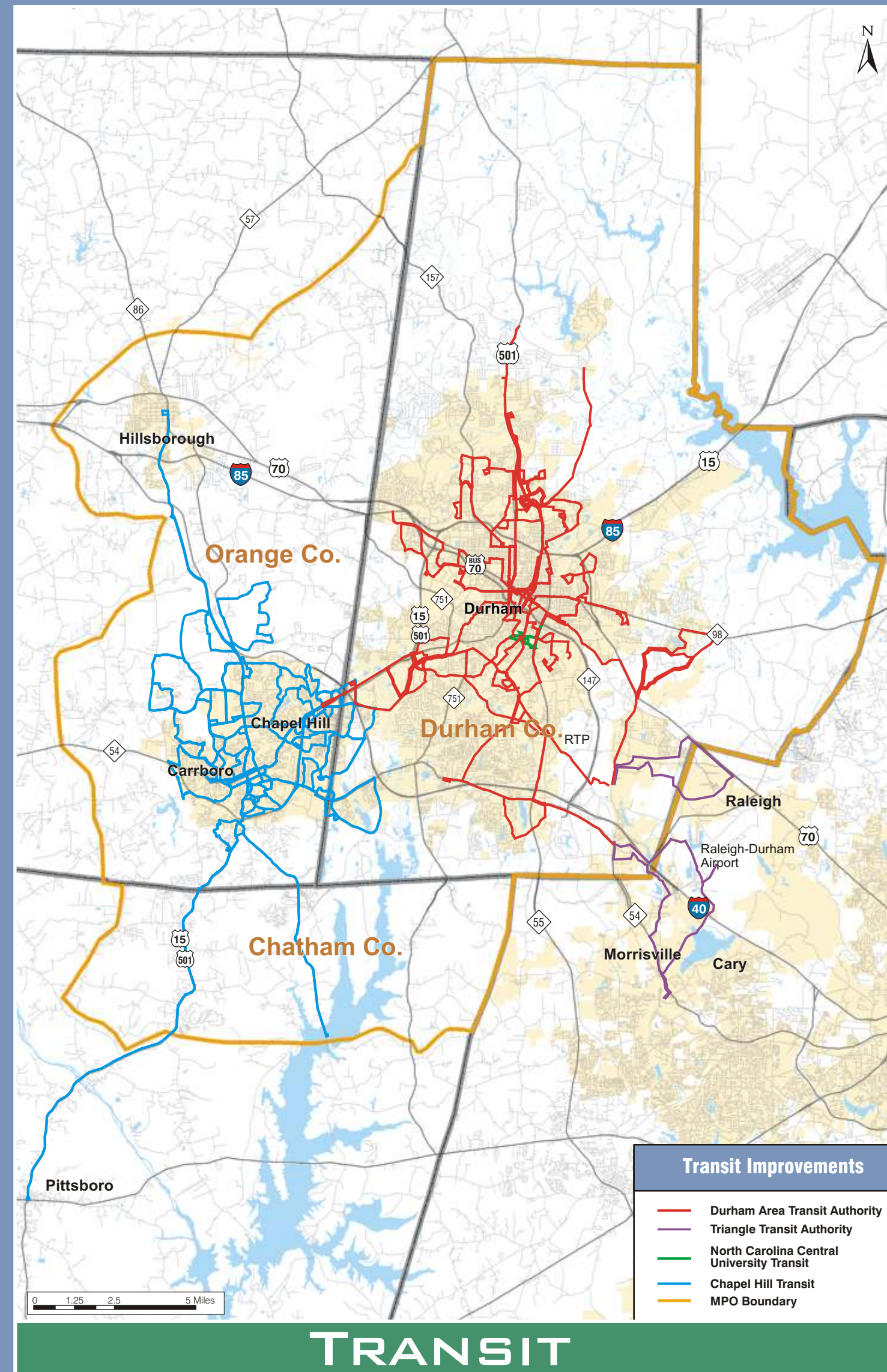
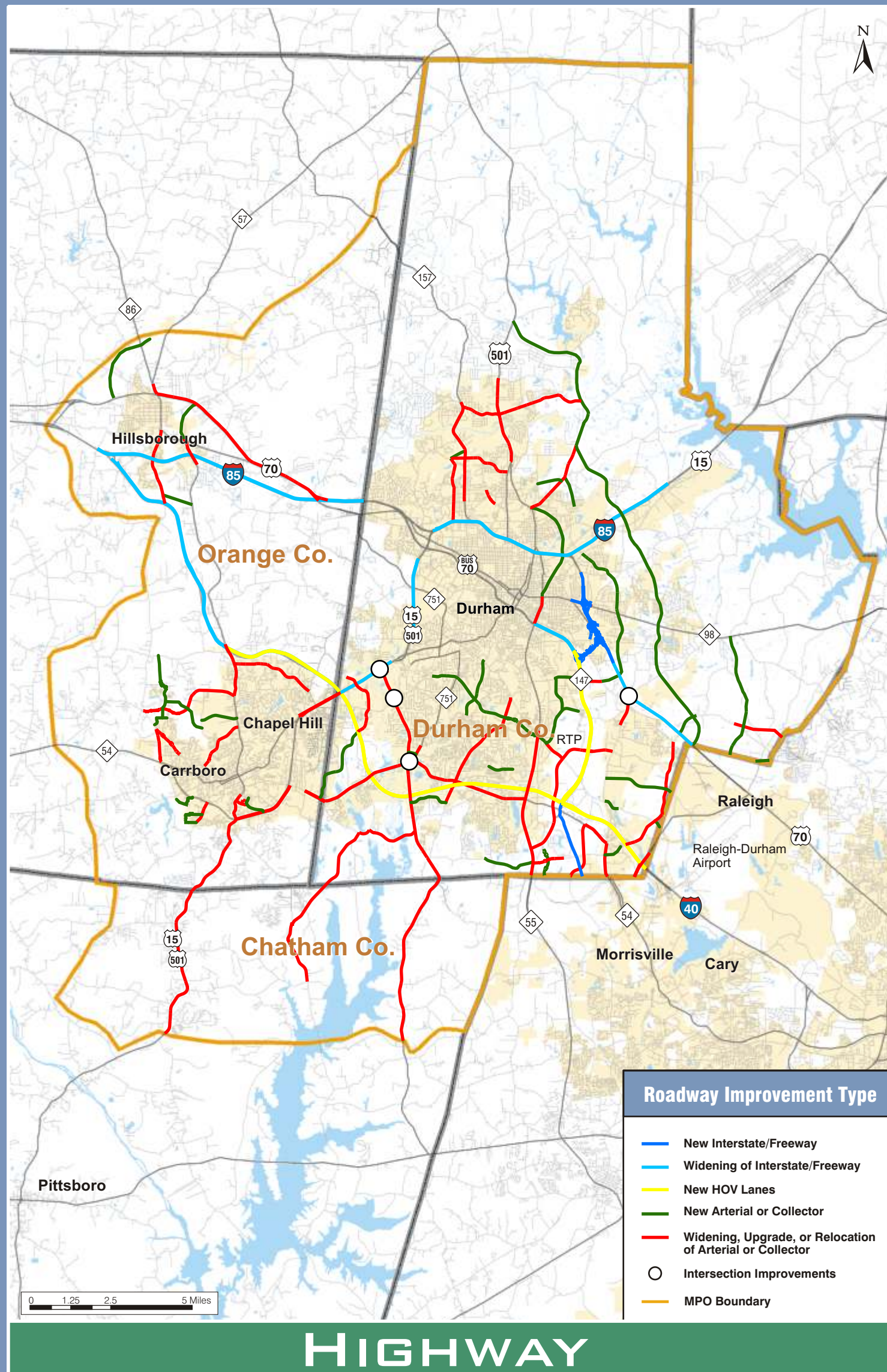
- Durham County's **Comute Trip Reduction** ordinance NCDOT to allow for regional **signal coordination** along arterials and arterial intersections with the use of **advanced transit technologies** such as automated vehicle locator (AVL), automated passenger counter (APC), mobile data terminals (MDT), electronic fare collection, State agencies to better coordinate responses to vehicle accidents.
- Supports building a regional **multi-modal traveler information center**.

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RECOMMENDED TRANSPORTATION PROJECTS



LONG-RANGE TRANSPORTATION PLAN GOALS

- 1 A **safe, efficient, attractive, multi-modal transportation system** that supports local land use, accommodates trip-making choices, maintains mobility, protects the environment and neighborhoods, and improves the quality of life for urban area residents.
- 2 An attractive **Multi-Modal Street and Highway System** that allows people and goods to be moved safely, conveniently, and efficiently.
- 3 A convenient, accessible, and affordable **Public Transportation System**, provided by public and private operators, that enhances mobility and economic development.
- 4 A **Pedestrian and Bicycle System** that provides an alternative means of transportation, allows greater access to public transit, and supports recreational opportunities.
- 5 A Transportation Plan that is **integrated with local land use plans and development policies**.
- 6 A multi-modal transportation system that provides access and mobility to all residents, while **protecting the natural environment, cultural resources, and social systems**.
- 7 An ongoing program to **inform and involve citizens** throughout all stages of the development, update, and implementation of the Transportation Plan.

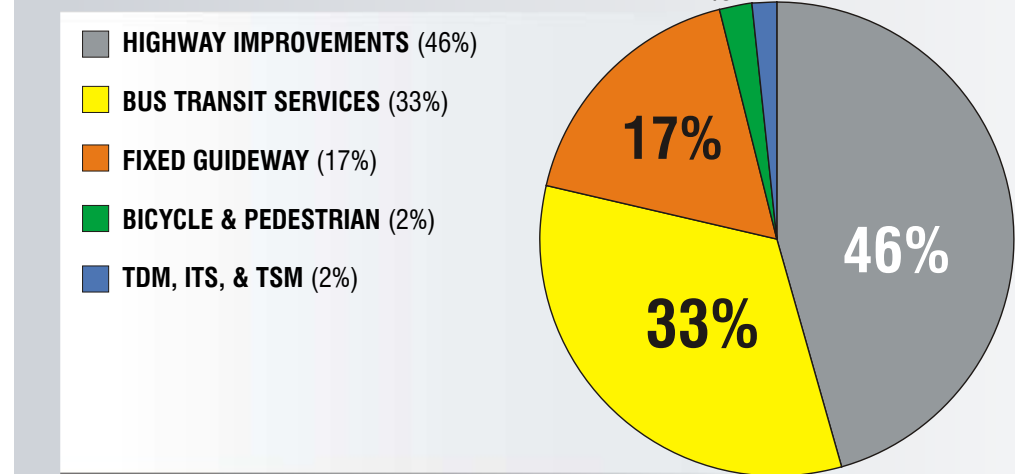
HOW MUCH DO WE PLAN TO INVEST?

The total cost estimate for the 2030 L RTP is **\$6.13 billion**. Of this total investment package, 46 percent is planned to go into Highway improvements, 33 percent will go into Bus Transit service improvements and 17 percent into Fixed Guideway and High Capacity Transit improvements. The remaining balance will build up the Bicycle and Pedestrian facilities and implement Transportation System Management (TSM), Intelligent Transportation System (ITS), and Travel Demand Management (TDM) strategies in the MPO area.

The Plan will be fully funded by tapping into a variety of traditional funding sources available to the MPO members, including State and federal transportation funds (such as STP, CMAQ and NHS, State Highway Trust Fund, bus transit funds, and fixed guideway funds), local Capital Improvement Program (CIP) funds, gas taxes and vehicle registration fees. In addition, non-traditional revenue sources, including a retail gas tax, vehicle registration fee increase and a highway toll (i.e., Triangle Parkway), will provide a substantial portion of needed revenue.

MULTI-MODAL PLAN INVESTMENTS

DISTRIBUTION OF \$6.13 BILLION TOTAL PLAN COST



MULTI-MODAL FUNDING SOURCES

DISTRIBUTION OF \$6.13 BILLION PLAN REVENUE

