



# State of the Plan

Spring 2024

**GO FORWARD**  
A COMMUNITY INVESTMENT IN TRANSIT



NC Capital Area Metropolitan Planning Organization



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# THE WAKE TRANSIT PLAN

In 2016, Wake County voters approved a package of new taxes and fees dedicated to expanding and strengthening public transportation services in Wake County. The county-wide transit investment program – the Wake Transit Plan (WTP) – was designed around Four Big Moves:



## 1. Connect the Region



## 2. Connect All Wake County Communities



## 3. Create Frequent, Reliable Urban Mobility



## 4. Enhance Access to Transit

This report is a “state of the plan” for the Wake Transit Plan. It describes how much money the Wake Transit Plan has raised to date, how elected officials and stakeholders have invested these funds, and the tangible outcomes from those investments. It also describes the outstanding needs and opportunities facing the Wake Transit Plan with the goal of supporting a conversation about next steps for transit development in Wake County. A shorter, higher-level summary of the findings is included in the Wake Transit Plan Summary Report.

In the eight years since, a lot has happened locally, regionally, and nationally, including the COVID-19 pandemic, which disrupted the way many people travel as well as where, when, and how they commute to work. The pandemic and its aftermath also led to changes in labor markets, including a national and regional shortage of bus operators.

Through these disruptions, Wake County has proven to be a resilient and robust community. Strong growth means new development, more jobs and increased opportunities and strong sales tax revenue. However, growth also comes with tradeoffs: high inflation and rising housing costs mean it is more expensive than ever to live in Wake County. The end of the pandemic has also meant the return of traffic congestion which, even with many workers continuing to work from home part- or full-time, is challenging the region.

The Wake Transit Plan continues to be part of the solution as Wake County supports growth and development while maintaining the region’s quality of life. The Wake Transit Plan Update is using this moment (2024) to evaluate plan accomplishments and lessons learned from the past several years as Wake County continues to build and develop its transit vision. The Wake Transit Plan is designed to identify

priorities for future investments. **At the beginning of 2024, forecasts prepared by the Wake Transit Plan show there will be between \$700 million and \$1 billion to invest in transit services between 2025 and 2035.** These funds are in addition to the capital projects and transit services already programmed for implementation in the next few years. This funding outlook does not, however, assume full funding for some of the large long-term projects considered in the 2016 Wake Transit Plan, like Commuter Rail. **We are using this moment to look forward – and ask for your help – to shape the future of the Wake Transit Plan.**

This State of the Plan is organized into four sections:

- Chapter 1 provides an overview of the revenues collected for the Wake Transit Plan implementation and the status of the program overall.
- Chapter 2 describes how Wake Transit Plan funds were spent between FY18 and FY23 and what is programmed to be spent from FY24 through FY30.
- Chapter 3 includes outcomes achieved from the investment program.
- Chapter 4 presents the strengths, weaknesses and opportunities identified from this analysis.

A Glossary of Terms is included as **Appendix A.**

### **Calendar Years and Fiscal Years**

The Wake Transit Plan Update State of the Plan refers to both calendar and fiscal years. Wake Transit financial policies and implementation plans follow the fiscal year schedule beginning on July 1 and ending on June 30<sup>th</sup>. So, for example, Fiscal Year (FY) 2024 began on July 1, 2023, and will end on June 30, 2024.

Dates in the report that are not noted as fiscal year (FY) refer to traditional calendar years that begin on January 1 and end on December 31.

# 1 WAKE TRANSIT PLAN REVENUES

In the seven years since April 1, 2017, the Wake Transit Plan has raised **\$747.9 million** to support transit.

In 2016, Wake County voters approved the Wake Transit Plan and a funding strategy designed to implement it. The main revenue sources supporting the Plan are:

- A new ½ cent Local Options Sales Tax
- A new \$7 Vehicle Registration Fee was levied in Wake County only.
- A \$3 increase to the Vehicle Registration Fee
- A portion of the regional 5% Vehicle Rental Tax is allocated to Wake County by the GoTriangle Board of Trustees.

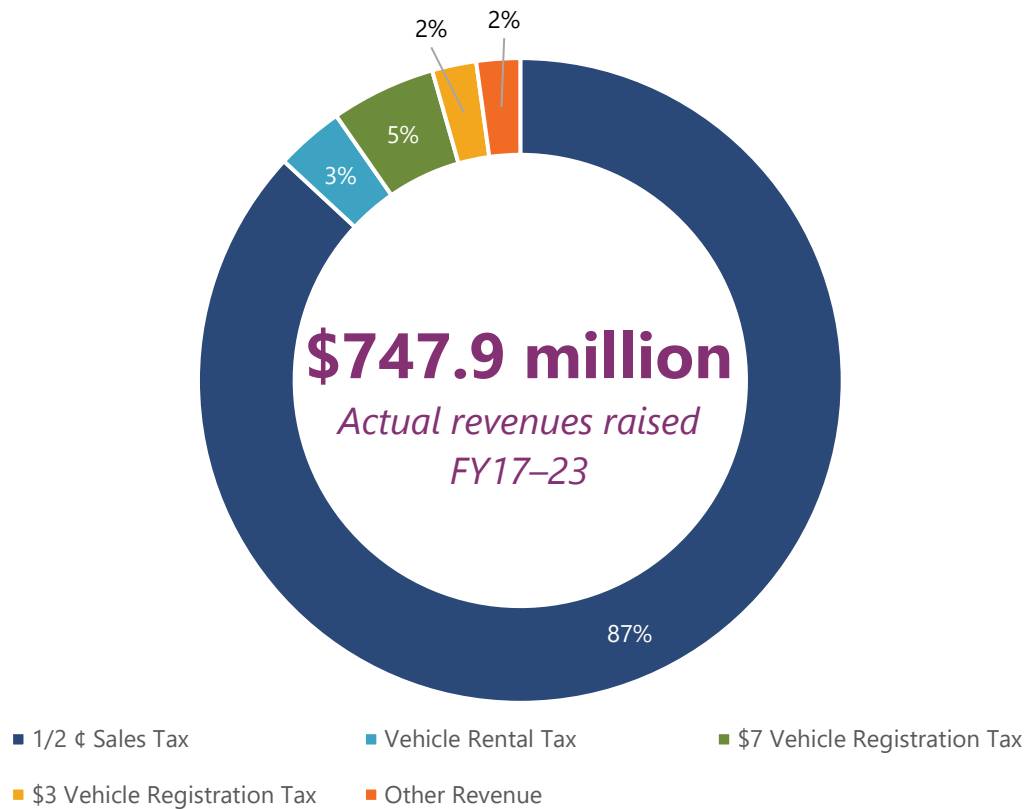
The Wake Transit Plan went into effect on April 1, 2017, when Wake County began collecting the ½ cent local option sales tax. Revenues raised through the taxes and fees are collected and managed by the Triangle Tax District.

## **What's the difference between the \$3 and \$7 vehicle registration fee?**

- The \$3 vehicle registration fee is an increase to an existing \$5 fee levied on vehicles registered in Durham, Wake, and Orange counties. Money earned by Wake County from this tax increase is for the Wake Transit Plan.
- The \$7 fee is a new county-wide tax only charged to people registering vehicles in Wake County.

Revenues collected through the Wake Transit Plan are transforming the transportation network. Access to a dedicated source of revenue means that municipalities and transit providers in Wake County – including GoCary, GoRaleigh, and GoTriangle – have been able to demonstrate the availability of local match funding that increases their opportunity to apply for and receive federal and state grant funds, thus expanding the amount of money available to support local public transportation projects.

Figure 1 Actual Wake Transit Plan Revenues Raised, FY17–23



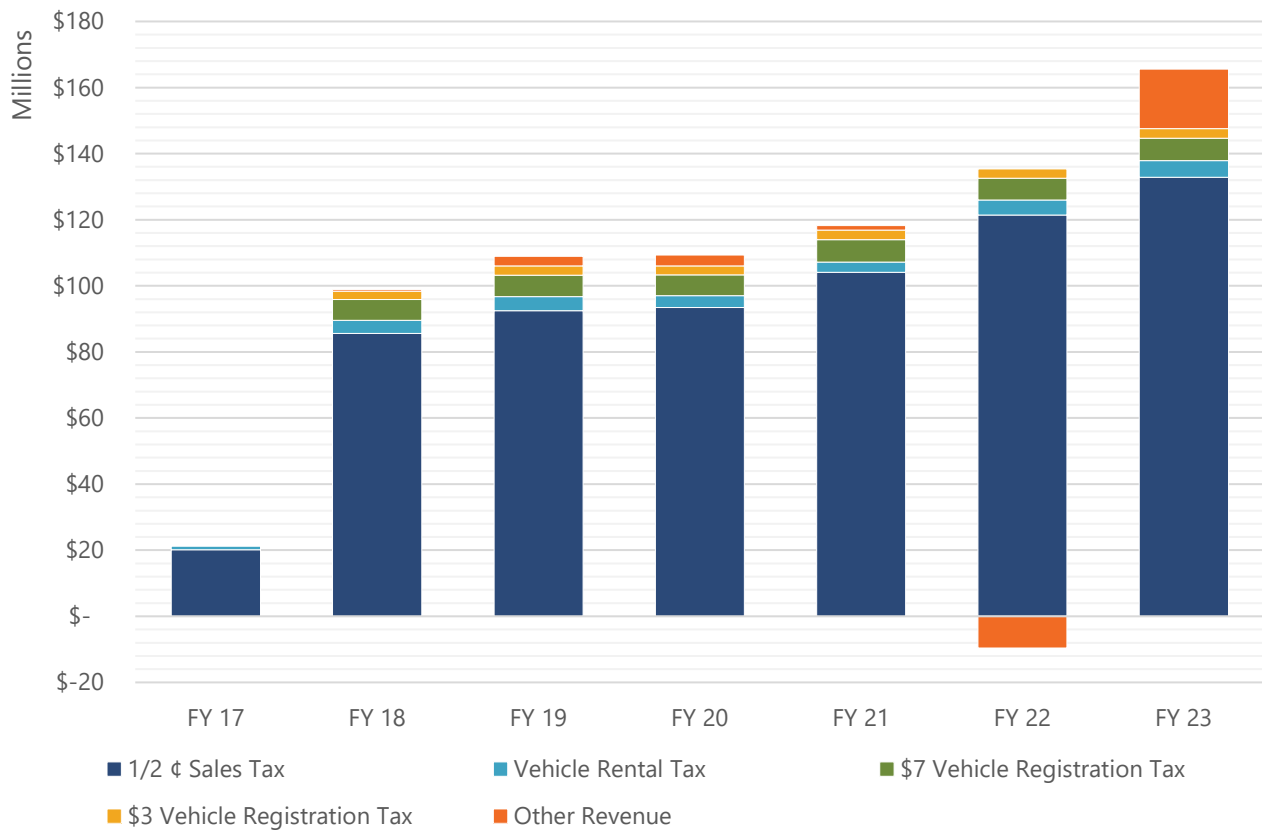
### Sales tax revenue remains strong despite changes in Wake County and the regional economy.

While each funding source is important, the 1/2 cent sales tax has been, and continues to be, the largest source of recurring revenue for the Wake Transit Plan, comprising 87% of all collected revenues since the Plan began (see Figure 2). The sales tax and vehicle registration taxes remained consistent year-over-year in their share of revenue sources, while the vehicle rental tax and other revenues<sup>1</sup> were impacted by wider economic trends between 2020 and 2022.

The COVID-19 pandemic and record inflation created turbulent socioeconomic conditions from 2020 through 2022, slowing economic activity in Wake County and nationally. Despite these challenges, sales tax growth has remained steady and continues to provide an optimistic outlook for ongoing and future transit investments.

<sup>1</sup> Other revenues are mostly comprised of interest and investment returns from the fund balance (95% of all “other revenues”). The actual amount of these additional revenues fluctuates based on the wider economic market.

**Figure 2 Wake Transit Plan Revenues Sources by Year**



Source: Wake Transit Plan adapted by Nelson\Nygaard

Note: In FY22, there was an unrealized negative return associated with investments included in Other Revenues.

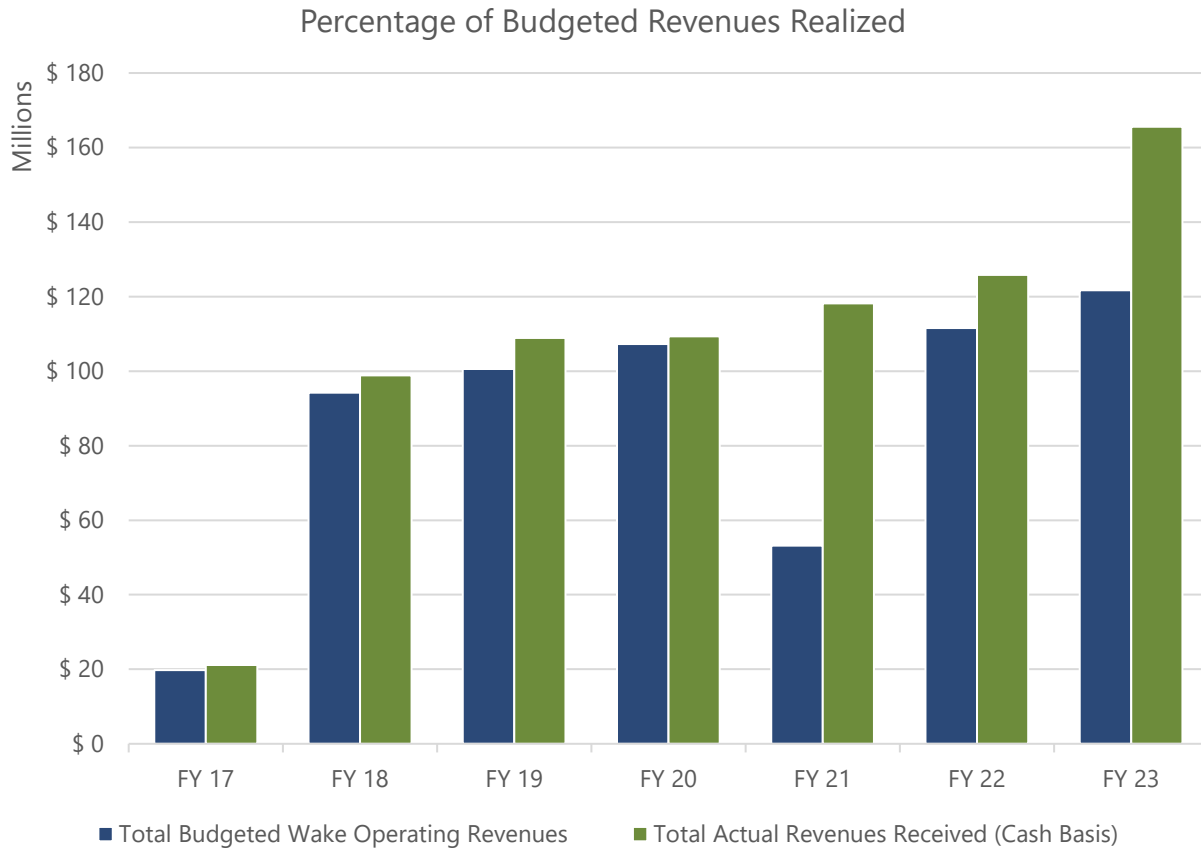
## Revenues collected have consistently **outperformed budgeted expectations.**

The Wake Transit Plan evaluates and refines revenue estimates on an annual basis as part of the Work Plan development process; the Annual Work Plan process allocates funds to specific projects in the upcoming fiscal year and programs funds for projects scheduled to begin in future years. Annual refinements of budgets and revenues help create more realistic forecasts. In all cases, however, the value of revenues collected has consistently outperformed budgeted estimates (see Figure 3).

When the Wake Transit Plan collects revenues exceeding the forecasted or anticipated amounts, funds are incorporated into the financial plan for the following year and accounted for as part of each year’s revised Annual Work Plan. The robust performance of tax revenues is a promising sign for the future of the Wake Transit Plan: It shows that the Plan and Wake County’s transit partners are equipped to deliver projects while being resilient to unpredictable conditions like those caused by the COVID-19 pandemic. Revenues during that time remained robust and have empowered agencies to bounce back more readily from the downturn.



**Figure 3 Comparison of Budgeted (Forecasted) Revenue and Actual Revenue Received**



Source: Nelson\Nygaard adapted from Wake Transit Plan data

## Wake Transit Plan revenues **continue to supplement existing resources** contributed by local governments in Wake County.

The Wake Transit Plan was designed to provide new funding for transit and not replace resources already being invested in transit projects and services. This goal has been—and continues to be—met. Local jurisdictions, including the City of Raleigh, the Town of Cary and regional funding used to support GoTriangle are providing the same level of support to local transit service in 2023 that they were in 2017.

In addition, the Town of Cary, the City of Raleigh and GoTriangle have been aggressive about applying for federal grant funds to supplement Wake Transit Plan funds. As of 2023, the amount of federal funds secured through competitive grant funds is roughly \$200 million and includes support for vehicles, facilities, and BRT corridors.

## 2 WAKE TRANSIT PLAN INVESTMENTS

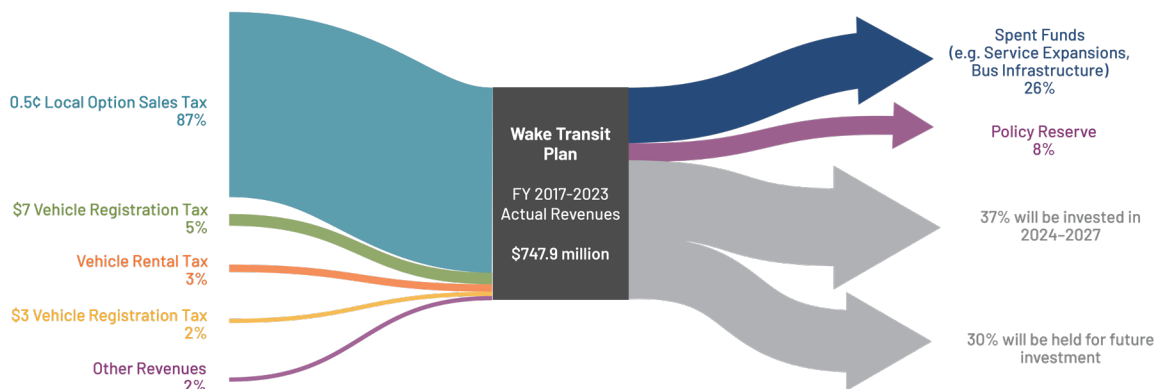
Since April 1, 2017, nearly **\$200 million has been spent** on transit service expansion, vehicles, studies, capital projects, and plan administration.

These investments have:

- Provided more transit services that run more often and for more hours of the day.
- Purchased newer, cleaner fuel buses and the space to maintain them.
- Planned new transit services such as Bus Rapid Transit (BRT) and expanded fixed routes.
- Studied new regional transit options including Commuter Rail service.
- Invested in safer and more comfortable bus stops and stations.
- Directed funding to suburban communities to expand local travel options.
- Built capacity to administer and manage the Wake Transit Plan.

The estimated distribution of funding towards these seven spending categories are illustrated in Figure 4 and Figure 6. To date, 26% of raised revenues (\$193.7 million) were spent implementing the Wake Transit Plan. Another 8% of Wake Transit Plan revenues (\$60 million) were held in reserve as a required part of the Wake Transit Plan’s original agreement<sup>2</sup> and to meet federal requirements.

**Figure 4 Wake Transit Plan Estimated Revenues and Investments (2017–2023)**



Source: Wake Transit Plan adapted by Nelson\Nygaard

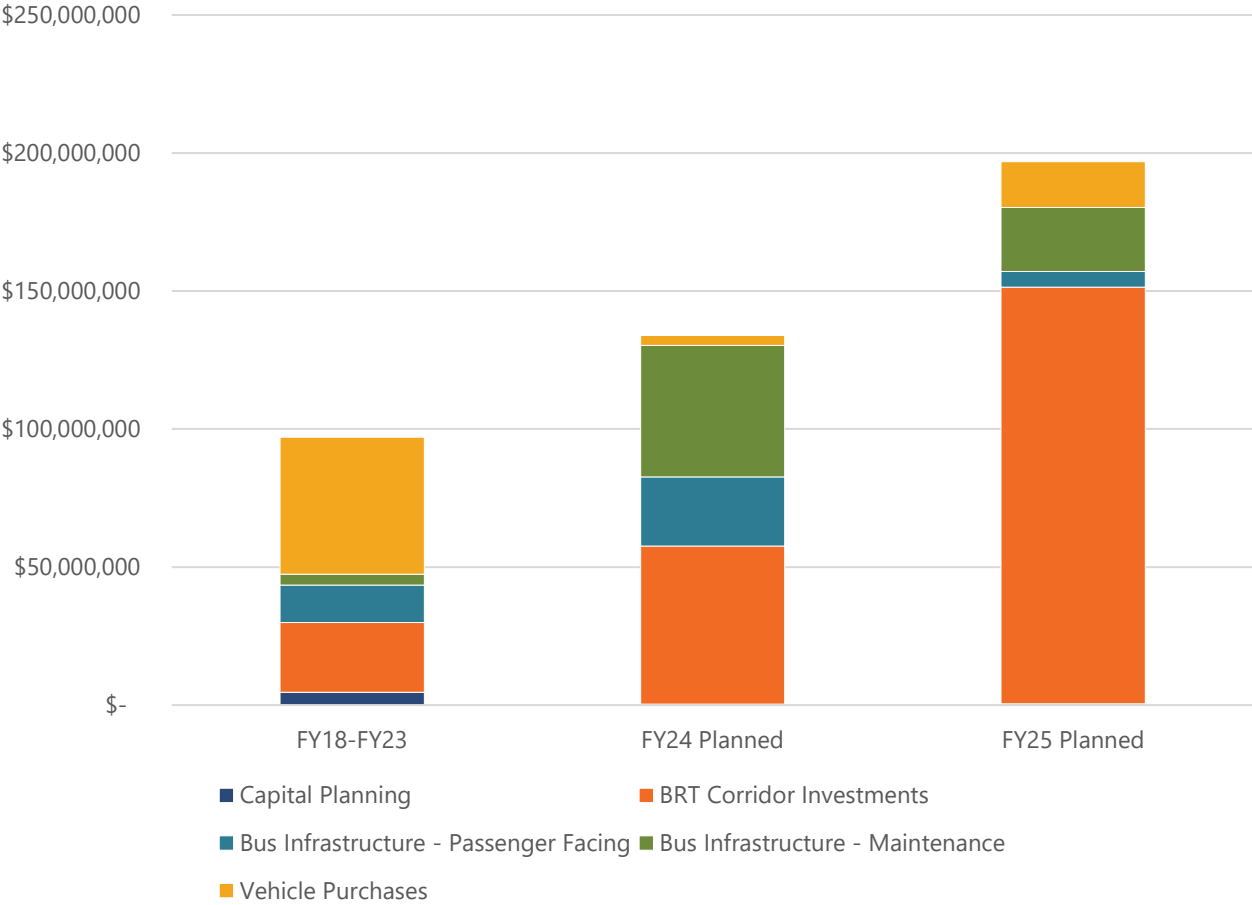
Note: Numbers are estimates and represent a single point in time. Funding allocations change annually, including the Policy Reserve, which varies depending on the value of planned projects.

<sup>2</sup> The Wake Transit Plan Interlocal Agreement (ILA) requires that the Wake Transit Plan set aside 5% of non-BRT capital projects and 10% of BRT capital projects plus enough funding to support 90 days of operating costs.

Most of the remaining 66% of the Wake Transit Plan funds collected since 2017 are programmed for spending on future projects. \$134 million has been committed for major capital projects and spending scheduled for FY24; another \$196 million is programmed for funding in FY25 (see Figure 5). Projects expected to move towards implementation in the next two years include construction of the New Bern BRT Corridor, the GoRaleigh/GoWake Access ADA Facility, the GoCary Bus Operating and Maintenance Facility, final design for the Southern BRT Corridor, the Cary Multimodal Transit Facility, and the Raleigh Union Station Bus Facility, among others. For more information about these projects, please see the [Wake Transit Performance Tracker](#).

Slower than expected spending between 2017 and 2023 reflects multiple factors, including the COVID-19 pandemic, when transit levels were reduced to account for lower levels of travel, and a driver shortage in the years immediately following the pandemic that made it difficult for transit agencies to ramp up service as quickly as desired. Other projects, especially capital projects that involve more expensive planning, environmental review, land acquisition and construction were also impacted by the pandemic. Inflation costs, staffing, and supply shortages have been key factors impacting project cost estimates and construction schedules.

**Figure 5 WTP Historic and Planned Near-Term Capital Investments (as of Spring 2024)**

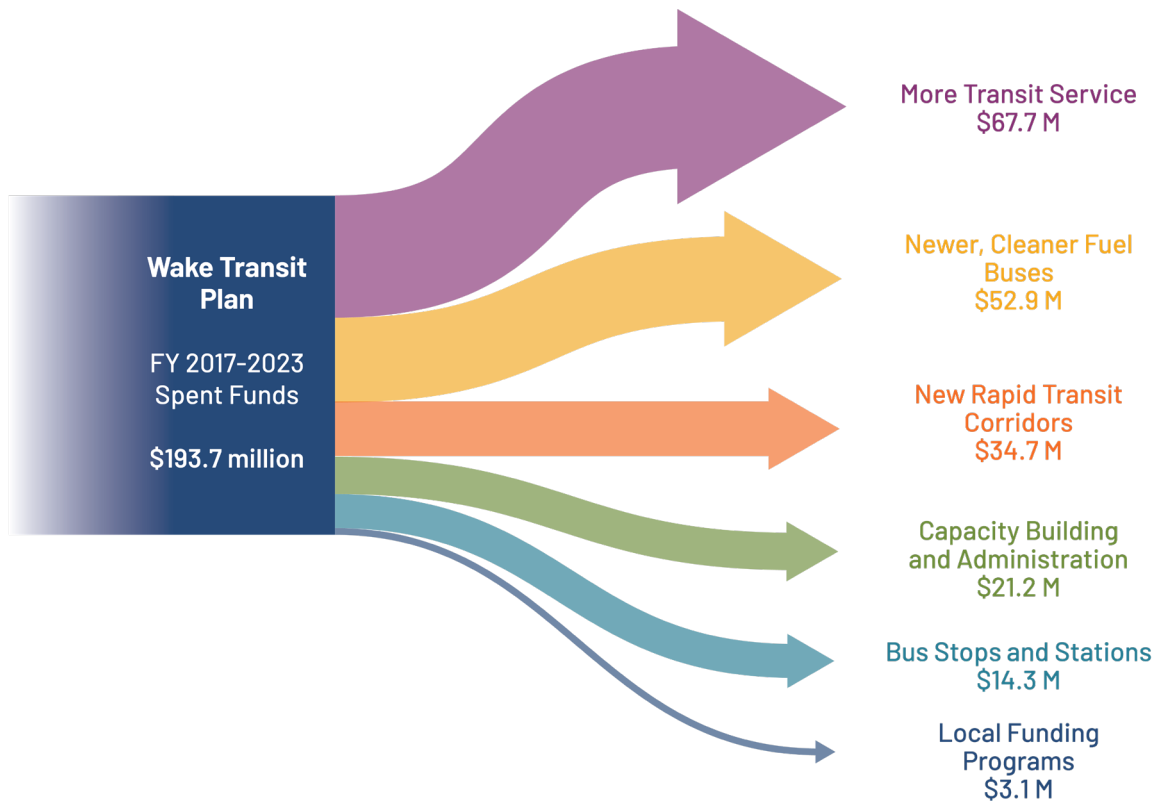


Source: Wake Transit Plan adapted by Nelson\Nygaard Consulting Associates

# Wake Transit Plan Spending: Fiscal Years 2017–2023

Nearly \$200 million in Wake Transit Plan funds were spent between April 1, 2017, and June 30, 2023. A significant share of the spent funds – 36% – has gone to expanding transit service; another 27% was spent buying buses to support the expanded operations. Other funds were spent building new bus stops, improving existing ones, building transit centers, and planning and designing Wake County’s BRT network. In total, almost 90% of spending to date have gone to bus-related projects.

Figure 6 Breakdown of Wake Transit Plan Investments by Category



Source: Wake Transit Plan adapted by Nelson\Nygaard Consulting Associates

Another \$350 million will be invested in 2024 and 2025 as capital projects advance towards implementation.

## The Wake Transit Plan has guided investments that included \$67.7 million to expand and improve bus services.

Bus service is the backbone of the region's transit system, and expanding bus service has consistently been a top priority of Wake Transit Plan implementation. One of the first investments made with Wake Transit Plan funds was to expand fixed-route bus service on Sundays, adding nearly 16,000 hours of bus service annually.

Since 2016:



**54%** increase in revenue hours

**88%** more boardings

GoCary increased hours of revenue service by providing more midday fixed-route bus service and expanding Sunday service. Since then, passenger boardings have increased by 88%.



**114%** increase in revenue hours

**28%** more boardings

GoTriangle more than doubled its fixed-route revenue hours despite pandemic impacts to its longer-distance commute routes and now serves 28% more riders than in 2016.



**22%** increase in revenue hours

GoRaleigh increased its fixed-route revenue hours by 22%, and ridership has almost fully recovered to pre-pandemic levels. It has also invested in more weekend service and continues to adapt to changing travel demands in 2024 and beyond.

## The Wake Transit Plan has guided investments that included \$52.9 million in buses and maintenance facilities, positioning the region's transit for growth and modernization.

Purchasing and updating transit vehicles and investing in bus operating and maintenance facilities are a major focus of the Wake Transit Plan. A larger, more modern fleet means the region is currently and will continue to be able to expand service. Wake County transit providers are transitioning their buses towards cleaner fueling systems and technology. Collectively, the investments ensure travel by transit will be in safe, comfortable, clean fuel vehicles.

**182** new vehicles

Since 2017, the Wake Transit Plan supported the purchase of 182 vehicles, including new buses and replacements for existing buses, as well as paratransit and support vehicles. Of the 104 new additional buses, 83 are clean fuel buses (CNG and BEB).

**\$26.1 million** in federal funding

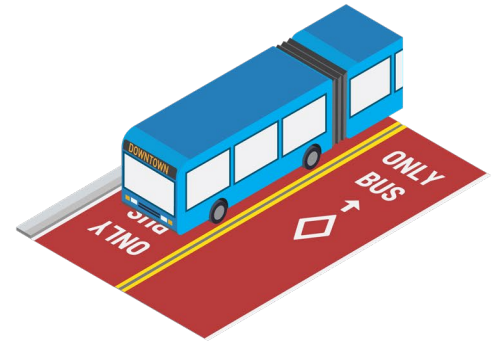
GoCary, GoRaleigh, and GoTriangle each pursued competitive federal grants, leveraging the Wake Transit Plan investment, to bring an additional \$26.1 million in federal funding to the region.

**Major investments in maintenance and operations facilities**

The Wake Transit Plan is supporting major investments in operating and maintenance facilities as well as investments in new fueling and charging stations, including new or updated bus operations and maintenance facilities for GoCary, GoTriangle and a shared GoRaleigh/GoWake Access facility.

# The Wake Transit Plan has guided investments that included **\$34.7 million to advance major transit infrastructure projects, like Bus Rapid Transit and Commuter Rail.**

The Wake Transit Plan identified major transit infrastructure projects that would transform how people travel in Wake County and the broader region. One of those projects is a 22-mile Bus Rapid Transit (BRT) network radiating from the center of downtown Raleigh and connecting major travel corridors and destinations north, south, east, and west of downtown.



Since 2016:

**\$28.7 million** bus rapid transit

\$28.7 million was spent on BRT, including planning studies and design. GoRaleigh is preparing for construction of the New Bern BRT corridor, which is scheduled for the second half of 2024.

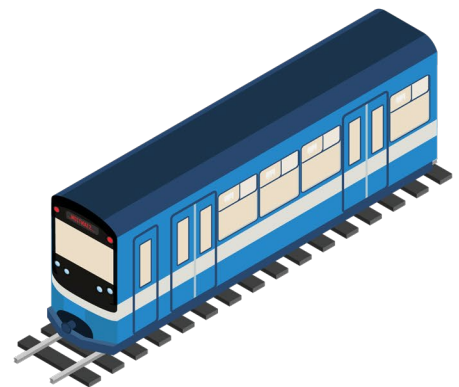
**\$133 million** in federal funding

GoRaleigh has successfully leveraged nearly \$133 million in competitive federal grant funds, including \$47.1 million for the New Bern corridor and \$85.9 million for the Southern corridor. Federal grant funds are anticipated to pay for part of the BRT development costs, achieving a goal of the Wake Transit Plan.

The Wake Transit Plan includes a commuter rail service that would connect Raleigh, Cary, Morrisville, Garner, and Durham. One of the early steps taken by the Wake Transit Plan was to evaluate the feasibility and cost effectiveness of commuter rail.

**\$5 million** Greater Triangle Commuter Rail Study

The Greater Triangle Commuter Rail study identified significant benefits to the region that would come from implementing regional rail, and significant feasibility challenges to implementing regional rail within the budget and timeline established in the current Wake and Durham Transit Plans. CAMPO and DCHC MPO are planning to undertake a follow up study to evaluate additional options for incremental expansion of passenger rail service in the region.



## The Wake Transit Plan has guided investments that included building capacity to deliver, including \$21.2 million on staff and systems to administer projects and manage the fund.

The Wake Transit Plan requires planning, designing, and building a large slate of transit projects that are brand new to Wake County. The Wake Transit Plan has been and continues to invest in the people, the processes, and expertise to make these projects happen. The capacity built will benefit the region for decades to come.

### \$15.7 million to hire and retain staff

\$15.7 million was spent on hiring and retaining staffing capacity equivalent to 49 full-time employees spread across 4 agencies to administer the Plan and deliver its projects.

These staff are in addition to the baseline staffing that each agency retains to maintain everyday operations.

### \$5 million to complete regional planning, operations, management, and finance plans

\$5 million was spent completing the necessary regional planning, operations, management, and finance plans including the Wake Bus Plan, microtransit studies, and the Community Funding Area Management Plan.



## The Wake Transit Plan has guided investments that included \$14.3 million to build better and safer bus stops, transit centers, and passenger facilities.

Passenger facilities, including bus stops, transfer centers, and stations, are essential to a seamless transit experience and are an area of investment that serves all of the Four Big Moves.



### \$4 million bus stops & accessibility

\$4 million was invested in improving bus stops and transfer points (“enhanced transit centers”) with seating, shelter, and sidewalks, to meet ADA accessibility requirements.

### \$8.8 million transit centers and hubs

\$8.8 million was spent to design, build, and improve transit centers, park & rides, and multimodal transit hubs.

### \$1.4 million passenger information technology

\$1.4 million was invested in passenger information technology, fare collection, and other technology implementations.

## RUS Bus

The Raleigh Union Station Bus Facility (RUS Bus) is a flagship project for GoTriangle and is currently under construction.

# The Wake Transit Plan has guided investments that included **\$3.1 million to study and develop new transit services in numerous Wake County suburban areas.**

The Community Funding Area (CFA) Program is a program in Wake County that provides funding to suburban towns to design local transit projects around local needs. Funding became available in 2020. Annual spending by the program increased from less than \$200,000 in 2020 to roughly \$1.5 million in 2023.

## **\$2.3 million** new transit services

\$2.3 million was invested in operating three new transit services for CFAs:

- Morrisville Smart Shuttle
- Wake Forest Circulator
- GoApex Route 1

## **\$758,000** capital projects across Wake County

Over \$758,000 has been invested in capital projects for suburban communities across Wake County through the CFA Program. This includes planning and feasibility studies for more transit and microtransit service, as well as bus stop and pedestrian infrastructure improvements.

As part of the Wake Transit Plan Update process, the CFAP Management Plan is also being reviewed and updated to meet current community needs.

GoTriangle initiated the Youth GoPass program that allows people aged 13 through 18 to ride transit for free in Wake County and across the Triangle region.

## **\$266,000** offset costs for transit agencies

Over \$266,000 was spent to offset the cost to the three transit agencies for operating the Youth GoPass program.

## **\$1 million** full program implementation

An additional \$1 million has been allocated from the fund balance for full implementation of the program.



### 3 WAKE TRANSIT PLAN OUTCOMES

An important goal of preparing the Wake Transit Plan “State of the Plan” is to understand what the Wake Transit Plan has accomplished since its adoption in 2016.

The State of the Plan started by measuring progress towards the Four Big Moves and evaluating the impact of the progress. Where available, the State of the Plan uses the goals identified in the Plan to measure and evaluate progress. As part of the evaluation process, the State of the Plan also considers how experience gained is shaping future needs and opportunities.

**Progress towards implementation is evaluated by looking at Wake Transit Plan investments:**

- Availability of Transit Service
- Bus Stops and Bus Passenger Facilities
- High-Capacity Rapid Transit Projects
- Transit Fleet and Vehicles
- Transit Supportive Policies and Programs

**The impact of this progress is measured using metrics of performance and productivity:**

- Transit Service Performance
  - Frequency or Coverage Service
  - Transit Ridership
  - Productivity of Transit Service
  - Proximity and Access to Transit
  - New Service Models (Demand Response)
- Technical Capacity and Financial Health



# Wake Transit Plan Progress: Availability of Transit Service

The Wake Transit Plan is focused on diversifying travel choices through a faster, more reliable, and more convenient network of transit service in part by increasing the amount of transit service available in Wake County. The largest proportion of Wake Transit Plan spending to date has gone to operating more bus service.



**Almost 90% of spending has gone towards bus-related projects.**

*From Chapter 2 Wake Transit Plan Revenues*

The “Availability of Transit” metric considers how much fixed-route bus service is available in Wake County and how bus service has changed since adoption of the Wake Transit Plan. One way to measure this is with the number of bus routes in operation. In 2023, the three largest public transit agencies in Wake County operated a combined 51 bus routes in Wake County, a 28% increase in the number of bus routes as compared with 2016.<sup>3</sup> However, this is a slight reduction from 2020, when there were 57 total bus routes available. This reduction in service, as mentioned, is largely attributed to the COVID-19 pandemic, specifically lower travel demand and driver shortages.

Of these 51 bus routes:

- 38 bus routes operate daily with at least some service available Monday through Sunday
- 19 routes provide all-day service, operating at least 17 hours per day.
- Three routes meet the criteria for frequent service, offering 15-minute service or better for most of the day.

Another way to measure the availability of transit service is counting the number of hours when bus service is available. Hours of bus service, measured as vehicle revenue hours (meaning the vehicle is in service and available to pick up and drop off riders) show the overall level of transit service. In 2017, the three transit operators collectively operated 334,372 hours of service over the calendar year; in 2023, between January and December, the three operators provided 394,591 hours of service, an 18% increase over 2017 (see Figure 7).

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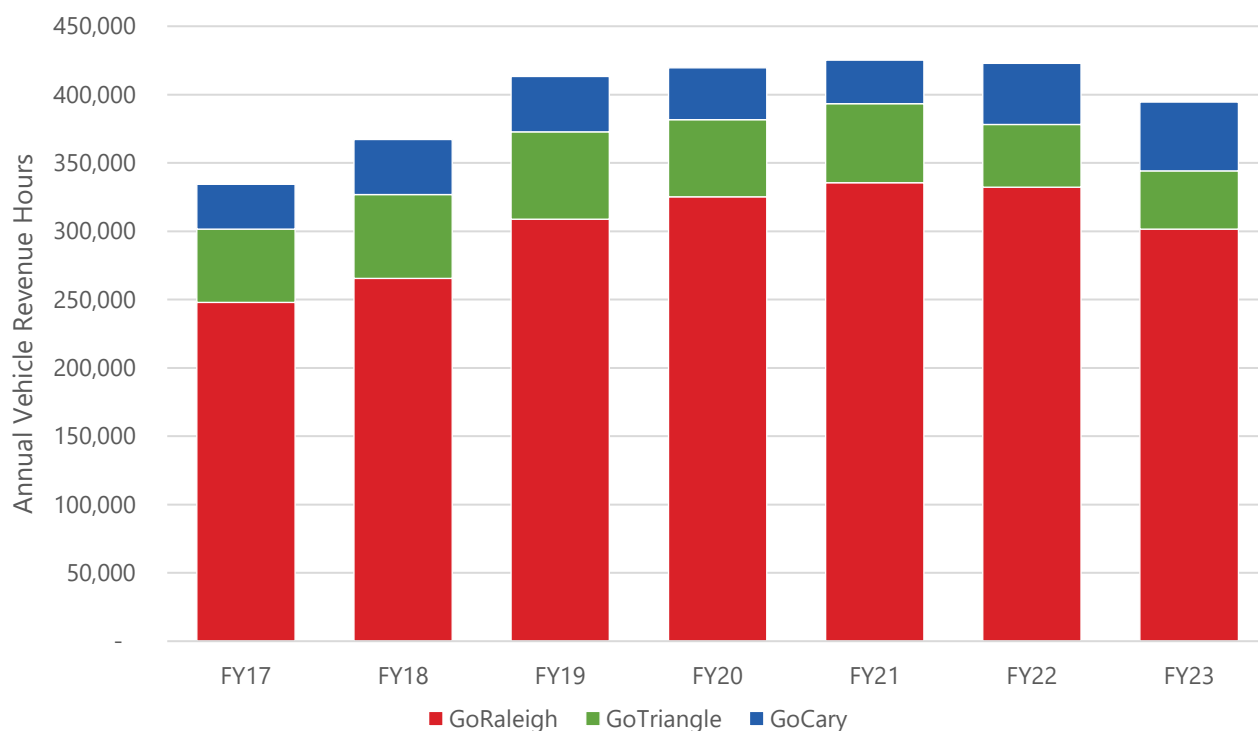
<sup>3</sup> Includes funding provided by Wake Transit Plan as well as funding contributed through City of Raleigh, Town of Cary and GoTriangle as part of the baseline contributions, or non-supplantation commitment.

### Understanding the Fixed-Route Transit Network

Transit service that is available to transit riders can look different depending on the time of day, day of the week, and/or the frequency of each bus routes. The Wake Transit Plan uses three statistics to measure how much and the quality of transit service available:

- **Full transit network** refers to bus services wholly or partially within Wake County, irrespective of frequency or service span.
- **All-day transit:** refers to bus services that operate at least 17 hours on each weekday and 14 hours on each weekend day.
- **Frequent transit:** refers to bus services that operate at 15-minute headways or better for most of the day (at least 6 AM to 6 PM) on each weekday.

**Figure 7 Fixed-Route Bus Service (Vehicle Revenue Hours) Provided by GoCary, GoRaleigh and GoTriangle in Wake County by Year, FY17–FY23**

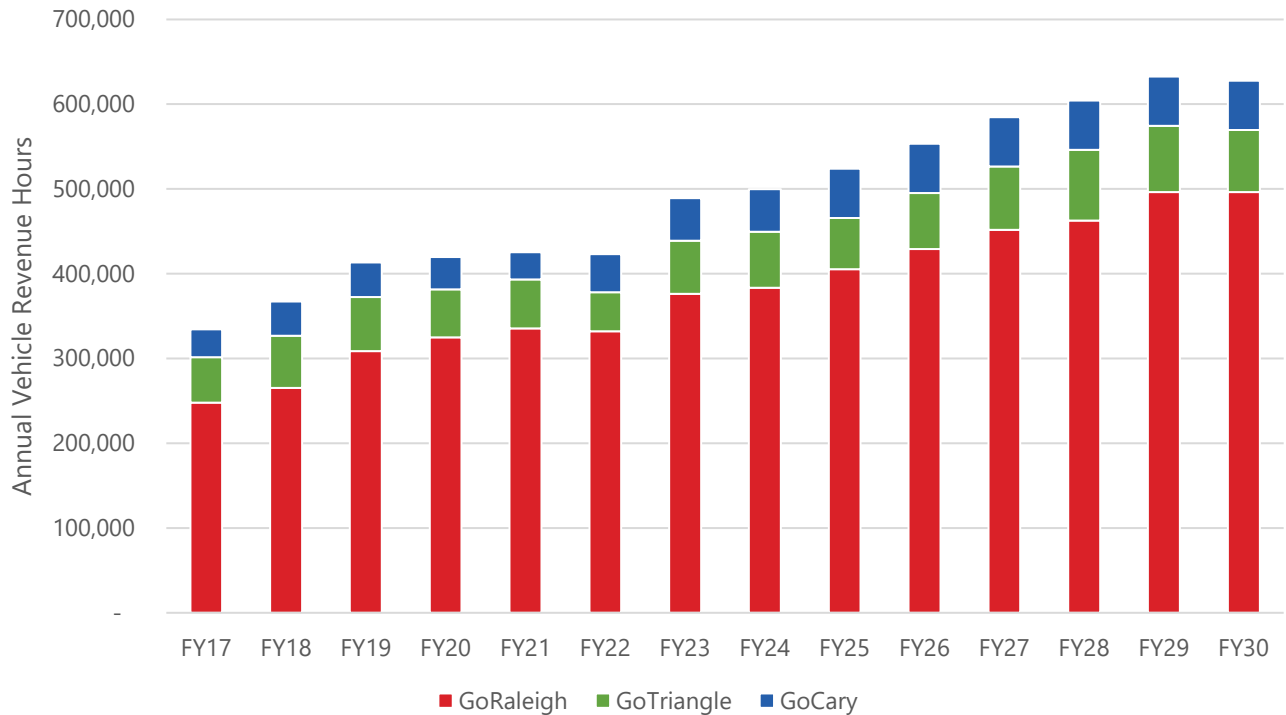


Source: Wake Bus Plan adapted by Nelson\Nygaard Consulting Associates

Consistent with previous metrics, Figure 7 shows that bus service levels in FY23 are slightly reduced from FY21. Notably, as the transit agencies are hiring new drivers, they are also expanding transit service. By the end of 2023, bus service levels were closer to 438,800 revenue hours (31% increase over base); this level of service includes restoring productive bus routes that were operating in 2020 and 2021 as well as the addition of new services.

As GoCary, GoRaleigh and GoTriangle are able to hire more drivers, they are planning significant investments in service through 2030 (see Figure 8). These investments will restore service reduced during the pandemic and advance core investments prioritized in the Wake Transit Plan, including upgrading several routes to meet the Wake Transit Plan standards for all-day and frequent service.

**Figure 8** Historic and Planned Hours of Fixed-Route Bus Service (Vehicle Revenue Hours) Operated by GoCary, GoRaleigh and GoTriangle in Wake County by Year, FY17 through FY30



Source: Wake Transit Plan adapted by Nelson\Nygaard Consulting Associates



## Needs and Opportunities

Investing in bus service is a fundamental part of the Wake Transit Plan and is one of the strategies where the Wake Transit Plan has had the most success and made the most progress. Outside of the setbacks related to the COVID-19 pandemic and the driver shortages following the pandemic, investments in transit services have been steady with roughly 26% of Wake Transit spending has been used to support and expand bus service. These investments include implementation of service on more days of the week and longer hours in the day, more frequent service, and new bus routes.

The Wake Bus Plan, which was adopted in 2023, outlines a bus service improvement strategy through 2030. The programmed projects demonstrate a strategy for ongoing bus service improvements that are aligned with market demand and advance the Wake Transit Plan’s stated goals. Implementation of the Wake Bus Plan recommendations will restore and exceed bus service levels provided in 2020. It also recommends reprogramming some bus services in areas where fixed-route service did not sufficiently meet the needs of riders and instead moving towards new service models, like on-demand or microtransit services, to better address those needs.

# Wake Transit Plan Progress: Bus Stops and Other Passenger Facilities



Passenger waiting areas are fundamental to transit systems; they are a rider’s first impression and experience of taking transit. Making bus stops, transit centers, and transfer locations safe, comfortable, and accessible are important goals for the transit agencies serving Wake County. Prior to the 2016 Wake Transit Plan, only limited resources were available for passenger facilities and as a result, transit services in Wake County sometimes expanded service without investing in passenger facilities. Recognizing the importance of passenger facilities, one of the Big Moves specifically focused on Enhanced Access to Transit, leading to Wake Transit Plan funds being set aside for bus stop and station improvements.

## Bus Stops and Transfer Points

There are 1,776 bus stops located across Wake County, each ranging from a simple signpost to transfer points with multiple shelters and real-time passenger information. Transit agencies typically add passenger amenities, like shelters and benches in locations where there are large numbers of riders, where multiple routes meet and/or according to other conditions, like a nearby school or senior center.

### Public Transit and the ADA

Accessibility of passenger facilities is an important metric and outcome to measure, as it ensures agencies are delivering equitable access to transit service for people of varying mobility needs.

On August 8, 2023, the U.S. Access Board issued its final guidance on applying the ADA to public transit facilities, known as PROWAG (public right-of-way accessibility guidance). It is anticipated that the U.S. Department of Justice and Department of Transportation will be adopting this guidance for enforcement in the near future, which would effectively make the design guidance mandatory. Even without formal directive, Wake County transit providers have been and continue to work toward ADA compliance at every stop.

Largely through the Wake Transit Plan, Wake County transit agencies have made advancements in upgrading and improving bus stops and passenger facilities. To date, 317 bus stops are equipped with transit shelters which provide shade and seating for passengers.

In Wake County, 30% of bus stops are fully ADA accessible, while the remaining are planned for future improvement; 42% of bus stops have a clear 8-foot by 5-foot concrete landing pad. Figure 9 illustrates the

number of bus stops serviced by each of the three main transit operators, and the proportion that already fully meet ADA requirements.

Notably, GoCary has improved 80% of its bus stops to be fully accessible and aims to achieve 100% compliance by the end of 2024. GoTriangle has been working with regional partners through its Bus Stop Improvement Program and as of the end of 2023, 46% of its bus stops are fully accessible. GoRaleigh has also been aggressively improving bus stops. At the end of 2023, 22% of GoRaleigh’s bus stops are ADA compliant.

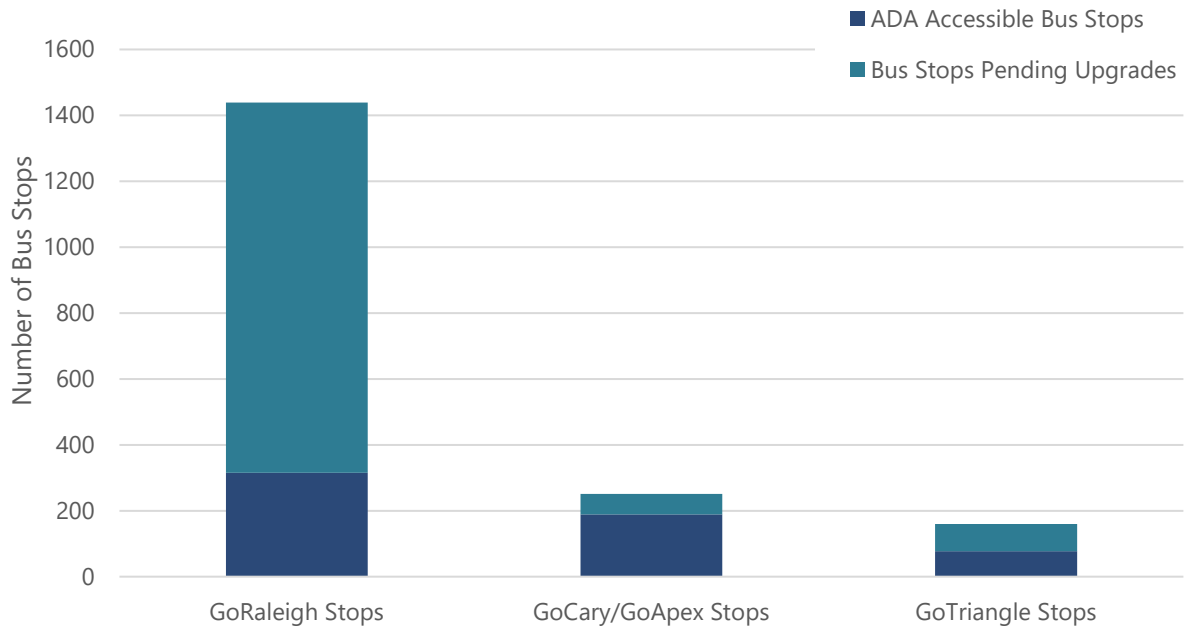
### **What makes a good bus stop?**

- Providing seating and shelters for passengers can significantly improve the waiting experience for transit, especially during adverse weather or for people with mobility needs.
- Pedestrian scale lighting can help combat perceptions of safety on quieter streets, making transit more accessible when sunlight might be limited. General street lighting designed for vehicles are often inadequate for this purpose.
- Waiting areas should be safe from crime, and agencies must work together to identify appropriate strategies to help improve safety and security at transit facilities. This could mean the presence of staff, security cameras, or other deterrents.
- The Americans with Disabilities Act (ADA) outlines accessibility requirements for transit facilities to ensure people of varying abilities can use and access public transit. For example, bus stops should have a dedicated boarding area for buses to safely deploy wheelchair ramps and be connected to pedestrian pathways. Guidelines on accessibility are also provided by the Public Right of Way (ROW) Accessibility Guidelines.



GoTriangle bus stop at McCrimmon Parkway and Airport Boulevard. This stop received a shelter, seating, and an ADA accessible landing area to the curb in 2021.

**Figure 9** **ADA Accessible Bus Stops Served by Each Major Transit Agency in Wake County (as of 2023)**



Source: GoRaleigh, GoCary and GoTriangle, adapted by Nelson\Nygaard Consulting Associates

Note: Shared stops between agencies are counted multiple times in this chart.

GoRaleigh has made substantial progress (see Figure 9) improving more bus stops. They have updated more bus stops than either GoCary or GoTriangle, but since they manage the majority of stops in Wake County, they still have a way to go. GoRaleigh is improving bus stops as packages and in 2023, GoRaleigh finished a set of bus stop improvement project sites that added sidewalks, ADA boarding pads, curb ramps, shelters, and seating to at 16 locations. The agency will begin the next package of improvements in 2024, which involves upgrading six Enhanced Transfer Points (ETPs) and up to 50 bus stops.

Enhanced Transfer Points (or ETPs) are “super stops” that include more shade, seating, real-time information systems, and a higher level of comfort for passengers. These locations are determined where multiple bus routes intersect, and it is known or anticipated that many riders wait here to transfer between services. Investments in ETPs have been exclusively made by GoRaleigh to date, but funding for additional ETPs have been programmed for GoCary (two ETPs, one at Crossroads Plaza and another at Park West Village), and eight for GoRaleigh (locations to be determined) have been earmarked.

## Transit Centers and Larger Facilities

Larger transfer centers, multimodal facilities, and transit hubs are also important parts of a transit network. For passengers, they provide shade, seating, parking, information, and transfer opportunities. For operators, they provide a better work environment to take breaks on the job. Many transit centers or park & rides serve as hubs in the network where numerous routes converge. The new and enhanced facilities will also provide much needed space and vehicle capacity for an expanding transit network.

The Wake Transit Plan identifies numerous facilities as priorities for the region. Many feasibility and planning studies have since been completed. However, like many other capital projects, construction and project delivery has been slower than anticipated considering the pandemic and related impacts.

**PROJECT SPOTLIGHT**  
Raleigh Union Station Bus Facility (RUS Bus)



**WTP Spending to Date: \$5.2 Million**  
**Anticipated Completion: Mid-2025**

GoTriangle, in partnership with the City of Raleigh, is constructing a bus transit center adjacent to Raleigh Union Station in Downtown Raleigh's Warehouse District. A joint development project of unprecedented scale in Wake County will include 8 off-street bus bays to provide seamless connections between intercity rail; local, regional, and express bus services; BRT and possible future rail service.

As a Transit-Oriented Development (TOD) project, RUS Bus will weave together a street-level bus facility with bike- and pedestrian-friendly spaces. Planned private development includes a residential tower with 385 apartments with 10% set aside for affordable housing. Planned development also includes a plaza with retail and restaurant space and a parking garage.

GoTriangle received a \$20 million federal BUILD grant to supplement Wake Transit Plan funding. Project construction began on schedule in October 2023, and is expected to be completed and open for bus service by summer 2025.

To date, 14 projects with discrete locations and three general systemwide improvement projects have received funding allocation through the annual Work Plan process (see call-out box). Eight of those projects have begun spending those funds to date. Some of the major transit center and facilities projects underway include:

- The **Raleigh Union Station Bus Facility** (RUS Bus) began planning and design in 2018 and has now entered construction with an anticipated completion date in 2025. More details are included in the above project spotlight.
- The **Downtown Cary Multimodal Center** underwent feasibility study from 2018 to 2022. Property acquisition of 21 parcels and master planning of the site is now underway. There is no anticipated completion date at this stage.
- **GoTriangle's Regional Transit Center** (RTC), also known as the Triangle Mobility Hub, has been proposed for relocation and has completed a preliminary study. Work is underway for master planning and land acquisition for the new facility location and GoTriangle is pursuing grants to support final design.
- Various **Park & Ride Facilities** across the County are being reviewed, improved, and constructed to feature better amenities and access circulation.





## Needs and Opportunities

National research shows that passengers need to be able to walk or bike safely to and from the transit network; they also need to feel safe and secure while they wait for the bus to arrive. The Wake Transit Plan has recognized the importance of these investments and has been making progress upgrading bus stops and planning new multimodal facilities. GoCary, GoRaleigh, and GoTriangle—as well as communities like Apex and Morrisville—are investing in and upgrading bus stops each year; the pace and capacity of each agency to upgrade bus stops has increased over time. GoRaleigh’s largest slate of bus stop improvements are scheduled for 2024.

The number of bus stop improvements contrasts with the region’s progress building passenger facilities. Between FY17 and FY23, the Wake Transit Plan programmed \$132 million to invest in and build passenger facilities, yet only \$14 million, about 11% of the programmed funds has been spent. This information suggests that there is an opportunity to improve project delivery for Wake Transit-funded passenger facility improvement projects.

Another potential opportunity for the Wake Transit Plan is increased coordination so facilities are planned and designed with the full group of transit operators in Wake County. Opportunities for increased coordination arise where multimodal and transfer facilities will be shared by multiple agencies and jurisdictions, as project development is assigned to one agency “sponsor”. The Wake Transit Plan could encourage a more regional approach to planning, designing, and building shared transit facilities, so there is a shared plan for the region’s bus stops and a unified approach to designing multimodal facilities. Coordinated planning and design may also alleviate performance tracking and evaluation challenges, as each agency currently reports and manages their own bus stop improvement program independently and differently from each other.

A final need for the Wake Transit Plan to consider is improving safety and security at passenger facilities and areas where riders wait for transit service. While no specific projects are currently programmed to directly address these challenges, there is opportunity for future consideration to new or enhanced strategies that other regions and agencies have explored, such as funding for ambassador programs or in transit policing.

### Funded Passenger Facilities

1. Holly Springs Park and Ride Lot
2. Raleigh Union Station Bus Facility
3. District Drive Park and Ride
4. Triangle Mobility Hub
5. Downtown Apex Mobility Hub
6. Poole Road Park and Ride
7. East Raleigh Transit Center
8. Cross Line/Rock quarry Transfer Point
9. Hillsborough/Gorman Transfer Point
10. MLK/Rock Quarry Transfer Point
11. Hillsborough/Jones Franklin Transfer Point
12. Capital Millbrook Transfer Point
13. Wake Med North Transfer Point
14. Pleasant Valley Shopping Transfer Point
15. Crabtree Valley Mall Transit Center
16. Triangle Town Center Transit Center
17. Cary Multimodal Transit Center

# Wake Transit Plan Progress: High-Capacity Rapid Transit Projects

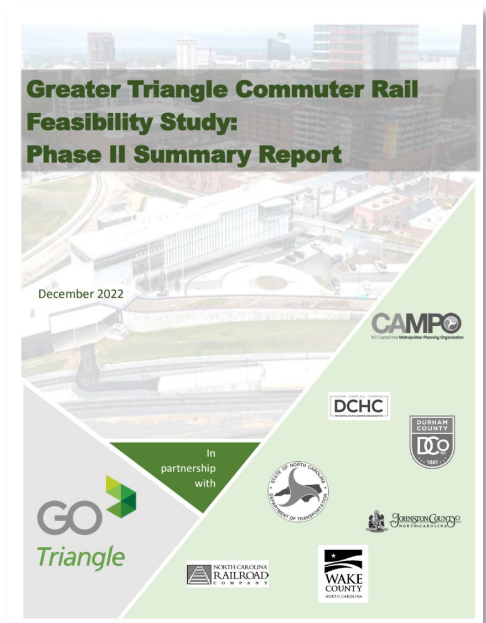


The Wake Transit Plan was envisioned as a transformative investment in public transportation that was designed around large projects that would change the way people travel locally and across the region. Two of the major investment projects included in the Wake Transit Plan were Commuter Rail and Bus Rapid Transit (BRT). These projects are reflected in two of the Four Big Moves: Connect the Region and Create Frequent Reliable Urban Mobility.

Commuter Rail and BRT are major projects that require many years to study, design, build, and implement. They are also the most expensive projects in the Wake Transit Plan. Measuring progress towards these strategies requires consideration of planning, feasibility assessment, and cost estimation as well as project development, which spans preliminary and final design.

## Commuter Rail

In the 2016 Wake Transit Plan, commuter rail was envisioned as a fast and reliable premium transit service serving commuters traveling between downtown Durham, the Research Triangle Park, Cary, Raleigh, and Garner. The commuter rail project was foundational to the Wake Transit Plan and the main strategy associated with the Connect the Region Big Move. Since that time, multiple studies have quantified the potential benefits of implementation of a regional rail project in this corridor, identified implementation challenges, and updated estimates for total cost and construction timelines. The Phase 1 Commuter Rail Study, completed in 2020, highlighted significant complexities and cost increases to the implementation of the Commuter Rail Project, while the Phase 2 Study refined those cost estimates given recent inflation and economic circumstances. While public support for commuter rail service has been strong, the proposed service would come at a significant monetary cost, with recent



estimates more than 50% higher than was assumed in the 2016 Wake Transit Plan. While the corridor takes advantage of existing rail infrastructure and right-of-way, investments in additional track, stations, trainsets, and a maintenance facility will need to be made in addition to the annual costs of operations and maintenance.

As part of the 2021 Wake Transit Plan, commuter rail cost assumptions were again reviewed with current conditions. Commuter rail was expected to cost \$1.8 billion and receive 50% in funding support from the federal government. The cost to the Wake Transit Plan was expected to be \$600 million with a completion date of 2032. Although the cost increases were concerning, the decision was made to adjust the Wake Transit Plan with the new numbers and continue the early studies on commuter rail to gather more information prior to making major decisions.

Additionally, while the 2016 Wake Transit Plan assumed the Commuter Rail would seek up to 50% of its funding through the FTA Capital Investment Grant (CIG) program, more recent feasibility analysis suggests the Wake Commuter Rail Project may face challenges qualifying for those funds. The cost and complexity analysis combined with new assumptions about federal aid means that in 2024, the expected cost of the commuter rail service from Garner to Durham would be \$3.1 billion. Additionally, the updated costs and assumptions of commuter rail means advancing the project would have significant impact of the future capacity and flexibility of the overall Wake Transit Plan.

## Bus Rapid Transit

The second major project included in the Wake Transit Plan is BRT. There are four core Wake BRT program corridors identified in the Plan. Each corridor radiates outward from downtown Raleigh.

- New Bern Corridor will run east from downtown Raleigh along New Bern Avenue to the WakeMed campus and New Hope Road.
- Southern Corridor will run south from downtown Raleigh on S Wilmington Street to Garner Station in Garner.
- Western Corridor will run west from downtown Raleigh along Western Boulevard to downtown Cary.
- Northern Corridor was originally designed to run north from downtown Raleigh along Capital Boulevard to Crabtree Creek. The corridor is undergoing additional study and analysis this year, with final design planned for 2024.

## What is BRT?

- Bus Rapid Transit (BRT) is a bus-based transit service that delivers fast, frequent, and efficient service. BRT may include any number of roadway improvements to improve speed and reliability, such as dedicated travel lanes, prioritized traffic signal timing, off-board fare payment, level boarding and other investments.
- Some agencies nationwide define BRT as a premium service with clear standards or characteristics, such as minimum frequencies or fleet type used. Other transit agencies implement a portion of the BRT improvements to create “BRT Lite”, which may for example not include dedicated travel lanes.
- The Federal Transit Administration has specific criteria for BRT and what would qualify for federal grants to support planning, design, and construction.

In total, these four corridors would provide 22 miles of BRT service. The Wake Transit Plan envisions a full BRT package of investments, with 10 miles of dedicated bus lanes (about half of each corridors’ alignment), plus traffic signal priority, BRT stations with level boarding, off-board fare payment, and unique “Go+” branding. In 2016, the estimated cost of the four BRT corridors was \$347 million; the Wake Transit Plan assumes that the corridors will attract 50% in funding support from the federal government, for a net cost to the Plan of \$174 million. It was assumed at that time that the corridors could be operational by 2026.

As part of the 2021 update of the Wake Transit Plan. Cost and schedule assumptions for the BRT corridors were assessed. At that time, there was no change in federal cost share assumptions, but the total project cost increased to \$461 million. This is a \$57 million increase to the Wake Transit Plan. The other adjustment was in timeframe. Some of the BRT corridors are taking longer to advance through the project development phases. It was then assumed that all corridors would be operational by 2032, with the first still on track to launch in 2025.

The 2021 update of the Wake Transit Plan also included studying the feasibility of extensions to the planned BRT corridors. One new potential extension would be added to the Southern Corridor to Clayton (Johnston County) and another extension to the Western Boulevard (West) to Research Triangle Park. The feasibility studies were designed to evaluate potential demand, determine the appropriate level of investment (full or partial BRT), and investigate the potential of the extensions to expand funding opportunities.

The City of Raleigh is the project sponsor for the four initial Wake BRT corridors. Project status for each corridor is as follows:

- Wake BRT: New Bern Corridor successfully attracted federal investment of \$47 million for the project, or 48.6% of estimated project costs. New Bern corridor construction is scheduled for 2024.
- Wake BRT: Southern Corridor is advancing into the final stages of design. The federal government has pledged \$85 million to support the project, which also means the corridor will reach – or nearly reach the Wake Transit Plan cost sharing target (50%).
- The City of Raleigh is also programming local funds to support the BRT projects, including modifications to water and sewer lines as well as sidewalk and trail investments. Coordination and shared responsibility of the BRT projects is helping to manage project costs and schedules.

- The City of Raleigh is continuing to study and advance the Wake BRT: Western and Northern corridors through the project development process.

In addition to the four initial BRT corridors identified and being supported by the WTP, a Rapid Bus Extension Study was conducted to evaluate the feasibility of extending both the Western and Southern Corridors. The study confirmed that rapid bus, if not full BRT, investment is viable to extend the Western Corridor from downtown Cary to Research Triangle Park and the Southern Corridor further south into Johnston County. Additional evaluation of service type and frequency and the selection of a project sponsor for the extension routes will be completed in FY24/25.

A final accomplishment and outcome associated with the rapid bus and BRT work underway in the City of Raleigh and supported by the Wake Transit Plan is development of staff expertise, knowledge and success advancing major transportation investments through the federal project development process. New Bern will be the first BRT project in the State of North Carolina, putting Wake County and the City of Raleigh at the forefront of project development in the state. This knowledge and experience will better position the region to advance the planned BRT projects (West and North corridors). Indeed, the City of Raleigh is already building on their experience to consider two new BRT projects extending from the Capital Boulevard corridor, potentially from Crabtree Creek to North Hills and from Crabtree Creek to I-540.



## Needs and Opportunities

The Wake Transit Plan's original four BRT projects are advancing and to date, have been successful at securing federal funds. A significant amount of Wake Transit Plan funding has been programmed between 2024 and 2030 to support these BRT projects and additional funding will be required to complete the BRT network. Funding is required to build bus-only travel lanes, update, and coordinate traffic signal technology, build BRT stations, and implement the updated fare payment system, ensuring the Wake Transit Plan BRT projects provide fast, reliable, premium service as promised to the taxpayers.













Cities and regions across the country have developed limited BRT bus services, sometimes called Rapid Bus, that adapt BRT models to operating needs and corridor conditions. Rapid Bus-type service could be a way for the Wake Transit Plan to offer premium bus services in ways that are easier to build, cost less and more appropriate to underlying market needs, such as corridors in north Raleigh. There are also opportunities to incorporate rapid bus service features and additional BRT lines should be considered with each Wake Transit Plan and Wake Bus Plan update. Other opportunities to strengthen BRT service is to invest in transit oriented development (TOD) strategies, as highlighted in Raleigh's [Equitable TOD Guidebook and Transit Overlay Districts](#).

Commuter rail faces more challenges, in light of challenging feasibility results, cost escalations, and the lack of federal support. Determining the future level of WTP support for commuter rail or some other rail service is currently being discussed. Continuing to pursue commuter rail will limit the ability of the Wake Transit Plan to invest in other projects and services, including BRT but also bus services more generally. Understanding and evaluating this trade-off is at the heart of the 2024 Wake Transit Plan Update.

Despite challenges associated with commuter rail, the need for regional connections is clear. As part of meeting this need, the Wake Transit Plan could adapt its focus away from specific modes or types of

transportation and towards “locally useful” transit services that link Wake, Durham, and Johnston counties. A solution could potentially leverage NCDOT’s recent \$1.09 billion grant from the federal government to improve the S-Line intercity service. The grant will design and improve track tracks and build new rail stations in Cary, Raleigh, and Wake Forest in Wake County. Other locally useful transit service connections could be ongoing investments in regional bus service, with Rapid Bus-like capital investments to improve service speed and reliability.

## Regular Bus, Rapid Bus, and BRT

What's the difference between them?		 Regular Bus	 Rapid Bus	 Bus Rapid Transit
	Typical features			
	Other common features			
	<b>Service design</b>			
	Simple route design	Varies	✓	✓
	Less frequent stops		✓	✓
	Frequent service	Varies	 <15 min	 <10 min
	Early morning to late night	Varies	✓	✓
	<b>Branding</b>			
	Special branding		✓	✓
	<b>Transit priority</b>			
	Transit signal priority		✓	✓
	Queue jump lanes		✓	
	Exclusive bus lanes			✓
	<b>Stops</b>			
	Enhanced stops		✓	✓
	Real-time passenger information		✓	✓
	Off-board fare collection		✓	✓
	Level platform boarding			✓
	<b>Vehicles</b>			
	Unique vehicles		✓	✓
	High-capacity buses		✓	✓

# Wake Transit Plan Progress: Fleet and Vehicles



The Wake Transit Plan outlines two key goals related to transit fleet and vehicles, with the understanding that clean, modern buses would:

1. Ensure a safe, comfortable ride for all riders, and
2. Improve system reliability with well-maintained vehicles.

Transit buses take up to two years to be delivered in part because they are tailored to specific agency requirements. Recognizing this schedule, Wake County transit operators started ordering vehicles shortly after the Wake Transit Plan took effect. Wake Transit funds can be used to purchase buses for new transit services, but transit operators are responsible for costs associated with replacing aging buses in their fleets.

GoRaleigh has purchased 56 vehicles, all of which were clean-fuel (CNG and BEB) vehicles. GoTriangle has purchased 27 new buses, including 7 BEB buses (two in fleet plus five on order; they also have and will continue to repower up to 10 buses per year to lower the cost of extending the useful life of their fleet. Purchasing vehicles early in the investment program ensured both transit agencies had enough buses to increase service. GoCary's vehicles are upgraded and replaced as needed through their service operations contract for which the Wake Transit Plan contributes a set amount annually.

The Wake Transit partners adopted the **Wake Transit Bus Replacement Strategy**, which permits Wake Transit funds to be used to purchase all vehicles

## What are clean, low- or no-emissions vehicles?

Transit vehicles, or transit buses, are heavy duty, high mileage vehicles that can travel between 30,000 and 40,000 miles each year. Diesel engines are more fuel efficient as compared with gas and offer benefits in terms of power. Low and no emission buses are still more expensive as compared with diesel buses and there are operational challenges associated with deploying them in the field. However, federal funding and public enthusiasm for lower emission vehicles are encouraging many transit agencies to cleaner fuel vehicles.

In 2024, there are multiple fueling systems and technologies used by transit agencies in the United States, including biodiesel (renewable, biodegradable fuel manufactured from vegetable oils and recycled greases), **compressed natural gas (CNG), battery electric buses (BEB)**, and hydrogen fuel cells. Wake County transit agencies are transitioning towards CNG and BEB fueling technologies.

The transition to clean fuel vehicles will take time. Buses have a "useful life" that is defined by the Federal Transit Administration as 12 years or 500,000 miles.

including expansion and replacement buses as well as paratransit and service vehicles. The Strategy includes a purchase schedule where a smaller number of vehicles every year are purchased or repowered each year, that supports a healthy, sustainable vehicle age system wide. It also means GoTriangle and GoRaleigh can continue to phase in and adapt to new fueling systems and technologies.

As part of this strategy:

- GoTriangle will purchase at least six transit buses every year (approximately 8% of its fleet) and dedicate resources to “repowering” or retrofitting older buses to extend their useful life.
- GoRaleigh will purchase eight transit buses every year (approximately 8% of its fleet) and will also continue replacing and modernizing its fleet of paratransit and service vehicles.
- As this new strategy takes hold, half of all vehicles on the road will be six years old or newer, ensuring passengers travel in modern and comfortable vehicles.

## Transit Vehicles

GoRaleigh and GoTriangle have successfully expanded, modernized, and transitioned towards a clean fuel, low emission fleet. In total, the Wake Transit Plan has helped purchase 137 vehicles, including transit buses, paratransit vehicles, and service vehicles. The Plan has also supported the refurbishing and repowering of an additional 30 buses.

- GoRaleigh and GoTriangle were awarded \$4.4 million (over three funding cycles) from the FTA Low or No Emission grant program to offset the cost of battery electric transit vehicles and charging stations. Federal grants together with Wake Transit Plan funding are helping to transition transit buses to cleaner and lower emission vehicles.
- Nearly 80% of GoRaleigh’s fleet operates with clean fuel technology.

## Bus Operations & Maintenance Facilities

The Wake Transit Plan is supporting major investments in operating and maintenance facilities as well as investments in new fueling and charging stations. Highlights include:

- The Town of Cary’s Regional Bus Operations and Maintenance Facility has reached 90% design, with construction targeted to begin in late summer of 2024. GoCary was awarded \$11.8 million in competitive grant funds so the new building will meet Leadership in Energy and Environmental Design (LEED) Platinum standards and accommodate electric vehicles.
- GoRaleigh and GoWake ACCESS are in the final stages of purchasing a site for their shared ADA Paratransit Operations and Maintenance Facility. Once the site is secured, final design and construction should start in late 2024. GoRaleigh was awarded a \$9.9 million federal competitive grant to help support this project.
- GoTriangle is developing plans and cost estimates for an expansion of its Nelson Road Bus Operations and Maintenance Facility.

Other bus investments related to transit vehicles include:



- A new CNG fueling station at GoRaleigh’s main Operations and Maintenance Facility on Poole Road, installed in 2019. In addition to Wake Transit Plan funding, this project secured \$3.5 million through the region’s Locally Administered Projects Program (LAPP).
- Installation of 14 electric bus charging stations with locations at Raleigh Station and at GoRaleigh’s Poole Road Operations and Maintenance Facility.
- A partnership with the City of Raleigh’s Water Department to build a renewable natural gas facility – the Bio-Energy Recovery Project – is anticipated to open in 2024 and expected to produce enough renewable natural gas to power more than 50 buses per day.
- GoTriangle is expanding its electrification efforts by installing three electric chargers at its Nelson Road Bus Operations and Maintenance Facility plus two more at the Raleigh Union Station (RUS) Bus Facility.

**Wake Transit Plan investments are making a difference for climate sustainability.**

By switching from diesel to CNG, GoRaleigh has reduced the tailpipe emissions of its service by 90%. As of 2023, by moving towards clean fuel technology, GoRaleigh has reduced its emissions by more than 27,000 metric tons of greenhouse gas emissions. Reductions at the tailpipe are in addition to environmental benefits gained from more people using transit.



## Needs and Opportunities

In part because the Wake Transit Plan agreed to fund all vehicle replacements, Wake County transit operators have been successful at expanding the size of their fleets, reducing the age of their buses, and transitioning the county’s fleet towards cleaner, lower emission vehicles. Wake County transit operators have also been successful at building infrastructure to support new clean fuel technologies with the development of a CNG fueling station and several vehicle chargers. These investments mean that Wake County transit agencies are positioned to continue to grow and expand local and regional transit capacity in line with the service expansions programmed for the next several years.

A handful of opportunities and needs related to vehicles and the overall fleet remain:

- Completing the planned and funded bus maintenance and operating facilities. In 2024, there are three facility projects, one each for GoCary, GoRaleigh/GoWake Access and GoTriangle. These projects are advancing towards construction, with some opening as soon as 2025.
- Replacing ADA paratransit and support vehicles according to a schedule that ensures the fleet is modern and within their federally designated useful life parameters.
- Exploring clean fuel technologies for smaller vehicles, including ADA paratransit and support vehicles.
- Working towards regional or Wake County vehicle standards could help create a shared or inter-operable fleet. Potential benefits include shared charging systems and bus operating and maintenance facilities, potentially allowing some facilities to develop areas of expertise. These steps would also generally advance regional integration of transit services.

# Wake Transit Plan Progress: Transit Supportive Policies and Programs

The Wake Transit Plan is investing in lots of transit service and capital projects, as described in the previous sections. Another important part of the Plan is to identify and implement programs, services, and technologies that will support transit service development, encourage transit ridership, and diversify Wake County’s transportation infrastructure. One of the signature transit supportive programs included in the Wake Transit Plan is the Community Funding Area Program.

The Wake Transit Plan also funded the Youth GoPass that allows youths aged 13 to 18 to ride the bus fare free and funded a study that laid out a strategy to integrate fares for riders using more than one local transit system. Both programs were paused in 2020 when fares were suspended by each of the county transit operators during the COVID-19 pandemic.

The Wake Transit Plan also funded and completed a Regional Transit Technology Plan that mapped out and planned a constellation of technologies and systems, including Automatic Fare Collection, Computer Aided Dispatch and Automatic Vehicle Location systems, Real Time Bus Information Systems, Automatic Voice Annunciation, Passenger Information Displays, Collision Avoidance and Traffic Signal Priority. These systems are designed to create a more integrated, efficient, and modern regional transit network.

## Community Funding Area (CFA) Program

The CFA Program is an essential part of the Wake Transit Plan addressing the Connect All Communities Big Move by ensuring all communities in Wake County have the opportunity to benefit from the transit investment program. The CFA Program is unique because it is designed to encourage community-oriented solutions and support local transit investment by providing funding. CFAP funds are available to 10 towns plus the Research Triangle Park. Participants can use grant funds to conduct planning studies, operate transit service, and invest in transit-related capital projects.

The Community Funding Area Program is the top funding priority of the Wake Transit Plan. Funding for the CFA Program became available in 2020. Participation in the program has been robust: 15 grants have been awarded to date, including six for planning projects and technical assistance, six for capital projects, and three for operating new services. These projects have resulted in new transit investments that are on the ground today, such as:

- **GoApex Route 1**, a new bus route that operates fare free within the Town of Apex. The local shuttle service connects important destinations in Apex including downtown, the senior center, WakeMed Apex, Walmart, as well as other community destinations. In addition to the fixed-route shuttle, the Town also provides the GoApex Door to Door complementary paratransit service.

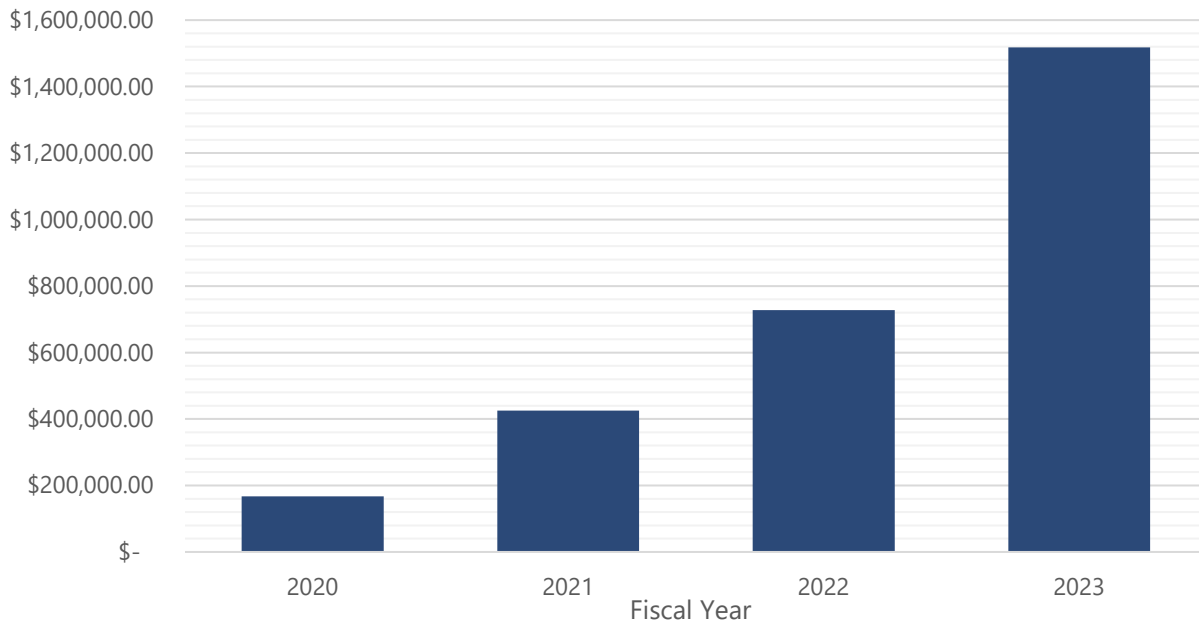
### Eligible CFA Participants

1. Apex
2. Fuquay-Varina
3. Garner
4. Holly Springs
5. Knightdale
6. Morrisville
7. Rolesville
8. Wake Forest
9. Wendell
10. Zebulon
11. Research Triangle Park

- **Morrisville Smart Shuttle**, an on-demand, shared-ride shuttle service that represents one of the county’s first microtransit-style services. In 2022, the service carried more than 11,000 riders.
- **Wake Forest Circulator**, a local circulator service helping people travel within the town and connect to other transit services. The Wake Forest Circulator service was expanded in FY20 to operate for longer hours using CFAP funds.

Despite the number of participants, grant awards and new transit projects, CFAP total investments represent a small portion of the Wake Transit Plan total expenditures. Through FY23, the CFA Program has provided roughly \$2.8 million in local grants and funding.

**Figure 10 CFA Program Grant Funding Awarded per Fiscal Year**



Source: Wake Transit Plan, adapted by Nelson\Nygaard Consulting Associates

As part of the 2024 Wake Transit Plan Update, a review of the CFA Program Management Plan is underway to assess long-term program health, growth plans and needs of eligible communities, and other programmatic policies and processes. The amount of funding available through the CFA Program is expected to grow over the next decade, continuing a trend of increased investment in local transit solutions as shown in Figure 10.

## CFAP PROJECT SPOTLIGHT

### Morrisville Smart Shuttle



**WTP Spending to Date:** \$666,700

**Ridership (2022):** 11,122 riders

Launched in October 2021, the Morrisville Smart Shuttle is one of many demand-responsive microtransit programs debuting across North Carolina and is the flagship microtransit pilot designed and delivered through the Wake Transit Plan and CFA Program, in partnership with the Town of Morrisville. The Smart Shuttle has worked well for trips within the community at all times of the day, for people making short journeys to grocery stores and shopping malls, students traveling to school at Wake Tech, and residents going to local temples.

The Town of Morrisville is making improvements to bus stops and pickup/drop-off “nodes” for the Smart Shuttle, such as adding shelters and bike racks. Now approaching its third year in operation, this operating model will serve as an example case for other communities considering a node-based, mobile technology enabled, demand responsive circulator service.

## Fare Programs and Integration

While the Wake Transit Plan is focused on expanding and advancing the region’s transit network, it is also focused on creating an integrated network that is accessible and equitable. A handful of programs designed to help achieve these goals were regional fare integration and the Youth GoPass program. An integrated and regional fare structure is a priority to develop a consistent and equitable fare structure across different transit providers and to simplify the transfer process for riders using more than one transit service. The Youth GoPass allows young people between the ages of 13 to 18 to ride buses for free, encouraging transit ridership and increasing access and opportunity for the youth population. Both programs were successful.

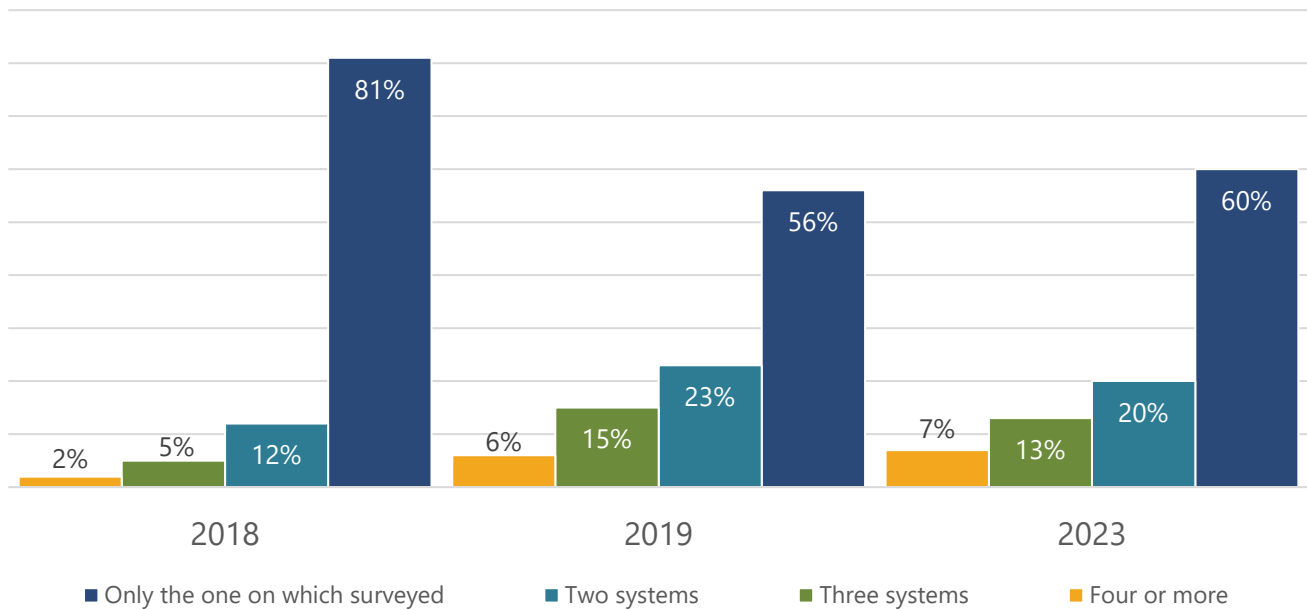
The Wake Transit Plan funded a fare integration study, and partners approved an updated structure to align fares among transit operators in Wake County. This includes tickets and passes that can be used across all transit providers. The Wake Transit partners continue working to establish integrated fare collection processes and technologies to support implementation of the adopted fare structure. In addition, the Wake County transit agencies (GoCary, GoRaleigh and GoTriangle) plus GoDurham in Durham County jointly agreed to the terms of the Youth GoPass program. It was implemented in 2018 and by FY20, more than 2,100 passes had been distributed to youths in Wake County. Fare collection systems were also included in the Regional Transit Technology Integration Plan so that technology and systems could support policy initiatives led by the Wake Transit Plan.

The success of these programs was stalled when transit fares were suspended in March 2020 at the beginning of the COVID-19 pandemic, putting a pause on both the regional fare integration efforts and the Youth GoPass programs. GoCary and GoRaleigh have committed to suspending fares at least through June

30, 2024; however, fares may be reinstated as soon as July 1, 2024. GoTriangle will reinstate fares beginning July 1, 2024, along with Youth GoPass, mobile ticketing, and fare capping.

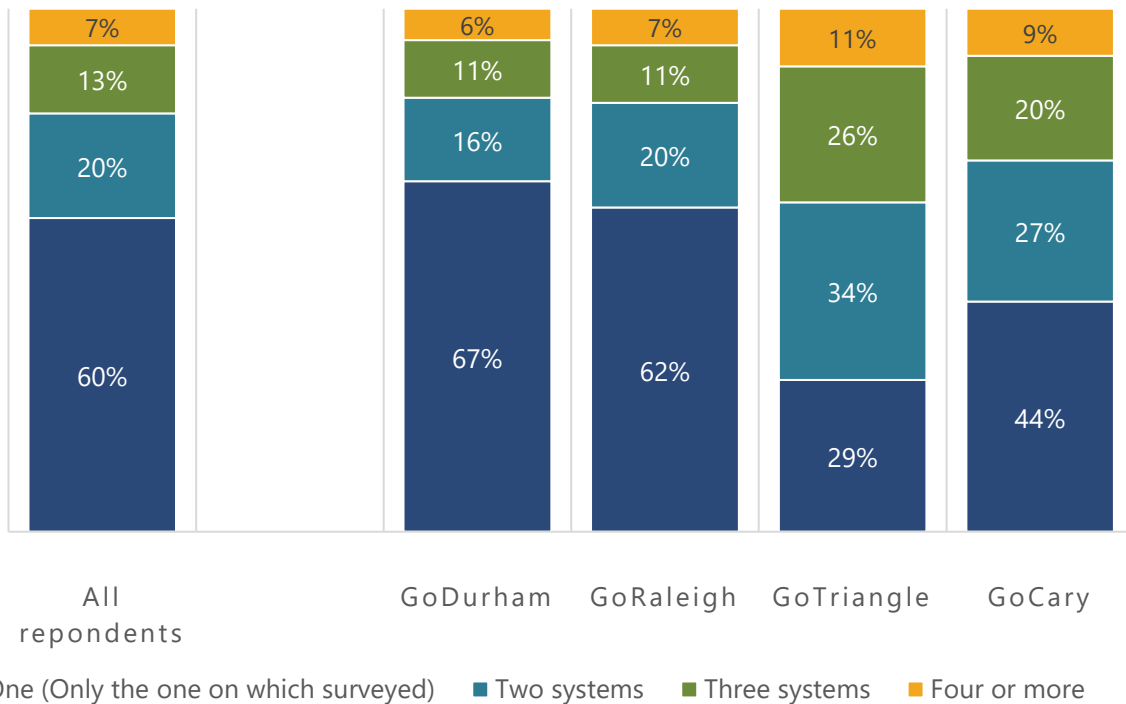
Throughout this time, more people have been using the county's myriad transit systems as part of a larger network: Survey data collected from transit operators in 2023 shows that more riders are using multiple systems to make their trips (see Figure 11). In 2018, most riders (81%) relied on a single system to make trip; this number decreased to 60% in 2023, as 40% of people riding transit reported using two or more transit systems. The same survey shows that riders surveyed on GoTriangle and GoCary's routes were more likely to use multiple transit services to complete a trip (see Figure 12).

**Figure 11 Percentage of Transit Riders Using One or More Transit Systems (2018, 2019, and 2023)**



Source: On-Board Survey of Transit Customers in the Triangle Region

**Figure 12 Use of Multiple Transit Systems Overall and by Operator in 2023**



\*Six systems include the four systems surveyed and shown above plus Chapel Hill Transit, and North Carolina Wolfline.

Source: On-Board Survey of Transit Customers in the Triangle Region



## Needs and Opportunities

Like other parts of the Wake Transit Plan, the Plan has achieved considerable success with transit supportive policies and programs, even as needs and opportunities persist.

Interest in the CFA program suggests an opportunity that funding levels could be increased to support more and larger transit investments in the eligible communities. An evaluation of the CFA Program Management Plan currently being conducted has also identified other potential changes such as expanding eligibility of the program to include GoWake ACCESS, which serves unincorporated parts of Wake County, extending the benefits of the Wake Transit program to more community members located in more rural areas of the county.

Another CFA Program component that is being evaluated is the current 50% match limit for operating projects. CFAP communities cite the 50% matching fund requirement as an obstacle to expanding transit services in their communities. Initial review shows that the City of Raleigh contributes local tax revenue to cover approximately 45% of GoRaleigh's annual operating budget, while the Town of Cary contributes approximately 30% to the GoCary operating budget (inclusive of fixed route and demand response services).<sup>4</sup> The proportion of local funds as a proportion of overall transit spending will decrease as the

<sup>4</sup> Local spending as a proportion of total annual operating budgets were estimated based on baseline contributions by agency (roughly \$3.15 million for GoCary and \$21.43m for GoRaleigh). Annual operating budgets are from 2022 Wake Bus Plan.

systems grow. In 2023, however, local funding contributions made by large communities are consistently slightly less than the 50% matching requirement in the CFA Program.

An important outcome of the match requirement discussion will be to both determine an equitable level of local contributions to transit investments and/or to identify a process by which projects graduate from using CFAP funding to access general Wake Transit Plan funding which may result in a higher level of financial support for services and capital investments like vehicles.

Another important opportunity is to develop the CFA Program in a way that creates locally appropriate transit solutions and integrates these services with the overall Wake Transit program.

Fare integration and fare equity are also program-level opportunities that will continue to develop. GoTriangle, for example, will return to fares on July 1, 2024, with mobile ticketing, fare capping and GoPass programs for youth and low-income riders. As other transit operators reinstate fares, the Wake Transit Plan will need to reconsider the regional fare structure adopted in 2019 to determine if it is still appropriate and, at the same time, determine the appropriate fare payment systems to support the regional transit network. New fare payment technologies may also help eliminate barriers to other fare equity programs, like the Youth GoPass but also best practices emerging nationally that include fare capping or income adjusted fares.

# Wake Transit Plan Impact: Transit Service Performance

The impact of the Wake Transit Plan’s investment on regional transit service is measured by tracking progress towards reaching specific goals outlined in the Wake Transit Plan. Impact is also evaluated using measures related to transit ridership and productivity as well as innovation.



**Frequency versus Coverage** aims to create a balanced transit network that invests in ridership-based bus routes and provides geographic coverage to low-density parts of Wake County that need service.



**Proximity and Access to Transit** are measures of transit availability, but instead of measuring hours of service, it measures the number of people and jobs in Wake County that are near transit service. This metric is tracked across the availability of different bus services such as the all-day and frequent transit networks.



**Transit Ridership** counts the number of people using transit. It is a simple measure that can be tracked over time and by transit agency. Transit ridership can also be evaluated with the availability of service to measure riders per service hour, a metric that captures the productivity or cost effectiveness of a specific transit service.



**Innovation and New Service Models** considers the extent to which the Wake Transit Plan has responded to changes in travel patterns and underlying market conditions by adapting the type of service provided and/or introducing new ways of delivering transit service.



## Frequency Versus Coverage Service

The Wake Transit Plan prioritizes the development of higher frequency services but does not eliminate funding for routes that provide transit services to underserved portions of the county. The investment goal is to allocate 70% of Wake Transit funds toward high ridership, frequent service projects, while continuing to invest 30% of available funds to connect communities throughout the county to the transit network.

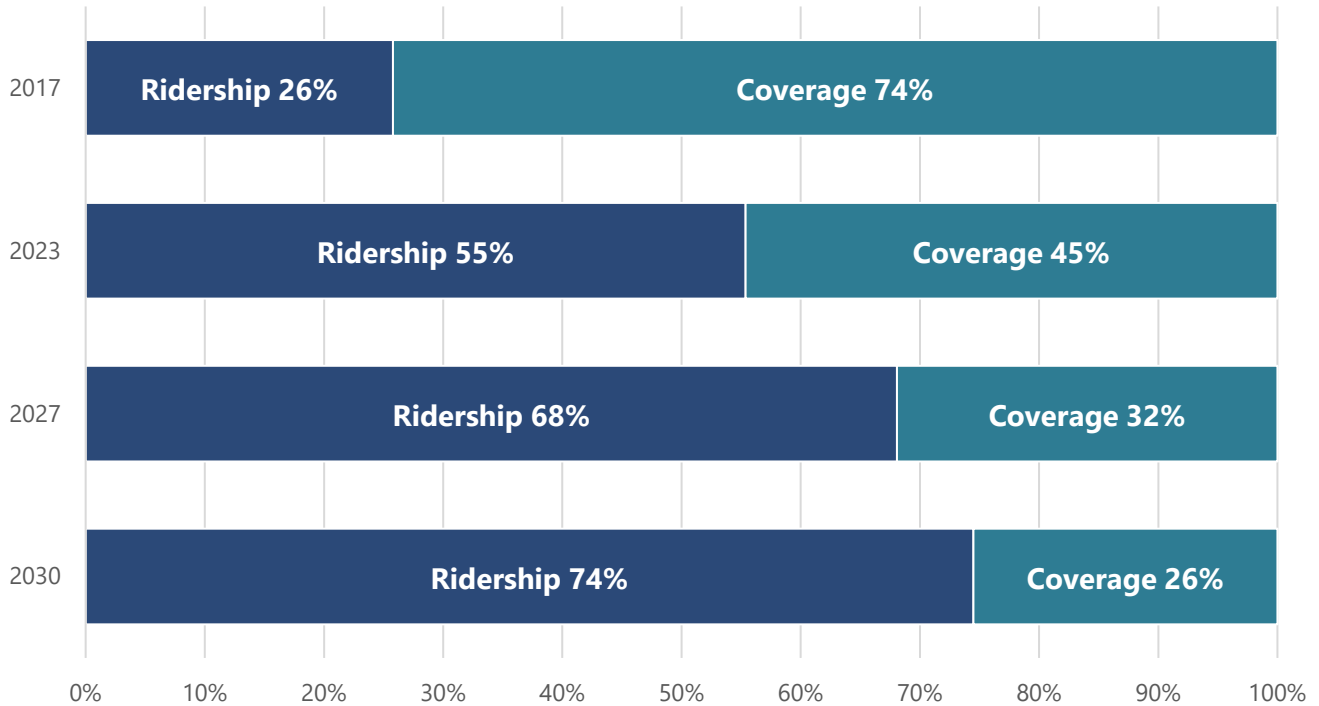
Investments to date have been working steadily towards this goal (see Figure 13) by simplifying and straightening out routes and increasing service frequency. Future investments, programmed as part of the Wake Bus Plan, will continue to advance this goal. By FY27, the balance of the transit network is expected to be 68% ridership and 32% coverage. It will further shift in FY30 to 74% ridership and 26% coverage.

As the Wake Transit Plan invests in transit service and strengthens the bus network overall, service levels are increasing, and more bus routes are meeting the frequency standard for ridership-oriented routes. This does not necessarily mean that the coverage-oriented goals of the network—providing access to more parts of Wake County—are being compromised. Instead, by increasing the number of bus routes that operate every 30 minutes or better, the bus network is strengthening in places where ridership is strong, including areas outside of the urban core, like Garner, Cary, and North Raleigh, as well as in suburban towns and communities.

**Ridership (or “frequency”) routes** include commuter rail, key regional express bus routes, BRT services, frequent bus routes and portions of the local bus network in Raleigh and Cary. Ridership routes serve areas with higher population or employment density and are designed to travel more directly, stay on main roads, and operate more frequently and for longer hours of the day.

**Coverage routes** are generally lower frequency routes that extend across the County, serving lower-density places. These services include links to suburban towns and low-density areas, paratransit services, and more community-centric local services. It is understood that coverage services will not have high ridership as that is not their purpose. Instead, their purpose is to provide more transportation options and connectivity, even in areas of low demand.

**Figure 13 2017 – 2039 Wake Transit Plan Network Investments in Ridership and Coverage Service**



Source: Nelson\Nygaard Consulting Associates

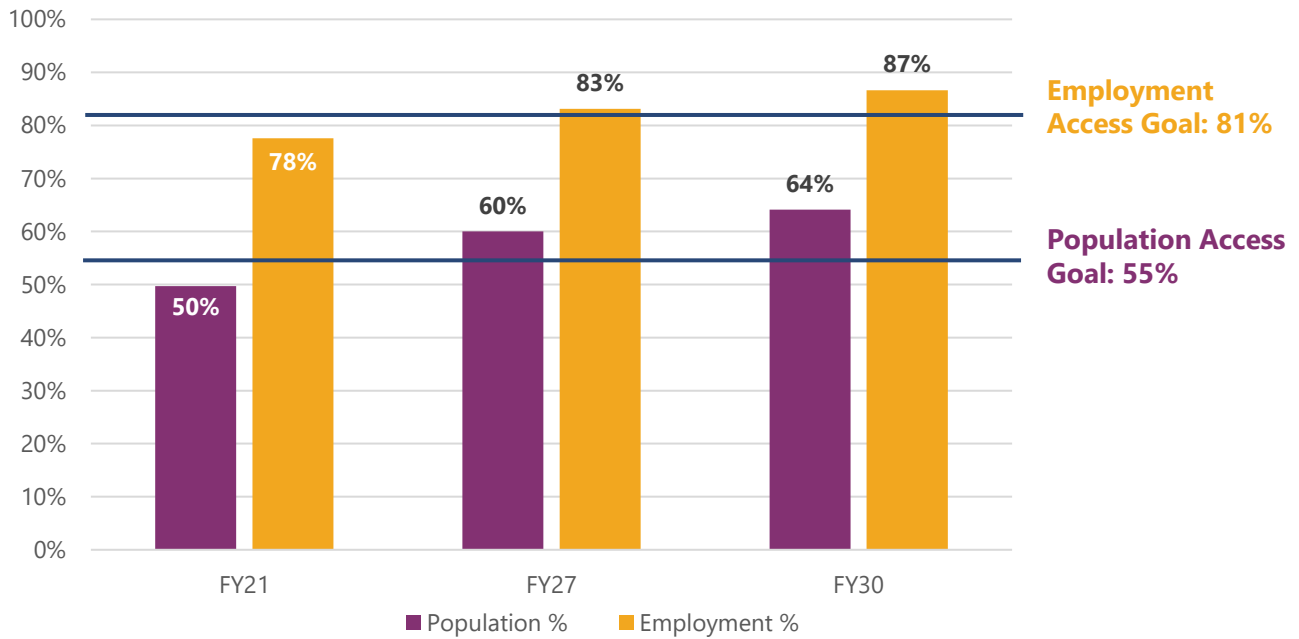
Assumes combined funding sources (contributions from individual transit agencies and Wake Transit Plan)

## Proximity and Access to Transit

One of the clearly stated goals of the Wake Transit Plan is to increase the percentage of Wake County residents and jobs located within three-quarters of a mile of bus service. Progress toward the goal is measured by calculating access to transit in terms of both the frequent bus network and transit services available during peak periods.

The goal set in the Plan is that 55% of Wake County residents and 81% of jobs in Wake County would be within  $\frac{3}{4}$  of a mile of all-day transit service. As of 2023, this standard has not been met. However, planned investments in the next few years suggest it will be met in FY27 (Figure 14). The goal for access to frequent transit was set at 43% for jobs and 23% for population; both goals are on track to be met—or nearly met—by FY30. (see Figure 15).

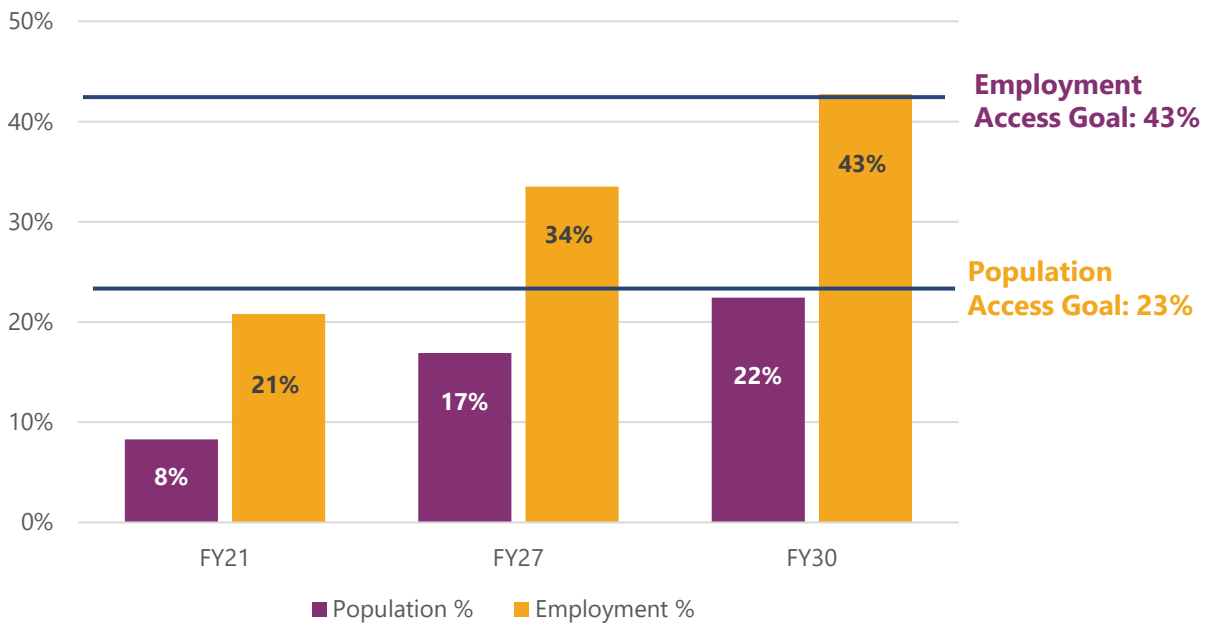
**Figure 14 Residents and Jobs Within ¼ Miles of All-Day Transit**



Source: Wake Bus Plan

Assumes combined funding sources (contributions from individual transit agencies and Wake Transit Plan)

**Figure 15 Residents and Jobs Within ¼ Miles of Frequent Transit**



Source: Wake Bus Plan

Assumes combined funding sources (contributions from individual transit agencies and Wake Transit Plan)

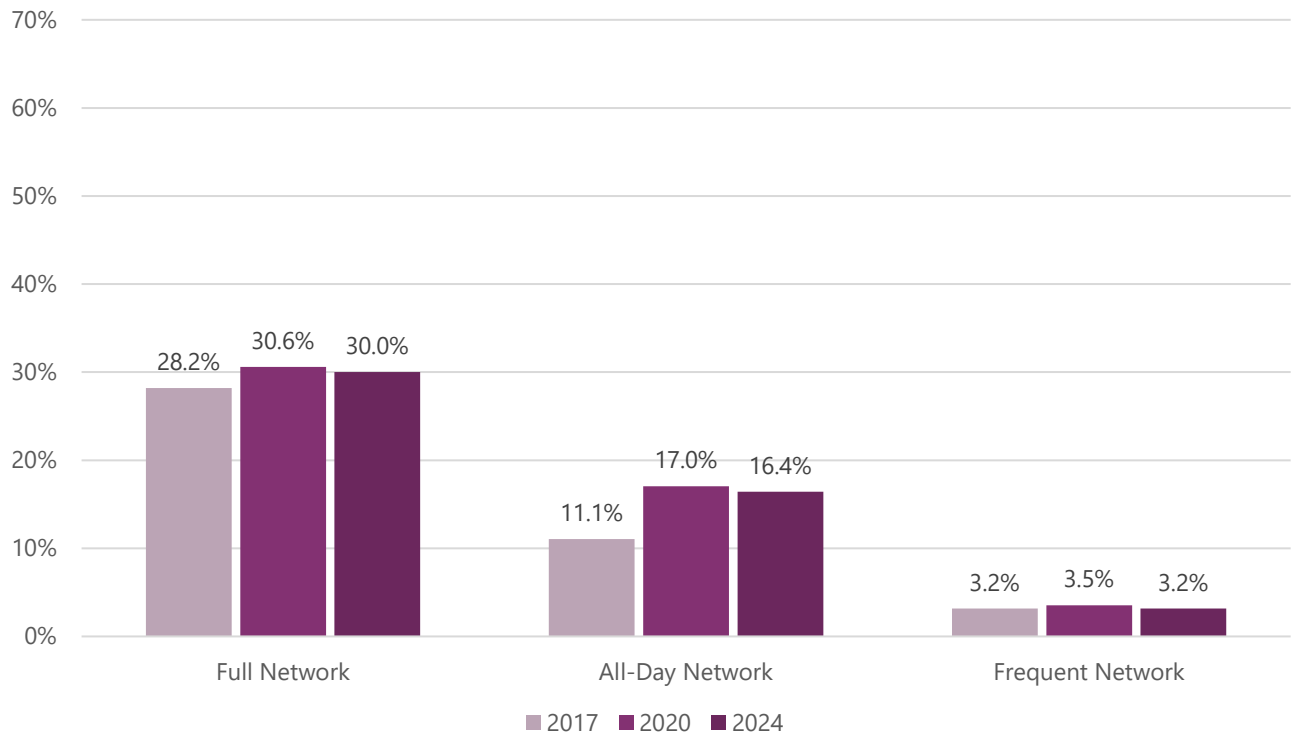
## Access to Transit

The existing measure of proximity to transit is a general tool that lacks consideration of the “true” accessibility of bus routes, by, for example, considering the availability of sidewalks or crosswalks that would allow a person to comfortably walk to a bus stop. Sidewalks, crosswalks, and space for people to get safely and comfortably to transit services are a critical part of a robust and successful transit network. Prior to the availability of resources through the Wake Transit Plan, municipalities had limited access to funding that could be used for sidewalks and crosswalks. As Wake County’s transit network matures and develops, the Wake Transit Plan may consider updating the Transit Plan’s access goal by adopting a more stringent and realistic measure of transit accessibility that is both more realistic and aligned with nationwide best practices.

	Current “Proximity to Transit” Measure	Proposed “Access to Transit” Measure
<b>Distance</b>	¾ mile (15–20 minutes walking)	½ mile (10–15 minutes walking)
<b>Distance From...</b>	Transit route or corridor line	Specific bus stops in the transit network
<b>Buffer Method</b>	“As the crow flies” distance from the corridor	Following streets with sidewalks

While more stringent, the updated approach of measuring accessibility is more aligned with how riders access transit services and better reflects rider experience. Setting a higher standard demonstrates continued commitment to improving transit access as an area of Wake Transit investment. It also allows us to value pedestrian infrastructure improvements such as sidewalks and crosswalks as part of a holistic transit experience, and measure progress accordingly.

**Figure 16 Population Access to Transit within ½ Mile, by Network Type and by Year**



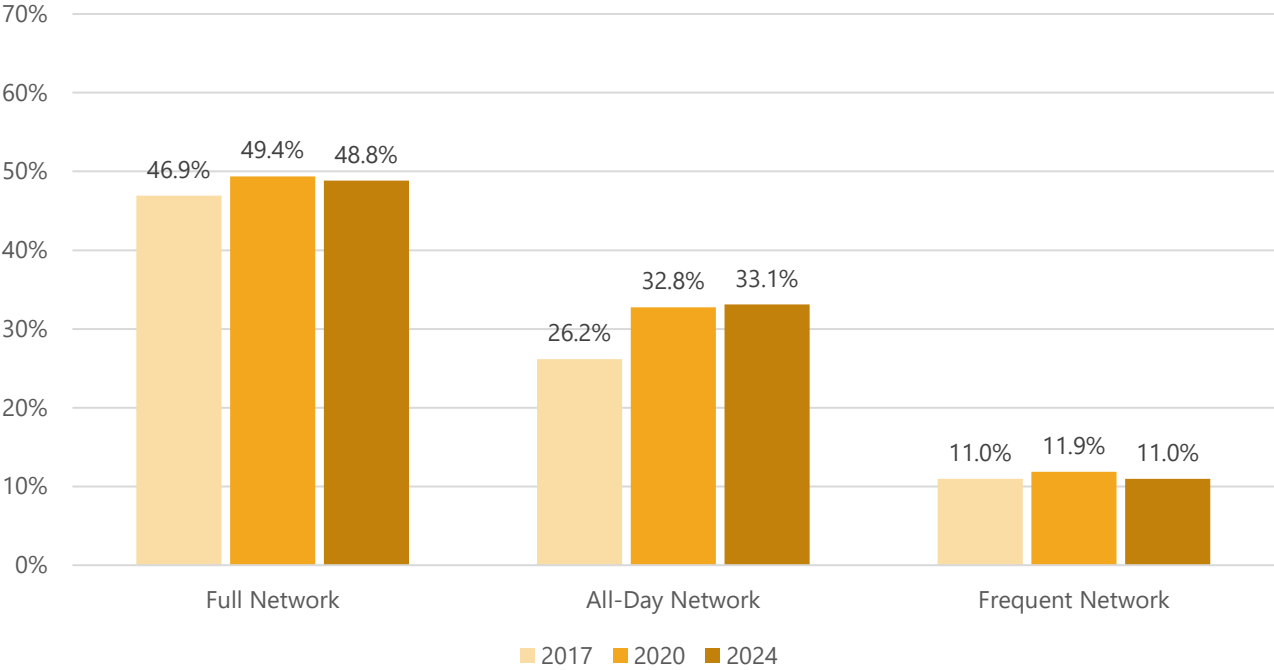
Source: Nelson\Nygaard

By this new metric, Figure 16 shows that substantial progress was made in the first four years of Wake Transit Plan implementation. Many bus routes saw service span expansions particularly during evenings and on weekends, which enabled more people to be within a 10- to 15-minute walking distance from transit. Some routes were discontinued during the pandemic, which has led to a slight decline in transit access and coverage since their peak in 2019–2020, but partners are rebounding and where travel patterns have changed, new services are being developed for implementation.

Access to frequent transit and all-day service remains limited and out of direct reach for many residents of Wake County. As the transit system expands and new routes are added, the region is expected to resume steady progress towards improving transit access. Recognizing the importance of this step, the Wake Transit Plan inventoried specific locations where additional investments are needed and prioritized the investments based on criteria such as safety and equity.

Jobs and employment access is proving stronger, which reflects the concentration of employment uses around core corridors and urban centers where transit is and is planned to be present. However, Figure 17 shows a consistent disparity between access to the full transit network and to all-day or frequent transit.

**Figure 17 Employment Access to Transit Within ½ Mile, by Network Type and by Year**



Source: Nelson\Nygaard

Changes in access to transit are shown spatially in Figure 18 and Figure 19; these two maps display the areas within a half-mile of a bus stop that also has sidewalks. While the maps show changes in access to transit over time, they also show how bus routes interact with local infrastructure.

Figure 18 shows changes in access to transit between 2017 and 2020, resulting from bus service extensions in Wake Forest, express service to Rolesville (Route 401), new service between New Hope and Knightdale (GoRaleigh Route 33), service expansion for GoRaleigh Route 20 connecting Raleigh and Garner, new service

on the Weston Parkway (GoCary Route 7), and GoRaleigh Route 18 and 18L serving Poole Road and Barwell area, as well as Route 311 connecting Apex and the Regional Transit Center. The maps also show where and how bus services are integrated with pedestrian infrastructure.

The maps also show how access to transit in Wake County changed between 2020 and 2024 (Figure 19). Changes and loss in access overall resulted in part because GoCary redesigned some of its routes to be straighter and more direct. The loss of access also reflects the suspension of two routes: Route 311 Apex RTC and Route 401 Rolesville. The Wake Bus Plan anticipates that Route 311 will return to service in FY27, which will increase access to transit in North Raleigh. Route 401, which has not attracted riders in the past few years, may evolve into a new type of service, using local connecting or on-demand service models. In both cases, access to transit will increase. More important than changes in individual bus routes, however, is the opportunity to measure and track progress towards developing a transit network that is supported with comfortable and safe pedestrian and bicycle infrastructure.

The 2035 Wake Transit Plan Update will include this updated Access to Transit metric to compare the impact of future investments on transit accessibility.

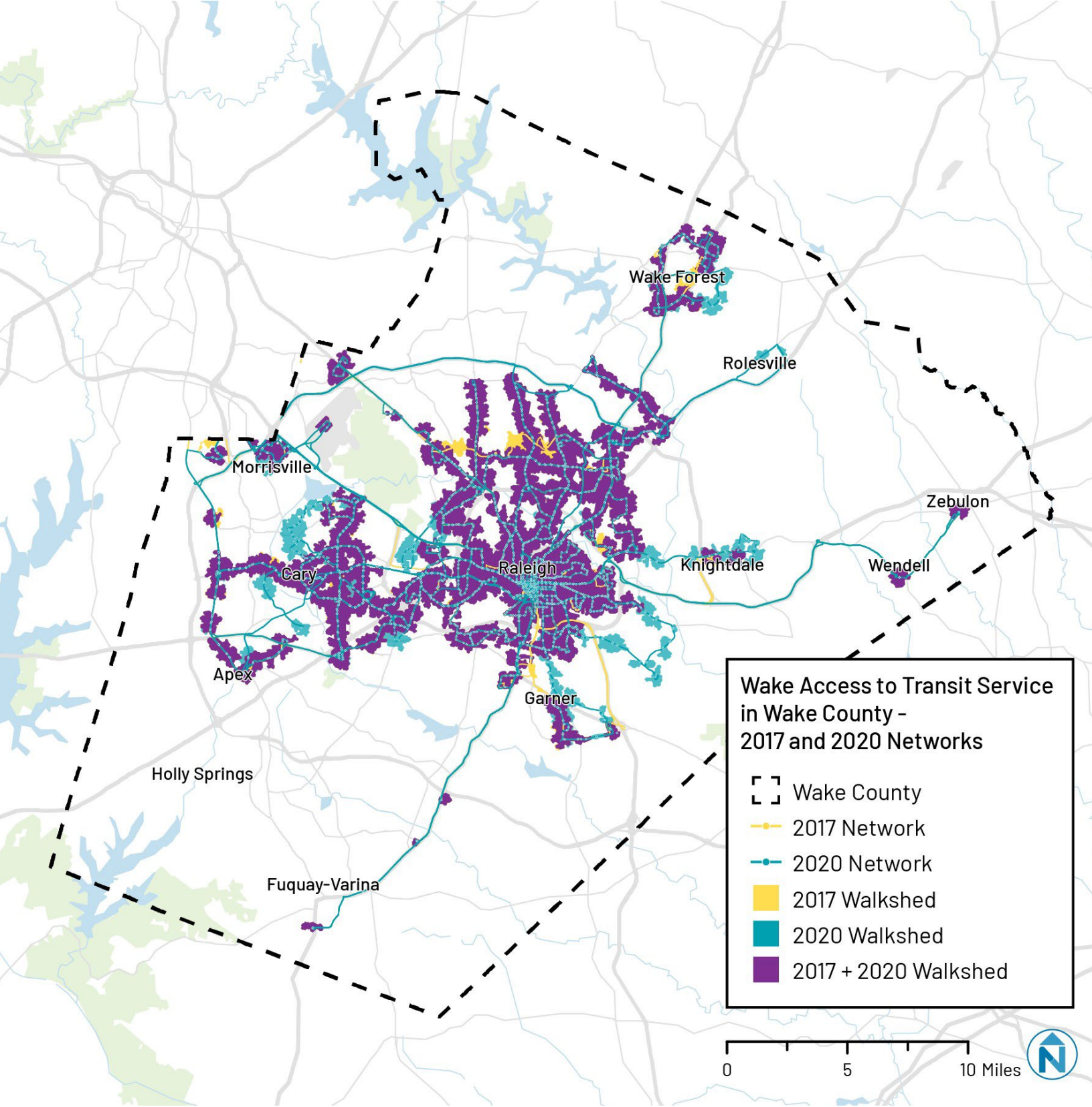


Figure 18 Change in Access to Transit Within ½ Mile Walksheds, FY17–FY20

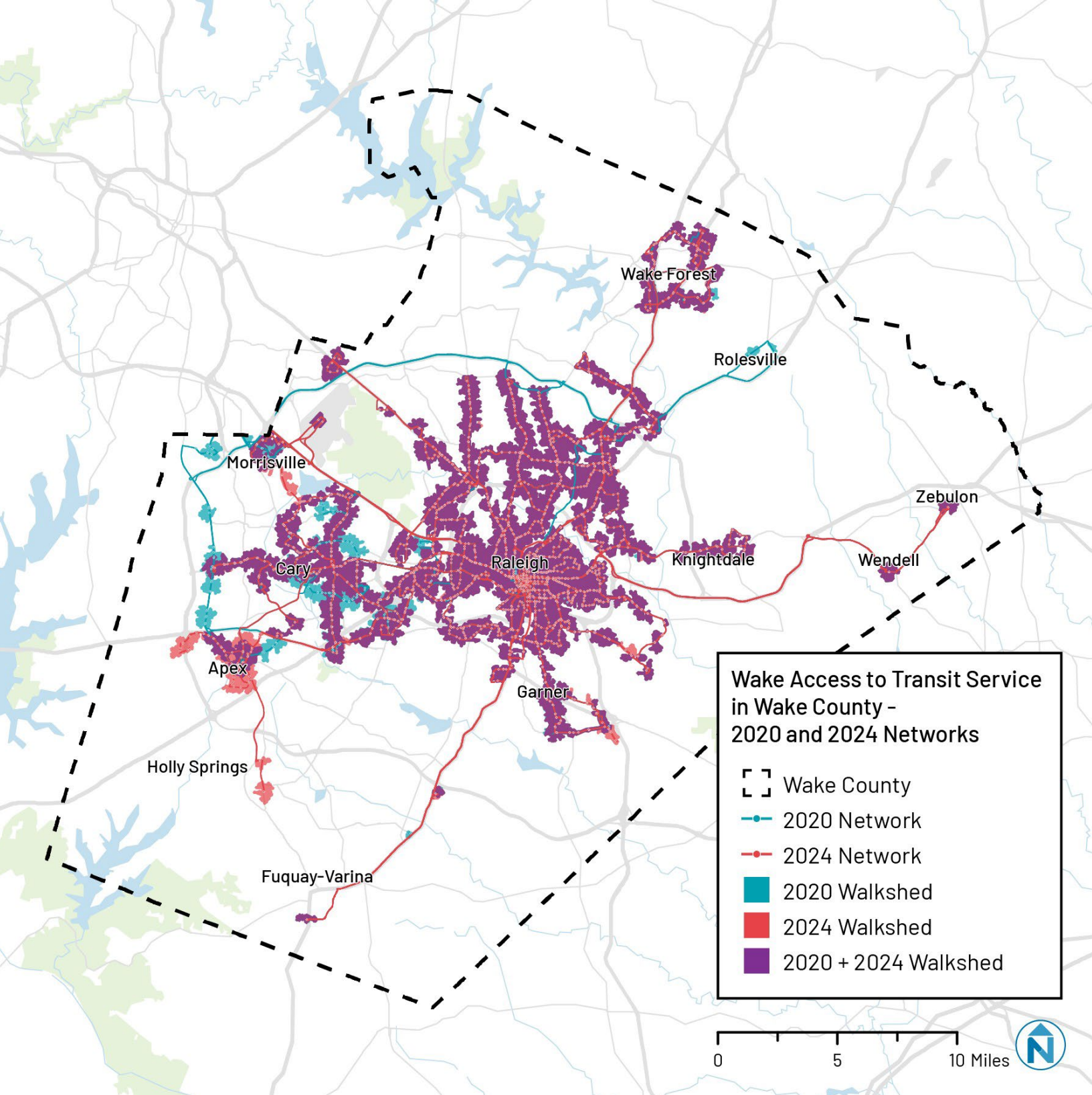


Figure 19 Change in Access to Transit Within 1/2 Mile Walksheds, FY20- FY24



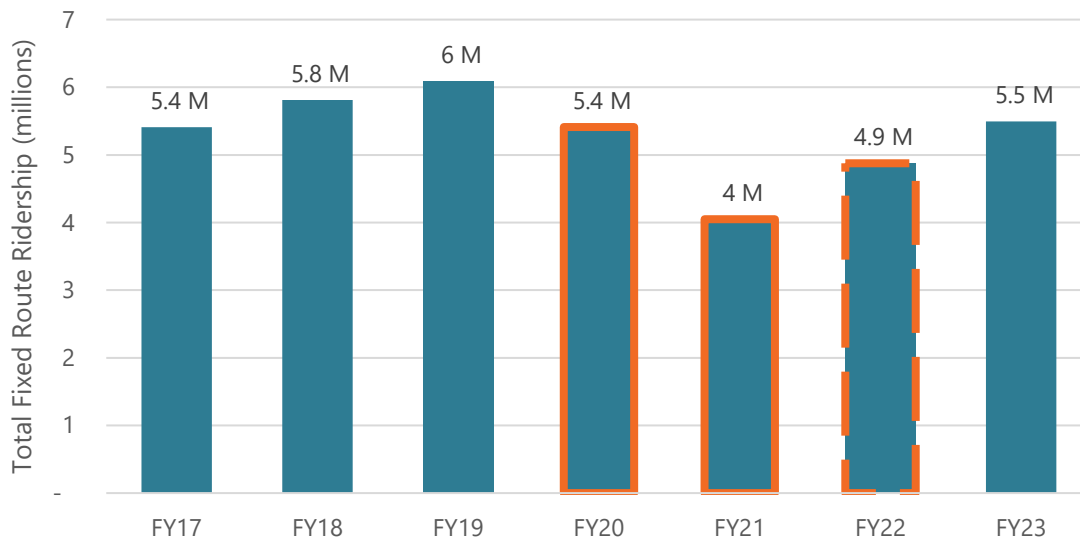
## Transit Ridership

An important outcome from investments in transit service is ridership. Indeed, the return on an investment in more hours of available service, or days of the week, is more ridership. Transit ridership was on a strong upwards trajectory prior to the COVID-19 pandemic, with early investments from the Wake Transit Plan spurring much of the growth (Figure 20). Transit providers saw key successes in the first three years of plan implementation, including:

- GoRaleigh saw a 12% ridership increase, adding nearly 600,000 boardings to its service performance, due in large part to the addition of Sunday service to nearly all routes.
- GoCary implemented service changes based on a comprehensive transit study<sup>5</sup> and achieved 22% ridership growth, having added Sunday service to all routes, including paratransit.
- GoTriangle service in Wake County increased by 15%. Routes 300 and DRX saw significant ridership uptake thanks to more trips and longer service spans.

As mentioned, the pandemic and its immediate aftermath impacted people’s employment status and their travel patterns, which in turn, impacted transit ridership. Like transit systems across the country, the pandemic meant fewer transit riders in Wake County (see Figure 20) between 2020 and 2022 (outlined in orange). Ridership data shows that people are returning to transit services; the number of people using transit in FY23 is nearly 40% higher than its low point in 2021 and is trending towards the peak achieved in 2019. Planned transit service investments, including projects identified in the Wake Bus Plan and investments associated with BRT will continue to attract riders to the network.

**Figure 20 Fixed-Route Transit Ridership in Wake County by Fiscal Year, FY17–23**



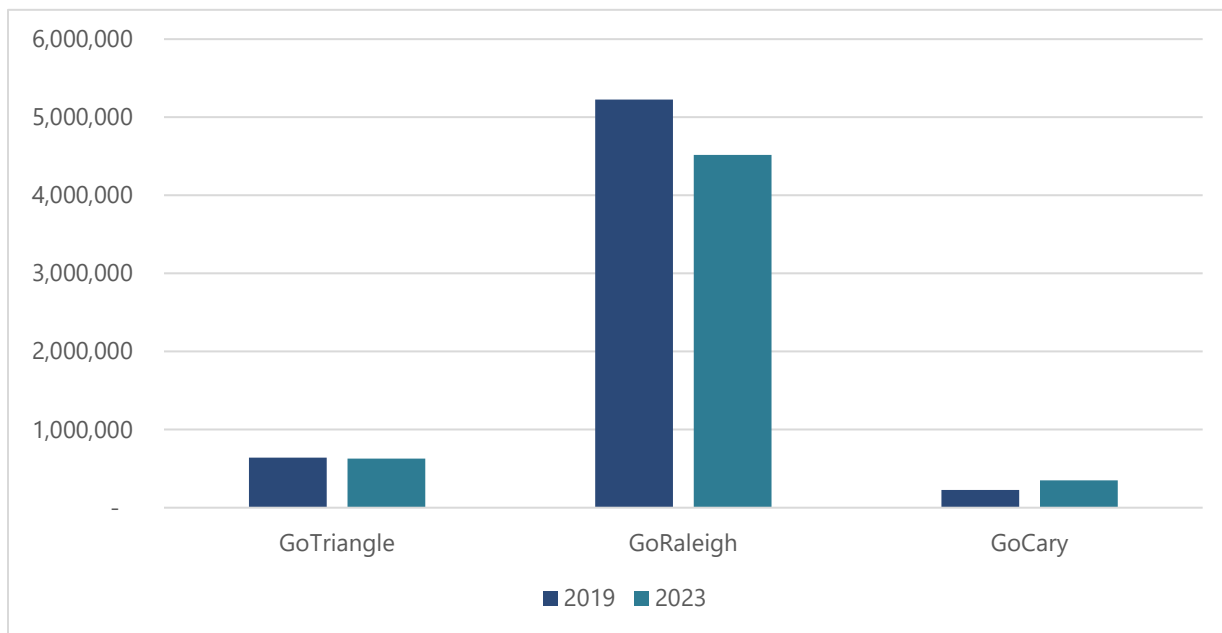
Source: Wake Transit Plan adapted by Nelson\Nygaard Consulting Associates. Includes ridership on GoRaleigh, GoCary and GoTriangle bus routes.

<sup>5</sup> The Western Wake Comprehensive Operations Analysis was a study conducted by GoCary in partnership with the towns of Apex and Morrisville to understand transit needs and opportunities.

An agency-by-agency perspective shows that both GoTriangle and GoCary have surpassed pre-pandemic ridership (see Figure 21).

- GoCary’s ridership growth reflects the fact that the agency adjusted routes and services based on a transit plan completed just before the pandemic. GoCary also implemented fewer service cuts and was able to restore service hours quickly in 2022.
- GoTriangle restored its service levels strategically, bringing back higher ridership routes and repurposing other routes.
- GoRaleigh ridership is still recovering, which reflects the fact that the network is significantly larger than GoCary or GoTriangle, with more bus routes providing essential connections.

**Figure 21 Transit Ridership on Fixed-Route Services by Agency: Pre Pandemic (2019) and Post Pandemic (2023)**



Source: GoCary, GoRaleigh and GoTriangle adapted by Nelson\Nygaard Consulting Associates

## Service Productivity

Service productivity is one way that the Wake Transit Plan measures effectiveness: how many riders use services funded through Wake Transit Plan investments as compared to the how much was spent to operate the service. Through the Wake Transit Plan, productivity is primarily measured using riders per revenue service hour of transit service provided. More riders riding the bus for each hour of service available leads to a more productive service. The Wake Transit Plan is focused on service productivity at a network level; individual transit agencies will evaluate routes individually to understand the strengths and weaknesses of each unique route.

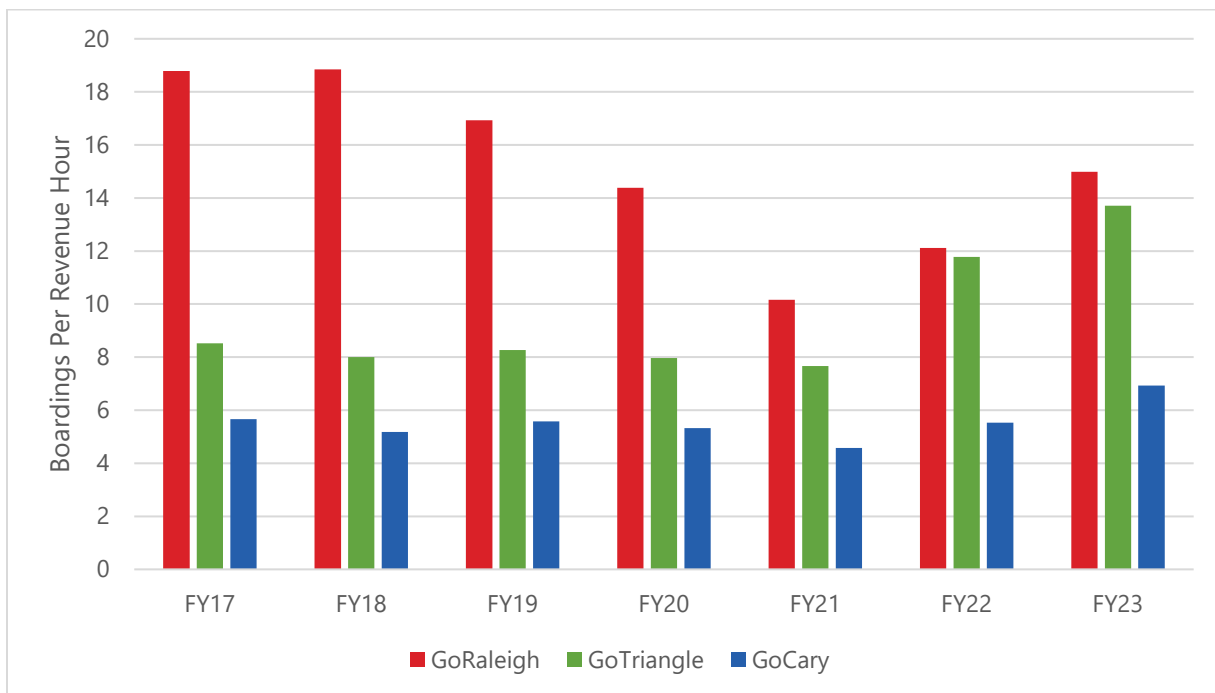
During the pandemic, productivity levels were relatively low, reflecting the fact that fewer riders were using transit while the network remained intact. As the pandemic went on, fewer riders and concerns about low productivity led to service reductions, which further reduced overall network productivity. During this time, each transit agency strived to provide steady levels of service and to best allocate limited resources, often

making tough choices regarding route cuts and service reductions on low-performing routes in favor of more productive ones.

These choices proved to be wise as reflected in strong ridership recovery and resulting in high productivity despite decreases in bus revenue service hours due to driver shortages. In FY23, average productivity across Wake County was just under 14 passengers per revenue hour, which is **95% recovery to pre-pandemic levels**. Consistent with agency-by-agency ridership trends, GoTriangle and GoCary surpassed pre-pandemic productivity levels, while GoRaleigh is steadily increasing its productivity.

- GoCary is averaging around 7 passengers per revenue hour, a 27% increase from 5.5 in FY19. Routes added during the pandemic, which include Routes 7 and 8 as well as GoApex Route 1, have generally seen steady ridership increases but are still low productivity compared to other routes as they are still in their building period.
- GoRaleigh has recovered to 89% of pre-pandemic productivity levels as of FY23. Despite a slower recovery, GoRaleigh has the highest overall productivity of the three agencies and includes six routes that have over 20 boardings per revenue hours. Several lower productivity routes that launched service right before the pandemic have also seen promising growth – for instance, Route 17, which began service in FY19, grew from 4 to 14 passengers per revenue hour.
- GoTriangle’s average productivity increased by 166%. Its highest performing routes – Routes 100 and 300, which saw 21 and 19 passengers per revenue hour in FY23 respectively – have seen the most improvement since Plan inception.

**Figure 22: Boardings per Vehicle Revenue Hour by Transit Agency FY17–FY23**



Source: Wake Bus Plan adapted by Nelson\Nygaard

## Innovation, New and Demand Responsive Service Models

The Wake Transit Plan has been steadily investing in traditional fixed-route transit services, such as frequent, all-day, and weekend service. It has also been investing in high-capacity transit (see next section) as part of building out the frequent, urban transit network.

One of the outcomes of the Wake Transit Plan that was not specifically set as a goal is innovation and the introduction of new service models. However, the ability to respond and adapt to changing circumstances, including by experimenting with new service models, has been consistently demonstrated. One of the best examples of innovative service delivery models is the Morrisville Smart Shuttle, an on-demand node-based shuttle service that uses a network of virtual bus stops, rather than door-to-door services, to balance efficiency with access. The service was developed and continues to operate with CFAP funding support and is well received and utilized by community members. Another example of innovative service delivery is the RTP Connect service operated by GoTriangle in conjunction with the Research Triangle Park Foundation. Riders can use this service to travel within RTP as well as select areas outside of RTP if their trip begins or ends at Boxyard RTP or the GoTriangle Research Triangle Park.

Building on the success of these projects, as well as the Wake Forest Loop and the NE Wake Smart Ride service, transit agencies in Wake County, including GoCary and GoRaleigh, are exploring implementation of similar service models in their service areas. GoCary is studying the potential of using on-demand services for parts of the Town that are growing quickly and have increasing needs but have low-density land uses that are not conducive to fixed-route service. GoRaleigh has been working with suburban communities where express transit routes were suspended during COVID and/or currently have very low ridership to understand the potential of on-demand services to better meet local needs as compared with peak period express bus service.



### Needs and Opportunities

Investing in bus service is a fundamental part of the Wake Transit Plan and is one of the strategies where the most success and the most progress has been made system wide. Wake Transit partners and stakeholders continue to prioritize investment in bus service. The bus service investments programmed in the multi-year operating program (MYOP) of the FY 2023 Work Plan, if completed as planned, will result in bus service levels well above those seen in 2020. This will be accomplished in part by reprogramming some bus services away from unproductive fixed-route services towards new service models, like on-demand or microtransit services. New service models will tie into other Wake Transit Plan opportunities such as innovation.

Other opportunities to strengthen and improve bus service relate to infrastructure required to make transit service work. This includes investments in vehicles and bus passenger facilities as well as alternative service models, such as on-demand and microtransit services. In all cases, as new transit services advance from pilot stages to full implementation, they need to be evaluated for cost effectiveness and role in the overall transit network.

As transit agencies begin to re-institute fares, fare payment technologies can also make it easy and simple for riders to pay for their trip. Potentially the best opportunities to strengthen transit services are developing

new approaches to the way municipalities plan and develop so that the built environment is integrated and supportive of the Wake County’s ongoing investments in transit services. New approaches in land use include developments that meet specific criteria such as “transit-oriented development” (TOD) that prioritizes compact, walkable, developments that bring people, activities, buildings, and public spaces within easy walking and cycling access of each other and transit services.

## Outcomes: Systems, Management, and Financial Health



An important success of the Wake Transit Plan is not directly tied to transit service, but instead reflects the way the program has been managed and developed over time. The Plan largely focuses on transit network development and over time has increased its consideration of the institutional and organizational structures required to deliver on Wake County’s long-term transit vision. Developing the strategies, policies, processes, and procedures for ongoing management of the Plan, including financial policies and guidance for service development, has been a significant focus since the WTP was first adopted. To date, nearly \$21 million – about 10% of all funds spent to date – has been spent on managing the program.

Wake Transit Plan investments in capacity and management include establishing the Wake County Transit Planning Advisory Committee (TPAC), a staff-level stakeholder group that includes representation from the 12 Wake County municipalities and five additional transit stakeholders to oversee and guide transit investments across the county, and a staff person to manage the TPAC’s ongoing activities. Other staff employed for Plan implementation include a program manager and coordinator; financial professionals that track, report, and forecast Wake Transit revenues and expenditures; communications and engagement specialists that continuously inform and engage partners and the public; and project-level delivery staff responsible for execution of funded services and projects. New staff and resources are helping to build and expand the expertise, knowledge, and capacity of Wake County to implement more and more complicated projects.

Tangible outcomes associated with this investment include:

- Complying with the financial rules governing and guiding the Wake Transit Plan since its’ adoption. This includes adhering to the minimum fund balance requirements and consistently ensuring the Wake Transit Plan can reimburse all funded projects and services.

- Preparing conservative and realistic forecasts of Wake Transit Plan revenues so that the investment program reflects available funding.
- Investing excess and unspent Wake Transit Plan funds wisely so that the fund balance earns revenue but does not put funds at risk.
- Strengthening the credit rating and scoring of the Wake Transit Plan. This accomplishment is important if/when Wake County opts to finance capital investments such as commuter rail because it will ensure borrowed funds are eligible for attractive financing rates.
- Working with transit agency partners to leverage non-Wake Transit Plan funds to help fund projects and services. Wake County transit agencies have successfully attracted nearly \$200 million from the federal government to help fund Wake Transit Plan investments.

Despite success, there are challenges, needs and opportunities facing the Wake Transit Plan’s organizational and management systems and structures. Opportunities generally fall into three areas:

1. Improving project delivery. Wake Transit partners and staff members have learned a lot through these processes and experiences. Yet, there is still opportunity to capitalize on its successes, learn from past experiences, and use this knowledge to increase project delivery. Setting up methods to capitalize and leverage recent knowledge will become increasingly important as the county simultaneously undertakes several major capital projects.
2. Focusing on the largest, most important projects. In the next two to three years, a slate of capital projects valued at more than \$400 million will be advancing toward completion. Many of these projects will be moving into final design and from design to construction. Management and oversight of the largest of these projects will be essential for success. Strategies may include setting up a set of checks and balances to control costs, reward schedule adherence and encourage ongoing status updates to set the stage for continued fiscal integrity.
3. Creating an integrated and coordinated transit network. As the Wake Transit Plan matures, success will require more emphasis on regionalism for Wake County to leverage and receive benefits of transit investments. This will almost certainly be the case as Plan implementation relies on individual transit agencies and TPAC partners to carry out and implement specific projects and programs.

## 4 WHAT COMES NEXT?

### Looking Ahead: Opportunities for the WTP Update

Wake County is a dynamic, fast-growing region. As it grows and develops, its transportation needs, including public transportation, are changing. The Wake Transit Plan is an investment program that outlines the vision for Wake County transit system growth and allocates available funds to specific programs and projects that will accomplish that vision. The Plan spans a 10-year planning period and is updated every five years to ensure that it remains responsive to changing needs, new opportunities, and experience gained.

The Wake Transit Plan Update will include discussion with partners and community members to identify and determine the best ways to respond to current and forecasted conditions. The analysis laid out in this document highlights the success and opportunities facing Wake County in early 2024. While the Four Big Moves continue to be the core strategy guiding transit investment in Wake County, our opportunity with the Plan update is to review and prioritize projects—recognizing that the costs of some projects have changed significantly since originally conceived in 2016 (Figure 23).

The goal of the Wake Transit Plan Update is to plan out future investments considering how much funding Wake County expects to have and its transit priorities. **Financial assumptions calculated in early 2024 show that between \$700 million and \$1 billion should be available to invest over the 10-year period between FY 2026–2035.** These funds are in addition to the capital projects and transit services already programmed for implementation in the next few years. This funding outlook does not, however, assume full funding for some of the large long-term projects considered in the 2016 Wake Transit Plan, like Commuter Rail.

**Figure 23** Estimated Costs to Complete for Major Capital Investments

Capital Investment Type	2016 Wake Transit Plan Cost Assumptions	2021 Wake Transit Plan Update Cost Assumptions	2024 Wake Transit Plan Cost Assumptions
Commuter Rail	\$900 million	\$1.8 billion	\$3.1 billion
Wake BRT – Original Routing	\$347 million	\$461 million	\$606 million
Wake BRT – Extensions		\$50 million	\$275 million

Source: Wake Transit Plan









Notes: All numbers are rounded and estimated. Commuter Rail and BRT investments represent the total cost of the project, including federal share.

This State of the Plan report identifies opportunities and needs (see Figure 24). The Wake Transit Plan Update will use these early findings to facilitate a conversation with stakeholders and community members to determine investment priorities for using the expected revenues given needs, values, and other community planning activities. This section highlights the opportunities and needs in support of the early steps of this conversation.

**We are inviting you to have your say in the investment decisions:  
Take the survey, fill out a comment card, attend a community meeting,  
talk to your elected officials, and stay in touch at  
[GoForwardNC.org/GetInvolvedWake](https://GoForwardNC.org/GetInvolvedWake).**



Figure 24 Wake Transit Plan Needs and Opportunities

Four Big Moves	Tangible Outcomes	Opportunities and Needs
	<p>Faster, convenient, and reliable ways to travel throughout the region</p>	<ul style="list-style-type: none"> <li>• Determine if Commuter Rail is the most appropriate solution given cost and feasibility study results.</li> <li>• Evaluate other possible rail options for the county, like leveraging investments in the S-Line.</li> <li>• Expand regional bus service with more frequent connections and more service during the middle of the day, in the evenings and weekends.</li> </ul>
	<p>Faster, convenient, and reliable ways to travel within Wake County, especially between suburban towns and communities</p>	<ul style="list-style-type: none"> <li>• Add more bus service connecting towns to employment centers in downtown Raleigh, NC State, Cary, and Research Triangle Park.</li> <li>• Invest in bus services that connect suburban towns in Wake County.</li> <li>• Invest in the Community Funding Area Program to encourage individual communities to identify transit solutions that meet their needs.</li> </ul>
	<p>Faster, convenient, and reliable ways to travel in Wake County's urban areas</p>	<ul style="list-style-type: none"> <li>• Complete the four programmed BRT corridors.</li> <li>• Expand Wake County's BRT program with more corridors, including potentially a Rapid Bus strategy that adopts most but not all the BRT systems and investments.</li> <li>• Investments in service levels (frequency).</li> <li>• Expand weekend and evening service span.</li> </ul>
	<p>Safer, more comfortable ways to connect to transit and travel within your communities</p>	<ul style="list-style-type: none"> <li>• Build more sidewalks, bike lanes and crosswalks.</li> <li>• Continuing investments in passenger facilities.</li> <li>• Advance on-demand and microtransit programs to support local travel and connections to the larger transit system.</li> </ul>
	<p>Encourage more people to use transit</p>	<ul style="list-style-type: none"> <li>• Invest in premium transit services (BRT, Rapid Bus, and more frequent service).</li> <li>• Expand transit service with more weekend and evening service.</li> <li>• Expand transit service with more town-to-town connections.</li> <li>• Operate service with modern, well-maintained vehicles.</li> </ul>
	<p>Work towards a transit network that is more connected and integrated</p>	<ul style="list-style-type: none"> <li>• Create regional standards, practices, and policies so the transit network is seamless from a rider perspective and facilities and infrastructure can be shared across transit systems and operators.</li> </ul>
	<p>Try new ideas and explore new transit solutions</p>	<ul style="list-style-type: none"> <li>• Evaluate and right-size resources assigned to Community Funding Area Program.</li> <li>• Develop county-wide guidelines for on-demand service models.</li> </ul>
	<p>Invest wisely and carefully with tangible outcomes, such as increasing ridership and more efficient services</p>	<ul style="list-style-type: none"> <li>• Confirm the Four Big Moves and update them with goals and performance metrics that are appropriate for a mature and well-developed transit network.</li> <li>• Consider incentives, performance measures and other strategies to encourage efficient project delivery, limit cost increases and encourage scheduled adherence.</li> </ul>

# APPENDIX A: GLOSSARY OF TERMS

<b>Access to Transit</b>	<p>Measures the distance of residents and jobs from the transit network. The 2016/2020 metric of "Proximity to Transit" captured the Wake Transit Plan's measure of "Proximity to Transit" from 2016 and 2020 measured access to the transit network and jobs within 3/4 mile of a transit route, except for limited stop services (like express or regional routes), where access is measured from a stop. Access is typically measured as a percentage of people and/or jobs within 3/4 miles of transit as compared to all people and jobs in Wake County.</p> <p>The 2024 proposed "Access to Transit" metric measures residents and jobs within 1/2 mile of a bus stop with the distance measured according to the underlying road and sidewalk network. The measure of accessibility is more constrained than the previous Proximity to Transit measurement.</p>
<b>Accessible Vehicles</b>	<p>Vehicles that are in compliance with the Americans with Disabilities Act and do not restrict access for individuals using wheelchairs or other mobility devices (see FTA for more information).</p>
<b>ADA Paratransit Service</b>	<p>The Americans with Disabilities Act (ADA) requires public transit agencies that provide fixed-route services to provide "complementary paratransit" to people who are unable to use fixed-route bus or rail service because of a disability.</p>
<b>All Day Transit</b>	<p>Transit service that operates 17 or more hours per day on weekdays and 14 or more hours per day on weekends.</p>
<b>All-Day Regional Routes</b>	<p>Bus routes that provide longer-distance service connecting the residential areas with major activity centers. All day regional routes operate at least 12 hours of the day on weekdays.</p>
<b>Americans with Disabilities Act or ADA</b>	<p>The Americans with Disabilities Act (ADA) protects people with disabilities from discrimination.</p>
<b>Boardings (Unlinked Trips)</b>	<p>The number of passengers who have boarded a public transportation vehicle in a specified period of time. Passengers are counted each time they enter a transit vehicle, no matter if they take more than one bus or a mix of services to travel from their origin to their destination. A person riding only one vehicle from origin to destination takes ONE unlinked trip; a person who transfers to a second vehicle takes TWO unlinked trips. (see also unlinked trip).</p>

<b>Bus Rapid Transit (BRT)</b>	Bus-based transit service that delivers fast and efficient service. BRT may include any number of roadway improvements to improve speed and reliability, such as such as dedicated lanes, prioritized traffic signal timing, off-board fare payment, level boarding and other investments.
<b>CAMPO</b>	Capital Area Metropolitan Planning Organization (CAMPO) is the regional metropolitan planning region for the Raleigh urbanized area. MPOs are a federally required decision-making body responsible for carrying out the transportation planning process in its urbanized area.
<b>Capital Costs</b>	Capital costs are expenses for the purchase of fixed or physical assets. In the context of the Wake Transit Plan, capital costs may include vehicles (buses), facilities (bus stops, stations, and operations facilities) and roadway investments designed to improve the speed and reliability of bus service.
<b>Community Funding Area (CFA) Program</b>	A funding program designed to support transit investments outside of Wake County's urban areas. The CFA program is available to 11 entities (Towns of Apex, Fuquay-Varina, Garner, Holly Springs, Knightdale, Morrisville, Rolesville, Wake Forest, Wendell, and Zebulon as well as the Research Triangle Park Foundation).
<b>Community Routes</b>	Bus routes serve low-density communities and neighborhoods, providing local connections or bringing passengers to transit hubs or higher capacity services. Community bus routes typically have lower frequency and shorter spans of service as compared with other transit services.
<b>Commuter Rail Transit (CRT)</b>	Commuter rail is passenger rail transportation that typically connects commuters to a central city from adjacent suburbs or commuter towns.
<b>Core Regional Routes</b>	Longer-distance transit service connecting the major activity centers across multiple jurisdictions and/or counties. They typically have limited stops and travel on freeways and expressways as appropriate.
<b>Cost Effectiveness</b>	Refers to the ratio of the output, or product, to the input used to produce the good or service. In the context of the WTP, cost effectiveness is the amount spent on operating a bus route (fuel, vehicle maintenance and repairs, and operator wages and benefits) divided by the number of riders carried on the bus route.

<b>Coverage-Oriented Services</b>	Services operate in rural or lower-density areas where there is a clear need for service, but the demand (number of potential riders) is lower. Coverage oriented routes are less direct, carry fewer riders and tend to be less cost effective.
<b>Demand-Responsive Service</b>	Demand response services are shared ride, public transportation services without a fixed schedule. They typically are scheduled upon request and offer curb-to-curb or door-to-door pickups and drop-offs.
<b>Enhanced Transfer Point (ETP)</b>	Bus stops that are served by multiple routes, including frequent bus routes. Most ETPs will have more amenities as compared to a typical bus route, including shelters, lighting, and real-time passenger information.
<b>Equity</b>	Fairness or justice in the way people are treated. There are numerous applications of equity in the Wake Transit Plan, each of which is nuanced and particular to the context (i.e., jurisdictional equity, engagement equity, capital investment equity). Nuanced definitions are defined in each of these applications.
<b>Express Routes</b>	Transit services that travel directly between destinations with limited stops, and typically operate during peak commute periods, serving park & ride facilities, transit centers and/or major employment centers.
<b>Fare (Farebox) Revenue</b>	Revenue collected from passengers paying a fare to use transit.
<b>Fiscal Year</b>	A fiscal year is used in government accounting for budget purposes. The Wake Transit Plan's fiscal year begins on July 1 and ending on June 30th.
<b>Fixed-Route Transit</b>	Transit service that operates according to a published schedule and serving pre-determined (or fixed) stops.
<b>Frequency of Service</b>	The time between consecutive buses (or trains) passing a fixed point, like a bus stop, defining how long a rider would wait for their vehicle. It is typically measured in vehicles per hour (i.e., 4 vehicles per hour is a bus every 15 minutes) (See also headway).
<b>Frequent Transit (Frequent Routes)</b>	Transit services that operate with an all-day (17 hours or more) headway of 15 minutes or less.
<b>General Transit Feed Specification (GTFS)</b>	An electronic format for public transportation schedules and associated geographic information. It allows public transit agencies to publish their transit data as GTFS "feeds" (or txt files) that can be consumed by a wide variety of software applications.

<b>Headway</b>	The time between consecutive buses (or trains) passing a fixed point, like a bus stop, defining how long a rider would wait for their vehicle. It is typically measured in terms of time between vehicles (i.e., a bus arrives every 15 minutes) (See also frequency).
<b>High-Capacity Transit</b>	Public transportation services that move people quickly and often. HCT can be a bus service, like BRT, or rail service, like a subway or light rail line. Typical characteristics include frequency, dedicated travel lanes and technology to improve service speed and reliability, like signal priority, level boarding and off-board fare payment.
<b>Local Bus Service (Local Routes)</b>	Transit services that operate along primary arterials and are anchored at a transit hub, either downtown or at the end of a frequent route or BRT. These routes offer relatively frequent, simple, and direct service, usually within neighborhoods or between local destinations.
<b>Microtransit</b>	An on-demand, shared ride public transit service, where riders schedule a ride to pick them up at their door or nearby location. Rides are scheduled using an app (mobile phone or computer) or by calling.
<b>Mobility Hub</b>	Places where people can access multiple transportation modes in one central location (e.g. bus, commuter rail, bike share, car share) and/or transfer between modes.
<b>Operating Costs</b>	The cost to operate transit service, which typically includes driver wages, fuel, vehicle maintenance and costs associated with supervision and management.
<b>Park and Ride</b>	Places where riders can access transit service by parking a vehicle or getting dropped off. Park and ride lots typically include places for buses to pull off the road as well as passenger facilities, like shelters, information kiosks, and lighting.
<b>Partners (Wake Transit Partners)</b>	All Wake County municipalities, Wake County, CAMPO, GoTriangle, North Carolina State University and the Research Triangle Park (17 organizations in total). Partners are voting members of the Transit Planning Advisory Committee (TPAC), which is responsible for developing and coordinating plan implementation.
<b>Peak &amp; Off-Peak Periods</b>	Peak periods are the times of day with the highest volume of travelers, typically on weekdays between 6 AM and 9 AM and between 3 PM and 6 PM. All other hours in the day are classified as off-peak transit service hours.
<b>Peak-Only Routes</b>	Transit services that operate during traditional commuter peak periods only.

<b>Performance Measures</b>	A reference point against which performance is evaluated. Measures can be evaluated against a baseline value or against a specific target.
<b>Performance Standards</b>	The minimum investment required to reach the service classification. For example, the Wake Bus Plan Service Guidelines and Performance Measures document sets standards for the span of service expected for demand-response service.
<b>Performance Targets</b>	The defined value that is set for individual measures. For example, a target for service effectiveness might be 20 passengers per revenue hour.
<b>Productivity</b>	A measure of how well a bus route performs. It could be measured as 1) Riders per revenue hour – the number of boardings divided by revenue hours or 2) Riders per trip – the number of boardings divided by the number of trips made by a route.
<b>Programming</b>	In the context of the Wake Transit Plan, programming means transit projects and programs that have been scheduled (programmed) for funding.
<b>Project Prioritization</b>	In the context of the Wake Transit Plan, project prioritization is the process used to rank transit investments for funding and implementation (see Wake Transit Bus Prioritization Technical Memo).
<b>Project Prioritization Policy</b>	The Project Prioritization Policy (PPP) is a framework to guide investment decisions over the course of Wake Transit Plan implementation. There are two PPPs: 1) the Wake Transit Plan PPP, which guides all transit investments associated with Wake Transit Plan funding and 2) the Bus Service Expansion PPP, which priorities bus service operating projects and capital projects tied to bus service expansion.
<b>Ridership-Oriented Services</b>	Transit services that are designed to carry larger volumes of riders. Ridership oriented routes typically operate in higher-density urban areas. They are also almost always more resource intensive because they operate frequently, for longer hours of the day and carry higher numbers of riders, but they are also typically more productive because they carry more riders. Examples include light rail and bus rapid transit, but also high frequency bus corridors.
<b>Service Allocation</b>	In the context of the Wake Transit Plan, service allocation refers to the WTP's policy of dividing funding so that roughly 70% of the plan's operating revenue is allocated to ridership-oriented (or productivity) services justified largely by high ridership and 30% to coverage-oriented services.
<b>Service Guidelines</b>	A policy that leads or directs a course of action to achieve a certain goal.

<b>Service Impact</b>	The Wake Transit Plan includes a "service impact" measure that captures the value of a bus route or transit investment if it serves a low-income and/or historically disadvantaged community. Bus routes that meet the standard qualify for a lower standard on some Wake Transit Plan performance measures.
<b>Short Range Transit Plan (SRTP)</b>	Detailed bus operating and capital projects scheduled over the short-term, typically 3 to 5 years.
<b>Span of Service (Service/Operating Hours)</b>	The length of time a route is available, typically measured by the time a bus route begins and ends (also referred to as service or operating hours).
<b>Stakeholders</b>	A person with an interest or concern in something. In the context of the Wake Transit Plan, stakeholders are individuals and organizations who have an interest or concern in public transportation. WTP partners also have a stake in the implementation of the WTP but are not defined as stakeholders.
<b>Transit Center</b>	Location where multiple transit services meet, typically including frequent services, offering amenities (like benches, shelters, information, etc.) and serving large volumes of passengers.
<b>Transit Governance Interlocal Agreement (ILA)</b>	A structure that governs the ongoing implementation and management of the Wake County Transit Plan upon the adoption of the original plan in 2016.
<b>Transit Propensity</b>	A measure or scoring that identifies areas with the highest likelihood for increased transit demand based demographic characteristics, such as race/ethnicity, income, and vehicle availability.
<b>Vehicle Revenue Hours</b>	The time that a public transportation vehicle is available to carry passengers. It includes the time it takes for the vehicle to travel from the beginning to the end of a specified route, as well as recovery and layover time, but it does not include the time when the bus travels to/from the beginning or end of routes (the industry term for this time before/after route service is "deadhead").
<b>Wake Bus Plan</b>	A multi-year, prioritized, and fiscally constrained plan to guide operating and capital bus transit investments.

<b>Wake County Transit Planning Advisory Committee (TPAC)</b>	A staff-level advisory committee including all Wake County municipalities, Wake County, CAMPO, GoTriangle, North Carolina State University and the Research Triangle Park (17 organizations in total). Partners are voting members of the Transit Planning Advisory Committee (TPAC), The TPAC is charged with coordinating planning and implementation aspects of the Wake Transit Plan.
<b>Wake County Transit Providers</b>	Agencies that operate and fund transit services. In Wake County, they include GoWake Access, GoRaleigh (City of Raleigh), GoCary (Town of Cary), and GoTriangle.
<b>Wake Financial Model</b>	The Wake Transit Plan Financial Model reflects funding available to support the Wake Transit Plan including local, state, and federal funding sources. The WTP Financial Model is used to estimate available funding to support transit investment. It is updated annually along with the Annual Work Plans; updated assumptions are detailed in each Annual Work Plan.
<b>Wake Transit Plan Service Guidelines and Performance Measures</b>	The Wake Transit Plan Service Guidelines and Performance Measures are a framework to evaluate the performance of Wake Transit Plan funded investments.