

FAST_{2.0}

Freeway, Arterial, Street, and Tactical Transit

EXISTING PLANS MEMO

January 2025

Introduction

This memorandum presents a comprehensive review of existing transportation data, planning documents, and relevant policies within the Triangle region of North Carolina. The analysis focuses on key studies and plans that inform the region's transportation future, including:

- **Phase I Freeway, Arterial, Street, and Tactical (FAST) Study:** This study provides a foundational understanding of transportation needs and opportunities in the Triangle Region of North Carolina.
- **Capital Area Metropolitan Planning Organization (CAMPO) Studies:** CAMPO has conducted several studies related to Bus on Shoulder (BOSS) systems, Reversible Express Lanes (RED lanes), and bus rapid transit (BRT) systems, which are relevant to the region's transportation planning.
- **Local Transit Plans:** Local transit plans, including those for Wake County, Raleigh, Chapel Hill, Durham, and Orange County, offer insights into local transportation priorities and strategies.
- **NCDOT 2024-2033 State Transportation Improvement Program (STIP):** The STIP outlines planned transportation projects and investments in the region.
- **Connect 2050 Metropolitan Transportation Plan (MTP):** The Connect 2050 MTP includes plans for the Capital Area Metropolitan Planning Organization (CAMPO) and the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), addressing regional transportation needs.

The following summaries provide an overview of each of these key studies and plans, highlighting areas where equity considerations were used; applicable areas of implementation; and where overlapping corridors and routes occur with the 2024 FAST 2.0 study.

As part of the 2024 FAST 2.0, stakeholder engagement with CAMPO, Central Pines COG, Town of Chapel Hill, Chatham County, City of Durham, DCHC MPO, Durham County, GoRaleigh, GoTriangle, Johnston County, Orange County, Regional Transportation Alliance (RTA), Research Triangle Foundation (RTF), Town of Cary, and Wake County was conducted to gauge priorities and interests on corridors and routes in the Triangle region. These stakeholders identified the following 13 potential corridors:

- I. **US 70**
 - a) Between Durham and Raleigh
 - b) Between Durham and Orange County
- II. **CHAPEL HILL TO RTP:** Emphasizing the importance of this connection for the region.
- III. **US 15-501 CORRIDOR**
 - a) Chapel Hill to Durham
 - b) Chapel Hill to Chatham County
- IV. **FAYETTEVILLE ROAD CORRIDOR** in Durham
- V. **NC 98 CORRIDOR:** Between Durham and Wake County
- VI. **VINFAST SITE IN CHATHAM COUNTY**
- VII. **NC 54**
 - a) Chapel Hill to Durham
 - b) Within Durham, through RTP
- VIII. **I-40** throughout the region
- IX. **I-540:** Northern and Southern
- X. **CAPITAL BOULEVARD**

XI. US 64: Raleigh west to Pittsboro

XII. US 1

- a) Raleigh/Cary to Holly Springs/Fuquay Varina
- b) Long term US 1 to towards Sanford and Pinehurst

XIII. S-LINE RAIL CORRIDOR: For multimodal connections

A summary of how these corridors overlap with the 2024 FAST 2.0 study is provided for each study or plan. This will ensure regional network coordination and emphasize areas where FAST 2.0 investments may be leveraged.

Phase I Freeway and Street-based Transit (FAST) Network Study

The Phase I FAST network study aims to improve transportation in the Triangle region by creating multimodal corridors that can accommodate high-capacity transit. It envisions a connected network linking major communities, activity centers, the Raleigh-Durham (RDU) Airport, and the Research Triangle Park. Funded by the RTA, GoTriangle, and the North Carolina Department of Transportation (NCDOT), the study proposes transforming existing roadways into efficient transit corridors. The study identifies key corridors and routes with potential demand for transit, including:

- US 15-501 Corridor
- NC 751
- NC 147
- NC 147 and I-40
- NC 55
- NC 540 (Western Boulevard)
- NC 540 (Northern Section)
- US 64 to Pittsboro
- Harrison Boulevard
- US 1 from east Raleigh to Regency Park
- Beltline (I-440) corridor
- Capital Boulevard
- US 70
- Six Forks Road
- US 401 S to Fuquay Varina
- Holly Springs Road
- NC 50/Creedmoor Road

Potential corridors are evaluated using a multi-faceted approach, considering both mobility and accessibility factors. Mobility factors include travel demand, transit performance, traffic conditions, and contextual factors. Accessibility factors focus on equity, existing projects, and identify gaps in the transportation network. By combining this analysis with spatial analysis of travel demand and existing regional transit service, illustrative FAST corridors are developed. The 10 proposed Triangle FAST corridors shown in Table 1 are interconnected corridors that directly serve Raleigh, Durham, Cary, Chapel Hill, RDU Airport, and Research Triangle Park.

Table 1: Proposed High Priority and 0-5 Years FAST Freeway and Street Corridors, with Future BRT linkages underlined.

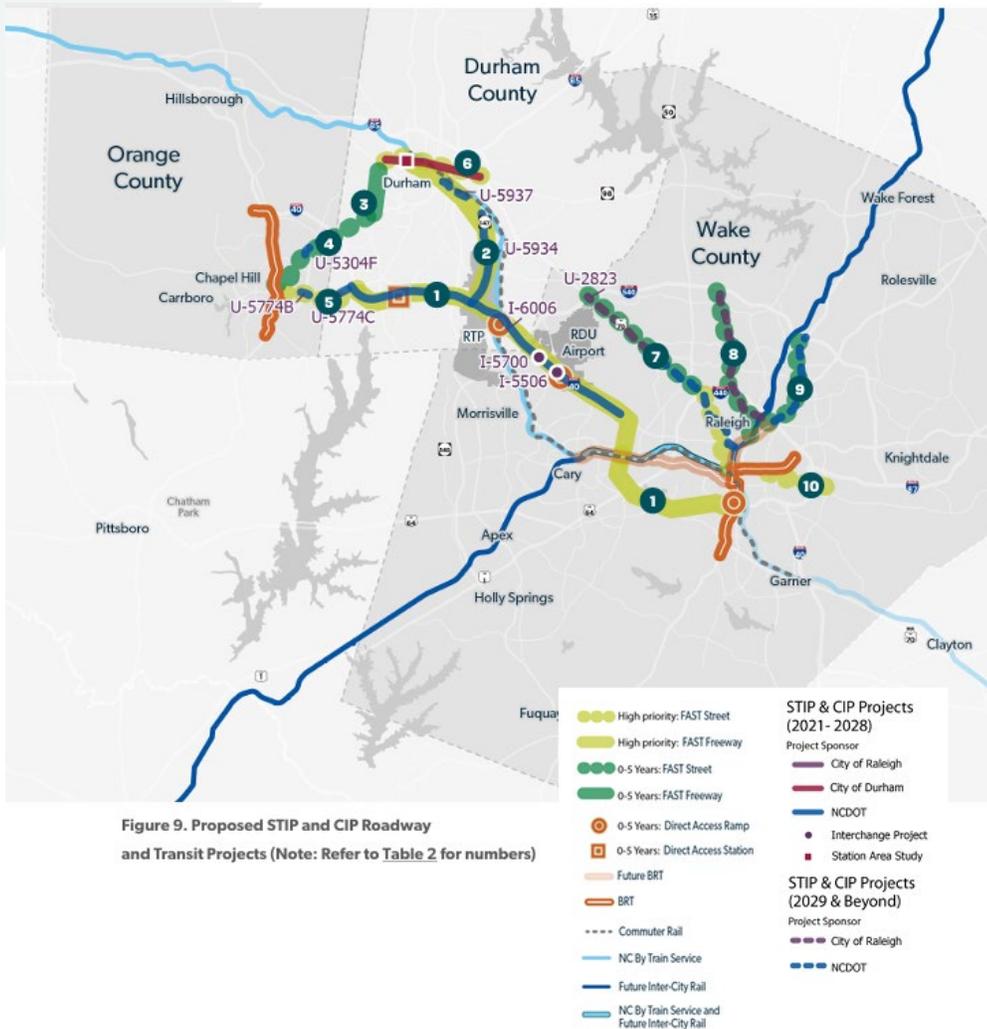
Corridor	From	To
1. I-40	future South Wilmington Street <u>BRT</u>	NC 54 / Raleigh Road in South Durham
2. I-885 / NC 147	I-40 in RTP	Duke University
3. US 15-501 freeway	Erwin Road area	US 15-501 arterial
4. US 15-501	future MLK / NC 86 <u>BRT</u>	15-501 freeway
5. Raleigh Rd / NC 54	future MLK / NC 86 <u>BRT</u>	I-40
6. Main / Erwin / Holloway	US 15-501 freeway near Erwin Rd	Holloway Street / future I-885
7. US 70	future Downtown Raleigh <u>BRT</u>	Brier Creek/I-540
8. Six Forks Road	future Capital Boulevard <u>BRT</u>	I-540
9. Capital Boulevard	future Capital Boulevard <u>BRT</u>	I-540
10. Poole Road	future New Bern Avenue <u>BRT</u>	New Hope Road

Source: FAST Network Concept for North Carolina’s Research Triangle Region and Triangle FAST Implementation Playbook, Table 2.

Figure 1 shows the type of projects proposed for the 10 corridors and whether they are included in the 2021-2028 STIP/Capital Improvement program (CIP) or 2029 & Beyond. Projects that are funded for implementation in 2029 or in the longer-term include the following:

- 2. Future I-885 / NC 147 (U-5937)
- 3. US 15-501 Freeway (not included in the STIP/CIP)
- 4. US 15-501 (U-5304D/F)
- 5. Raleigh Rd / NC 54 (U-5774B/C)
- 7. US 70 (U-2823)
- 8. Six Forks Road (Wake BRT: Northern Corridor)
- 9. Capital Boulevard (Wake BRT: Northern Corridor)

Figure 1: Proposed STIP and CIP Roadway and Transit Projects (Note: Refer to Table 1 for numbers)



Source: FAST Network Concept for North Carolina’s Research Triangle Region and Triangle FAST Implementation Playbook, Figure 9.

The FAST study emphasizes the importance of regional coordination, funding, and implementation challenges. Additionally, the study suggests potential BRT extensions in several areas, including Western Wake County and Southern Wake County.

Equity

Accessibility criteria, including equity considerations, are used to screen potential FAST corridors. Benefits are analyzed to assess the equitable distribution of benefits (and costs) across different market types, with a particular focus on underserved communities and disadvantaged populations. The analysis is further disaggregated by socio-economic characteristics of communities served to evaluate equity impacts and ensure an equitable distribution of opportunities.

By prioritizing accessibility and focusing on scalable, cost-effective solutions, the FAST approach aims to maximize benefits and improve mobility for a wider range of people. This strategy can help optimize public transit investments and enhance accessibility for all.

Implementation

The 2021 FAST network study provides a comprehensive framework for advancing regional transit service. This study can inform local and regional transportation planning efforts by:

- **Guiding Transit Planning:** The study identifies priority corridors and recommendations can be used to develop detailed transit plans and corridor studies.
- **Integrating Transit into State-Funded Projects:** State-funded transportation projects can be designed and implemented to accommodate future transit infrastructure, such as BRT or light rail, by incorporating dedicated lanes, stations, and other necessary features.
- **Promoting Regional Collaboration:** The study emphasizes the importance of regional collaboration to coordinate planning and implementation efforts, ensuring a seamless and efficient transit network.

Beyond the Triangle region, the FAST approach can be applied statewide to:

- **Incorporate Transit into Roadway Design:** Roadway projects can be designed to include transit elements, such as bus lanes, transit signal priority, and pedestrian and bicycle facilities.
- **Enhance Regional Transit:** Opportunities to improve existing transit services, expand service areas, and connect regional transit systems can be identified and prioritized.
- **Prioritize Equity:** The FAST approach can be used to identify and address equity gaps in transit access and service, ensuring that all communities have access to reliable and affordable transportation options.

The FAST framework allows transportation agencies to determine where transit investments may be most effective to improve mobility and enhance the quality of life for residents across the state.

Bicycle and Pedestrian Considerations

The Phase 1 FAST study acknowledges the need to provide pedestrian and bicycle connections to express transit service at stops and stations in the report. Pedestrian connections were a key determinant for deciding which interventions to recommend in each priority corridor, including:

- **Direct Access Stations,** which provide a connection to a freeway-based transit station from another mode of transportation.
- **Level Boarding,** which makes it easier and faster for people to board with mobility devices such as wheelchairs or strollers.
- **Floating Bus Stops,** which separate the boarding area from the sidewalk and bike lane and reduces conflicts between modes.

The report provided a more detailed look at the US-70 corridor in Raleigh and identified the lack of pedestrian and bicycle facilities as both a limitation (north of I-440) and the presence of those facilities as an opportunity to implementing high-quality transit (between downtown and I-440).

Overlap with Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 2 highlights which of the 13 corridor and routes identified by the 2024 FAST 2.0 stakeholders are also included in the 2021 FAST study. Please refer to Figure 1 for the location of the 2021 FAST study projects listed in Table 2.

Table 2: 2024 FAST Study Corridors that Overlap with 2021 FAST Study

2024 FAST 2.0 Corridor/Routes	2021 FAST STUDY	Notes from Triangle FAST Network Implementation Playbook
2. Chapel Hill to RTP: Emphasizing the importance of this connection for the region.	✓	Two projects: 1. I-40: From future South Wilmington Street BRT to NC 54 / Raleigh Road in South Durham. And 5. Raleigh Rd / NC 54 from Future MLK / NC 86 BRT to I-40
3. US 15-501 Corridor		
a. Chapel Hill to Durham	✓	Two projects: 3. US 15-501 Freeway from Erwin Road area to US 15-501 arterial and 4. US 15-501 from Future MLK / NC 86 BRT to 15-501 freeway.
8. I-40 throughout the region	✓	1. I-40: From future South Wilmington Street BRT to NC 54 / Raleigh Road in South Durham.

North Carolina Capital Area Metropolitan Planning Organization (CAMPO) Studies

CAMPO Bus on Shoulder System (BOSS) Implementation Blueprint

The BOSS systems are dedicated bus lanes designated along the shoulder of freeway lanes. They are striped to be only used by buses to improve travel time reliability and safety. The current North Carolina BOSS system operating on I-40 in Raleigh is highly utilized by buses operating in the corridor and has improved travel time reliability. As such, the state is planning to expand the use of BOSS and incorporate it into their plans and policies as a transit improvement strategy for other corridors. The 2021 CAMPO BOSS Implementation Blueprint provides a comprehensive guide for implementing BOSS systems in the Triangle region of North Carolina. It outlines the necessary steps, best practices, and considerations for agencies looking to implement BOSS projects. The minimum criteria for BOSS are:

- Limited access facility such as interstates and expressways
- Existing paved shoulders which meet the minimum width of 10 ft. and are in good or fair condition, or require minimal upgrades
- Buses are utilizing the facility or if not, there is evidence of a transit market present
- Corridor experiences recurring congestion

Equity

The CAMPO BOSS Blueprint suggests using several equity prisms to gauge how BOSS can contribute to a more equitable transit network:

- **Consider BOSS Trips in the Broader Universe of Transit Trips:** BOSS facilities are likely to be used by bus riders with a range of incomes, and not primarily transit-dependent riders. The study states that there is an economic motivation to travel further for high-paying jobs, which means that longer-haul routes are likely to contain a higher proportion of higher-income earners than the overall transit system in a given region.
- **Bus Service Planning May Play the Greatest Role in Determining Who Uses BOSS:** The demographics of who rides on BOSS facilities will be significantly determined by the locations served by the bus before and after it enters the BOSS lane, and not by any attribute of the BOSS facility itself.
- **With Inline Stations, Traditional Title VI Analysis Is Recommended:** Current BOSS facilities are located along limited access freeways where pedestrians are discouraged from walking, and there are no plans to add inline stations to any BOSS facilities in North Carolina. If that changes, quantitative methods used for Title VI bus service change analysis would be appropriate tools for this work.
- **Equitable Engagement and Transit Onboard Surveys Can Help with Prioritization:** Equitable engagement and transit onboard surveys can also help prioritize BOSS investments in areas that have high concentrations of environmental justice populations. By understanding the on-time performance challenges experienced by transit dependent passengers and demographics of bus riders on different routes, agencies can make more informed decisions about where to prioritize BOSS facilities.
- **BOSS Investment Is One Component of a Larger Transit Plan:** BOSS can often be deployed for \$1 million per mile or less, and sometimes for less than \$25,000 per mile, which is significantly less than BRT, which frequently approaches \$10 million per mile when using dedicated lanes. In a program that was also investing in existing stops, sidewalk access to bus stops, frequent service networks, and BRT, BOSS investment would likely be a relatively small portion of the overall transit investment package in the community.

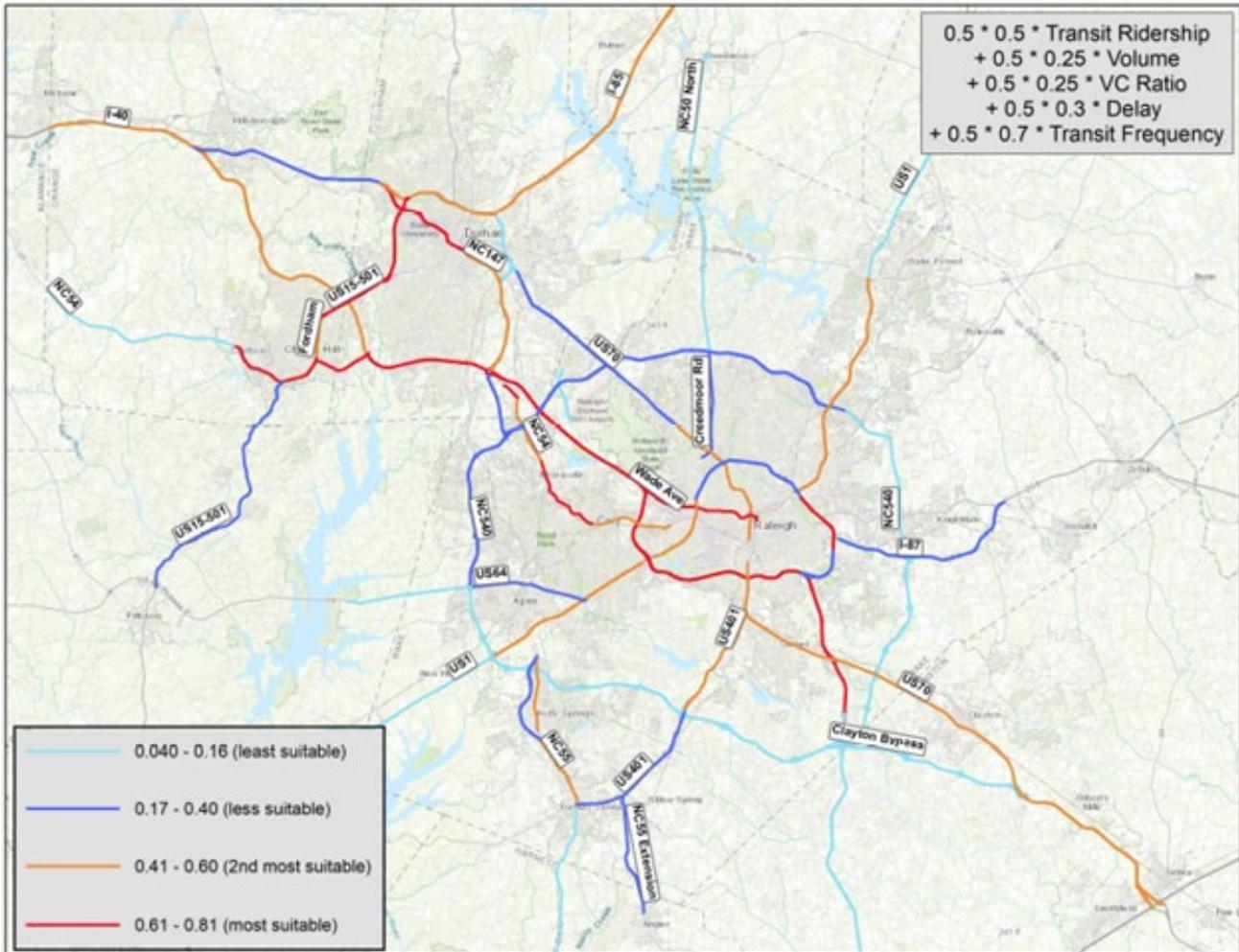
Implementation

The BOSS Blueprint provides guidance on various aspects of BOSS implementation, including:

- **Planning and Feasibility:** This includes identifying suitable corridors, conducting traffic and safety analyses, and assessing the feasibility of BOSS implementation. Figure 2 shows the corridors in the region that are suitable for BOSS.
- **Design and Engineering:** This involves developing detailed design plans for BOSS lanes, including lane markings, signage, and other infrastructure elements.
- **Operations and Maintenance:** This addresses operational considerations such as bus stop locations, frequency of service, and maintenance requirements.
- **Public Outreach and Engagement:** This outlines strategies for engaging with stakeholders and the public to build support for BOSS projects. Each outreach program should utilize multiple communication channels well in advance of the implementation as well as upon commencement of BOSS operation or expansion.
- **Funding and Grants:** This provides information on potential funding sources and grant opportunities for BOSS projects such as reviewing existing or the upcoming STIP is one example of a potential funding opportunity.

STIP Projects within the suitability corridors are shown in Figure 3. These projects are located on I-40, Wade Avenue, I-440, I-87, and US 1/US 64. Cost/mile for implementation and service as shown in Figure 4 and Figure 5.

Figure 2: BOSS Corridor Suitability Map



Source: CAMPO Bus on Shoulder System (BOSS) Implementation Blueprint, Figure 2.

Figure 3: STIP Projects within Suitability and Managed Motorways

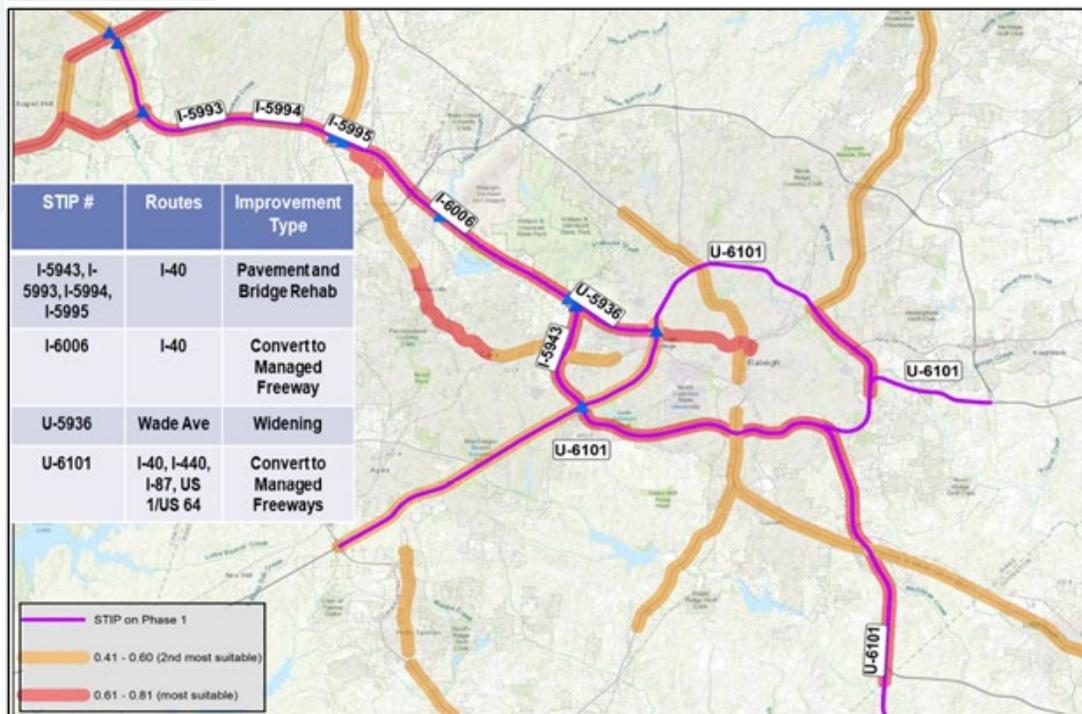


Figure 4: Incremental BOSS Implementation – Average Costs / Mile

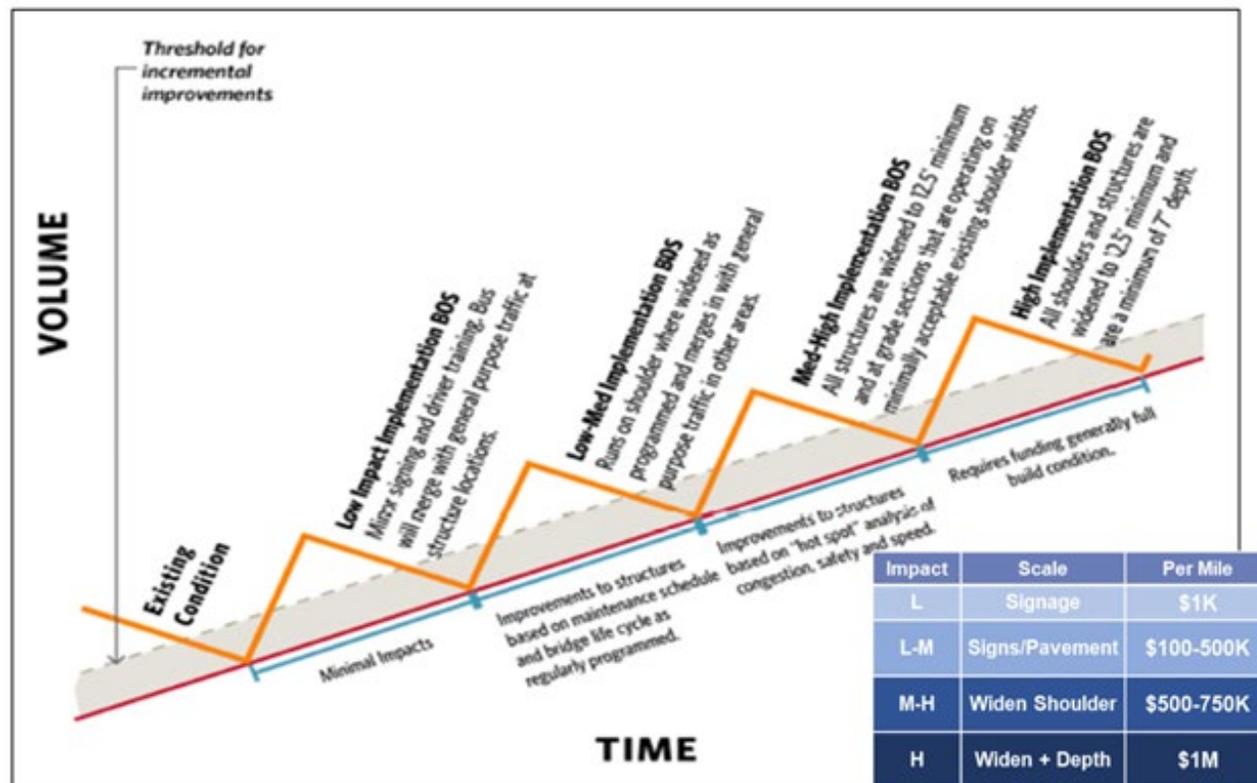
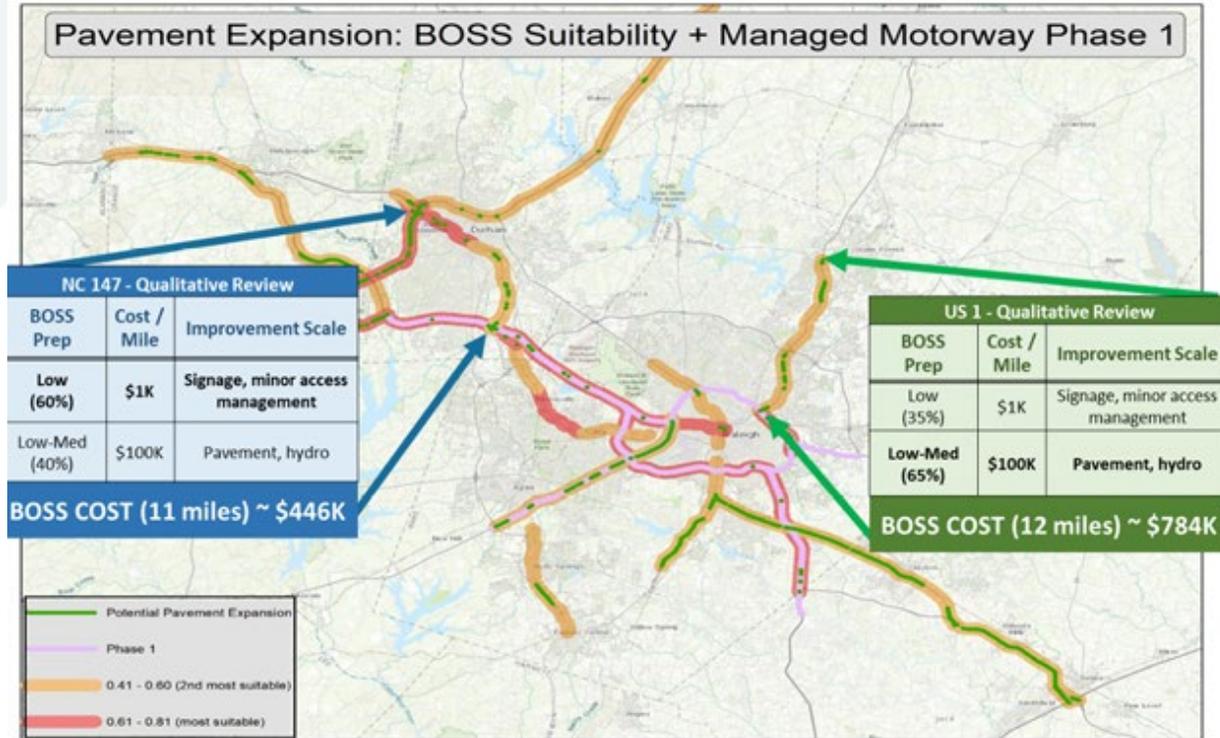


Figure 5: Incremental Service Costs – Capital Boulevard and Durham Freeway



Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 3 shows the 2024 FAST 2.0 corridors and routes that are also included in the CAMPO BOSS Blueprint.

Table 3: FAST 2.0 Study Corridors that Overlap with BOSS Study

2024 FAST 2.0 CORRIDOR/ROUTES	BOSS STUDY	NOTES FROM THE BOSS STUDY
8. I-40 throughout the region	✓	I-40: SR 1728 (WADE AVENUE) TO I-440 / US 1 IN RALEIGH. PAVEMENT AND BRIDGE REHABILITATION (I-5943); US 15 / US 501 TO EAST OF NC 147. PAVEMENT REHABILITATION (I-5993 and I-5994); EAST OF NC 147 TO SR 1728 (WADE AVENUE). PAVEMENT REHABILITATION (I-5995); NC 54 (EXIT 273) TO SR 1728 (WADE AVENUE), I-40 TO SR 1664 (BLUE RIDGE ROAD) CONVERT FACILITY TO A MANAGED FREEWAY WITH RAMP METERING AND OTHER ATM / ITS COMPONENTS (I-6006); SR 1728 (WADE AVENUE) TO NC 42 (U-6101).
11. US 64: Raleigh west to Pittsboro	✓	US 1 FROM NC 540 TO I-40 (U-6101).
12. US 1	✓	US 1 FROM NC 540 TO I-40 (U-6101).

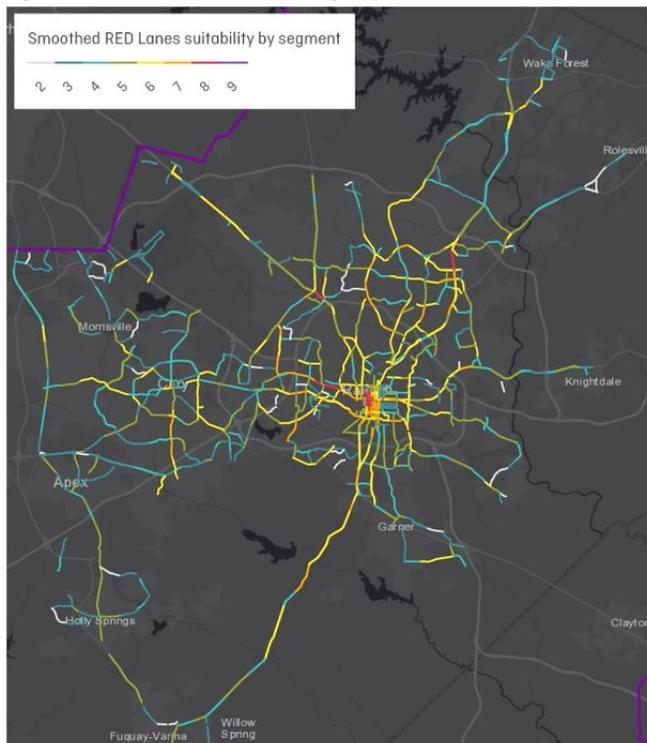
RED Lanes Study: Key Projects and Priorities Summary

The 2020 RED Lanes Study, conducted by CAMPO, identifies and prioritizes corridors suitable for reversible transit priority express lanes within the Triangle region of North Carolina. A RED Lane is a dedicated lane for buses with restrictions for other modes. The lanes are usually restricted for five days per week during the peak periods (six hours per day) for fifty weeks. It is designed to prioritize transit and improve bus operations. While buses typically share RED lanes with right-turning vehicles and emergency vehicles, the purpose of the lanes are to minimize traffic conflicts and congestion while maximizing transit efficiency and encouraging ridership.

The RED Lanes Study provides guidance and resources to help implement RED Lanes for other cities and regional agencies. It includes a toolkit for assessing the potential effectiveness of RED lanes in their communities and has identified several suitable segments throughout the region. Areas with higher development density and those located in more urbanized parts of Raleigh and Cary tend to have higher suitability scores. Additionally, corridors connecting urban centers to more distant communities, such as Wake Forest and Fuquay-Varina, also have higher suitability scores. See Figure 6.

The study notes that RED Lanes are part of a suite of cost-effective strategies available to the Triangle area to efficiently enhance the multimodal transportation system with the aim of increasing multimodal utilization and maintaining or improving travel conditions on major corridors.

Figure 6: RED Lanes Suitability Scores

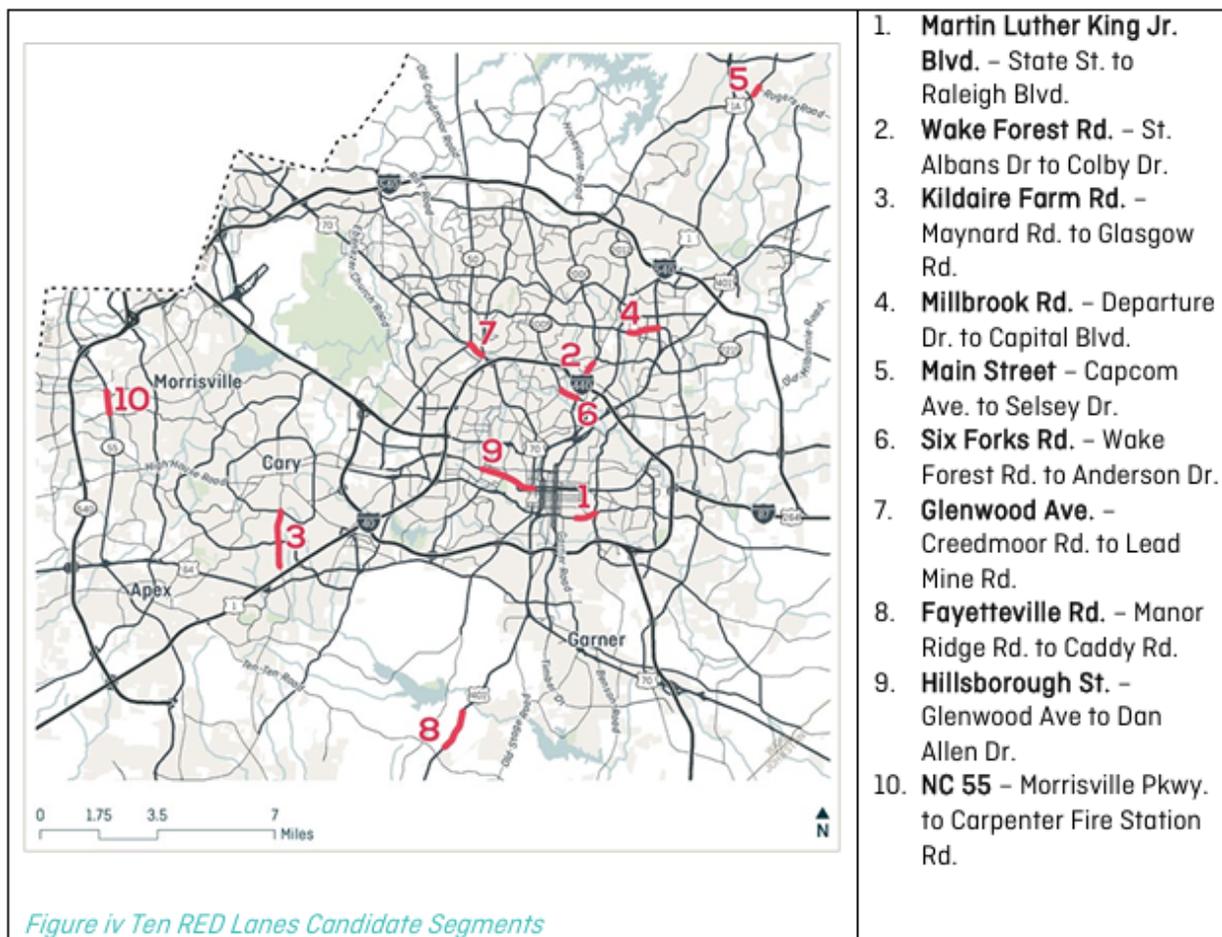


Source: RED Lanes Study Final Report, Figure iii.

The following candidate corridors are identified in the study as best suited for RED lanes based on travel demand, transit operations, highway operations, and local context and design characteristics (see Figure 7):

1. Martin Luther King Jr. Blvd. – State St. to Raleigh Blvd.
2. Wake Forest Rd. – St. Albans Dr to Colby Dr.
3. Kildaire Farm Rd. – Maynard Rd. to Glasgow Rd.
4. Millbrook Rd. – Departure Dr. to Capital Blvd.
5. Main Street – Capcom Ave. to Selsey Dr.
6. Six Forks Rd. – Wake Forest Rd. to Anderson Dr.
7. Glenwood Ave. – Creedmoor Rd. to Lead Mine Rd.
8. Fayetteville Rd. – Manor Ridge Rd. to Caddy Rd.
9. Hillsborough St. – Glenwood Ave to Dan Allen Dr.
10. NC 55 – Morrisville Pkwy. to Carpenter Fire Station Rd.

Figure 7: Ten RED Lanes Candidate Segments



Source: RED Lanes Study Final Report, Figure iv.

Equity

The RED Lanes Study considers various factors when identifying suitable corridors for RED Lanes, including the context of the surrounding area. The study found that the region has diverse development patterns and concluded that RED Lanes are more appropriate in “transit-supportive” contexts, for which activity density (jobs per acre plus

housing units per acre) and intersection density are proxy measures. Transit-dependent populations were found to be dispersed throughout the region, mostly with a southeasterly focus in cities.

The study used communities of concern as a key metric of the Detailed Differentiator and Implementation Guidance analyses, noting that RED Lanes have a more positive impact if they provide mobility benefits to disadvantaged populations. By using a similar communities of concern metric, FAST 2.0 can incorporate an equity layer to demonstrate potential mobility benefits to disadvantages populations.

Implementation

The RED Lanes Toolkit provides guidance for implementing RED lanes, including a tool to assess corridor suitability and potential design, operations, and enforcement elements. Source information is provided citing typical costs for various RED lane elements, offering guidance on which elements are appropriate based on specific corridor characteristics. The Toolkit also helps identify opportunities for strategic investment highlighting RED lanes’ role in enhancing transit mobility and visibility throughout the CAMPO region.

Table 4 provides high-level guidance for interpretation of several Implementation Guidance Metrics, while Table 5 outlines typical costs for various RED lane elements.

Table 4: RED Lanes Elements to Consider Based on Implementation Guidance

Code	Cost Element	Candidate Corridor Attributes
LANE TYPE		
L1	Standard Bus Lane – White Pavement Striping	Full-time suitability is Low or Medium
L2	Red Paint Bus Lane	Full-time suitability is Medium or High
ENFORCEMENT		
E1	Police enforcement	Full time suitability is Low
E2	Bus mounted Camera	Full time suitability is Medium or High
E3	Stationary Camera	Full time suitability is High
TRANSIT SIGNAL PRIORITY		
T1	Center to Center systems	
T2	GPS based System	TSP suitability is Medium or High

Source: RED Lanes Study Final Report, Scoping and Developing RED Lanes Projects, Table 8

Table 5: Cost Considerations for RED lanes

Code	Cost Element	Capital Cost		Maintenance cost	
LANE TYPE					
L1	Standard Bus Lane – White Pavement Striping	\$200,000	per mile	\$10,000	per mile per year
L2	Red Paint Bus Lane	\$580,000	per mile	\$10,000	per mile per year (to be repainted every 5 years)
ENFORCEMENT					
E1	Police enforcement			\$75,000	1500 hours of enforcement per year per mile
E2	Bus mounted Camera	\$95,000	for 10 buses running on a route at 15-minute headway	\$7,500	for 10 buses per year
E3	Stationary Camera	\$130,000	4 cameras per mile	\$40,000	per mile per year
TRANSIT SIGNAL PRIORITY					
T1	Center to Center systems	\$200,000 to \$600,000	Depending on the total number of TSP intersections		
T2	GPS based System	\$ 5,000	per bus		
		\$ 10,000	per intersection		

Source: RED Lanes Study Final Report, Scoping and Developing RED Lanes Projects, Table 9

Bicycle and Pedestrian Considerations

Pedestrian and bicycle travel, captured in the RED Lanes Study as non-motorized propensity, are considered key factors in how to design RED Lanes. In some cases, bicycles can use RED Lanes. In others, separated bicycle and pedestrian facilities are recommended.

Kildaire Farm Rd from Maynard Rd to Glasgow Rd, one of the potential priority corridors, is listed as a candidate for RED Lanes and is given a medium non-motorized propensity, indicating a possibility of including bicycle and pedestrian elements in the design.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

As shown in Figure 7, the RED Lanes Study identifies a number of corridors in the Triangle region that could benefit from the implementation of RED lanes. As shown in Table 6, one FAST 2.0 Study corridor (US 70) is included in the RED Study.

Table 6: FAST 2.0 Study Corridors that Overlap with RED Study Corridor/Routes

2024 FAST 2.0 Corridor/Routes	RED Study	RED Study Notes
1. US 70		

2024 FAST 2.0 Corridor/Routes	RED Study	RED Study Notes
a. Between Durham and Raleigh	✓	Segment #7: Glenwood Ave. – Creedmoor Rd. to Lead Mine Rd.

CAMPO BRT Extension Major Investment Study (MIS)

Completed in 2022, the CAMPO BRT Extension Major Investment Study (MIS) Evaluation of Alternatives Report examines potential extensions to the Wake BRT system in Raleigh. The report evaluates various routes and alignments for extending the BRT service to Research Triangle Park (RTP) and Clayton.

The study analyzed alternative routes for two corridors, considering factors such as ridership potential, construction costs, and environmental impacts. The BRT corridors would connect Cary to RTP in the west (Western Extension) and the Towns of Garner to Clayton in the south (Southern Extension), see Figure 8 and Figure 9. Both corridors were identified in CAMPO’ 2045 Metropolitan Transportation Plan (MTP) and the 2020 – 2029 Transportation Improvement Program (TIP) as a regional project connecting Clayton to RTP.

The report assessed the feasibility of each extension through a Phase I screening and a more refined study of preferred routes for each extension. Phase I considered current roadway conditions, network opportunities, and socioeconomics. The study then identified a preferred route for each extension, based on access, productive and sustainable service, safety and compatibility with the surrounding environment. The report concluded by providing recommendations for the implementation of the BRT extensions, including potential funding sources and next steps.

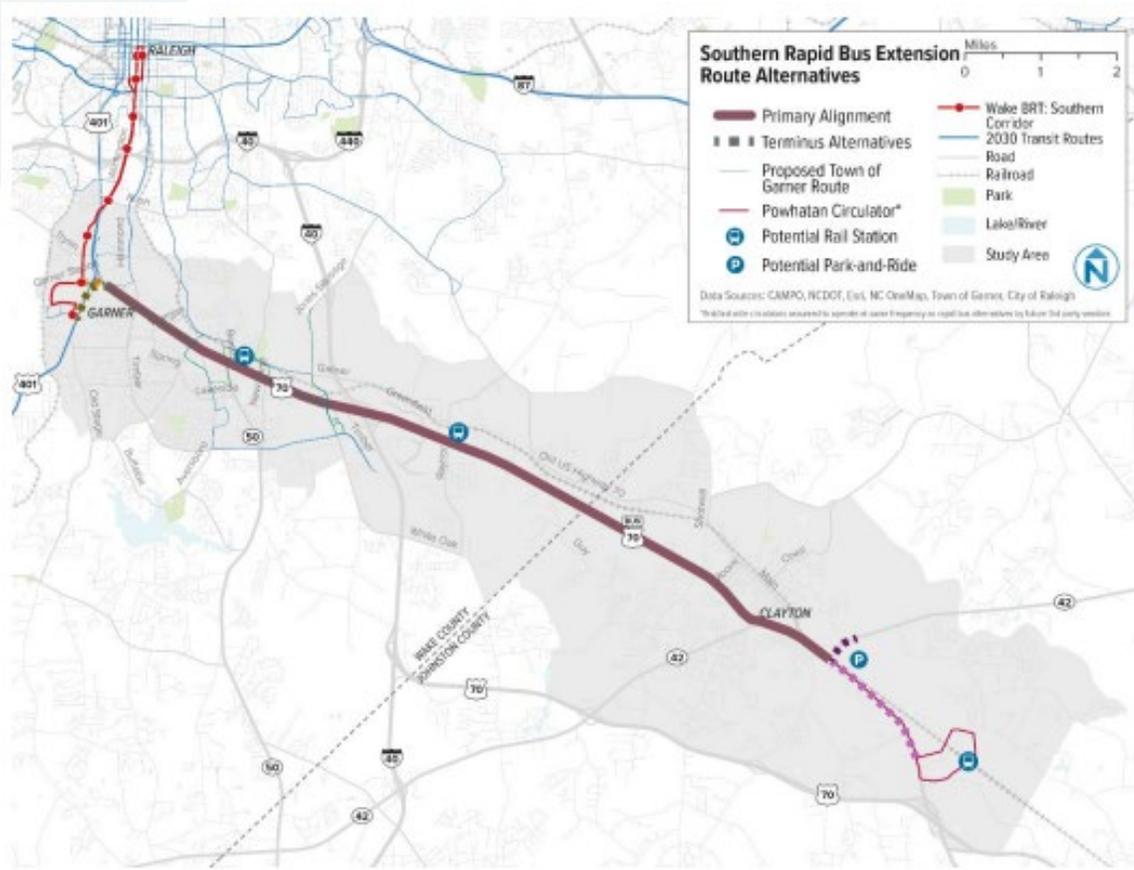
Equity

The study outlines a method to estimate future transit demand involving population density adjustments to account for a "transit propensity factor" (TPF). This factor is calculated based on socioeconomic indicators like low-income households and carless households to identify areas with higher potential transit use. The adjusted population density is then analyzed spatially within a ¼-mile radius of proposed BRT stations to estimate potential ridership. This innovative approach combines population growth projections with socioeconomic factors to predict future transit demand for specific station areas.

Implementation

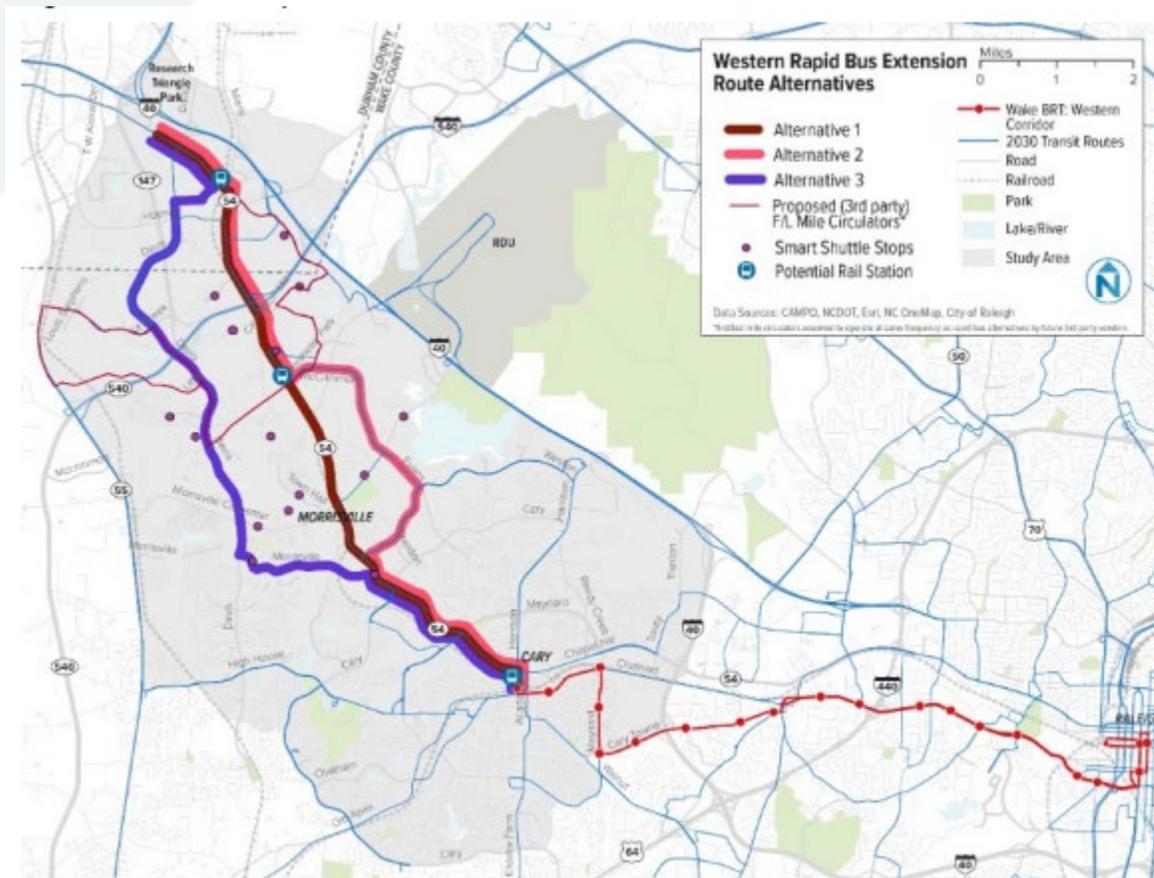
At the conclusion of this study, evaluation results supported the need for more detailed study and additional stakeholder coordination to determine implementation of a BRT extension in Garner that would most appropriately support a core Southern BRT service. Using the CAMPO BRT Extension MIS as an example, key criteria for FAST 2.0 can be refined as alternatives/options are screened and a more refined evaluation is warranted. For example, when analyzed for independent utility, Garner Station Blvd (G2) was the top performing candidate for Southern Extension due to its more direct routing, better transit travel time reliability, and connectivity / accessibility benefits over the Fayetteville Road option. The top performing alternative for Western Extension (from Cary to RTP) was due to better long-term redevelopment opportunity and potential for transit speed and reliability investments.

Figure 8: Southern Rapid Bus Extension Route Alternatives



Source: CAMPO BRT Extension MIS, Figure 5

Figure 9: Western Rapid Bus Route Alternatives



Source: CAMPO BRT Extension MIS, Figure 8

Bicycle and Pedestrian Considerations

The CAMPO BRT Extension MIS recommends that accessible pedestrian connections be a key aspect of station location and design. It also notes that choosing corridors that have planned road widenings may be beneficial to transit operation but may limit opportunities to improve the pedestrian environment around station areas if the available right-of-way has been consumed by the widening. Multimodal connections, including density of sidewalks, trails and bike lanes, was a key evaluation criterion in selecting the preferred alternative for each extension.

Connections between the Western Extension in the study and the potential priority corridors in the FAST 2.0 study would be made at the Cary Train Station and a relocated Regional Transit Center.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

See Table 7 for the FAST 2.0 Study corridor (NC 54) that is included in the CAMPO BRT Extension MIS.

Table 7: FAST 2.0 Study Corridors that Overlap with Corridor/Routes with the BRT Extension MIS

2024 FAST 2.0 CORRIDOR/ROUTES	BRT EXTENSION MIS	BRT EXTENSION MIS NOTES
7. NC 54		
b. Within Durham, through RTP	✓	Alternative 2: Cary to RTP via Chapel Hill Road and Evans Road

Local Transit Plans

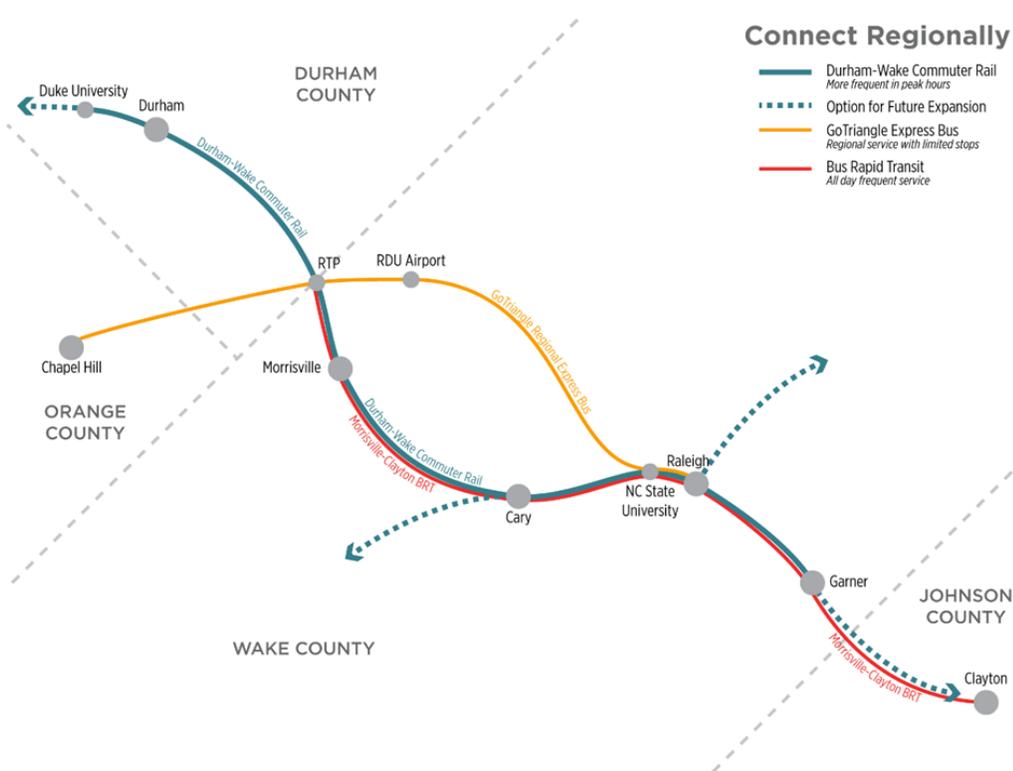
Wake County Transit Plan Update

The Wake County Transit Plan Update (2021-2030) outlines a strategy to expand transit options and improve mobility in the county. The plan focuses on four key areas:

- **Cross-county connections:** Strengthening connections between Wake County and neighboring counties through bus and rail investments. See Figure 10 for the major elements of each regional connection that are proposed to be implemented through 2030.
- **Community connections:** Linking Wake County communities to the transit network, ensuring access to jobs, education, and services, see Figure 11.
- **Urban mobility:** Providing frequent, reliable transit service to densely populated areas, see Figure 12.
- **Accessibility:** Enhancing access to transit throughout Wake County, see Figure 13.

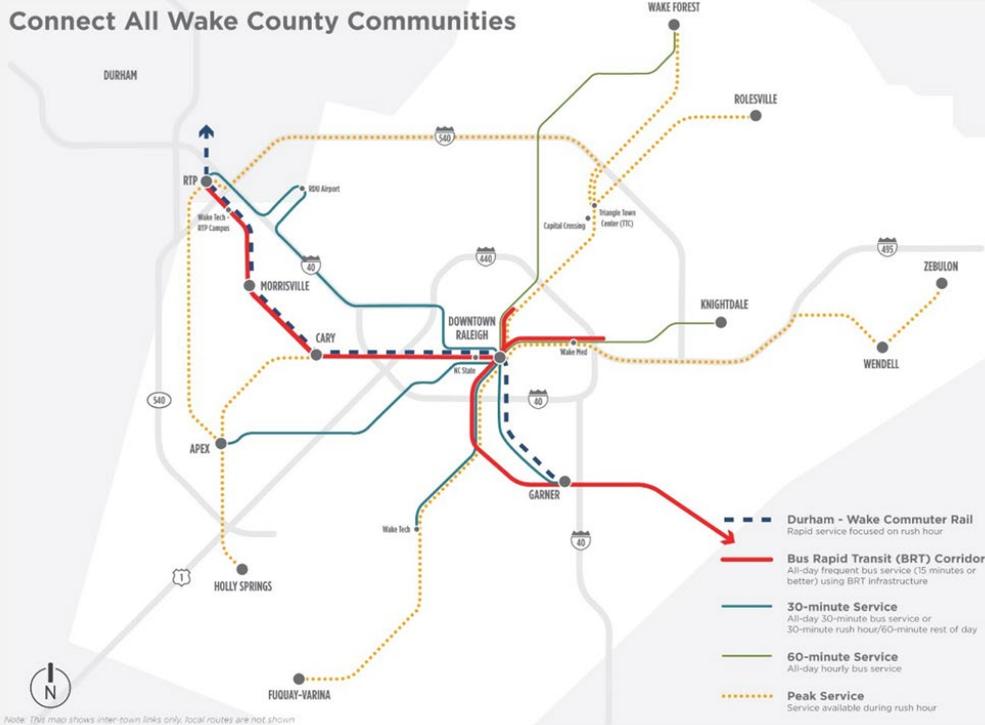
The plan acknowledges that due to funding constraints and community priorities, some planned bus routes may not reach their full originally planned levels of service by 2030.

Figure 10: Major Elements of Regional Connections Proposed Through 2030



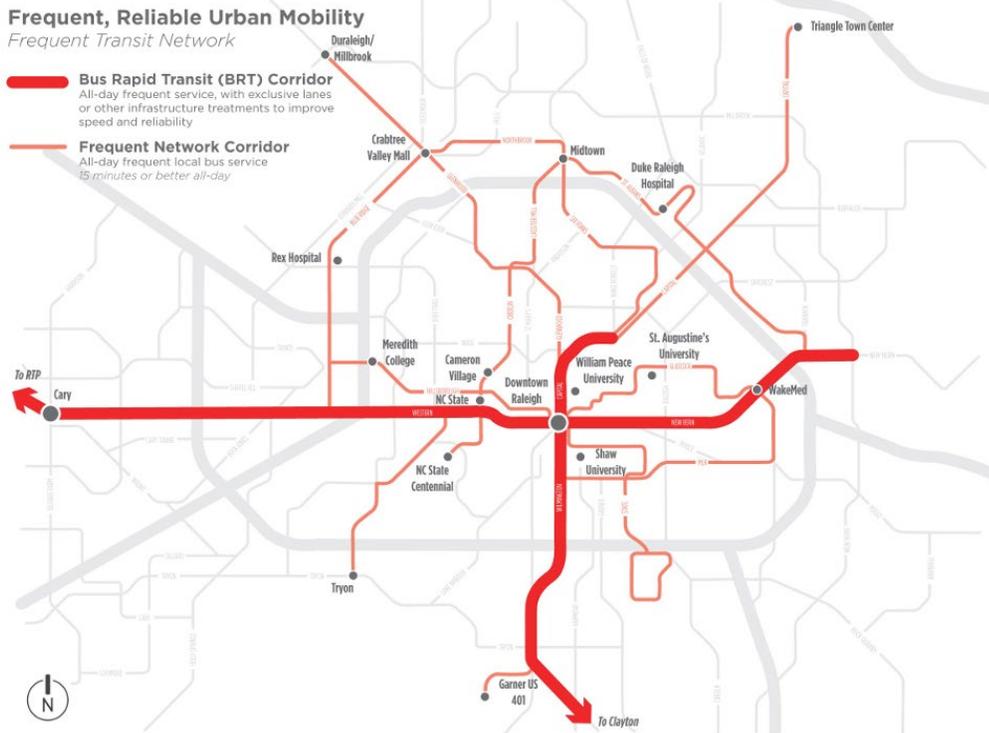
Source: Wake County Transit Plan Update, Figure 5.

Figure 11: Wake County Connections



Source: Wake County Transit Plan Update, Figure 6.

Figure 12: BRT and Frequent Transit Network to be Implemented by 2030



Source: Wake County Transit Plan Update, Figure 8.

Figure 13: Enhanced Access to Transit

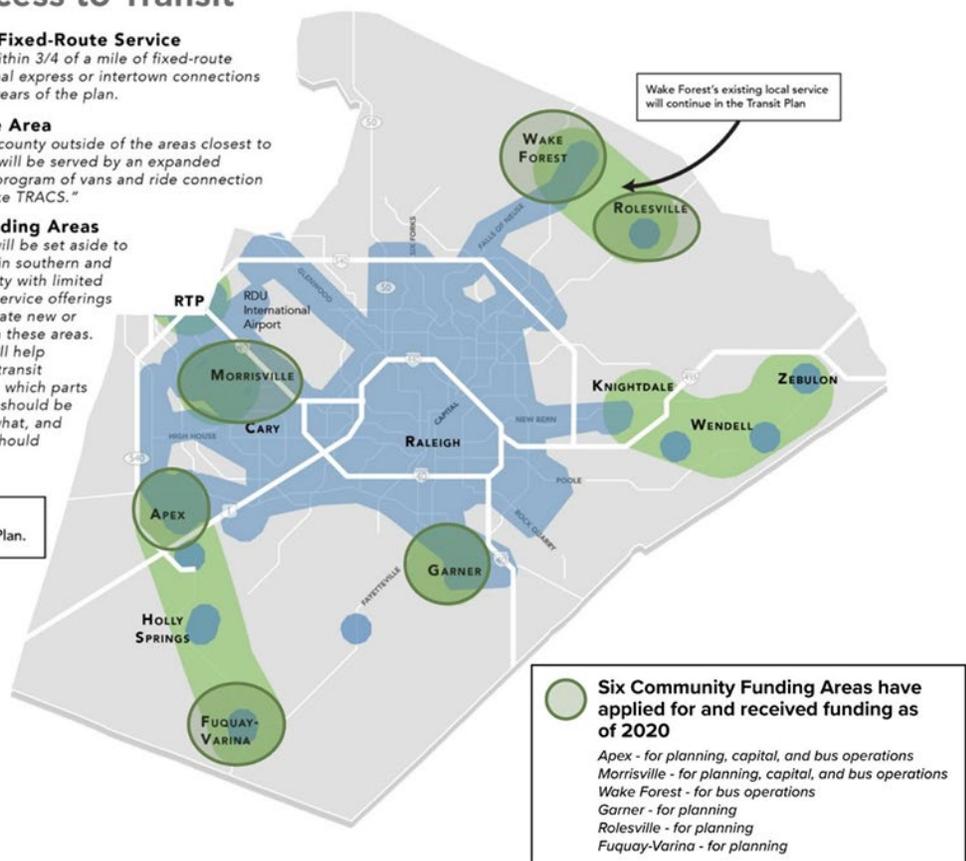
Enhanced Access to Transit

Areas Close to Fixed-Route Service
Shaded areas are within 3/4 of a mile of fixed-route bus services, regional express or intertown connections during the first 10 years of the plan.

Flexible Service Area
The entirety of the county outside of the areas closest to fixed-route service will be served by an expanded on-demand call-in program of vans and ride connection services called "Wake TRACS."

Community Funding Areas
Matching funding will be set aside to partner with towns in southern and eastern Wake County with limited fixed-route transit service offerings to create or accelerate new or enhanced service in these areas. The partnerships will help determine the best transit services to provide, which parts of each community should be connected and to what, and when the services should be put in place.

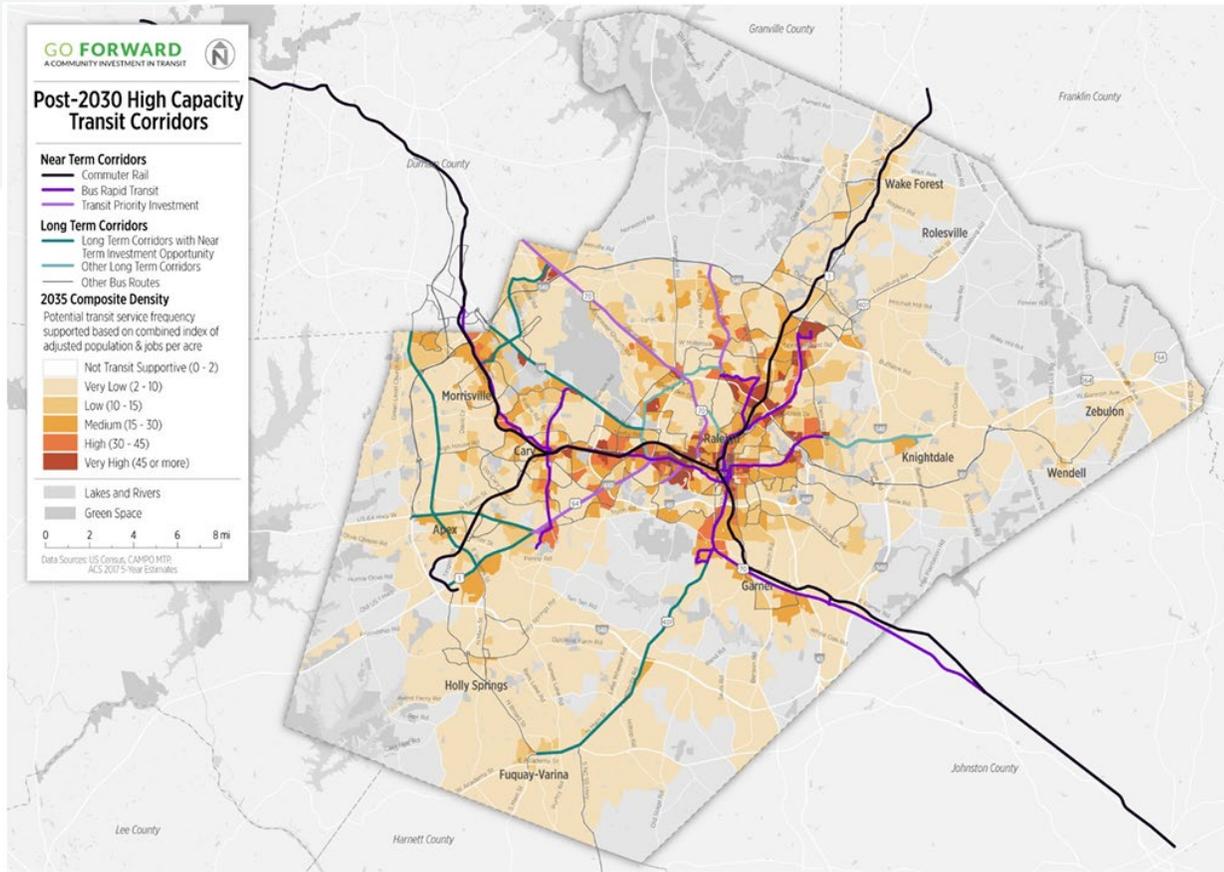
Existing bus service will be roughly tripled in the Transit Plan.



Source: Wake County Transit Plan Update, Figure 10.

The plan identifies specific corridors for potential high-capacity transit services or improvements. These corridors are chosen based on stakeholder input, reviews of other regional plans, and analysis of population and job growth (see Figure 14).

Figure 14: Potential Post-2030 High-Capacity Transit Corridors



Source: Wake County Transit Plan Update, Figure 15.

Equity

The plan considers how socioeconomic characteristics influence people's use of transit. The plan recognizes groups like communities of color, foreign-born residents, low-income families, and those without vehicles often have a higher propensity for transit use. A TPF is used in this plan to show the areas where people are more likely to use transit for work. For example, people below the poverty level are 4.2 times more likely, and those without cars are 15.8 times more likely to use transit for work compared to the average resident. These TPFs can be applied to population density maps to get a more accurate picture of transit demand in different areas. Raleigh has the highest transit propensity, followed by corridors like Highway 1 to Wake Forest and the Highway 264 corridor to Zebulon. However, most of Wake County outside of town centers typically has low transit propensity. This is another example of how TPF can be a useful tool to determine key transit markets.

Implementation

The plan was a comprehensive review of the original plan, incorporating feedback from stakeholders and reassessing key factors such as community priorities, funding, and project feasibility. The update extended the plan's horizon to 2030, reassessed the transit market analysis, updated capital project costs, schedules, and anticipated revenues,

revisited stakeholder priorities, and reprioritized investments. The process involved collaboration between CAMPO, local governments, transit agencies, NCDOT, and other stakeholders, with public engagement playing a crucial role.

Bicycle and Pedestrian Considerations

One of the community goals identified in the Wake Transit Plan is to provide safe and comfortable pedestrians connections to bus stops and transit stations. The plan notes that the pedestrian environment is a key factor affecting transit demand, and thus frequency of service. The plan includes capital expenditures for sidewalk access. In the FY 2025 Wake Transit Work Plan, there is \$2.7M allocated to the City of Raleigh, \$680,000 to the Town of Cary, \$1.2M to GoTriangle, and \$100,000 to NC State University for bus stop improvements, which can include sidewalk improvements, curb ramps and bike racks at or near bus stops. Wake Transit funds can also be used to construct sidewalks along Bus Rapid Transit (BRT) lines.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 8 shows the FAST 2.0 Study corridors and routes that are included in the Wake County Transit Plan Update.

Table 8: FAST 2.0 Study Corridors that Overlap with Wake Transit Plan

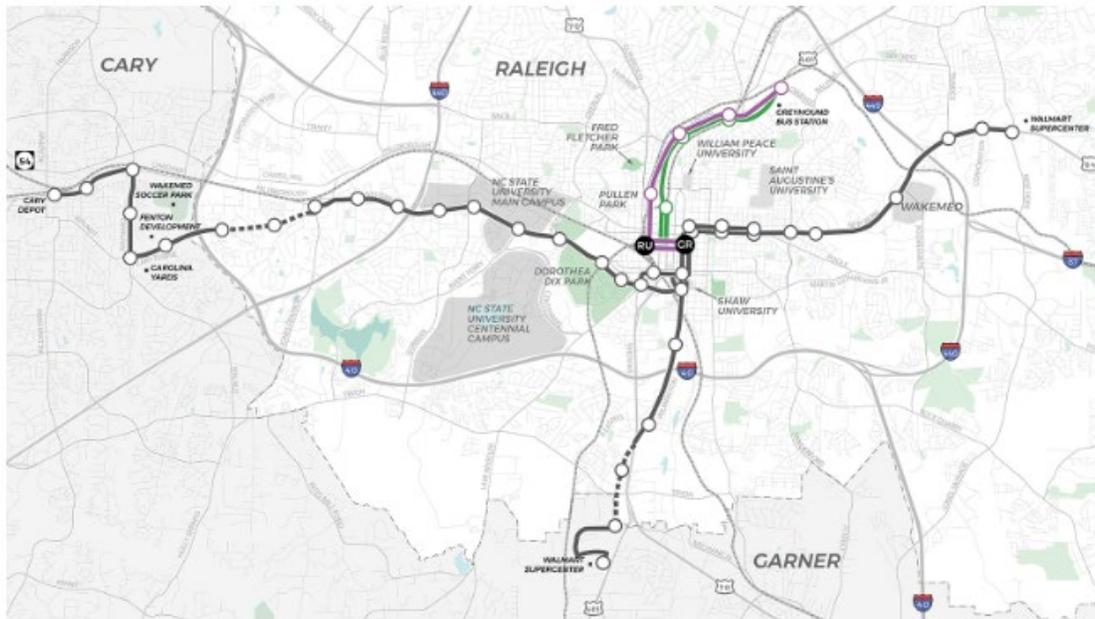
2024 FAST 2.0 Corridor/Routes	Wake Transit Plan	Wake Transit Plan Notes
1. US 70		
a. Between Durham and Raleigh	✓	Transit priority investment between Durham and Raleigh and BRT to Garner and beyond.
8. I-40 throughout the region	✓	Post-2030 high-capacity transit corridor: I-40 from Blue Ridge Road to US 540 is a Long Term Corridor.
12. US 1		
a. Raleigh/Cary to Holly Springs/Fuquay Varina	✓	Transit priority investment from Raleigh to US 64 and then a long term corridor with near term opportunity to the commuter rail in Apex.
13. S-Line Rail Corridor: for multimodal connections	✓	Classified as a near term corridor.

City of Raleigh BRT Study

The Wake County BRT system is a planned network of rapid bus transit corridors in Raleigh. The goal is to provide fast, reliable, and frequent service between downtown Raleigh and key destinations across the region, see Figure 15.

Once completed, the BRT system will feature dedicated bus lanes, frequent service, and modern, accessible stations. This is expected to alleviate traffic congestion and improve overall mobility in the region. The development of these BRT corridors aligns with the Wake County Transit Plan, which calls for approximately 20 miles of dedicated transit lanes across four key corridors.

Figure 15: Wake BRT Four Corridors



Source: City of Raleigh, BRT Projects - [Bus Rapid Transit \(BRT\) Projects | Raleighnc.gov](https://www.raleighnc.gov/transportation/buses/bus-rapid-transit)

The northern corridor, currently in the planning phase is proposed to connect Midtown Raleigh and Triangle Town Center, see Figure 16 and Figure 17.

Equity

Raleigh is implementing an Equitable Transit-Oriented Development (EDAT) initiative to create sustainable and equitable communities around its BRT system. The EDAT Guidebook, adopted in early 2021, provides a framework for this transformative approach.

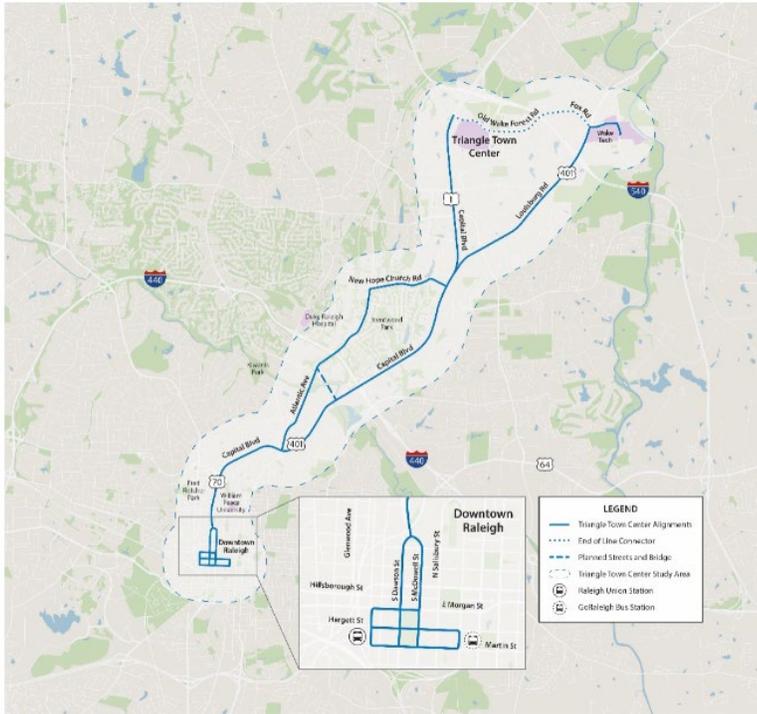
Key Components of EDAT:

- Transit Overlay Districts (TOD): New zoning regulations have been developed to encourage mixed-use development, including affordable housing and employment opportunities, around BRT stations.
- Station Area Planning: Detailed plans are being created for each BRT corridor to identify specific development opportunities and strategies. The New Bern Avenue Corridor was the initial focus, with the Western and Southern corridors to follow.

Equity Goals:

- Preserving affordability: Maintaining and enhancing housing affordability.
- Accessibility: Ensuring that existing residential areas have easy access to the BRT service.
- Minimizing displacement: Minimizing displacement caused by rising property values.
- Increasing ridership: Promoting BRT usage through convenient and attractive station areas.
- Economic development: Creating jobs and economic opportunities in BRT corridors.

Figure 17: Northern Corridor Downtown Raleigh to Triangle Town Center Study Area



Source: City of Raleigh, Wake BRT Northern Design and Construction - [Wake BRT: Northern Design and Construction | Raleighnc.gov](https://www.wakegov.com/transportation/wake-brt-northern-design-and-construction)

Implementation

Currently, the western and southern Wake corridors are in preliminary design, while the New Bern Avenue Corridor is in final design. The northern corridor, connecting Midtown Raleigh and Triangle Town Center, is in the planning phase (see Figure 18).

Figure 18: Wake BRT Program Status



Source: Wake BRT: Northern Corridor Update – Fall 2022 ([Wake BRT: Northern Corridor Update – Fall 2022](https://www.wakegov.com/transportation/wake-brt-northern-corridor-update-fall-2022))

Bicycle and Pedestrian Considerations

There are currently four BRT lines planned in Raleigh in various stages of the planning, design, and construction process. Pedestrian and bicycle connections will be built along each BRT line. Station area land use planning is also taking place along the BRT corridors, which provides more details on potential pedestrian and bicycle connections to each line from the surrounding neighborhoods.

The potential priority corridors along Blue Ridge Road and Harrison Avenue would both connect with the Western BRT. The connection from Blue Ridge Road is at Western Boulevard, while the connection from Harrison Avenue is at the Cary Train Station. It will be important for these connections to be safe and inviting for people walking and biking. First mile, last mile connections were a key component of the [station area planning](#) for the Western BRT shown to the public in February 2024.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 9 shows the FAST 2.0 Study corridors and routes that are included in the City of Raleigh BRT Study Update.

Table 9: FAST 2.0 Study Corridor that Overlaps with the City of Raleigh BRT Study

2024 FAST 2.0 corridor/routes	City of Raleigh BRT study	City of Raleigh BRT study notes
8. I-40 throughout the region	✓	Southern corridor

Chapel Hill Transit Locally Preferred Alternative Report – North-South Bus Rapid Transit (NSRBT)

The Chapel Hill Transit BRT project aims to improve transit service along Martin Luther King Jr. Boulevard, South Columbia Street, and US 15-501 South. Key features of the project include:

- **Dedicated bus lanes:** 5.7 miles of exclusive bus lanes
- **New buses:** Purchase of 14 new buses
- **Transit signal priority:** Improved traffic signal timing for buses
- **Near-level boarding platforms:** Easier access for passengers
- **Bicycle and pedestrian path:** Enhanced multimodal connectivity
- **Fare-free service:** No fares will be charged for riders
- **Frequent service:** Every 7.5 minutes during peak hours, every 15 minutes off-peak, and every 20 minutes on weekends

The project will provide faster, more reliable service, connecting to key destinations like UNC-Chapel Hill, UNC Hospitals, and Downtown Chapel Hill. It is also designed to improve mobility and accessibility in low-income communities and accommodate future growth in transit demand.

Equity

Since the 2019 evaluation, the project has added a station near Downtown Chapel Hill to improve access for underserved communities. This change increased the overall project cost from \$141.39 million to \$183.00 million. The amount of capital investment grants (CIG) funds being requested increased from \$100.00 million to \$146.40 million, changing the federal share request from 70.7 to 80.0 percent.

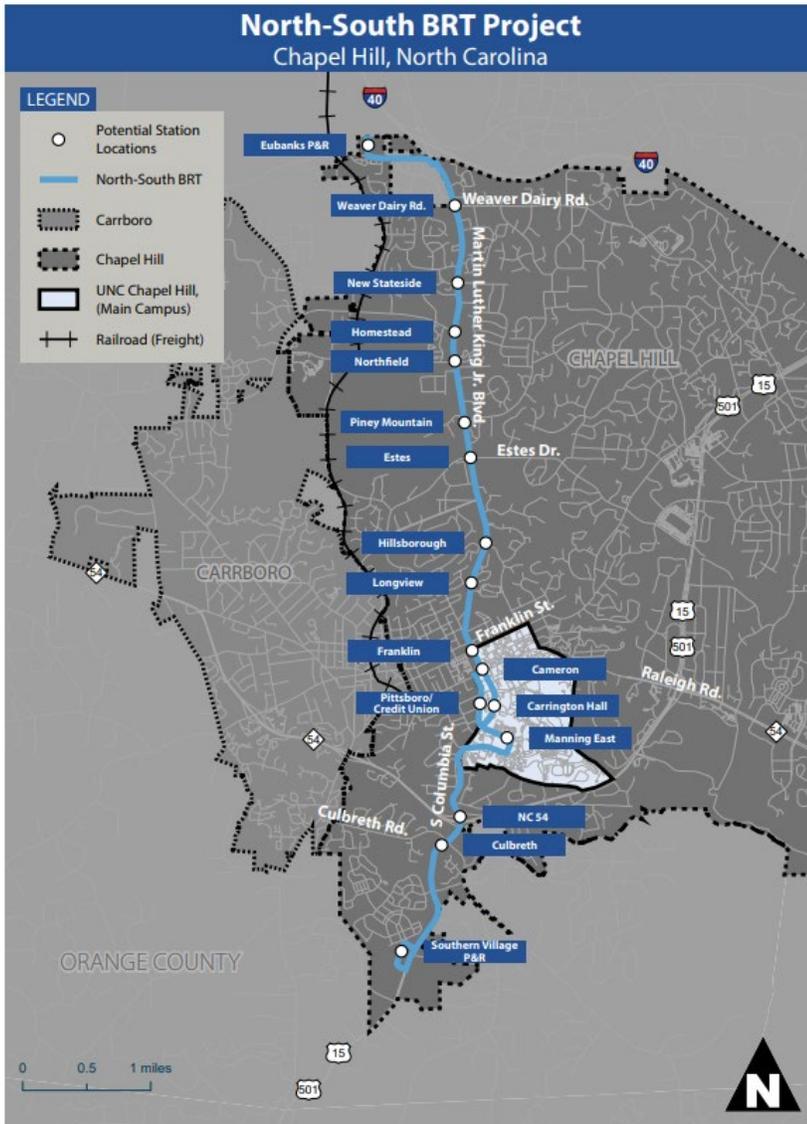
Implementation

The Chapel Hill Transit BRT project has been in development since 2016. Key milestones include:

- **LPA Selection:** In April 2016, CHT selected the preferred alternative for the project.
- **Project Development:** The project entered the development phase in November 2016.
- **Long-Range Plan Adoption:** The LPA was incorporated into the long-range transportation plan in March 2018.
- **Environmental Review:** The environmental review process was completed in March 2023.
- **Funding and Construction:** A Small Starts Grant Agreement is anticipated in 2026, with revenue service expected to begin in 2029.

Given the timeline from planning to design, to funding and construction, this BRT Project can provide an example for some local FAST 2.0 projects.

Figure 19: Chapel Hill North-South BRT Project



Source: North-South Bus Rapid Transit (NSBRT) - https://www.transit.dot.gov/sites/fta.dot.gov/files/2024-03/NC-Chapel-Hill-North-South-BRT-Profile-AR25_0.pdf

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Based on outreach conducted for the FAST 2.0 Study, stakeholders identified 13 corridors and routes for consideration. The Chapel Hill North-South BRT project is proposed along Martin Luther King Jr. Boulevard. This is not one of the 13 corridors identified by the FAST 2.0 Study, stakeholders.

Durham BRT studies

City of Durham Strategic Plan

The City of Durham's Strategic Plan for FY 2024-2026 provides an understanding of the planned initiatives for the city, and the overall goals to support sustainable transportation and transit initiatives. This plan will serve as the guiding vision and action plan for the City of Durham.

The plan outlines five key goals:

- **Shared Economic Prosperity:** Promote a diverse and equitable economy benefiting all Durham residents.
- **Creating a Safer Community Together:** Foster safe neighborhoods and build trust within communities.
- **Connected, Engaged, and Inclusive Communities:** Strengthen community connections and inclusivity.
- **Innovative and High-Performing Organization:** Improve city operations and service delivery.
- **Thriving and Vibrant Environment:** Protect the environment and promote sustainability.

This plan serves as a roadmap for the city's future, guiding its efforts to create a thriving, equitable, and sustainable community for all.

Equity

Equity related objectives within the Plan highlight the need to have more inclusive involvement with local communities. These include:

- Elevate community voices in local government planning and decision making
- Make housing more affordable
- Expand resident access to digital resources & community programs & services.
- Embed Equitable Considerations in Programs, Policies, and Culture

Implementation

The plan states that transitioning the City's vehicle and transit fleets to electric is critical to achieving the goals of the City's Carbon Neutrality and Renewable Energy Action Plan (CNRE). This plan commits the City to achieving 50% carbon neutrality by 2030 and 100% by 2040. In addition to an electrified fleet, other planned initiatives include powering City facilities and operations with 80% renewable energy sources by 2030 and 100% by 2050.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Based on outreach conducted for the FAST 2.0 Study, stakeholders identified 13 corridors and routes for consideration. The Durham Strategic Plan does not mention any specific corridor projects.

Durham Transit Plan and Updates

The 2023 Durham County Transit Plan outlines a vision for the future of public transportation in Durham County. It prioritizes projects and improvements funded by local sales tax revenue, focusing on expanding service, improving accessibility, and enhancing the overall rider experience. The plan was developed through public input and analysis of existing conditions, aiming to create a more sustainable and equitable transportation system for the county.

The plan considers future population and employment trends to ensure that the identified transit solutions remain relevant as the county grows. The analysis highlights areas with significant future growth, including the US 15-501 corridor, downtown Durham, south Durham, northern Durham, and specific neighborhoods like Erwin Road, east Durham, South Square, Patterson Place, and areas near North Carolina Central University (NCCU). These areas are projected to have increased demand for transit services in the future.

In addition, the plan identified a need for improved pedestrian infrastructure, particularly at bus stops. A survey review of 1,324 bus stops found that only 260 had paved landings, highlighting a significant gap in accessibility for pedestrians (see Figure 17). This information will be used to prioritize improvements to pedestrian facilities and enhance the overall transit experience.

Equity

The plan prioritizes equity in both the planning process and the delivery of transit services. The plan incorporates input from historically disadvantaged communities and aims to provide accessible transit to low-income, environmental justice, and affordable housing areas. A transit propensity analysis was conducted to identify areas with higher demand for transit based on demographic factors such as race, nativity, income, and vehicle ownership. This analysis informs decisions about service expansion and improvements to ensure equitable access to transportation opportunities. The areas with the highest demand and need for transit services include the VA Hospital, Duke Hospital, Duke University's east campus, Downtown Durham, North Carolina Central University, Wellons Village, and South Square.

The plan prioritized equitable community engagement. The Engagement Ambassador program, consisting of residents from marginalized communities, played a crucial role in reaching out to diverse populations. Ambassadors conducted in-person and virtual events, distributed surveys in English and Spanish, and provided feedback on outreach strategies. Demographic data was collected to measure engagement and ensure that the plan addressed the needs of all community members. Tools like the Engagement Ambassador program can be good examples of how to engage transit dependent communities through the planning process.

Implementation

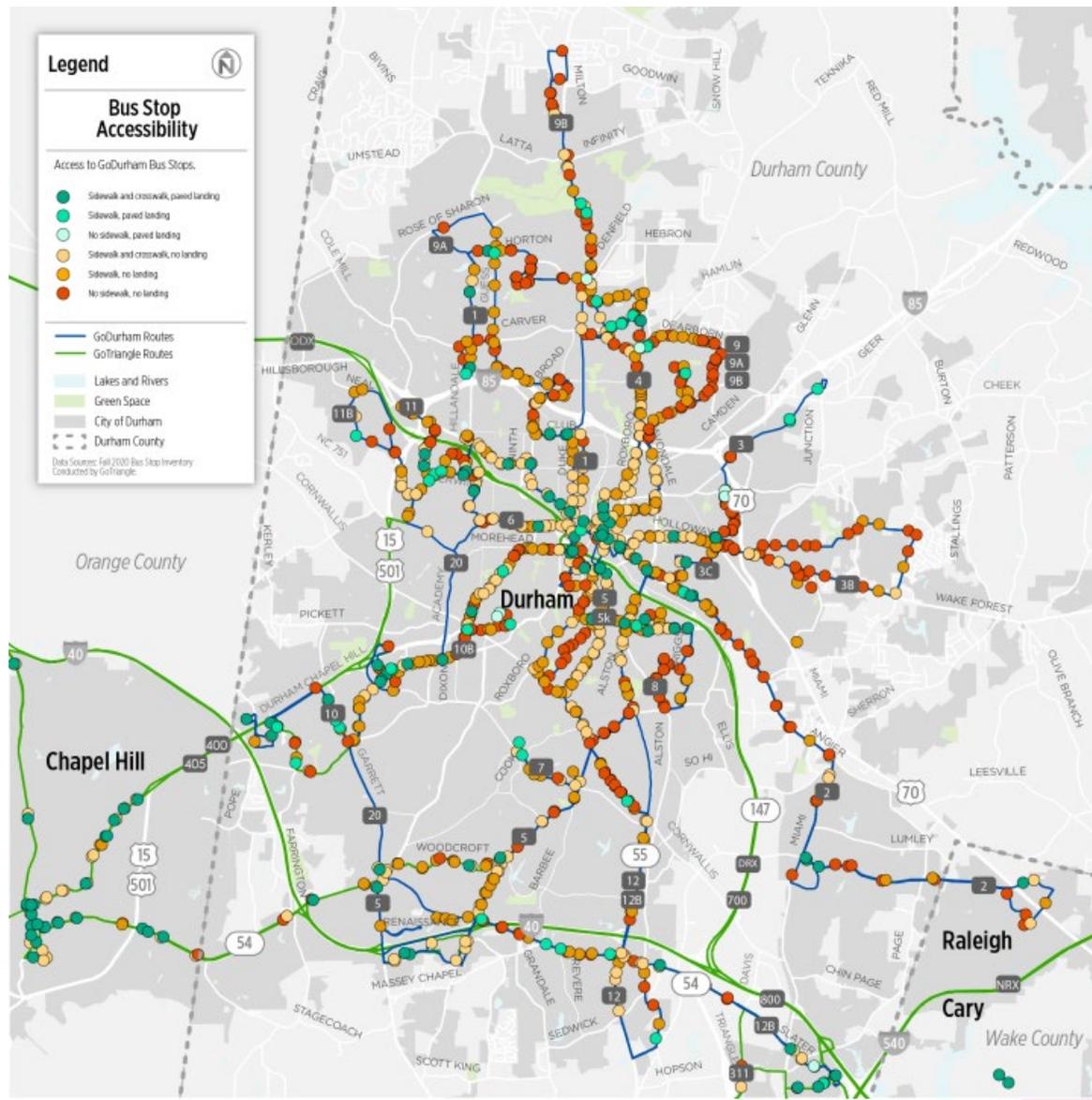
The community identified several key priorities for transit improvements in Durham County:

- **Enhanced and extended bus service:** This was the top priority for all respondents.
- **More routes and faster, more reliable bus service:** This was also a highly supported priority.
- **Bus stop improvements:** Respondents emphasized the need for better bus stops.
- **Additional funding:** If more funding becomes available, the top priority is to increase service frequency on existing routes.
- **New local bus services:** Creating new local bus services was identified as a secondary priority.

While passenger train service received some support, it was not the top priority for any group.

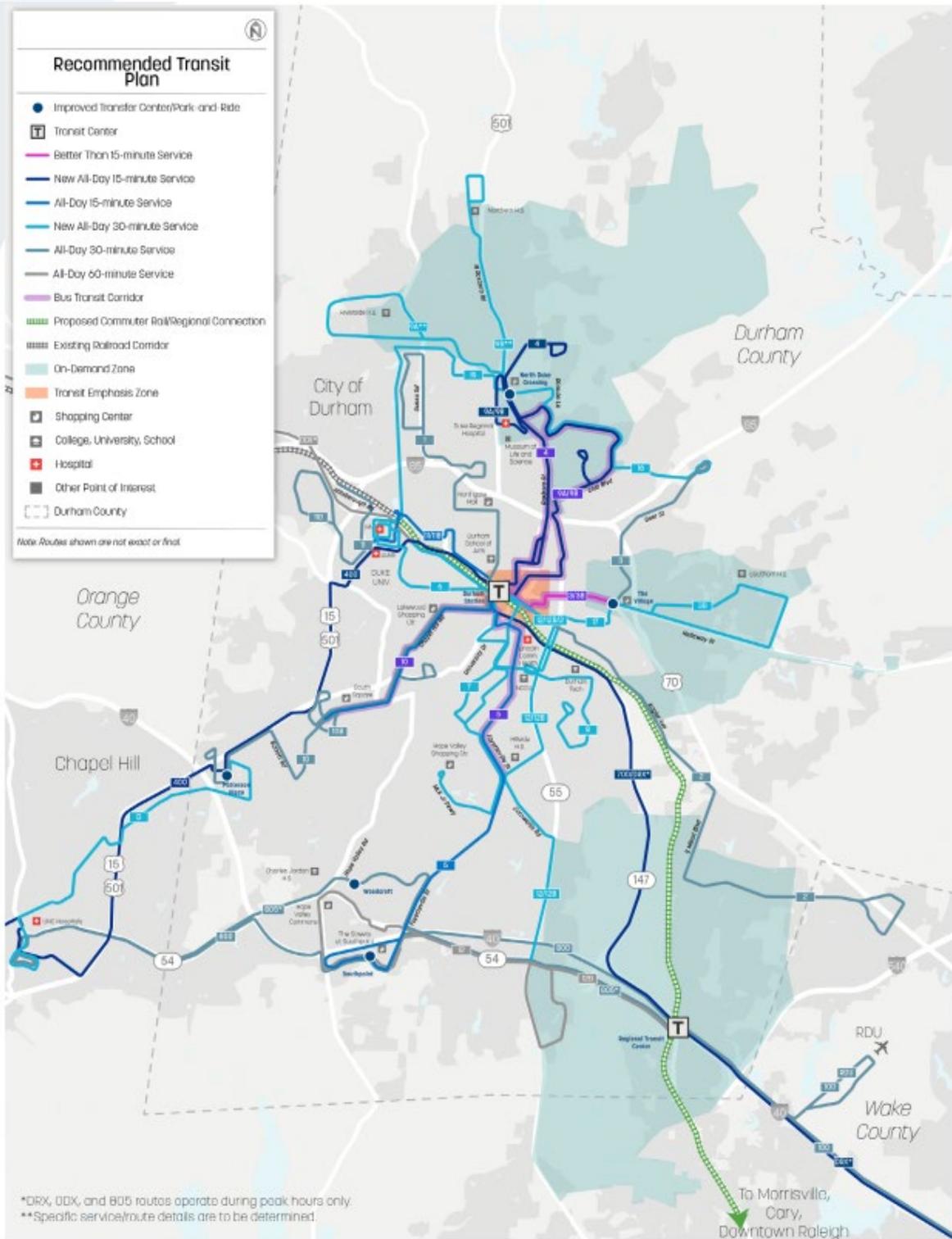
The plan outlines a vision for the county's transit system through 2040. The plan prioritizes immediate improvements, such as increased service frequency, extended Sunday service, and a new crosstown route, which are expected to be implemented within the first five years. Additionally, the plan includes funding for regional transit connections, such as commuter rail. Existing transit services will continue to be funded, except for Route 20, which is recommended for elimination due to low ridership (see Figure 21). Unfunded projects are shown in Figure 22.

Figure 20: Bus Stop Accessibility



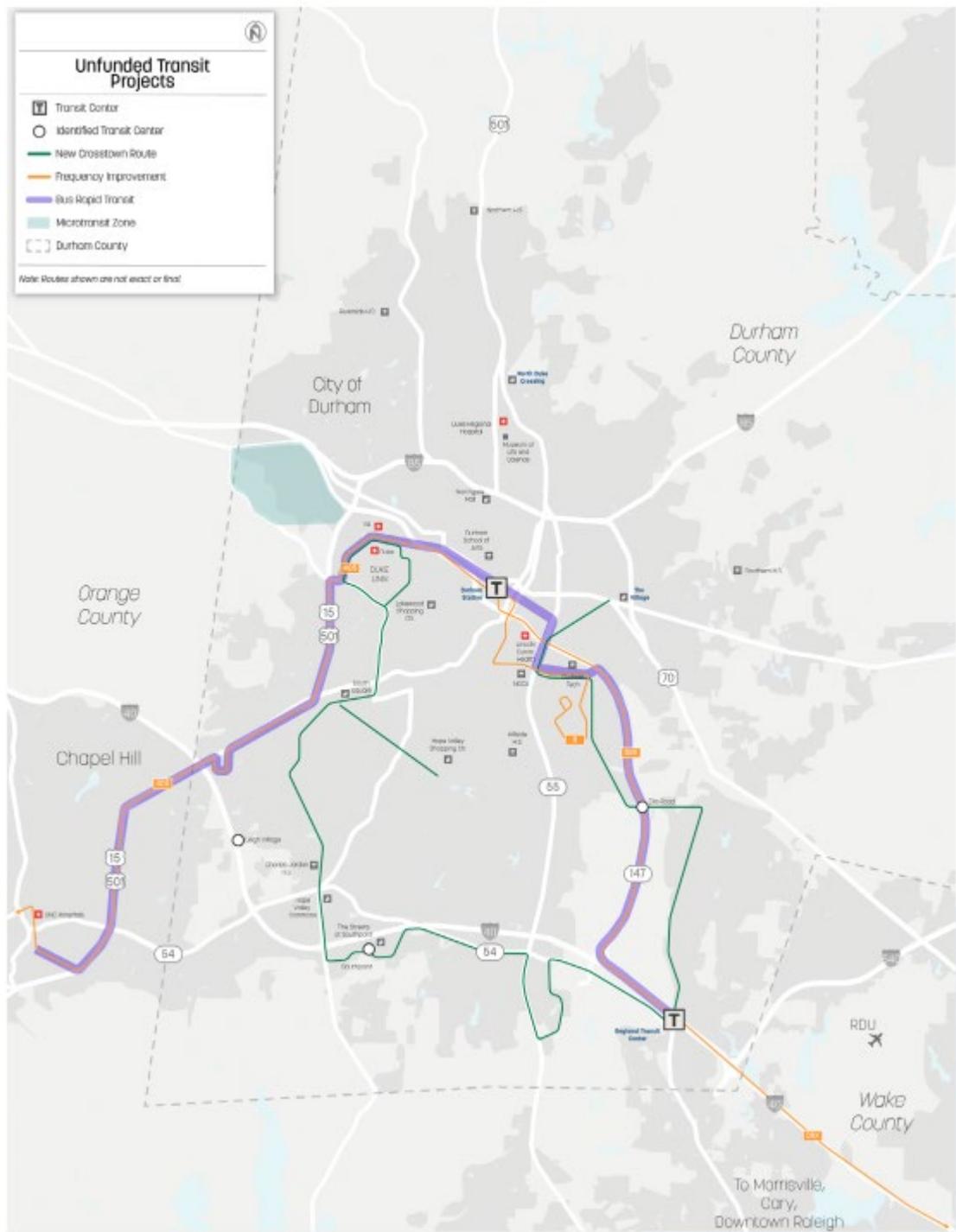
Source: 2023 Durham County Transit Plan, Figure 8.

Figure 21: Recommended Transit Plan



Source: 2023 Durham County Transit Plan, Figure 16.

Figure 22: Unfunded Transit Projects



Source: 2023 Durham County Transit Plan, Figure 18.

Bicycle and Pedestrian Considerations

The Durham County Transit Plan did an inventory of pedestrian safety and bus stop accessibility, which found that about 27% of bus stops in Durham County do not have a sidewalk. The inventory also showed which stops do not have a landing pad at the stop and which are not located near a crosswalk. Pedestrian safety and sidewalk access were consistent themes in public outreach.

The Plan contains funding for pedestrian crossing improvements at bus stops along frequent bus routes. ADA-accessible landing pads at each bus stop and sidewalk improvements to the nearest corner are also included in the Plan. The FY25 Transit Work Program includes several segments of new sidewalk construction in conjunction with bus stop improvements. There are also a few pedestrian projects that align with the potential FAST 2.0 priority corridors:

- Sidewalks and crossing improvements are programmed with the Holloway Street Transit Emphasis Corridor.
- The Village Mobility Hub (Miami/Holloway) may include accessibility improvements.
- New sidewalks and crossing treatments will be constructed to access two GoTriangle bus stops along NC-54 at Huntingridge Rd and Falconbridge Rd.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 10 shows the FAST 2.0 Study corridors and routes that are included in the Durham County Transit Plan.

Table 10: FAST 2.0 Study Corridors that Overlap with Durham County Transit Plan

2024 FAST 2.0 Corridor/Routes	Durham County Transit Plan	Durham County Transit Plan Notes
3. US 15-501 Corridor		
b. Chapel Hill to Chatham County	✓	New All-Day 15-minute Service (funded), BRT is unfunded.
4. Fayetteville Road Corridor in Durham	✓	Enhanced and new transit service. Bus transit corridor.
7. NC 54		
b. Within Durham, through RTP	✓	
8. I-40 throughout the region	✓	Enhanced and new transit service.

2022 Orange County Transit Plan Update

The 2022 Orange County Transit Plan Update allocates Orange County's Transit Tax District expenditures over the next 20 years. It includes new projects funded with the remaining revenue after accounting for existing projects. The plan prioritizes equitable distribution of transit services to support community members who rely on transit. The plan also ensures that investments support sustainable development.

Equity

The plan promotes equity in the distribution of transit services. The plan considers the diversity of residents to create equitable access for reliable and affordable transportation. This is achieved through several strategies:

- **Identifying underserved areas:** The plan identifies areas with high transit need, particularly low-income and minority communities.
- **Expanding service:** Increasing service frequency and hours on existing routes and adding new routes to underserved areas.
- **Improving accessibility:** Upgrading bus stops with amenities like shelters, benches, and real-time information displays, and ensuring accessibility for people with disabilities.
- **Encouraging transit-oriented development:** Promoting development of housing, jobs, and amenities near transit stations to create walkable, transit-friendly communities.
- **Engaging with the community:** Involving community members in the planning process to ensure their needs and priorities are reflected in the plan.

By implementing these strategies, the plan aims to create a more equitable and sustainable transportation system for all residents.

Implementation

The recommendation of transit projects was based on various factors including:

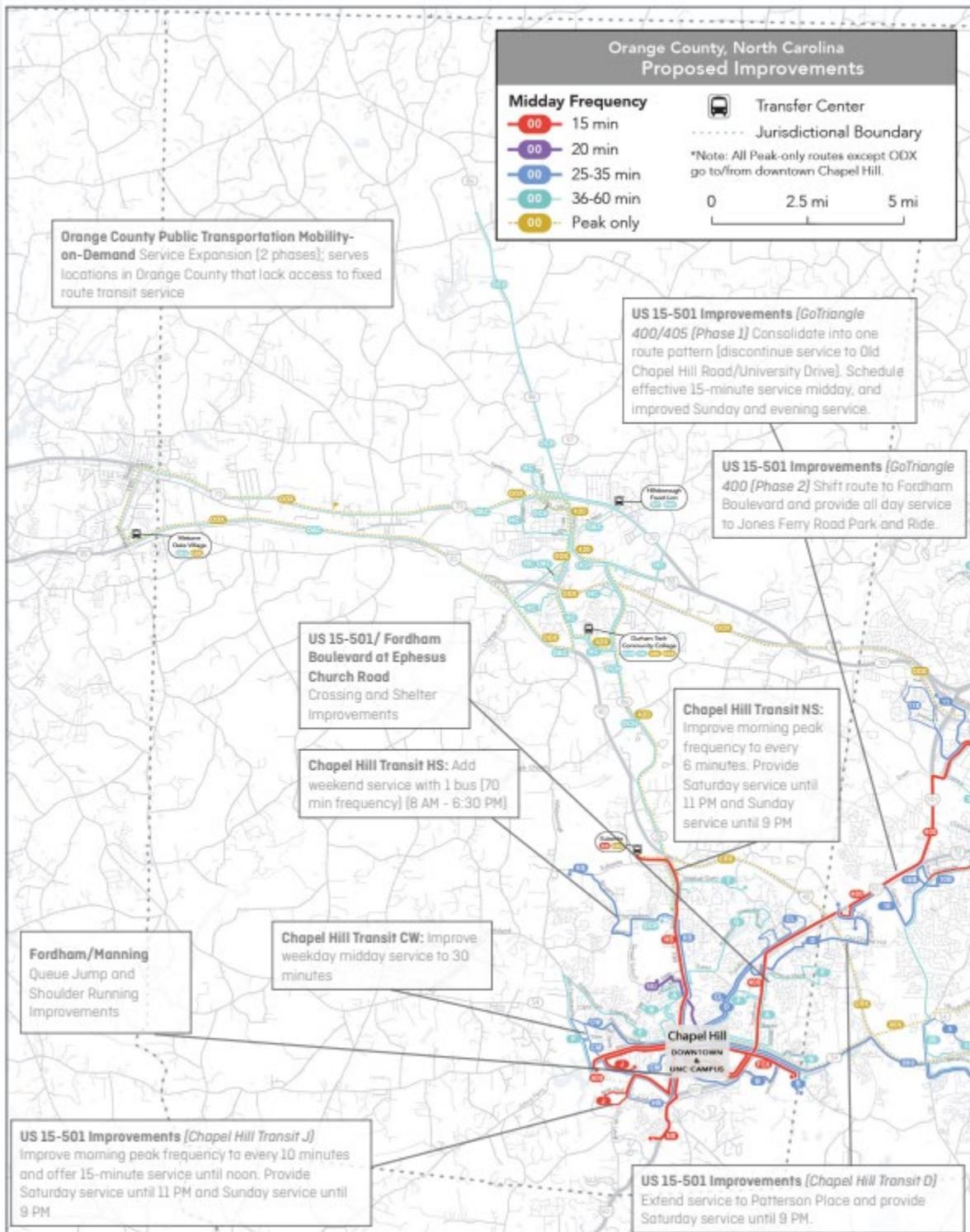
- **Transit service provider priorities:** Projects identified as important by transit operators.
- **Public need:** Projects addressing the needs and demands of the community.
- **Community values:** Projects aligning with community values such as equity, sustainability, economic prosperity, and accessibility.
- **Regional connectivity:** Projects enhancing connections between different regions.
- **Long-term vision:** Projects contributing to the long-term vision for transit in the area.

By considering these factors, the selected projects addressed the overall transit system to meet the diverse needs of the community.

Proposed projects include:

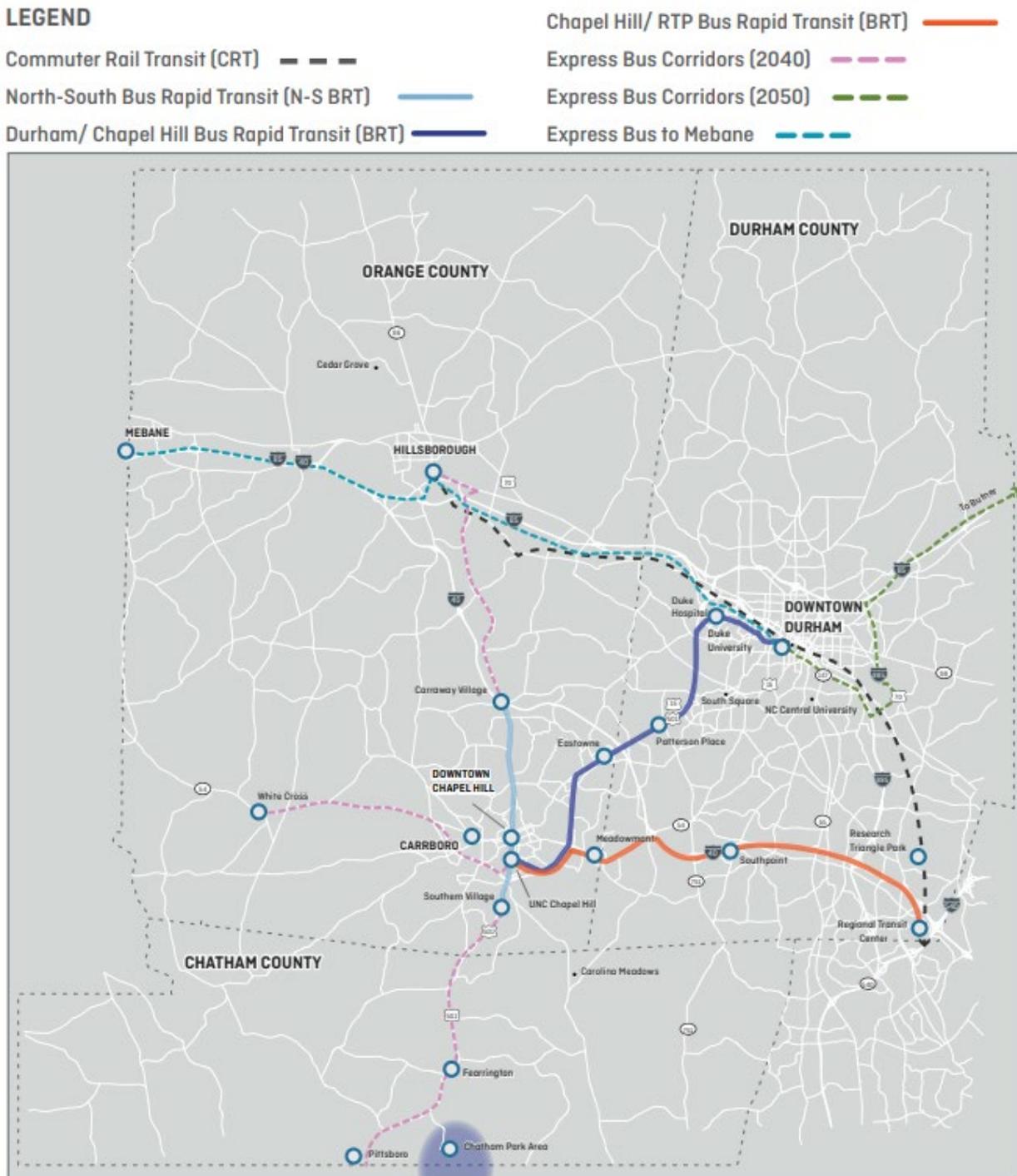
- **Expanding bus service:** Increasing frequency and service hours on existing routes, adding new routes, and improving connections to regional transit.
- **Improving bus stops and facilities:** Upgrading bus stops with shelters, benches, real-time information displays, and better lighting.
- **Enhancing accessibility:** Improving accessibility for people with disabilities, including accessible curb cuts, ramps, and level boarding buses.
- **Exploring new technologies:** Investigating the potential of emerging technologies like autonomous vehicles and micro-transit to improve mobility options.
- **Supporting transit-oriented development:** Encouraging development of housing, jobs, and amenities near transit stations to create walkable, transit-friendly communities.

Figure 23: Orange County Proposed Transit Improvements



Source: 2022 Orange County Transit Plan Update

Figure 24: Orange County Long-term investments



Source: 2022 Orange County Transit Plan Update

Bicycle and Pedestrian Considerations

The Orange Transit Plan funds several pedestrian improvements, including:

- Crossing treatments on US 15-501/Fordham Boulevard at Ephesus Church Road
- ADA upgrades at Chapel Hill Transit bus stops
- Estes Drive transit access/corridor study and bike-ped improvements in Carrboro
- Morgan Creek Greenway in Carrboro
- Sidewalks along S. Greensboro Street and W. Main Street in Carrboro
- Signalized pedestrian crossings along NC-54

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 11 shows the FAST 2.0 Study corridors and routes that are included in the Orange Transit Plan.

Table 11: FAST 2.0 Study Corridors that Overlap with Orange Transit Plan

2024 FAST 2.0 Corridor/Routes	Orange Transit Plan	Orange Transit Plan Notes
1. US 70		
b. Between Durham and Orange County	✓	36-60 midway frequency and peak only service.
3. US 15-501 Corridor		
a. Chapel Hill to Durham	✓	(GoTriangle 400/405 (Phase 1) Consolidate into one route pattern (discontinue service to Old Chapel Hill Road/University Drive). Schedule effective 15-minute service midday, and improved Sunday and evening service. (GoTriangle 400 (Phase 2) Shift route to Fordham Boulevard and provide all day service to Jones Ferry Road Park and Ride. Durham/ Chapel Hill Bus Rapid Transit (BRT) [Long-term vision]
b. Chapel Hill to Chatham County	✓	Express Bus Corridors (2040)
b. Within Durham, through RTP	✓	
8. I-40 throughout the region	✓	Chapel Hill/ RTP Bus Rapid Transit (BRT)

Central Pines COG Connected Region

NCDOT STIP

The STIP is a multi-year capital improvement document that outlines the scheduling and funding of construction projects across North Carolina, as required by federal law. The 2024-2033 STIP covers a ten-year period, with the first

five years (2024-2028) referred to as the delivery STIP and the latter five years (2029-2033) as the developmental STIP. Due to funding constraints, the STIP focuses on existing projects from the previous plan.

Equity

The program requires transportation investments to benefit all communities, including underserved and disadvantaged populations. The scoring process accounts for regional equity by evaluating how projects benefit different areas of the state. Projects that address disparities and serve underserved communities receive attention. Local input points are assigned based on community feedback, ensuring that local priorities and equity concerns are factored into the decision-making process.

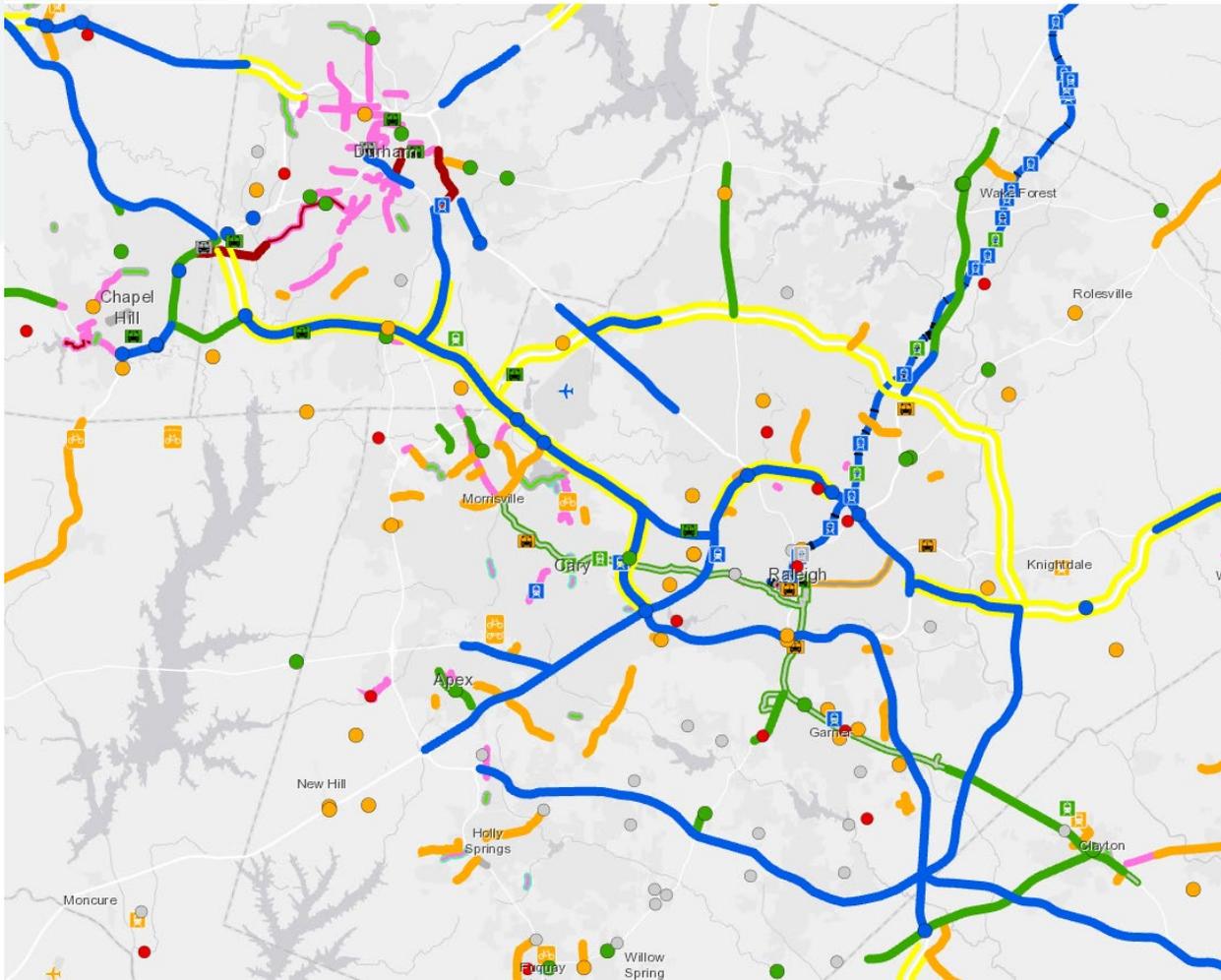
Implementation

Transit projects are prioritized using a process called Strategic Prioritization. This process involves:

- **Transportation data:** Analyzing various metrics related to transportation needs. Projects are assessed in terms of their impact on current and future transportation needs. Consideration of various transportation modes, including highways, ferries, rail, public transportation, bicycles, pedestrians, and aviation.
- **Input from local government partners and the public:** Gathering feedback to ensure community needs are met.
- **Scoring and ranking:** Projects are scored and ranked based on criteria such as congestion, benefit-cost ratio, safety, and local priorities.

The STIP projects for the region are shown in Figure 25 and the overlapping corridors and descriptions are shown in Table 12. The draft 2026-2035 STIP, is currently out for public comment, and is expected to be adopted in Summer 2025, so the status of projects shown in Table 12 are updated to reflect what is shown in the draft 2026-2035 STIP.

Figure 25: 2024-2033 STIP Exert



Source: 2024-2033 STIP - [NCDOT: 2024-2033 STIP Projects Map \(see link for legend and details\)](#)

Bicycle and Pedestrian Considerations

The following projects in the STIP relate to pedestrian and bicycle improvements for potential priority projects:

- Trinity Rd at Edwards Mill Rd: Upgrade traffic signal to provide pedestrian accommodations and crosswalks (HS-2405D)
- US-15/501/NC-54 from NC-86 to I-40 (U-5304): Upgrade corridor. U-5304B is just the portion of US-15/501/NC-54 between NC-86 and Raleigh Rd and is described as capacity improvements, with sidewalks, wide outside lanes, and transit accommodations. It is currently unfunded.
- NC-54 between US-15/501 and NC-55 (U-5774) is programmed for an extensive roadway upgrade, including pedestrian, bicycle, and transit improvements.
- I-885 from I-40 to NC-147 (U-5934): Add lanes, rehabilitate pavement, and prioritize the addition of transit accommodations.
- NC-54 from NC-55 to RTP limit (EB-5708): Construct sections of sidewalk on south side.
- There are several projects along I-40 from NC-86 in Chapel Hill to Trinity Rd in Raleigh. The most significant of these are I-3306, a highway widening currently under construction between NC-86 and the Durham County line, and I-6006 and I-5943 between NC-54 in Durham and Trinity Rd in Raleigh, which would convert I-40 to a

managed freeway with ramp metering and other ATM/ITS components. I-6006 is currently funded for preliminary engineering only. I-5943 is currently unfunded.

- In the Draft 2026-2035 STIP, I-6006 is removed. I-5943 remains and is noted as pavement and bridge rehabilitation along I-40 from SR 1728 (Wade Avenue) to I-440 / US 1 in Raleigh.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 12 shows the FAST 2.0 Study corridors and routes that are included in the STIP.

Table 12: FAST 2.0 Study Corridors that Overlap with the STIP

2024 FAST 2.0 Corridor/Routes	STIP	STIP Notes
1. US 70		
a. Between Durham and Raleigh	✓	U-5720: LYNN ROAD TO EAST OF SR 2095 (PAGE ROAD EXTENSION). UPGRADE TO CONTROLLED-ACCESS FACILITY AND CONVERT SR 1811 AT-GRADE INTERSECTION TO INTERCHANGE. U-5518: WEST OF SR 3067 (T.W. ALEXANDER DRIVE) TO I-540 IN RALEIGH. UPGRADE ROADWAY TO IMPROVE CAPACITY, SAFETY AND TRAFFIC OPERATIONS INCLUDING INTERCHANGES AT VARIOUS LOCATIONS. [Construction 2030].
2. Chapel Hill to RTP: Emphasizing the importance of this connection for the region.	✓	I-5993: I-40, US 15 / US 501 TO EAST OF NC 147. PAVEMENT REHABILITATION.
3. US 15-501 Corridor		
a. Chapel Hill to Durham	✓	U-5717: SR 1116 (GARRETT ROAD) IN DURHAM. CONVERT AT-GRADE INTERSECTION TO INTERCHANGE. B-5674: REPLACE BRIDGE 310080 OVER SR 1308 (CORNWALLIS ROAD) IN DURHAM.
b. Chapel Hill to Chatham County		
4. Fayetteville Road Corridor in Durham		
7. NC 54		
a. Chapel Hill to Durham	✓	U-5774B: WEST OF US 15 / US 501 IN ORANGE COUNTY TO EAST OF SR 1110 (BARBEE CHAPEL ROAD) IN DURHAM COUNTY. UPGRADE ROADWAY CORRIDOR. [Not funded]
b. Within Durham, through RTP	✓	EB-5708: NC 55 TO RESEARCH TRIANGLE PARK WESTERN LIMIT IN DURHAM. CONSTRUCT SECTIONS OF SIDEWALK ON SOUTH SIDE. (Construction Year 2025)
8. I-40 throughout the region	✓	I-5966: SR 1002 (AVIATION PARKWAY) TO SR 1652 (HARRISON AVENUE) IN CARY. CONSTRUCT AUXILIARY LANES IN BOTH DIRECTIONS. [Construction year 2032]

2024 FAST 2.0 Corridor/Routes	STIP	STIP Notes
<p>9. I-540: Northern and Southern</p>	<p>✓</p>	<p>Northern (I-40 to I-495 / US 64 / US 264 IN KNIGHTDALE): Pavement Rehabilitation [Construction Year: I-5998, 2026; I-5999, 2024; I-5945, 2031.]</p> <p>Southern (NC 55 BYPASS to I-87 / US 64 / US 264 BYPASS): CONSTRUCT FREEWAY ON NEW LOCATION. [Construction Year: R-2721A, 2019; R-2721B, 2019; R-2829A, 2025; R-2829B, 2025).</p>
<p>10. Capital Boulevard</p>	<p>✓</p>	<p>U-5307A: I-540 TO NORTH OF SR 2006 (DURANT ROAD) IN RALEIGH. [Construction Year: 2031]</p> <p>U-5307B: NORTH OF SR 2006 (DURANT ROAD) IN RALEIGH TO NORTH OF SR 2045 (BURLINGTON MILLS ROAD) IN WAKE FOREST.</p> <p>U-5307C: NORTH OF SR 2045 (BURLINGTON MILLS ROAD) TO SOUTH OF NC 98 BUSINESS IN WAKE FOREST.</p> <p>U-5307D: SOUTH OF NC 98 BUSINESS TO SR1909 (PURNELL ROAD) / SR 1931 (HARRIS ROAD) IN WAKE FOREST.</p>
<p>11. US 64: Raleigh west to Pittsboro</p>		
<p>13. S-Line Rail Corridor: for multimodal connections</p>	<p>✓</p>	<p>P-5753AA: RALEIGH UNION STATION TO NC 98 - S-LINE RAIL IMPROVEMENTS</p>

DCHC /CAMPO MTP

The Connect 2050 Metropolitan Transportation Plan is a long-range plan for the Research Triangle Region. It outlines transportation projects and strategies for the next 30 years, focusing on improving mobility, reducing congestion, and enhancing air quality. The plan prioritizes a variety of transportation modes, including roads, public transit, bicycles, and pedestrians, with the goal of creating a sustainable and equitable transportation system for the region. It aims to address challenges like population growth, changing travel patterns, and climate change, and ensure that the region's transportation system can meet future needs.

The plan contains the MTPs for the two organizations charged with transportation decision-making in the Research Triangle Region: CAMPO and the DCHC MPO. These organizations, and the areas for which they are responsible, are commonly called "MPOs."

Equity

The plan commits the region to transportation services and development patterns that contribute to a more equitable and sustainable place, where people can successfully pursue their daily activities. The plan includes Ensure Equity and Participation as a goal with the following objectives:

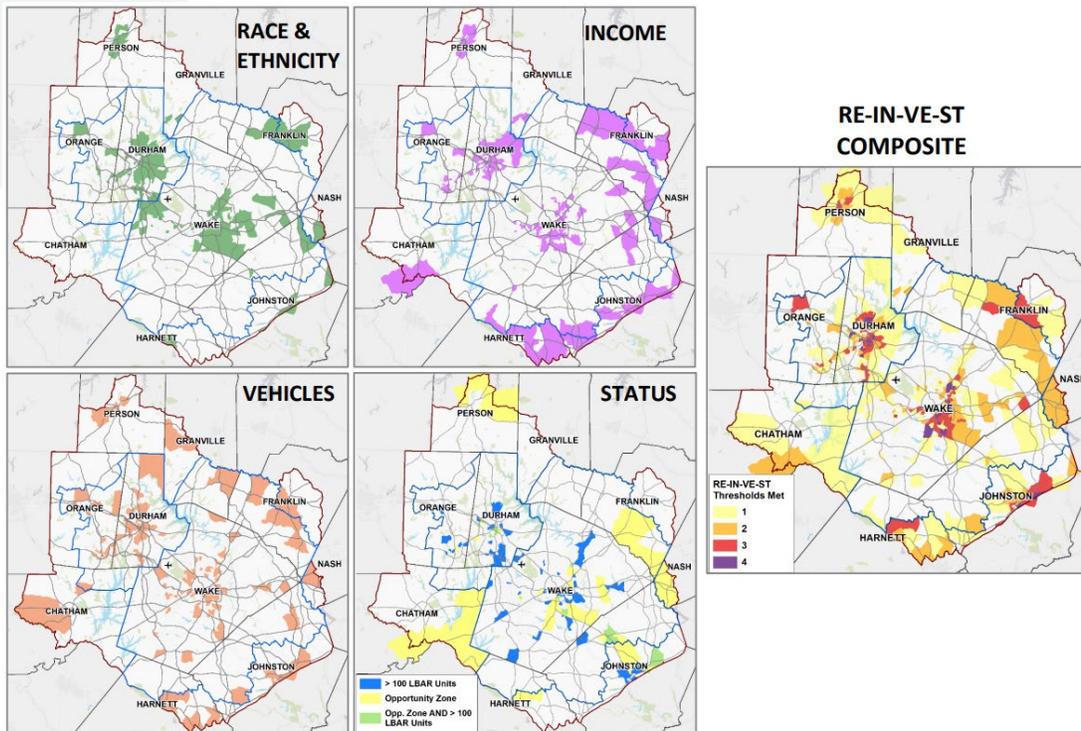
- Ensure that transportation investments do not create a disproportionate burden for any community.
- Enhance public participation among all communities. Ensure equitable public participation among communities of concern.

The MPOs use a similar set of criteria to identify neighborhoods that would benefit most from transit investments. These neighborhoods, termed "REINVEST Neighborhoods," are selected based on four factors:

- **Race/Ethnicity:** Areas with a significant population of BIPOC individuals.
- **Income:** Neighborhoods with low-income households.
- **Vehicle Ownership:** Areas with a high proportion of households without vehicles.
- **Status:** Neighborhoods designated as Opportunity Zones or having a high number of affordable housing units.

By identifying these REINVEST neighborhoods, the MPOs can target transit investments in areas with the greatest need and potential impact. See Figure 26.

Figure 26: REINVEST neighborhoods



Implementation

The plan anticipates that the region will match its historic focus on roads with a sustained commitment to high quality transit service as well, emphasizing five critical components:

- Connecting the region's main centers with fast, frequent, reliable rail or bus services;
- Offering transit service to all communities that have implemented local transit revenue sources;
- Providing frequent transit service in urban travel markets;
- Launching on-demand “microtransit” services where they can provide superior service, and
- Supplying better transit access, from "first mile/last mile" circulator services within key centers to safe and convenient cycling and walk access to transit routes.

The multimodal projects proposed by the plan are shown in Figure 27.

Figure 27: DCHC /CAMPO MTP Multimodal Projects

<p>North Carolina Railroad Corridor Passenger Rail (1st phase from Durham to Garner or Clayton)</p>		<p>Regional Transit Center Relocation (serving regional buses, future BRT and future passenger rail)</p>	
<p>Triangle Bikeway along I-40 (NC 54 in Chapel Hill to I-440 in Raleigh)</p>		<p>Wake-Durham Bus Rapid Transit (extension of Wake Western Corridor BRT from Cary to RTP HUB)</p>	
<p>US 70 Durham: modernization Wake: freeway conversion</p>		<p>I-40 Durham: modernization Wake: managed freeway</p>	
<p>Aviation Parkway Durham: modernization Wake: new alignment</p>		<p>Triangle Transportation Demand Management Program</p>	

Source: Connect 2050 Metropolitan Transportation Plan

The plan includes a new emphasis on transit investment, but it envisions significant additional roadway investment as well, focusing on “complete corridors” that incorporate provisions for transit and active transportation travel as part of roadway improvements. See Figure 28 and Figure 29 for roadway projects list.

Figure 28: DCHC MPO Major Highway Projects

DCHC MPO Major Roadway Projects List (estimated cost > \$100 million) and All Projects Map

Durham Chapel Hill-Carrboro MPO		
2021-30	2031-40	2041-50
East End Connector linking US 70 to NC 147 (Durham Freeway) to form I-885*	US 15-501 modernization (South Columbia in Chapel Hill to Cameron Blvd. in Durham)	
I-40 widening in Orange County (US 15-501 to I-85)	I-40/NC 54 Interchange and NC 54 modernization (TIP# U-5774)	
	US 70 modernization in Durham County (Lynn Road to Wake County)	
	I-85 widening in Orange County (Orange Grove Rd. to Sparger Road.)	
	US 15-501 Synchronized Street (Smith Level Road to US 64 in Chatham Co.)	
	I-40 managed roadway modernization (NC 54 to Wake County; links to CAMPO I-40 project)	
	NC147 modernization (I-40 to Swift Ave.)	

* funded in prior years but open to traffic in indicated time period

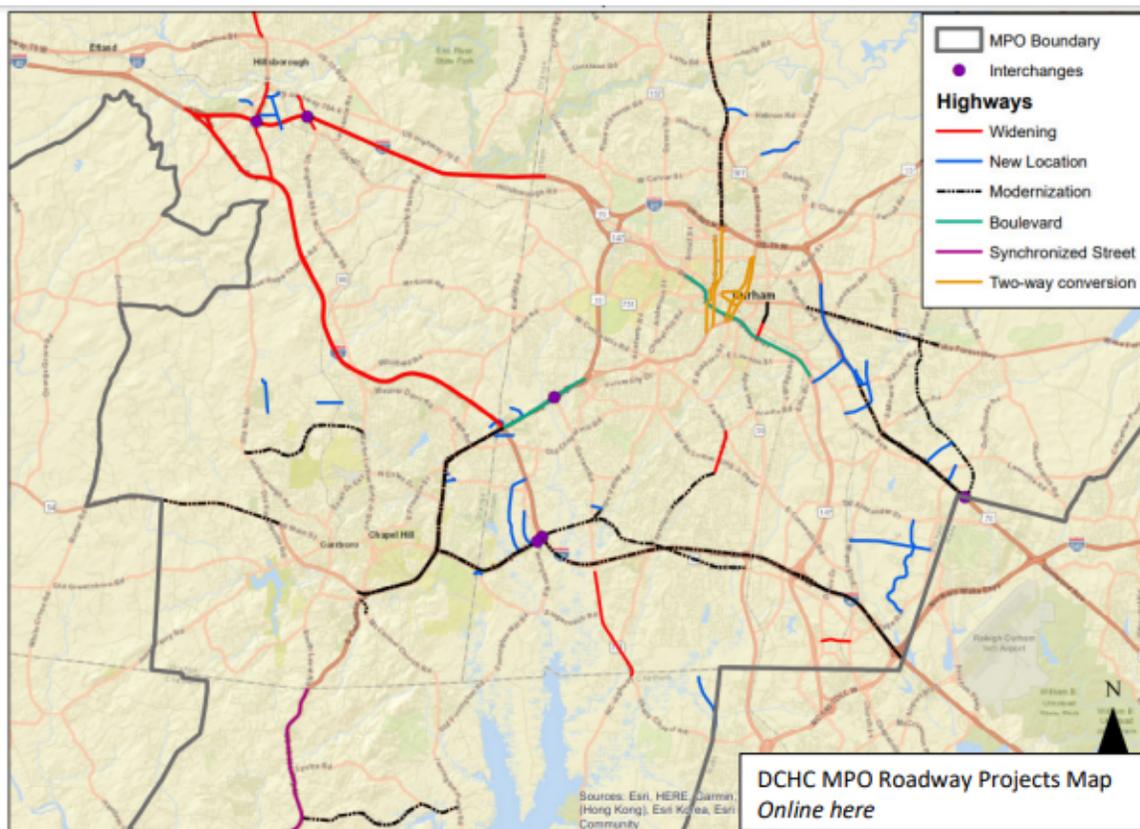
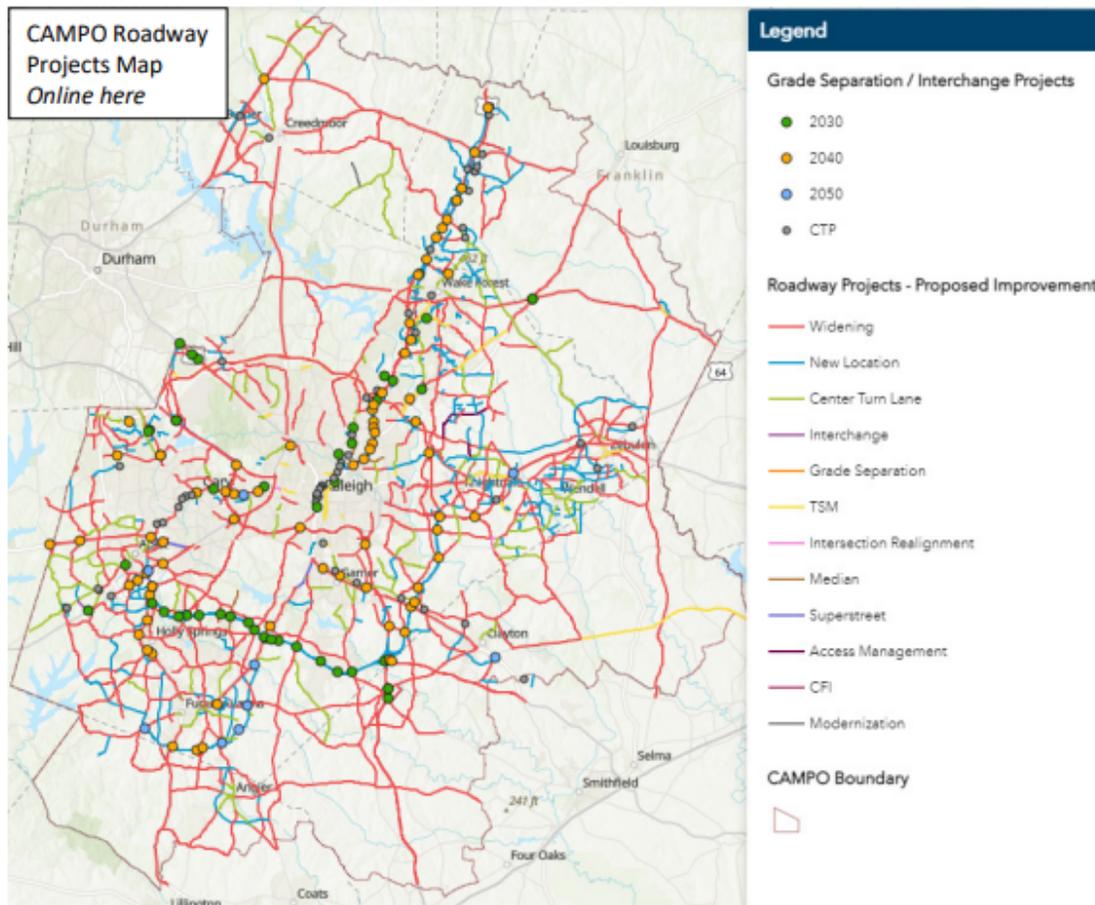


Figure 29: CAMPO Major Roadway Projects

CAMPO Major Roadway Projects List and All Projects Map

Capital Area MPO		
2021-30	2031-40	2041-50
I-40 widened from Wade Ave. to Lake Wheeler Road	I-40 widened from I-440 to NC 42 in Johnston County	I-87 widened from US 64 Bus to US 264
I-440 widened from Wade Avenue to Crossroads	I-87 widened from I-440 to US 264	NC 210 widened from Angier to Lassiter Pond Rd.
I-40 widened from I-440 to NC 42 in Johnston County	US 1 widened south from US 64 to NC 540	NC 50 widened from NC 98 to Creedmoor
US 64 W corridor improvements from US 1 to Laura Duncan Rd.	Managed lanes added to I-540 (Northern Wake Expressway) from I-40 to US 1	US 401 widened from Fuquay-Varina to MPO boundary in Harnett County
NC 540 toll road extended from Holly Springs to I-40 south of Garner	NC 540 completed as a toll road from Holly Springs to I-87/US 64 bypass	NC 96 widened from US 1 to NC 98
US 70 widened and access management from I-540 to Durham/Wake Co. Line	I-40 Managed lanes added to I-40 from Durham County line to MPO boundary in Johnston County	NC 56 widened from I-85 to MPO boundary in Franklin County



Bicycle and Pedestrian Considerations

The following projects in the Connect 2050 Plan (that are not listed in the STIP) may relate to pedestrian and bicycle improvements for the potential priority projects:

- Trinity Rd from Edwards Mill Rd to Wade Park Blvd: Road widening. It is not clear if pedestrian and bicycle improvements will be made. The Horizon Year is 2030.
- Blue Ridge Connector, a project to construct a protected bike lane along Blue Ridge Road. It is not clear which segment of Blue Ridge Rd this project refers to. The Horizon Year is 2050.
- Trinity Road: Construct a multi-use path. It is not clear which segment of Trinity Rd this project refers to. The Horizon Year is 2040.
- Blue Ridge Rd grade separation under the railroad tracks. This project is currently under construction and includes pedestrian and bicycle improvements.
- North Harrison Ave from Reedy Creek Rd and I-40: Road widening. It is not clear if pedestrian and bicycle improvements will be made. The Horizon Year is 2050.
- Holloway St (NC-98) from Miami Blvd to Nichols Farm Dr: Modernization. It is not clear if pedestrian and bicycle improvements will be made beyond what was constructed for the East End Connector project. The Horizon Year is 2050.
- Ramseur St from Chapel Hill St to Roxboro St, Roxboro St from Lakewood Ave to Markham Ave, and Duke St from Lakewood Ave to I-85: Two-way street conversion. It is not clear if pedestrian and bicycle improvements will be made. The Horizon Year is 2040.
- NC-54 bridge over NC-147: Widen and buffer bicycle/pedestrian side path on NC-54 bridge over NC-147 (now NC-885). The Horizon Year is 2030.
- Chapel Hill St from Ramseur St to Swift Ave: Construct buffered bicycle lanes. Horizon Year: 2030
- Liberty St from Dillard St to Miami Blvd: Construct bicycle lanes. The Horizon Year is 2030.
- Holloway St from Gary Ave to Guthrie Ave: Construct sidewalk. The Horizon Year is 2030.

Overlap Corridors and Routes Identified by Stakeholders for FAST 2.0

Table 13 shows the FAST 2.0 Study corridors and routes that are in Connect 2050.

Table 13: FAST 2.0 Study Corridors that Overlap with Connect 2050

2024 FAST 2.0 Corridor/Routes	CONNECT 2050	CONNECT 2050 Notes
1. US 70		
a. Between Durham and Raleigh	✓	DCHC MPO: US 70 modernization in Durham County (Lynn Road to Wake County) [2031-40]
b. Between Durham and Orange County	✓	DCHC MPO: East End Connector linking US 70 to NC 147 (Durham Freeway) to form I-885. [Funded in prior years but open to traffic in 2021-30]
2. Chapel Hill to RTP: Emphasizing the importance of this connection for the region.	✓	DCHC MPO: I-40 managed roadway modernization (NC 54 to Wake County; links to CAMPO I-40 project) [2031-40]
3. US 15-501 Corridor		

2024 FAST 2.0 Corridor/Routes	CONNECT 2050	CONNECT 2050 Notes
a. Chapel Hill to Durham	✓	DCHC MPO: US 15-501 modernization (South Columbia in Chapel Hill to Cameron Blvd. in Durham) [2031-40]
b. Chapel Hill to Chatham County	✓	DCHC MPO: US 15-501 Synchronized Street (Smith Level Road to US 64 in Chatham Co.) [2031-40]
8. I-40 throughout the region	✓	DCHC MPO: I-40/NC 54 Interchange and NC 54 modernization (TIP# U-5774) and I-40 managed roadway modernization (NC 54 to Wake County; links to CAMPO I-40 project) [2031-40] CAMPO: I-40 widened from Wade Ave. to Lake Wheeler Road and I-40 widened from I-440 to NC 42 in Johnston County [2021-30] CAMPO: I-40 widened from I-440 to NC 42 in Johnston County and I-40 Managed lanes added to I-40 from Durham County line to MPO boundary in Johnston County [2031-40]
9. I-540: Northern and Southern	✓	CAMPO: NC 540 toll road extended from Holly Springs to I-40 south of Garner [2021-30] CAMPO: NC 540 completed as a toll road from Holly Springs to I-87/US 64 bypass [2031-40]
10. Capital Boulevard		
11. US 64: Raleigh west to Pittsboro	✓	US 64 W corridor improvements from US 1 to Laura Duncan Rd [2021-30]
12. US 1		
a. Raleigh/Cary to Holly Springs/Fuquay Varina	✓	CAMPO: US 1 widened south from US 64 to NC 540 [2031-40]

Summary

Based on the review of relevant documents, plans, and projects for FAST 2.0, there are several common themes which overlapped in their planning, equity approach, and implementation of transit and transportation initiatives. Overall, all plans and reports primarily revolved around improving transportation infrastructure and addressing mobility challenges from a community as well as regional perspective within the Research Triangle region of North Carolina.

Here are key themes that emerged from the plans and reports:

- **Enhanced Public Transit:** Emphasize the importance of improving public transit systems, including BRT, BOSS systems, and RED lanes.
- **Accessibility and Equity:** Highlight the need to improve accessibility for all residents, particularly those in disadvantaged communities. This includes addressing equity in the planning and implementation of transportation projects.

- **Regional Connectivity:** Recognize the importance of improving regional connectivity through investments in transportation infrastructure. This includes expanding and enhancing highway networks, as well as improving intermodal connections between different modes of transportation.
- **Sustainable Transportation:** Promote sustainable transportation solutions, such as reducing reliance on single-occupancy vehicles, encouraging the use of public transit, and promoting active transportation (walking and biking).
- **Data-Driven Decision Making:** Utilize data-driven approaches to identify transportation needs, evaluate alternative solutions, and prioritize investments. This includes using transit priority tools like TPF, travel demand modeling, geographic information systems (GIS), and other advanced analytical tools.

By addressing these themes, FAST 2.0 can create a more efficient, equitable, and sustainable transportation system for the Research Triangle region.

Given the extensive planning efforts conducted by cities and agencies within the Research Triangle region, it is important to recognize any connection or overlap, particularly at a regional or corridor level. To recognize where the 13 potential corridor and routes identified by FAST 2.0 stakeholders overlaps with previous established projects/plans, Table 14 highlights the areas where these occur. As shown in the table, there are several areas of alignment between these projects/corridors.

Table 14: FAST 2.0 Study Corridors that Overlap with the Reviewed Plans and Studies

2024 FAST 2.0 Corridor/Routes	2021 Fast Study	BOSS Study	RED Study	BRT Ext MIS	Wake Transit Plan	Raleigh BRT Study	Durham County Transit Plan	Orange Transit Plan	NCDOT STIP	Connect 2050
1. US 70										
a. Between Durham and Raleigh			✓		✓				✓	✓
b. Between Durham and Orange County								✓		✓
2. Chapel Hill to RTP: Emphasizing the importance of this connection for the region.	✓								✓	✓
3. US 15-501 Corridor										
a. Chapel Hill to Durham	✓							✓	✓	✓
b. Chapel Hill to Chatham County							✓	✓		✓
4. Fayetteville Road Corridor in Durham							✓		✓	

2024 FAST 2.0 Corridor/Routes	2021 Fast Study	BOSS Study	RED Study	BRT Ext MIS	Wake Transit Plan	Raleigh BRT Study	Durham County Transit Plan	Orange Transit Plan	NCDOT STIP	Connect 2050
5. NC 98 Corridor: Between Durham and Wake County										
6. VinFast Site in Chatham County										
7. NC 54										
a. Chapel Hill to Durham									✓	
b. Within Durham, through RTP				✓			✓	✓	✓	
8. I-40 throughout the region	✓	✓			✓	✓	✓	✓	✓	✓
9. I-540: Northern and Southern									✓	✓
10. Capital Boulevard									✓	
11. US 64: Raleigh west to Pittsboro		✓							✓	✓
12. US 1										
a. Raleigh/Cary to Holly Springs/Fuquay Varina					✓					✓
b. Long term US 1 to towards Sanford and Pinehurst										
13. S-Line Rail Corridor: for multimodal connections					✓				✓	

Following additional outreach efforts in December 2024, FAST 2.0 stakeholders identified new corridors. To comprehensively analyze these new corridors, Table 14 has been expanded to include them. Additionally, FAST 2.0 priority corridors are highlighted within the table. The amended table, presented in Appendix A, reveals several areas of alignment and overlap between these new corridors and previously identified projects/plans.

Appendix A

FAST 2.0 Study Corridors that Overlap with the Reviewed Plans and Studies

2024 FAST 2.0 Corridor/Routes	2021 Fast Study	BOSS Study	RED Study	BRT Ext MIS	Wake Transit Plan	Raleigh BRT Study	Durham County Transit Plan	Orange Transit Plan	NCDOT STIP	Connect 2050
1. US 70										
a. Between Durham and Raleigh			✓		✓				✓	✓
b. Between Durham and Orange County								✓		✓
2. Chapel Hill to RTP: Emphasizing the importance of this connection for the region.	✓								✓	✓
3. US 15-501 Corridor										
a. Chapel Hill to Durham	✓							✓	✓	✓
b. Chapel Hill to Chatham County							✓	✓		✓
4. Fayetteville Road Corridor in Durham							✓		✓	
5. NC 98 Corridor: Between Durham and Wake County										
6. VinFast Site in Chatham County										
7. NC 54										
a. Chapel Hill to Durham									✓	
b. Within Durham, through RTP				✓			✓	✓	✓	
8. I-40 throughout the region	✓	✓			✓	✓	✓	✓	✓	✓
9. I-540: Northern and Southern									✓	✓
10. Capital Boulevard									✓	
11. US 64: Raleigh west to Pittsboro		✓							✓	✓

2024 FAST 2.0 Corridor/Routes	2021 Fast Study	BOSS Study	RED Study	BRT Ext MIS	Wake Transit Plan	Raleigh BRT Study	Durham County Transit Plan	Orange Transit Plan	NCDOT STIP	Connect 2050
12. US 1										
a. Raleigh/Cary to Holly Springs/Fuquay Varina	✓	✓			✓					✓
b. Long term US 1 to towards Sanford and Pinehurst	✓	✓								
13. S-Line Rail Corridor: for multimodal connections					✓				✓	
13. I-85 in Durham County	✓	✓							✓	
14. I-440	✓	✓			✓				✓	✓
15. I-40: From I-87 to Johnston County line		✓							✓	✓
16. I-40: From NC 54 to MLK in Chapel Hill		✓							✓	✓
17. I-40: From I-85 to Alamance County line	✓	✓						✓	✓	
18. US 1: From I-540 to Sanford	✓*	✓								
19. US 64: Pittsboro to Siler City										
20. I-87: N Ardentell Ave to I-440		✓							✓	✓
21. I-540: From I-40 to I-87		✓							✓	
22. US 1: Raleigh to Franklinton		✓			✓				✓*	✓*
23. US 70: Between Mebane and Hillsborough							✓	✓		✓
24. NC 86: From Eubanks Road to Hillsborough	✓							✓		

2024 FAST 2.0 Corridor/Routes	2021 Fast Study	BOSS Study	RED Study	BRT Ext MIS	Wake Transit Plan	Raleigh BRT Study	Durham County Transit Plan	Orange Transit Plan	NCDOT STIP	Connect 2050
25. Miami Blvd: Between US 70 and NC 54	✓						✓			
26. NC 55: From NC 147 to Fuquay Varina		✓	✓*							✓*
27. NC 42: From Clayton to Fuquay Varina		✓								
28. NC 54: To Orange / Alamance County line starting at NC 86									✓*	
FAST 2.0 Priority Corridors										
30. Trinity Road: Blue Ridge Rd to I-40										
31. I-885: NC 98 to I-40										
32. Harrison Avenue/Kildare Farm: I-40 to US 64					✓					✓
33. NC 54: Miami Blvd to I-40	✓	✓								
34. NC 54: I-40 to US 15-501	✓	✓*			✓*			✓*	✓*	✓*
35. I-40: Trinity Rd to NC 86	✓*	✓			✓*		✓*	✓*	✓	✓*
36. Miami Boulevard: NC 54 to I-40	✓						✓*			
37. Blue Ridge Road: Western Blvd to Trinity Rd										
38. Concept Corridor BRT: RDU Airport to US 70										

Note: * Only a portion of the corridor segments are included in the noted plans or studies.

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