

TOWN *of*
WAKE FOREST

WAKE FOREST
PUBLIC  **TRANSIT**
PLAN

DRAFT-AUGUST 2023

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Thank You!

We would also like to thank the many people in Wake Forest that set aside time to attend open houses and respond to surveys to provide their valuable perspectives on transit services throughout the development of this Public Transit Plan.

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Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change.

EXECUTIVE SUMMARY

The Town of Wake Forest is seeking to expand its transit service. The Wake Forest Loop (WFL) circulator and the Wake Forest-Raleigh Express (WRX) have served the Town since 2008. The circulator service provides residents access to public services, medical facilities, and commercial destinations in Wake Forest and the Wakefield neighborhood in Raleigh. The express service provides commuter access to downtown Raleigh.

With a rapid increase in population and development, expanded transit services are necessary in Wake Forest to provide residents, employees, and visitors additional mobility options beyond that of an automobile. The Town conducted the Wake Forest Public Transit Plan (Transit Plan) to explore the options to expand transit to serve growing parts of the Town and connect to key activity centers. The Transit Plan summarizes the evaluation of existing transit services in Wake Forest, discusses the viability of different transit expansion alternatives, and recommends a preferred option to expand transit – including the service type, cost of the service expansion, and steps to implement the service.

An interdepartmental group of Town staff, with the support of a consultant team (the “project team”) developed the Transit Plan with input from the community. The project team held open house events at key milestones and conducted a community survey, a rider survey, and a pop-up engagement event to better understand the community’s transit needs and solicit feedback on alternative service scenarios.

The Transit Plan presents the preferred alternative and next steps to implement the service, including an overview the preferred alternative operations – map(s) and operating assumptions.

PURPOSE AND NEED FOR EXPANDED TRANSIT IN WAKE FOREST

Although the Town of Wake Forest is currently served by transit services, rapid growth and development over the past decade require renewed understanding of how the transit services can be expanded to meet the current and future needs of the Town. Expanded transit service in the Town will provide an additional mobility option for residents, employees, and visitors to reach destinations inside and outside of the Town. Additional mobility options can support the Town's ability to grow while lessening the impact of the growth on the existing roadway network.

PREVIOUS PLANS AND STUDIES

A review of previous plans and studies by the Town of Wake Forest, transit service providers, and regional partnering agencies provided insight into the purpose and need for expanding transit in the Town. The plans and studies summarized below have set the foundation from which the Transit Plan and the transit service alternatives considered are based.

- The Town of Wake Forest **Community Plan**, adopted in April 2022, prioritizes transit as a key element of its long-term vision for the Town. It includes recommendations to nurture supportive urban development for transit, walking, and bicycling, with specific land use typologies and designated areas for Transit-Oriented Development. The Plan also proposes actions such as incorporating pedestrian/bicyclist/transit-oriented areas in shopping centers, expanding route networks, constructing smart bus shelters with interactive features, and exploring long-term transit options like fixed or microtransit.
- The Town's **Comprehensive Transportation Plan (CTP)** is a long-range multi-modal Plan that aims to develop a safe, efficient, and inclusive transportation system. With a low percentage of residents utilizing existing services, the Plan acknowledges the current barriers to transit use. To address these barriers, the CTP recommends implementing additional bus loops, developing interactive websites and real-time technology, incorporating public art and wayfinding at bus shelters, and exploring microtransit options.
- The **Northeast Community Plan**, adopted in late 2021, focuses on improving transit options in the historically Black Northeast Community. The Plan acknowledges limited connectivity and the lack of transit frequency in the area. Recommendations include exploring new transit connections and routes to link the community to commercial and job centers, investigating innovative multimodal technologies like microtransit, and considering the viability of adding transit routes to points north of the community.
- The **Wake Bus Plan** provides an overview of the recommended transit service and capital investments from FY2025 to FY2030 across Wake County. The Plan focuses on four big moves, including regional connections, frequent transit networks, and enhanced access to transit. The Plan proposes replacing Route 401X in the Town of Rolesville with a potential microtransit service, a new Route2L that connects the northern terminus of Route 2 to Wake Forest, and capital investment for the Wake Forest Park and Ride Lot.

EXISTING AND PLANNED TRANSIT

The Town of Wake Forest is currently served by two fixed-route transit services and a paratransit service. The services are provided by GoRaleigh, a local transit provider operating services throughout the City of Raleigh and Wake County areas.

- The **Wake Forest Loop (WFL)** is a bidirectional circulator that operates largely within the Town (and partially within Raleigh on the southwestern portion of the loop). WFL A runs clockwise and WFL B runs counterclockwise. Both loops operate every 75 minutes from approximately 6:00 AM to 8:00 PM Mondays to Fridays, and every 65 minutes from approximately 8:00 AM to 9:00 PM on Saturdays.
- The **Wake Forest-Raleigh Express (WRX)** is a commuter service that connects Wake Forest to Downtown Raleigh, via Triangle Town Center. The WRX provides service on Mondays to Fridays approximately between 6:00 AM to 7:30 PM. In the northbound direction from Downtown Raleigh to Wake Forest, there are two buses in the morning and three buses in the evening. In the southbound direction from Wake Forest to Downtown Raleigh, there are three buses in the morning and two buses in the evening. Buses are an hour apart in both the morning and evening.
- **GoRaleigh Access** provides a paratransit service for people with disabilities and covers trips that originate within 3/4-mile of any GoRaleigh bus stop. The service is available to anyone who qualifies under the Americans with Disabilities Act and requires an application. Trips need to be scheduled between 8:15 AM and 4:45 PM for the same day or next day. Trips may be scheduled via an online form, phone call, or email.
- **GoWake Access** offers door-to-door service in Wake County, allowing individuals who require specialized transportation assistance to schedule trips for various purposes such as medical appointments, employment, education, and other essential activities. It is designed to provide accessible transportation options for individuals with disabilities, people 60 years or older, people who need work-related transportation, residents in rural service zones, or people who participate in a sponsored eligible service such as Medicaid.

There are several planned transit services in Wake Forest based on regional transit and county plans.

- **Route 2L** is a planned route by GoRaleigh that will provide new hourly service from Downtown Wake Forest to WakeMed North Hospital.¹ The route will be scheduled for timed transfers at the hospital to and from Route 2 in the peak direction. Route 2 provides half-hourly service to Downtown Raleigh via Falls of Neuse Road and Five Points.
- The **S-Line** is an existing freight corridor between Tampa, FL and Washington, DC and was noted as an "Option for Future Expansion."² The North Carolina Department of Transportation (NCDOT) is facilitating a group of municipal and regional stakeholders to study passenger rail options to provide a local commuter and regional intercity rail service through the S-Line. There are three potential S-Line stations, including a downtown stop, that will go through Wake Forest.
- **Rolesville Microtransit** is being planned by GoRaleigh to open in FY2024 per the FY2025-2030 Wake Bus Plan. The operating scenarios for the service are still being developed, however, the current proposal includes specific drop-off/pickup locations in Wake Forest. The microtransit service would replace the 401X in Rolesville.

¹ <https://online.flippingbook.com/view/745228616/55/>

² <https://storymaps.arcgis.com/stories/ad165d3a7df8468b8c7f54c86e88b21d>

WAKE FOREST PUBLIC TRANSIT PLAN

Figure 1 illustrates the existing transit services – the WFL and the WRX in Wake Forest, as well as services in the surrounding areas – the 25L in Raleigh, and the 401X in Rolesville. The proposed transit services shown are the Route 2L, proposed S-Line stations in Wake Forest, and the preliminary microtransit zone in Rolesville which will replace the 401X.

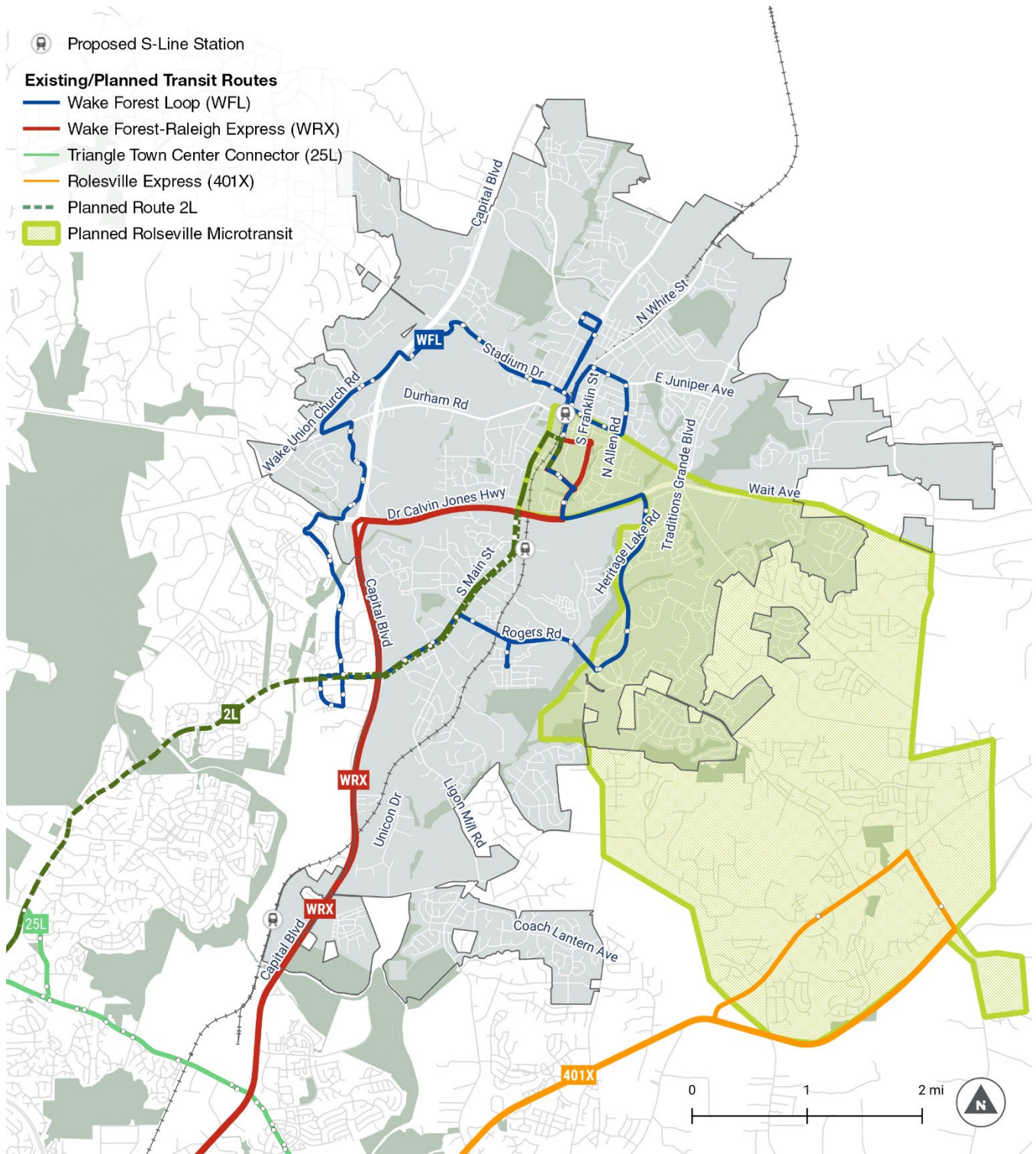


Figure 1. Existing and Proposed Transit Service in Wake Forest (2023)

Ridership on existing transit services in Wake Forest were impacted by the COVID-19 pandemic. The WFL carried approximately 30,000 riders annually until the start of the pandemic in 2020 where ridership was reduced to approximately 15,000-18,000 annually. Ridership began to rise again in 2022, though it has not reached pre-pandemic levels. Similarly, ridership on the WRX dropped from approximately 13,000 riders annually to 7,000 in 2022. This decline in ridership coincides with a national trend in transit ridership away from commuter use and toward all-purpose ridership, with commute-focused express services being slower to rebound to pre-pandemic ridership levels than other services. See Figure 2.

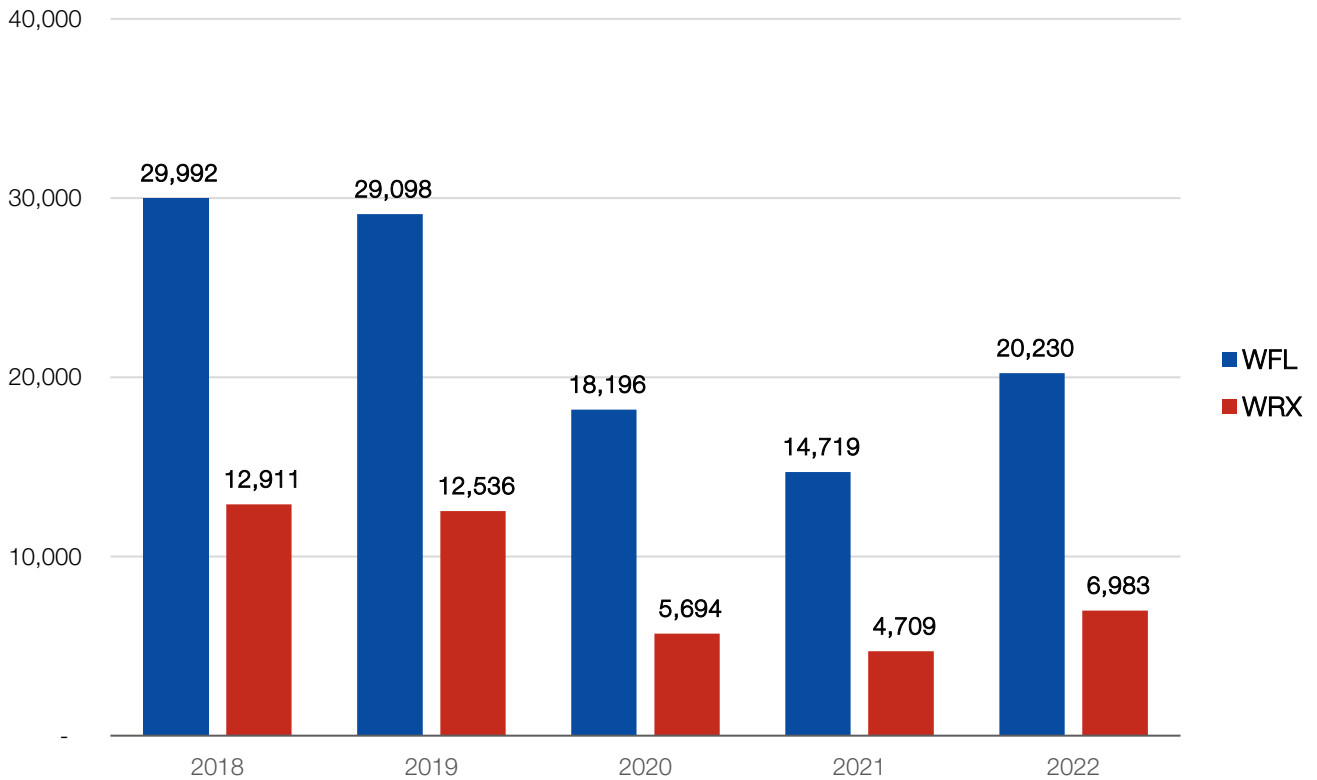


Figure 2. WFL and WRX Annual Ridership (2018-2022)

WAKE FOREST PUBLIC TRANSIT PLAN

Figure 3 illustrates the density of weekday ridership on the WFL in 2022. Areas with higher ridership are in Downtown Wake Forest and retail and commercial activity centers on the west side of Town.

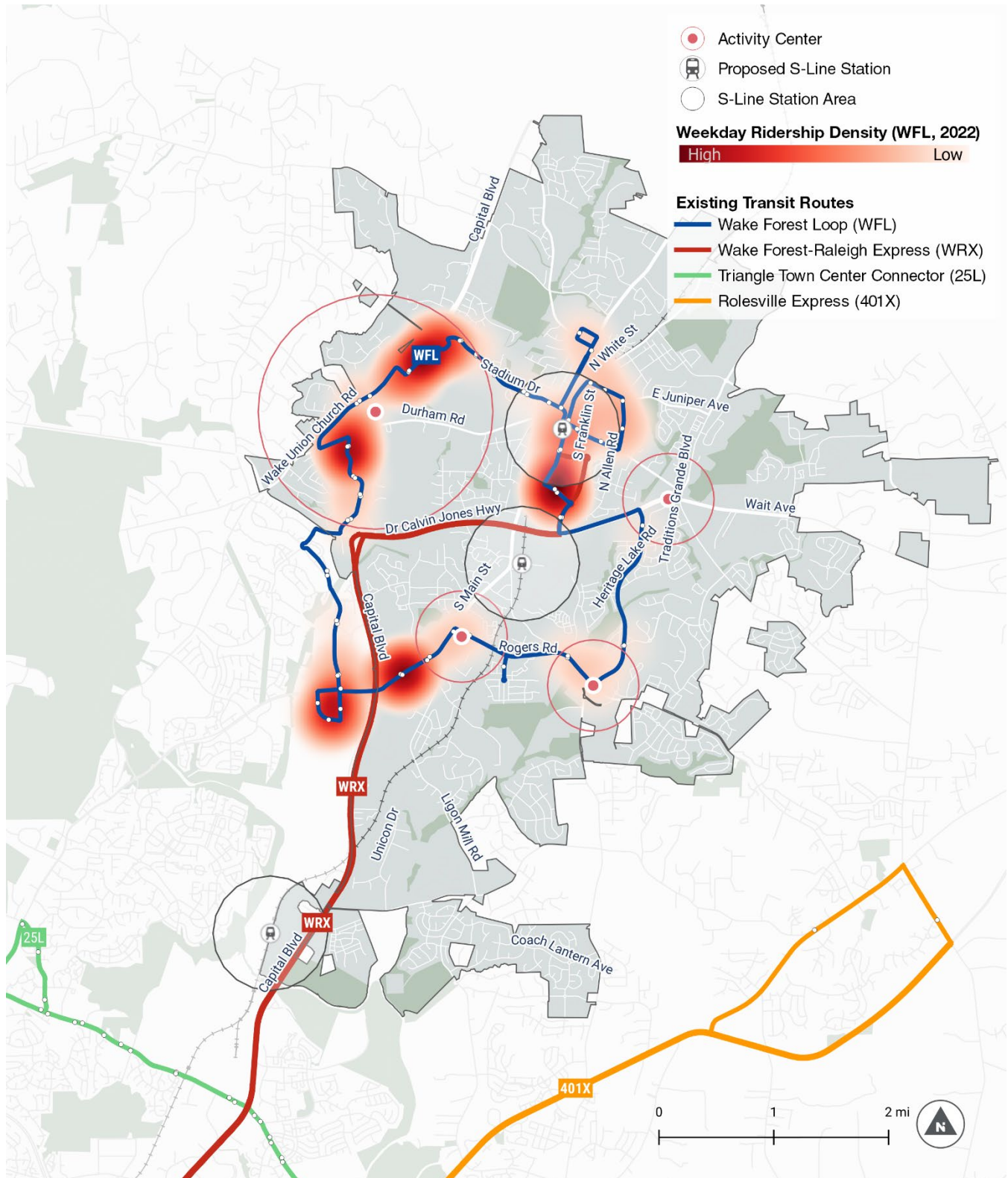


Figure 3. Ridership Density for Weekday WFL (2022)

POPULATION GROWTH AND TRANSIT NEEDS

The population in Wake Forest has been significantly increasing over the past decade. From 2010 to 2020, there was an estimated 32 percent increase in population density in Wake Forest –1,995 persons per square mile in 2010 to 2,638 persons per square mile in 2020.³ Figure 4 maps the population density in the Town with data from the American Community Survey (ACS) 5-year, 2017-2021 estimates. The parts of Wake Forest that have the highest population density include the sections east of Main Street, near Calvin Jones Highway and Durham Road, north of Stadium Drive, and near Coach Lantern Avenue and Ligon Mill Road.

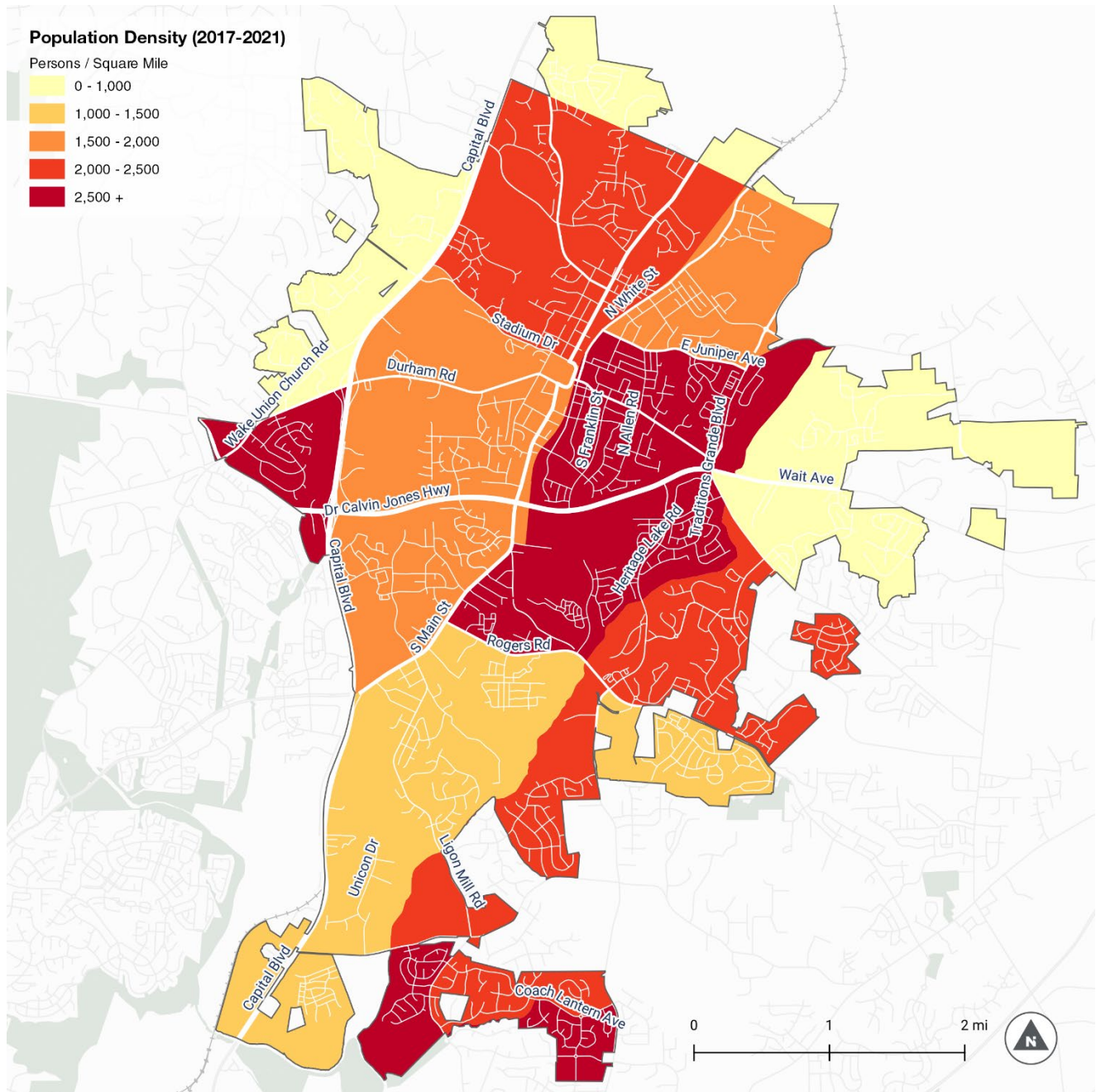


Figure 4. Wake Forest Population Density, Population Estimates from ACS 2017-2021

³ <https://www.census.gov/quickfacts/wakeforesttownnorthcarolina>

Beyond population growth, the project team identified four elements that indicate where transit expansion in the Town is needed.

- **Transit Propensity**, the likelihood that people would choose to take transit, can be indicated based on the demographics of the community. Areas that have a higher population density, a higher percent of households below the poverty line, and/or a higher percent of zero vehicle households have been shown by national and regional research to have a higher transit propensity.⁴
- **Transit-Oriented Development & Activity Centers** are identified as growth areas in the Wake Forest Community Plan. It included three proposed Transit-Oriented Development (TOD) sites centered around the proposed S-Line commuter rail stations that would have highly walkable, active developments to support and fully leverage the new transit service. The Wake Forest Community Plan also designated four Activity Centers intended to be unique focal points of the community where residents can gather, socialize, live, work, and shop.
- **Local and Regional Areas** were identified in previous plans as places to connect to transit. The Northeast Community Plan discussed the limited connectivity in the Northeast Community of Wake Forest.⁵ Additionally, Wake County has led discussions about a connection between Wake Forest and Rolesville, a Town about five miles southeast of Wake Forest.
- **Multiuse Paths and Greenways** are an important piece of the transit propensity analysis. Existing multiuse paths and greenways provide first- and last-mile connections for transit riders. They can also be destinations for local and regional visitors who want to travel by transit.

Figure 5 illustrates these elements along with existing transit services in the Town and surrounding areas and formed the basis from which the project team developed transit service alternatives.

⁴ Regional studies include the GoTriangle FY 2021 Annual Bus Service Performance Report and the Wake County Transit Plan Update.

⁵ Northeast Community Plan (<https://online.flipplingbook.com/view/370447640/2-3/>)

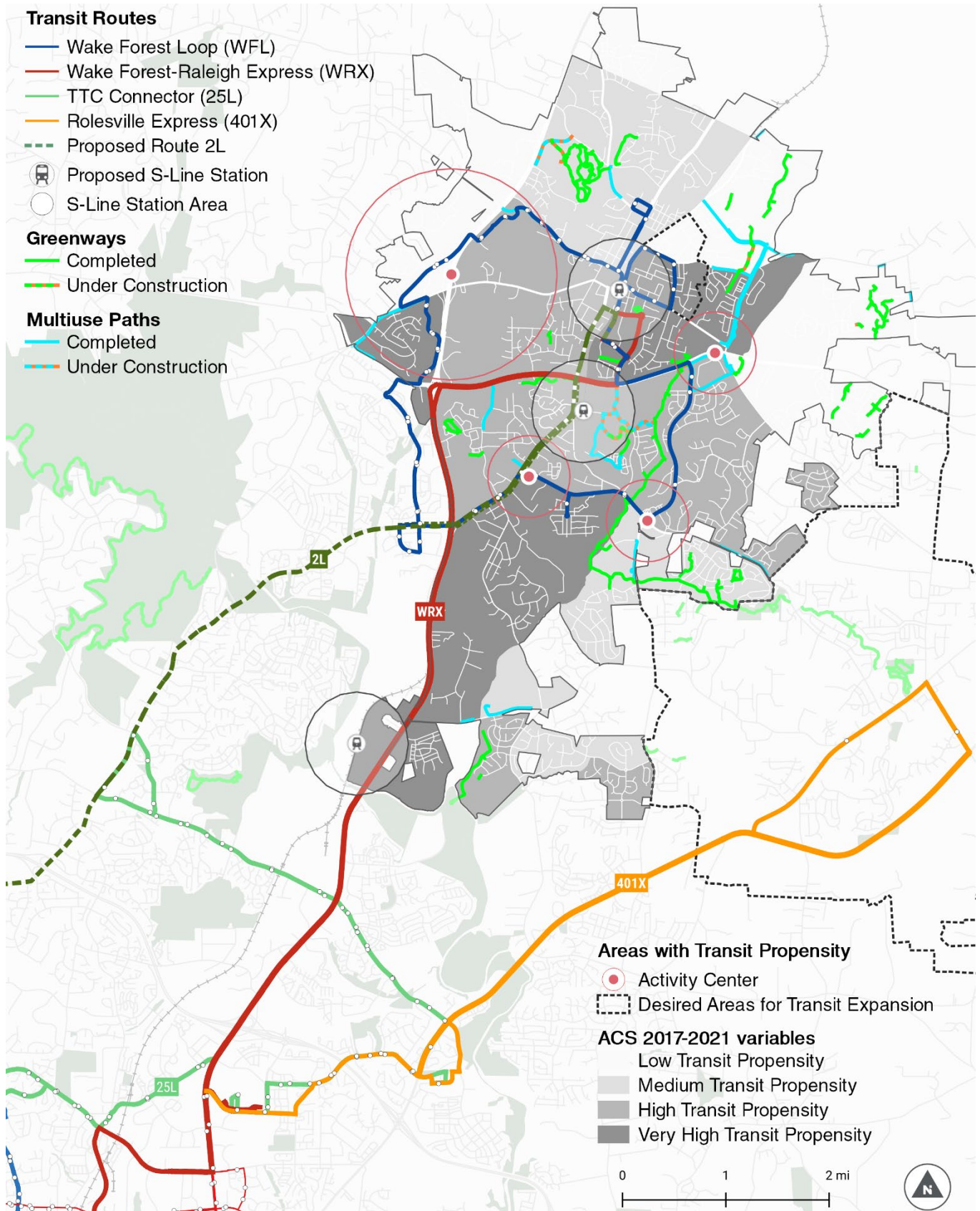


Figure 5. Transit Propensity Wake Forest

COMMUNITY AND STAKEHOLDER FEEDBACK

The project team heard from the people of Wake Forest through multiple means of community and stakeholder engagement. The goals of the engagement process were to 1) better understand how well existing services are working for the public, and 2) consider potential alternatives.

Eight engagement activities were held by the project team to gather feedback from the community and stakeholders. This section outlines these events chronologically as they were held throughout the planning process from October 2022 through July 2023.

October 2022

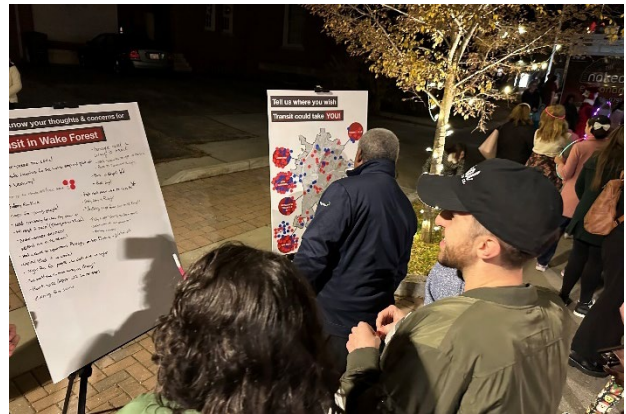
Board of Comissioners and Planning Board Work Sessions

To kickoff the project, the project team made introductory presentations at the October 4, 2022 Board of Commissions work session and the October 11, 2022 Planning Board meeting. The presentations provided an overview of the transit types, key considerations, and the engagement efforts that would be made to develop the Transit Plan.

December 2022

Pop-up Events

The project team attended the Lighting of Wake Forest holiday event on December 2, 2022 to provide information and gather feedback for the Transit Plan. At this pop-up, attendees were invited to place a sticker on a map to indicate where they would like to be able to travel to via bus. The map board received 224 responses and the Town staff along with the project team were able to answer questions about existing transit service from residents.



February 2023

Community Survey

The project team released a community survey to learn more about the public transit preferences of residents. The community survey was made available from December 1, 2022 to February 19, 2023. The survey was available in an online format and a paper form made available at the December 2022 pop-up event. There were 687 unique participants. Results from the survey are summarized below and in Appendix A.

Public Open Houses

Two public open houses—one early afternoon and another in the evening—were hosted at the Alston-Massenburg Center by the project team on February 2, 2023. The goal of these open houses was to provide residents and stakeholders with information on the Transit Plan. Attendees were invited to share feedback on their existing use of transit and future transit needs. These open house events also included activities for kids.

The project team hosted a BBQ to encourage participation and asked participants to ride the bus. The event was advertised via postcards mailed to residents and on the project’s webpage.



April 2023

Rider Survey

From March 12, 2023 to April 6, 2023, a survey focused on collecting input from people that use the existing transit services in Wake Forest was released by the project team. A total of 51 participants provided feedback related to existing transit and opportunities for improvement. Results from the survey are summarized below and in Appendix B.

To promote the survey, the project team posted QR codes on sidewalk decals, posted signs at bus stops that took users to the online survey, and handed out information with the QR code to bus riders.



May 2023

Stakeholder Interviews

The project team held interviews with key stakeholders in the region. Interviews were held with regional transit service providers – GoTriangle, GoRaleigh, and GoWake Access on May 9, 2023, and with the Capital Area Metropolitan Planning Organization (CAMPO) on May 15, 2023. At the interviews, the project team presented draft transit service alternatives and received feedback about system compatibility from the transit service providers, and information on program funding from CAMPO.

July 2023

Board of Commissioners and Planning Board Work Sessions

The project team made presentations at the July 6, 2023 Board of Commissioners work session and the July 11, 2023 Planning Board meeting. The presentations provided an overview of the transit service alternatives being considered and the strengths and weaknesses of each alternative.

Public Open Houses

The project team hosted two public open houses—one early afternoon and another in the evening—on July 10, 2023 at the Alston-Massenburg Center. The goal of these open houses was to present transit service alternatives to expand transit services in Wake Forest. The strengths and weaknesses of each alternative were presented, and the project team solicited feedback on the community’s preferred alternative.

To promote the open house, the project team placed notices on the project’s webpage and postcards with details about the open house were mailed to residents (samples below).



In the community survey, 82% of the 679 respondents indicated that they do not ride transit in Wake Forest. See Figure 6.

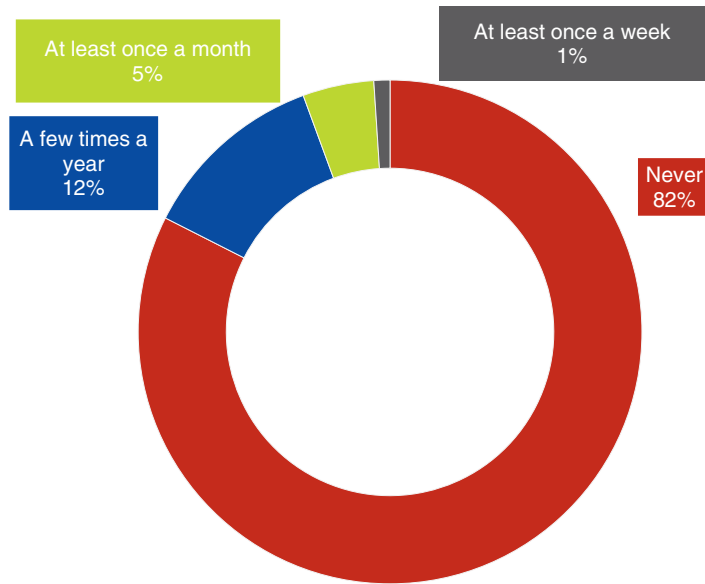
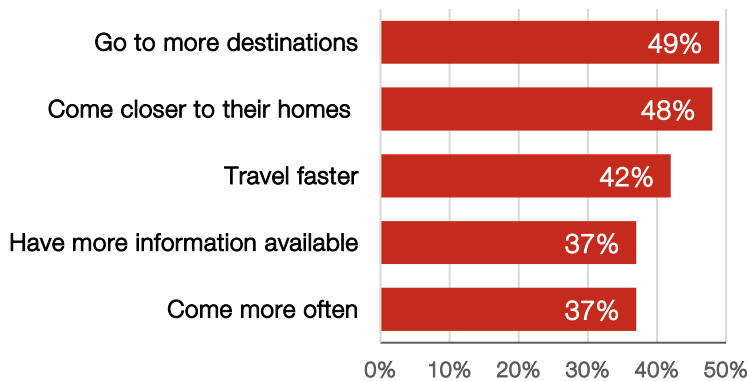


Figure 6. Frequency of Wake Forest Transit Use Among Survey Respondents, Community Survey February 2023



The low use of transit indicates that the existing transit services are not meeting the mobility needs of the Town. When asked what transit service needed to do differently to encourage people to ride transit more frequently, respondents top three responses were 1) *go to more destinations*, 2) *come closer to their homes*, and 3) *travel faster*. See Figure 7 for the top five reasons given.

Figure 7. Things That Would Encourage Respondents to Take Transit More, Community Survey February 2023

Respondents indicated that the top destinations that they would like to access via transit, were:

- Downtown Raleigh (66%),
- Downtown Wake Forest (54%),
- The Rogers Road Shopping Area (37%),
- Joyner Park (36%),
- Downtown Durham (34%),
- South Main Street Wake Forest (34%), and
- Wakefield Commons (33%).

See Appendix A for a full summary of results from the community survey.

In the rider survey, 62% of the 25 people who responded to the question indicated that the primary purpose they take transit (the WFL or WRX) is to get to work, and 21% for shopping or errands. None of the respondents indicated that they used the transit to get school or special events. See Figure 8. “Other” included going to the gym and recreation.

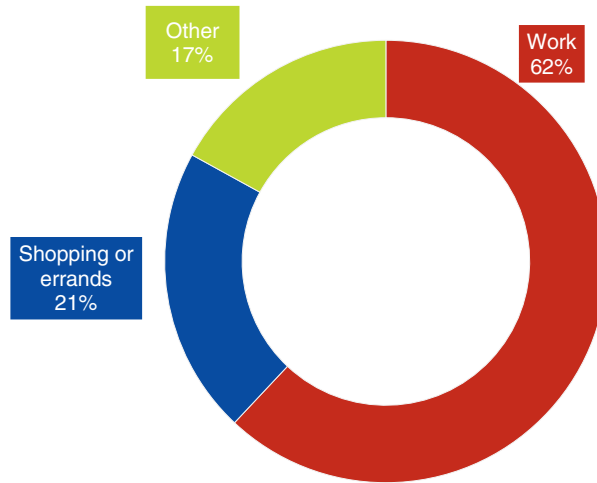


Figure 8. Primary Purposes for Taking Transit, Rider Survey April 2023

The prevalence of riders using transit to get to work, relates to 80% of respondents using transit at least three days per week.

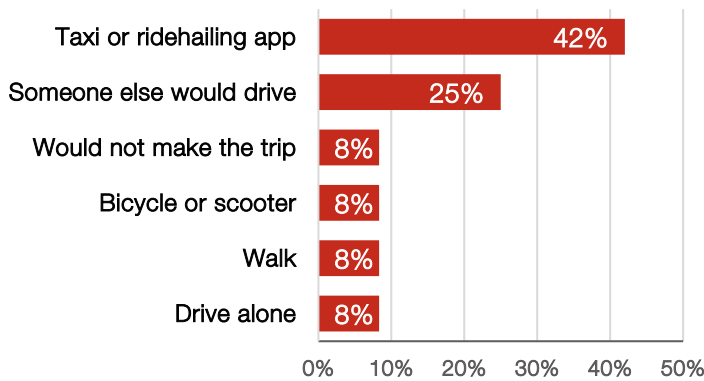


Figure 9. Alternatives if Transit WFL or WRX Were Not Available, Rider Survey April 2023

When asked how they would get to their destinations if the WFL or WRX were not available, respondents top two responses were taxi or ridehailing app (42%) and someone else would drive (24%). See Figure 9 for the top six responses.

Additional key takeaways from the rider survey include:

- 83% of respondents walk to access bus stops,
- The top features desired at bus stops are seating (58%), lighting (54%), and accessible paths (54%),
- 37% of respondents racially identified as Black/African American,
- 79% of respondents are very satisfied or somewhat satisfied with their transit experience, and
- 56% of respondents are from a household making less than \$47,000 per year.

See Appendix B for a full summary of results from the rider survey.

TRANSIT SERVICE ALTERNATIVES

The project team developed transit service alternatives based on five key purposes for transit expansion. The purposes and brief justifications for each purpose are listed below:

- **Serve Northeast Wake Forest**
Identified as a key need in the 2021 Northeast Community Plan, and an area with high transit propensity.
- **Serve Southern Wake Forest**
Based on population growth and high transit propensity.
- **Connect to key activity centers**
Based on community feedback to connect to more destinations.
- **Connect to future S-Line Stations**
Identified as a key connection in 2022 Community Plan and 2021 Northeast Community Plan.
- **Connect to Rolesville**
Identified as a key connection in the FY2025-2030 Wake Bus Plan.

Based on the five key purposes, options for transit expansion were evaluated. Four transit service expansion alternatives were developed by the project team and are described in a series of maps on the following pages.

- **Alternative A**
Two new circulator loops by adjusting the existing WFL.
- **Alternative B1**
New microtransit zone with the WFL.
- **Alternative B2**
An alternative to B1 with a new microtransit zone and Alternative A circulators.
- **Alternative C**
New microtransit zone and elimination of the WFL.

ALTERNATIVE A

Modification of the WFL route to create two loops – **East Loop and West Loop** (Figure 10). The West Loop would largely follow the existing WFL route with some adjustments to add Ligon Mill Road and decrease the WFL length and deviations. The proposed East Loop route would go to destinations that the WFL currently connects to as well as new destinations, such as Joyner Park, the Wake Forest Reservoir, and Flaherty Park. In the Town’s core both loops would overlap to provide more frequent service in areas with higher ridership stops on the WFL (see Figure 3). The West Loop is approximately 13 miles and would travel in a counterclockwise direction, and the East Loop is 16 miles in a clockwise direction.

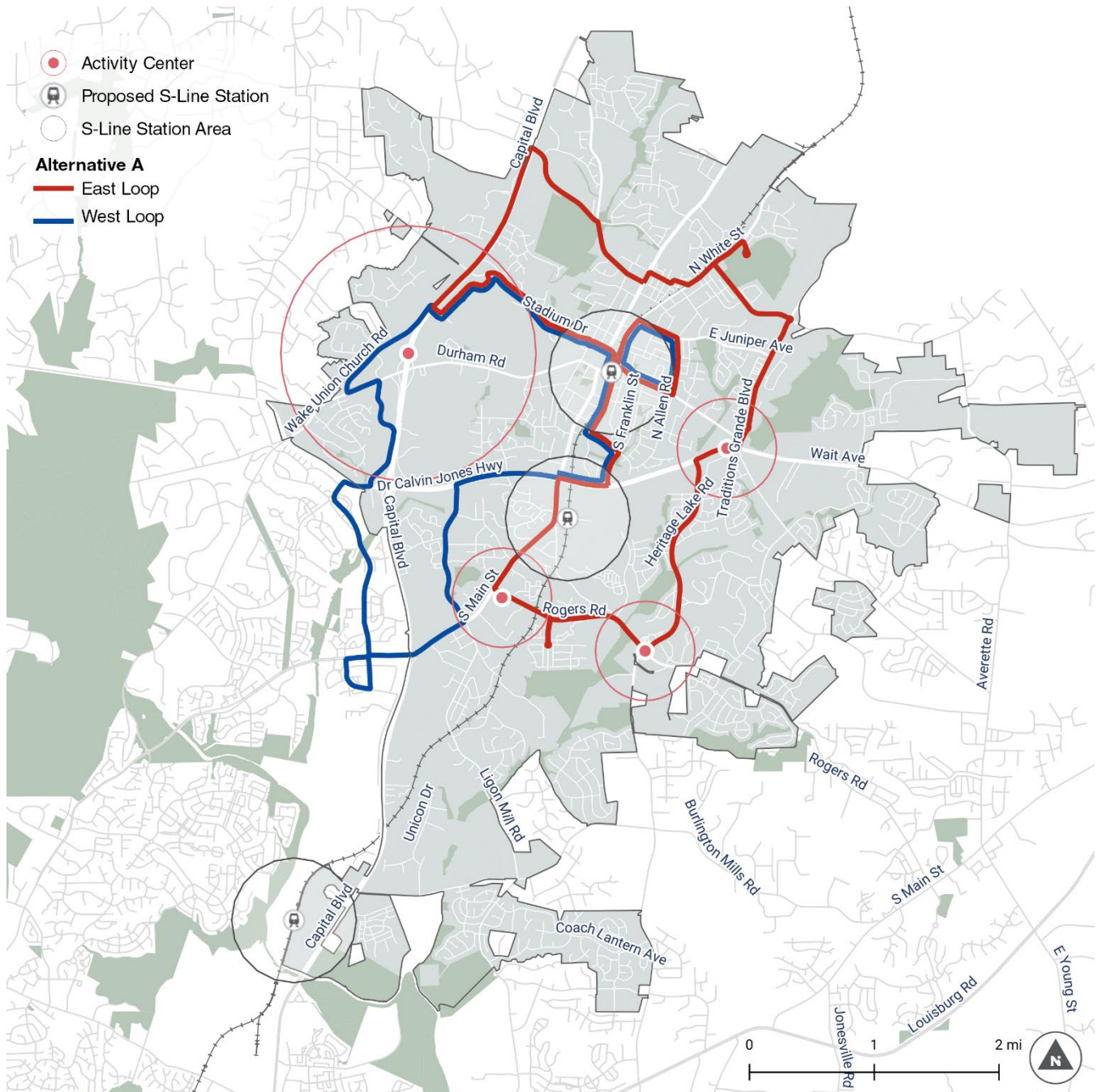


Figure 10. Proposed Transit Alternative – New East Loop and West Loop Circulators

ALTERNATIVE B1

Southern Wake Forest Microtransit Zone + WFL (Figure 11) would provide service to areas in southern Wake Forest via a microtransit service and combine with the existing WFL. This alternative would increase access to destinations through the connection to the current circulator route.

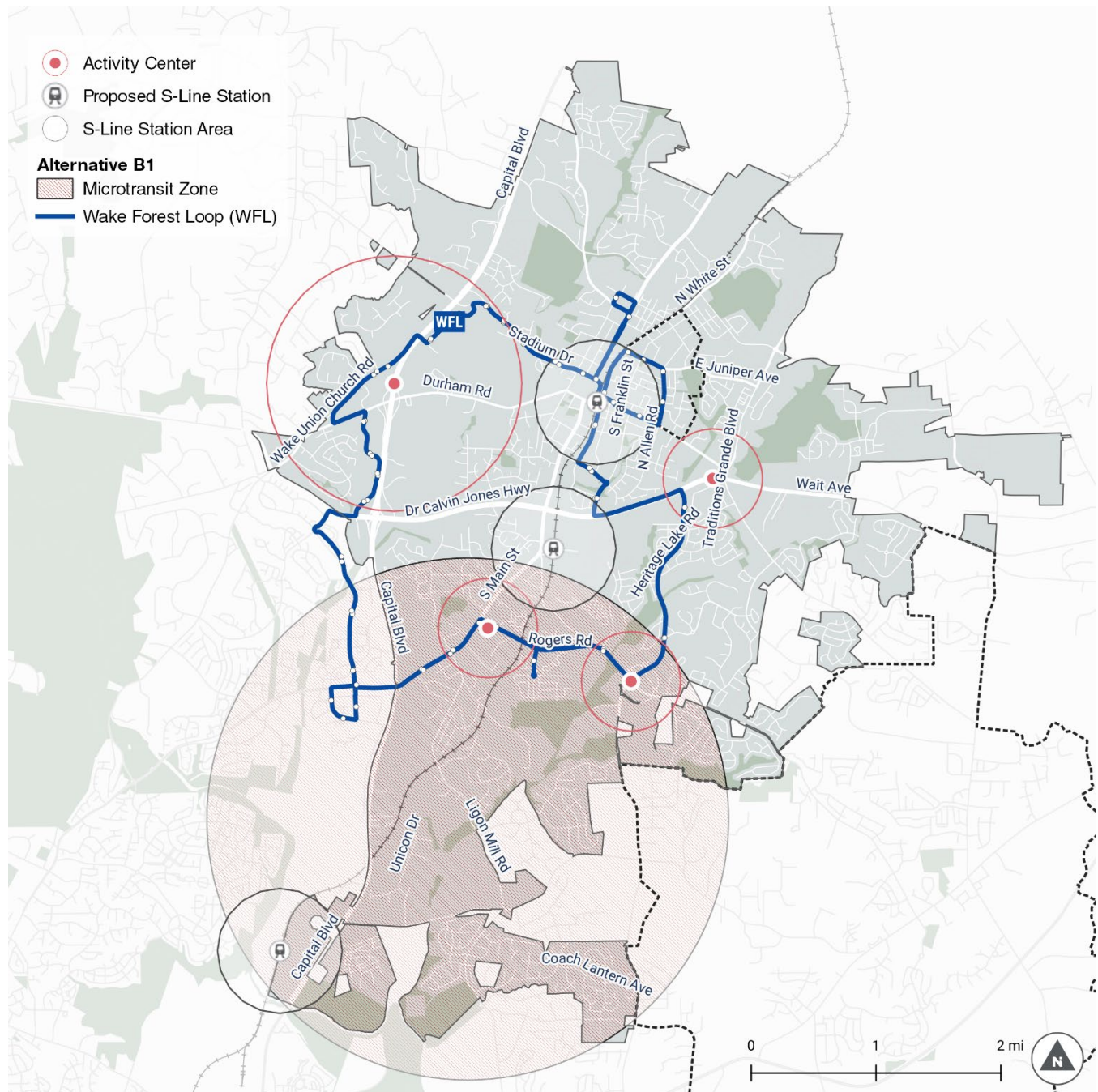


Figure 11. Proposed Transit Alternative – Southern Wake Forest Microtransit and Connection with WFL

ALTERNATIVE B2

Southern Wake Forest Microtransit Zone + Alternative A (Figure 12) would provide service to areas in southern Wake Forest via a microtransit service and combine with the circulator loops proposed in Alternative A. This alternative would increase access to additional destinations, such as Joyner Park, the Wake Forest Reservoir, and Flaherty Park, via a choice of the two circulator loops.

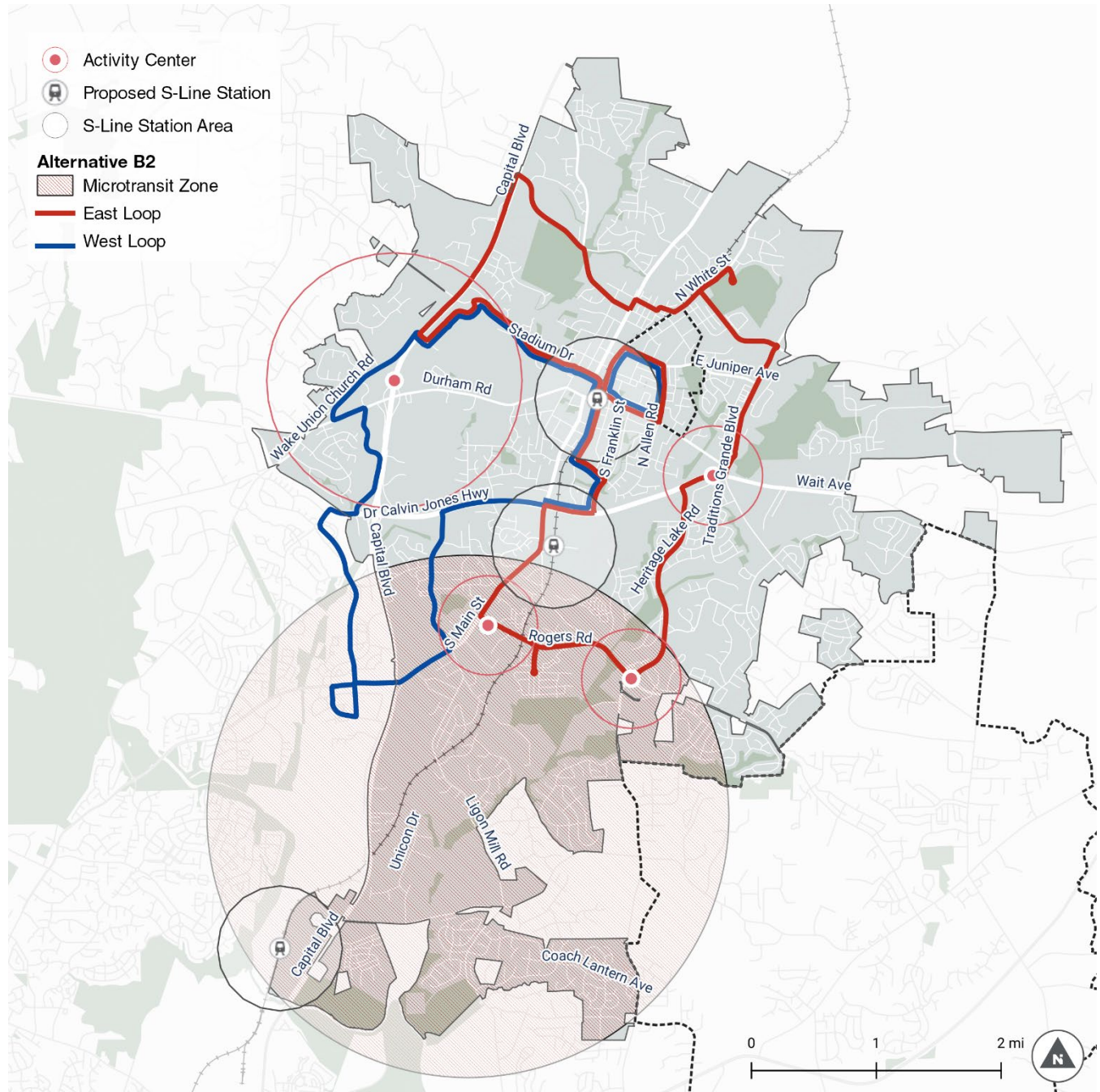


Figure 12. Proposed Transit Alternative – Southern Wake Forest Microtransit and Connection with Alternative A Circulators

ALTERNATIVE C

Wake Forest Microtransit (Figure 13) would be a new microtransit zone that eliminates the WFL and serves all residents and destinations in Wake Forest. The exact boundaries of the microtransit zone would be further refined to include all the Town’s boundaries and potentially select destinations outside of the Town when the service is designed for implementation.

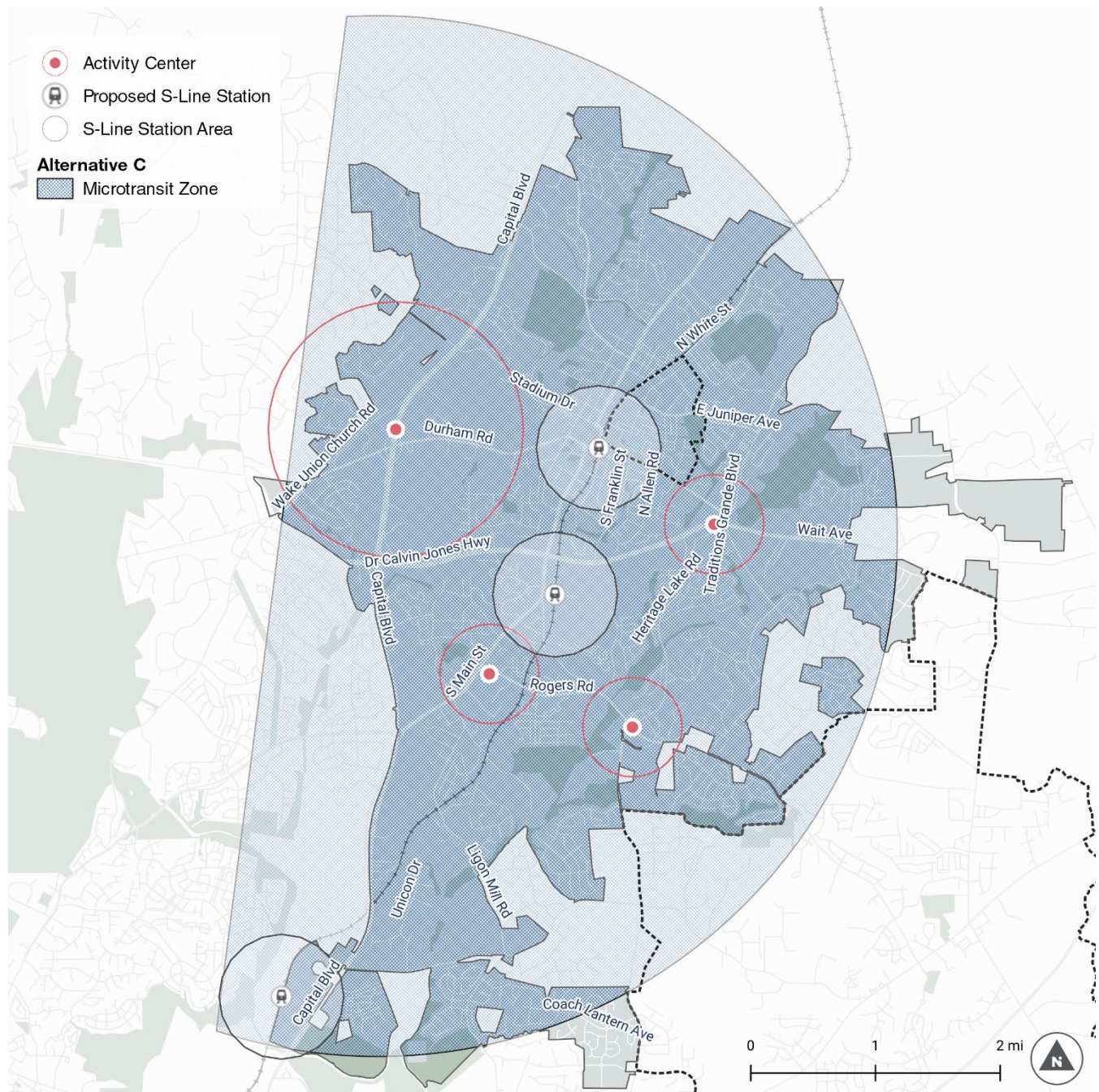


Figure 13. Proposed Transit Alternative – Wake Forest Microtransit

ADDITIONAL CONSIDERATIONS

There are additional considerations of the Transit Plan that go beyond the transit expansion alternatives. These additional considerations include:

- **An expansion of the WRX** to an all-day bidirectional route that would provide additional options for people to travel between Downtown Raleigh and Wake Forest, especially for midday trips for non-work purposes, e.g., going to medical appointments, or shopping.
- **Expanding the WFL** to have a 30-minute frequency to decrease the time that people must wait to get a bus.
- **Extending the Planned Route 2L** to Northeast Wake Forest which is being considered as a new transit service to begin in FY 2029.
- **Rolesville Microtransit** is planned to open in FY 2024 per the FY2025-2030 Wake Bus Plan and could potentially serve specific pick up/drop off nodes within Wake Forest. When it opens, the service will replace the Route 401X. This service could satisfy the transit expansion purpose of connecting Wake Forest to Rolesville

Although these were not considered as part of the transit expansion alternatives, they are potentially viable options that the Town may consider in the future to meet the needs of riders.

Figure 14 illustrates the expanded route additional considerations.

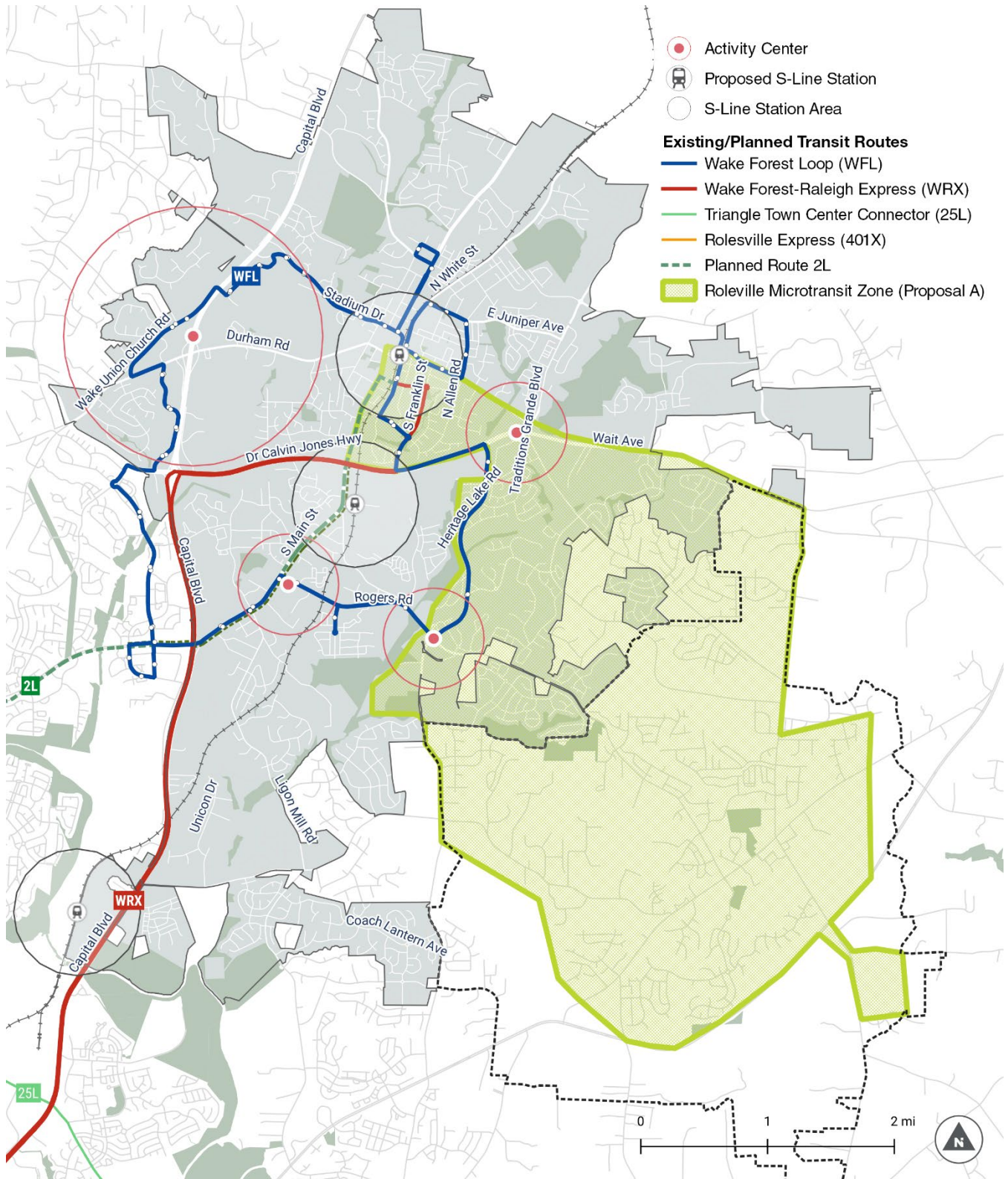


Figure 14. Additional Considerations for Transit Expansion

ALTERNATIVES EVALUATION

The project team evaluated the four alternatives by 1) estimating high-level operating costs for each alternative, 2) assessing how well each alternative met the stated purposes for transit expansion, and 3) summarizing the alternatives’ strengths and weaknesses.

HIGH-LEVEL OPERATING COSTS

To compare the alternatives, the project team developed high-level operating costs. These costs are based on initial assumptions about the operating scenario for each alternative and are not final recommendations for how the alternative would operate if implemented.

Table 1 summarizes the comparative high-level operating costs for the alternatives. The annual operating cost for the existing WFL is also provided for comparison. The annual operating cost for Alternative A is similar to the existing WFL’s cost (\$1,002,000 for the WFL, compared to \$1,040,000 for Alternative A). This is primarily because the assumption for Alternative A is similar to the existing WFL. The West Loop of Alternative A will operate in a counterclockwise direction, while the East Loop would be clockwise.

Table 1: Summary of High-Level Annual Operating Costs per Alternative

	Existing WFL	Alternatives			
		A	B1	B2	C
Loop A	West Loop \$501,000	West Loop \$520,000	Microtransit \$700,000	Microtransit \$700,000	Microtransit \$1,400,000
Loop B	East Loop \$501,000	East Loop \$520,000	WFL (A+B) \$1,002,000	Alternative A \$1,040,000	
Total	\$1,002,000	\$1,040,000	\$1,702,000	\$1,740,000	\$1,400,000

These costs are only for a high-level comparison of the alternatives, not for presented for programing reasons.

ASSUMPTIONS

Circulator

- Circulator operating cost assumes vehicle revenue hour cost of \$109.39 (FY2024 GoRaleigh cost).
- Circulator loops in Alternative A assume the same service times and frequency as the existing WFL.





















Microtransit

- Microtransit assumes vehicle revenue hour cost of \$80.
- Microtransit cost is based on number of vehicles needed. Ridership demand is a factor of vehicles needed. Generally, the larger the service area, the more demand. More vehicles will help ensure the service can meet the demand, fulfill more riders, and reduce waiting times for riders.
- Microtransit cost assumes top end of cost range – higher ridership demand and more vehicles – two vehicles for Alternatives B1 and B2; four vehicles for Alternative C.

STRENGTHS AND WEAKNESSES

Table 2 summarizes how well each of the four transit service alternatives meets the five stated purposes for transit expansion in Wake Forest. Alternatives B1, B2, and C all similarly meet four of the five purposes, because they provide transit service coverage to a large part of the Town. Alternative A does not connect to areas in southern Wake Forest, and only connects to a portion of the S-line stations. All the alternatives do not satisfy the purpose to connect to Rolesville because they primarily serve destinations and communities within the Town. The Rolesville Microtransit service being planned for FY 2024 service could provide connectivity between the Wake Forest and Rolesville (see the *Additional Considerations* section above).

Table 2: Summary of Transit Expansion Purpose and Alternatives

	Alternative A	Alternative B1	Alternative B1	Alternative C
Connect to Northeast Wake Forest				
Connect to Southern Wake Forest				
Connect to Activity Centers				
Connect to S-line Stations				
Connect to Rolesville				



Key:  – fully meets the purpose;  – partially meets the purpose;  – does not meet the purpose

Table 3 summarizes the strengths and weaknesses for each alternative. It combines the information in Table 1 and Table 2 to compare benefits and shortfalls of each alternative.

Table 3. Summary of Strengths and Weaknesses for Each Alternative

	Strengths	Weaknesses
A	<ul style="list-style-type: none"> • Connects to key activity centers and high ridership stops. • Increases service in Town’s core. • Shortens the WFL with fewer deviations. • Potentially near neutral operating cost change. 	<ul style="list-style-type: none"> • Changes an established service in the Town (WFL). • Two different routes may cause rider confusion. • Misses the S-Line station and high transit propensity area to the south. • Does not connect to Rolesville.
B1 & B2	<ul style="list-style-type: none"> • Adds service to high transit propensity area. • Complements circulator service(s) to provide additional connectivity. • Connects to key activity centers, S-Line, and high ridership stops. (B2) 	<ul style="list-style-type: none"> • Higher annual operating cost. • Does not connect to Rolesville.
C	<ul style="list-style-type: none"> • Connects to all activity centers and S-Line stations. • Opportunity to reallocate circulator cost. • Expands services to places not serviced by WFL. • Potentially attracts more choice riders. • Potentially near neutral operating cost change. 	<ul style="list-style-type: none"> • Discontinues established WFL. • No fixed-route service in the Town. • Does not connect to Rolesville.

PREFERRED OPTION

The project team identified Alternative B2 – East and West Loops and the Southern Wake Forest Microtransit as the preferred option to expand transit services in Wake Forest. For the preferred option, the East Loop in Alternative B2 was adjusted to shorten the route length and ensure a shorter travel time to complete the route. The shortened East Loop would not provide service to areas that had low ridership on the WFL along Rogers and Heritage Lake roads (see Figure 3). This alternative would meet the Town’s goals to expand transit service for its residents, employees, and visitors by modifying the WFL route to create two loops – East Loop and West Loop combined with a new microtransit service zone in southern Wake Forest. The WRX would continue operating as it does today to provide express service between Wake Forest and downtown Raleigh.

OPERATING CHARACTERISTICS

The project team developed operating characteristics for the two transit services – the East and West loop circulators, and the microtransit zone.

CIRCULATORS

The East and West loops would operate as circulators. The recommended operating characteristics are summarized in Table 4. The loops would have a small adjustment to the WFL’s operating hours and frequency. They will provide service 6:00 a.m. to 9:00 p.m. Monday through Saturday, with no service on Sunday. The frequency on each loop will be 60 minutes. Compared to the WFL, this service recommendation standardizes the operating times and can help riders understand and predictably expect the circulators. It will be easier for riders to understand and remember that a bus comes every hour 6:00 a.m. to 9:00 p.m., Mondays to Saturdays.

Table 4: East and West Loops Operating Characteristics

Characteristic	Recommendation
Route Length	12 miles (East Loop) 13 miles (West Loop)
Direction	Clockwise (East Loop) Counterclockwise (West Loop)
Frequency	Every 60 minutes
Days of Operation	Monday to Saturday
Span of Hours	6:00 a.m. to 9:00 p.m.
Cost to Riders	Free
Vehicle Type	40-ft buses
Vehicles Needed	2

The circulators’ level of service and quality of service provided to riders can be further improved by increasing the frequency (how many times the bus comes per hour) of the routes. A higher frequency decreases the time riders must wait to get on the bus. To increase the frequency additional vehicles will be needed for each route. The recommendations in Table 4 assume two buses total – one for each loop. If the routes had an additional bus (two buses for each route), the frequency can be increased to two buses per hour, or service every 30 minutes.

MICROTRANSIT

The microtransit zone in southern Wake Forest would provide transit service in an area of the Town with a primarily residential land use and curvilinear street network that is not very conducive for fixed-route transit. The Southern Wake Forest Microtransit zone would allow residents to use an on-demand service to get to and from destinations within southern Wake Forest, and the Wakefield neighborhood of Raleigh. Riders would be able to transfer between the microtransit service and the West Loop to connect between other destinations in the Town.

The project team developed assumptions about the operating characteristics for the microtransit zone, summarized in Table 5, however, additional analysis will be needed to develop the best operational strategy for the service. Unlike the circulator service which is based on an existing service (the WFL), the southern microtransit zone would be a new service for Wake Forest. Before launching the microtransit service, the Town will need to conduct additional planning and coordination with a third party microtransit service operator to determine the best service characteristics for southern Wake Forest.

Two sets of assumptions are made about the operating characteristics for the microtransit service: 1) a door-to-door service that picks up and drops off riders at any destinations within the zone, or 2) node-to-node service that only picks up and drops of riders at established nodes located within the zone. In a door-to-door service, riders can request microtransit vehicles pick them up at a specific location or address within the zone (e.g. at their home) and be transportation to another specific location or address within the zone (e.g. school). Riders will not have to travel long distances to access the service. The microtransit service operator can combine trips for riders traveling to the same or nearby locations to create a shared ride – one vehicle or trip taking more than one riders to the same or nearby destinations. However, shared rides are not very common because it is not very likely that riders will be traveling to the same or nearby destinations, and small 6-8 person vehicles are usually used.

In a node-to-node service, riders would have to travel longer distances to access the microtransit service at locations such as existing or new bus stops or key activity centers. The node-to-node service can help streamline the operations by making trips more predictable and increasing the likelihood of shared rides. Because of the increased likelihood of shared rides, larger vehicles are assumed for the node-to-node service. The microtransit service would have similar operating hours as the WFL – standardized hours Mondays to Saturdays.

Table 5: Southern Microtransit Zone Operating Characteristics

Characteristic	Door-to-Door Assumptions	Node-to-Node Assumptions
Days of Operation	Monday to Saturday	Monday to Saturday
Span of Hours	6:00 a.m. to 9:00 p.m. (Monday to Saturday)	6:00 a.m. to 9:00 p.m. (Monday to Saturday)
Cost to Riders	\$2.00 (free for youth, seniors, people with disabilities)	Free
Stops	N/A	16 nodes
Vehicle Type	Minivan	16-seat cutaway

ROUTE ALIGNMENT AND ZONE

CIRCULATORS

The project team recommends operating the East Loop in the clockwise direction and the West Loop counterclockwise. There are fewer infrastructure improvements needed to install bus stops when travelling in the clockwise direction in the East Loop and counterclockwise operation in the West Loop avoids challenging left-turn movements.

The East and West loops would provide access to several destinations. Key destinations include:

East Loop

- Downtown Wake Forest Historic District
- Flaherty Park and Community Center*
- Joyner Park and Community Center*
- Kiwanis Park
- Retail and restaurants at E Roosevelt Avenue and Brooks Street
- Shopping Center at Gateway Commons Circle and Dr Calvin Jones Highway
- Envision Science Academy*
- United States Postal Service at S White Street and E Holding Avenue
- Wake Forest Community Library
- Wake Forest Historical Museum
- Wake Forest Reservoir*
- Wake Forest Sprayground
- Wake Forest Crossing Shopping Center
- Wake Forest High School

West Loop

- Downtown Wake Forest Historic District
- Forest Pines Elementary School
- Shopping Center at Dr Calvin Jones Highway and Ligon Mill Road*
- Kiwanis Park
- Northeast Regional Library
- North Forest Pines Elementary School
- North Wake College and Career Academy
- Shoppes at Wake Forest Shopping Mall
- Shopping Center at Forest Pines Drive and Common Oaks Drive
- Shops and Restaurants at Center S Main Street and Carter Street
- Shops at Ligon Mill Road (Dr Calvin Jones Highway to S Main Street)*
- Shops at Retail Drive
- Wakefield Commons Shopping Center
- Wake Forest Community Library
- Wake Forest Crossing Shopping Center
- Wake Forest High School
- Wake Forest Historical Museum
- Wake Forest Sprayground

* *new destinations that the WFL does not serve currently*

The new circulators will provide access to six additional key destinations compared to the WFL. Existing bus stops will serve the locations that are currently served by the WFL, however, new stops will be needed for the new destinations. The project team identified the need for 15 new potential bus stops. Before the new circulators are implemented, bus stops will need to be installed to serve these destinations, and evaluation of sidewalks, bus pads, and safe crossings is needed to determine final stop locations.

MICROTRANSIT

There are several key destinations within the Southern Wake Forest Microtransit Zone that riders would be able to access. While, the final boundaries of the zone will need to be refined before launching the service, destinations in the Southern Wake Forest Microtransit Zone include:

- Endeavor Charter School
- Goddard School of Wake Forest
- Heritage High School
- Heritage Middle School
- Northeast Regional Library
- Primrose School of Heritage Wake Forest
- Shops at Ligon Mill Road and S Main Street
- Shopping Center at Forestville Road and Rogers Road
- Shopping Center at S Main Street and Wake Drive
- Shopping Center at Rogers Road and Heritage Center Drive
- Wakefield Commons Shopping Center

The service can be operated as a door-to-door service, or a node-to-node service. For the node-to-node service, the project team has identified 16 potential nodes that are located in residential areas and near key destinations so riders can access the service from their home and access retail areas, parks, schools, and other activity areas, and transfer between the West Loops to access additional destinations throughout the Town. The nodes, in no particular order are:

1. Commons Oaks Drive and Oliver Road
2. Endeavor Charter School
3. Forest Pines Drive and John Rex Boulevard
4. Forestville Road and Rogers Road
5. Crossings at Heritage
6. Heritage High School
7. Ligon Mill Road and Lariat Ridge Drive
8. Ligon Mill Road and S Main Street
9. Ligon Mill Road Porto Fino Avenue
10. Marshall Farm Street and Heritage View Trail
11. Richland Creek Church
12. Rogers Road and Heritage Center Drive
13. Shearon Farms
14. Song Sparrow Dr
15. Stonegate
16. Wake Drive and S Main Street

Figure 15 illustrates the preferred transit service option with the East and West loops, and nodes for the microtransit zone.

WAKE FOREST PUBLIC TRANSIT PLAN

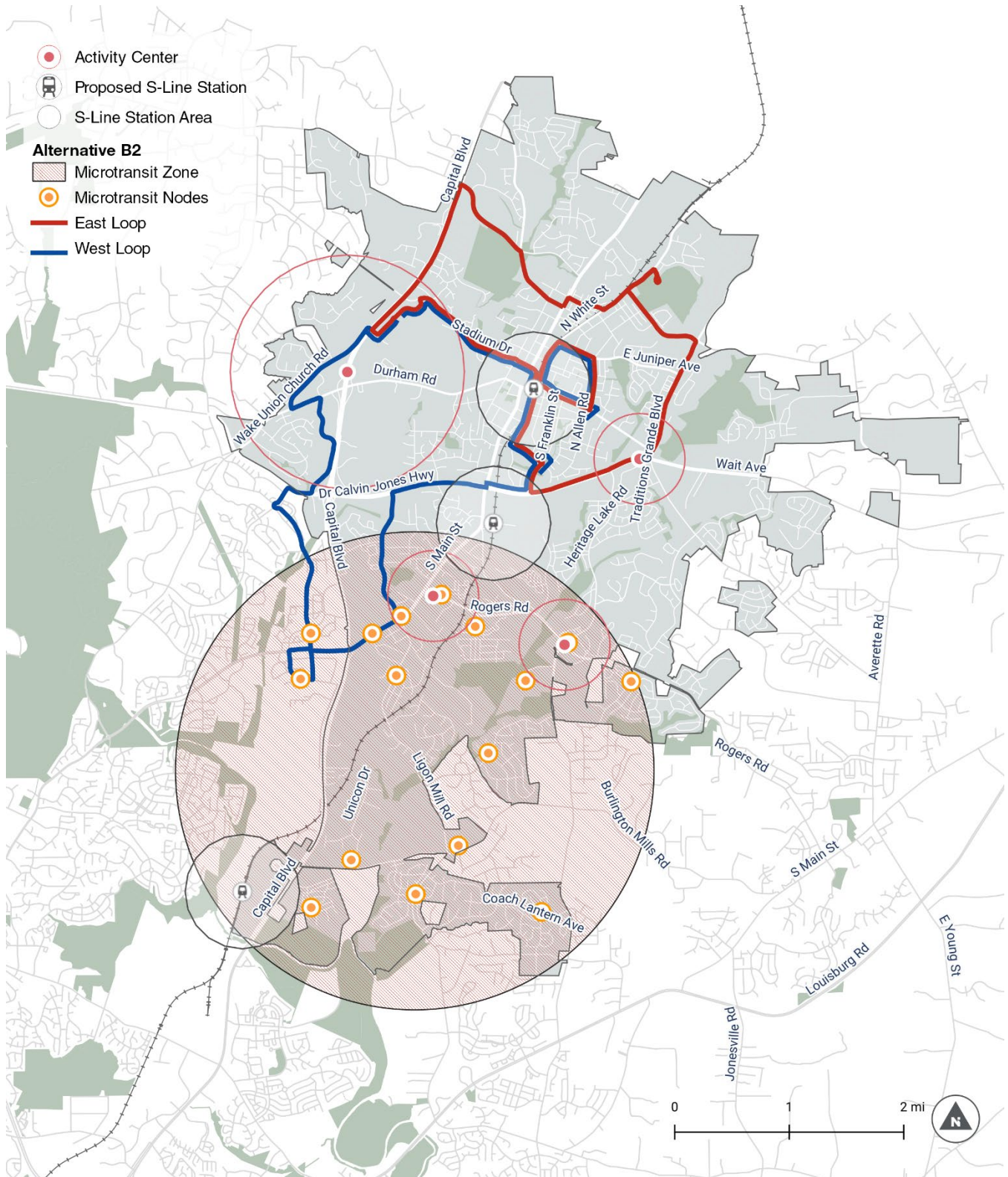


Figure 15. Preferred Option

PREFERRED OPTION FEASIBILITY

The project team developed planning-level costs to understand the level of resources that is likely needed to start-up and operate the preferred transit option. These costs are high-level costs and are the project team's opinion of likely costs based on information and assumptions made during the planning study.

PLANNING-LEVEL COSTS

CAPITAL COSTS

The capital cost for initializing the preferred transit option is primarily for the installation of new bus stops on the circulator routes and the microtransit node-to-node service. Since the routes are adjustments to the WFL, the existing bus can be used for the new routes, primarily on the West Loop. The project team identified the need for 15 new stops, however, additional analysis is needed to evaluate the specific need for each bus stop and its location. Additionally, as new developments open and expand in the future, the Town will evaluate the need for new bus stops. The planning-level cost estimated to implement the 15 bus stops is approximately \$180,000. This cost assumes a general unit cost per bus stop of \$12,000, however the range of costs can be between \$5,000 to \$19,000 per stop. The cost will depend on the needs at each specific bus stop, such as sidewalk connections, concrete pads, right-of-way, post and signage, shelters, benches, and trash receptacles.

For the microtransit service (if deployed as a node-to-node service) 10 of the 16 nodes will require a bus stop with a concrete pad and shelter to provide a comfortable place for riders to wait to access the microtransit service – the remaining six are existing WFL bus stops that have a pad and shelter. The planning-level cost estimated to implement 10 bus stops is approximately \$190,000. This cost assumes a general unit cost per bus stop of \$19,000 to account for the higher costs of a concrete pad, shelter, and potentially right-of-way needs.

OPERATING COSTS

The project team's opinion of the planning-level total annual operating costs for the preferred option is between \$1,337,000 and \$3,016,000. This is the cost to operate both circulator routes (East and West loops) and the Southern Wake Forest Microtransit. The range is dependent on a 60-minute or 30-minute frequency for the West Loop and a low or high demand for the microtransit service (a higher frequency and a higher microtransit demand is on the high-end of the cost range). The section below provides costs for several options that the Town can use to identify the best level of service based on available funding.

Circulators

The operating costs for the circulators are based on the cost to operate the WFL. **Table 6** outlines the current operating characteristics for the WFL (A and B loops) and the annual operating cost assumed by the Town of Wake Forest and GoRaleigh for FY 2024. The total cost for the WFL’s Monday to Friday and Saturday service is approximately \$1,002,000 (\$854,000 for weekday service, and \$148,000 for Saturdays). The cost is based on a unit operating cost set by GoRaleigh of \$109.39 per vehicle hour. These factors are assumed as the basis to develop an opinion of planning-level operating cost for the East and West loops.

Note, approximately 17% of the WFL operates in the City of Raleigh (based on the route’s length), therefore the cost to the Town of Wake Forest is 83% of the total cost – approximately \$832,000.

Table 6: WFL Operating Cost (FY2024) for A and B Loops

	Monday to Friday	Saturday
Route Length (miles)	16 (one-way for each loop)	16 (one-way for each loop)
Frequency (minutes)	65 minutes	75 minutes
Revenue Hours per Day	14	12
Number of Vehicles	2 (one for each loop)	2 (one for each loop)
Vehicle Revenue Hours per Day	28	24
Total Vehicle Hours per Day ¹	30	30
Days per Year ²	260	52
Vehicle Revenue Hours per Year	7,800	1,352
Annual Operating Cost ³	\$854,000	\$148,000
Cost per Vehicle Hour	\$109.39	\$109.39

¹ Includes one hour of deadhead per day for each vehicle to account for travel to and from bus garage.

² Average weekdays and Saturdays per year.

³ Rounded up to the nearest 1,000ths (assuming the current cost-splitting arrangement continues in a similar fashion).

Table 7 summarizes the assumptions and the planning-level annual operating costs for East and West loops. The routes have a similar travel time, therefore the costs are identical – \$550,000 per year for each loop (\$1,100,000 total). Like the WFL, approximately 17% of the West Loop route length operates in the City of Raleigh, therefore the project team assumes that under a similar agreement between Raleigh and Town of Wake Forest, the cost of the West Loop to the Town is 83% of the total cost – \$457,000 for a total of \$1,007,000 for both loops (assuming the current cost-splitting arrangement continues in a similar fashion).

Table 7: Estimated Annual Operating Cost for Circulator – 60-minute Frequency

	West Loop (Counterclockwise)	East Loop (Clockwise)
Route Length (miles)	12 (one-way)	13 (one-way)
Frequency (minutes)	60	60
Revenue Hours per Day ¹	15	15
Number of Vehicles	1	1
Total Hours per Day	15	15
Total Vehicle Hours per Day ²	16	16
Days per Year ³	312	312
Vehicle Revenue Hours per Year	4,992	4,992
Cost per Vehicle Hour ⁴	\$109.39	\$109.39
Annual Operating Cost	\$550,000	\$550,000
Annual Operating Cost (minus City of Raleigh Portion – 17%)	\$457,000	\$550,000
Total Annual Operating Cost ⁵	\$1,007,000	

¹ 6:00 a.m. to 9:00 p.m.

² Includes one hour of deadhead per day for each vehicle to account for travel to and from bus garage.

³ Average weekdays and Saturdays per year.

⁴ Based on FY2024 cost per revenue hour for GoRaleigh fixed route.

⁵ Assumes the cost-splitting arrangement between Raleigh and the Town of Wake Forest continues in a similar fashion.

One option discussed in the *Operating Characteristics* to improve the level of service is to increase the number of vehicles on the loops to provide a 30-minute frequency. Table 8 summarizes the costs if both loops had two vehicles each. The total cost to Wake Forest for operating both loops would be \$2,013,000.

Table 8: Estimated Annual Operating Cost for Circulator – 30-minute Frequency

	West Loop (Counterclockwise)	East Loop (Clockwise)
Route Length (miles)	12 (one-way)	13 (one-way)
Frequency (minutes)	30	30
Revenue Hours per Day ¹	15	15
Number of Vehicles	2	2
Total Hours per Day	16	16
Total Vehicle Hours per Day ²	32	32
Days per Year ³	312	312
Vehicle Revenue Hours per Year	9,984	9,984
Cost per Vehicle Hour ⁴	\$109.39	\$109.39
Annual Operating Cost	\$1,100,000	\$1,100,000
Annual Operating Cost (minus City of Raleigh Portion – 17%)	\$913,000	\$1,100,000
Total Annual Operating Cost	\$2,013,000	

¹ 6:00 a.m. to 9:00 p.m.

² Includes one hour of deadhead per day for each vehicle to account for travel to and from bus garage.

³ Average weekdays and Saturdays per year.

⁴ Based on FY2024 cost per revenue hour for GoRaleigh fixed route.

Microtransit

The operating costs for the microtransit are based on comparative microtransit services in Town of Wilson, North Carolina; City of Chandler, Arizona; and Town of Morrisville, North Carolina. The services in Wilson and Chandler are run as door-to-door services, and Morrisville has a node-to-node service. Table 9 outlines the operating characteristics of the comparative services and their annual operating cost. The comparative services costs range from \$65 to \$103 per revenue hour. On the low-end (\$65) is the Wilson door-to-door service, and the high-end is Morrisville node-to-node service. Although node-to-node services are expected to have lower operating costs due to efficiencies gain by streamlining pick-up and drop-off locations, the Morrisville service cost may be higher due to having a mix of operators – GoCary vehicles and third-party (Via) application and a larger vehicle requiring specialized maintenance and commercial driver license – a 16-seat cutaway.

For the purposes of estimating planning-level costs for the Southern Wake Forest Microtransit, the project team escalated the comparative services cost per revenue hour by 5%, therefore the range of costs used for the microtransit cost opinions were rounded up from the inflated \$69 to \$108 range to \$70 to \$110 per revenue hour.

Table 9: Comparative Microtransit Services

	Wilson, NC ¹	Chandler, AZ ¹	Morrisville, NC
Service Type	Door-to-door – Town-wide (~32 sq. miles)	Door-to-door – sub-area (~40 sq. miles)	Nodes (16)
Operating Hours	M-F, 5:30 am to 7 pm Sa, 7 am to 6 pm	M-F, 5:30 am to 9 pm	M-F, 7 am to 9 pm Sa, 8 am to 8 pm Su, 8 am to 7pm
Vehicle Type	Minivan	Minivan	16-seat cutaway
Fare	\$2.50	\$2.00	Free
Ridership	161,204	24,976	21,445
Operator	Via	Via	GoCary ops; Via app
Annual Revenue Hours	27,830	9,111	6,521
Annual Operating Cost	\$1,820,000	\$741,325	\$671,652
Cost per Revenue Hour	\$65	\$81	\$103
Cost per Revenue Hour Inflated by 5%	\$69	\$85	\$108

Information about comparative microtransit systems was collected in July, 2023 from each service provide and is based on Fiscal Year 2023 data for each service.

¹ Wilson, NC and Chandler, AZ data is a based on 10 months in FY 2023 (July 2022 to April 2023).

Table 10 summarizes the assumptions and the planning-level annual operating cost for the Southern Wake Forest microtransit zone as a door-to-door service and a node-to-node service. Demand is a driving factor of microtransit operating cost. A higher demand means more riders are looking to ride the service and how well the service is meeting demand is indicated by the length of time riders must wait to get a ride. If demand is high, the service will need more vehicles operating at peak times to meet the demand to provide rides when needed with minimal wait times. Lower wait times mean a high level of service is being provided; however, the more vehicles operating at peak times means a higher microtransit operating cost.

To fully understand and estimate the likely demand for a new microtransit service, additional planning and coordination with a third party microtransit service operator is needed to model the service operations. Therefore, for the planning-level cost opinions, two levels of service scenarios (low demand and high demand) are provided for each microtransit service type, determined by the number of peak vehicles required. For the door-to-door service the annual operating cost is between \$310,000 to \$990,000 and \$520,000 to \$1,003,000 for node-to-node service.

Table 10: Southern Wake Forest Microtransit Zone Planning-Level Annual Operating Cost

	Door-to-Door Assumptions		Node-to-Node Assumptions	
	Low Demand	High Demand	Low Demand	High Demand
Revenue Hours per Week ¹	90	90	90	90
Peak Vehicles ²	1	3	1	2
Vehicle Hours per Week	90	270	90	180
Vehicle Hours per Year	4,680	14,040	4,680	9,360
Cost per Vehicle Hour	\$70	\$70	\$110	\$110
Annual Operating Cost (rounded)	\$330,000	\$990,000	\$520,000	\$1,003,000

¹ Revenue hours per week is the same for all microtransit service assumptions because each service would operate from 6:00 a.m. to 9:00 p.m. Monday to Saturday (15 hours per day for 6 days per week).

² Vehicles needed for peak service determined by level of demand. More vehicles are needed to make more trips and decrease riders' wait times. More detailed modeling and analysis is needed to estimate demand and required number of vehicles.

FUNDING OPPORTUNITIES AND PARTNERSHIPS

To implement the expanded transit services, the Town will need to continue partnerships with regional transit operators and seek funding programs. Operating the transit service with a paid fare system can also allow the Town to offset some of the cost to provide the services. The project team recommends several potential funding opportunities and partnerships.

IMPLEMENTATION PARTNERSHIPS

The project team recommends that the Town of Wake Forest partner with a local transit provider, such as GoRaleigh, GoTriangle, or other, to operate the East and West loops. This is consistent with ongoing operations for the WFL (operated by GoRaleigh); therefore allowing the Town to negotiate with GoRaleigh to operate the East and West loops under similar contract terms. Cost estimates in this Plan for both circulator operating costs are based on assumptions using the existing contract.

For the microtransit service, the project team recommends the Town partner with a third party microtransit operator, such as Via, or a transportation network company such as Uber or Lyft. These third party operators provide a turnkey operation. Turnkey operation is advantageous, especially when implementing a new microtransit service, because the operator provides all aspects of the service – vehicles, IT, operations management, drivers, etc.

COMMUNITY FUNDING AREA PROGRAM (CFAP)

The Community Funding Area Program (CFAP) was created as a result of the Wake County Transit Plan to provide financial support to eligible organizations to accelerate public transportation services and programs. The Town of Wake Forest is among 11 eligible Community Funding Areas but must participate in a competitive process to receive funding for planning, capital, and/or operating expenses.

The CFAP requires all projects provide a minimum funding match of 50% of the total project costs. The matching requirement is the same for operating, capital, and planning projects. There are no restrictions on the funding source used to match CFAP resources. The Town may use federal, state, or local funding sources (local property tax, sales tax, fees, other revenues, etc.) to meet the CFAP match requirements. The Town should note that accepting funds from federal or state programs have separate application processes and reporting requirements that are in addition to the CFAP. The application process renews annually. A representative of the Town must attend an applicant training session that provides an overview of procedures and addresses issues that are relevant to the upcoming call for projects. A representative of the Town must also attend a pre-submittal application review meeting during which CAMPO staff will advise the Town on application completeness.

CFAP funds can be used for operational costs, bus stops and amenities, and projects that provide access to bus stops. Currently, \$420,000 from CFAP is provided annual for the operating costs of the WFL. In any year, no single municipality may have greater than 30% of the CFAP allocation in that year, and currently the cap is \$550,000. Therefore, the Town is only eligible to receive an additional \$130,000 from CFAP.

LOCALLY ADMINISTERED PROJECTS PROGRAM (LAPP)

The Locally Administered Projects Program (LAPP) is a competitive capital funding program managed by CAMPO. Projects are funded using various federal funding sources and require a minimum 20% local match. CAMPO member jurisdictions including the Town are eligible to apply for these funds. Projects are scored

according to published criteria. For transit projects these include Safety & Security, Rider Experience, Connectivity, Improves Facilities, Reliability Improvements, Benefit/Cost, and Planning Consistency.

FEDERAL GRANTS FOR BUSES AND BUS FACILITIES FORMULA PROGRAM – 5339(A) AND URBANIZED AREA FORMULA GRANTS – 5307

The 5339 program provides funding to states and transit agencies through a statutory formula to replace, rehabilitate and purchases buses and equipment to construct bus-related facilities. The 5307 program provides funds for operating transit service, including bus purchases and stop improvements. These formula-based programs could be a source of funds to support eligible capital and operating expenses related to the Town of Wake Forest’s planned transit service, however, coordination with an eligible recipient (i.e. the transit agency) will be necessary.

FAREBOX RECOVERY FEASIBILITY

The project team recommends a free fare for riders on the circulator, however, for the planning study an estimate of potential revenue from adding a fare to the service was developed. The project team assumed a range of potential farebox recovery rates for the service. From a low rate of 10%, medium 15%, and high 35%. This range is based on average farebox recovery rates for transit systems across the county. The national average farebox recovery in 2021 was 12.8%, a recently low rate due to impacts of the COVID-19 pandemic.⁶ In 2019, the national average farebox recovery was 32.3%.⁷ Table 11 summarizes the potential net annual operating cost for each of the circulator routes at low, medium, and high farebox recovery rates. If a fare is implemented on the 60-minute circulator service, the operating cost could be reduced from \$1,007,000 to between \$654,500 to \$906,300.

Table 11: Potential Circulator Farebox Recovery

	60-minute Frequency			30-minute Frequency		
	East Loop	West Loop ¹	Total	East Loop	West Loop ¹	Total
Gross Annual Operating Cost	\$550,000	\$457,000	\$1,007,000	\$1,100,000	\$913,000	\$2,013,000
Low Recovery Net Annual Operating Cost	\$495,000	\$411,300	\$906,300	\$990,000	\$821,700	\$1,811,700
Medium Recovery Net Annual Operating Cost	\$467,500	\$388,450	\$855,950	\$935,000	\$776,050	\$1,711,050
High Recovery Net Annual Operating Cost	\$357,500	\$297,050	\$654,550	\$715,000	\$593,450	\$1,308,450

¹ Cost for West Loop to the Town of Wake Forest (minuses the City of Raleigh’s portion – 17%)

⁶ 2021 National Transit Summaries and Trends , <https://www.transit.dot.gov/ntd/data-product/2021-national-transit-summaries-and-trends-ntst>
⁷ 2019 National Transit Summaries and Trends, <https://www.transit.dot.gov/ntd/2019-national-transit-summaries-and-trends-ntst>

A fare for the rider is assumed for the microtransit service (\$2.00 per ride). Therefore, the microtransit operating costs will be offset by the revenue generated from rider fares. To estimate likely fare revenue for the service, modeling of the planned service is needed, however, the project team has made some assumptions to demonstrate potential revenue to Wake Forest for operating the service. Table 12 summarizes potential ridership levels for the microtransit and resultant farebox revenue. The 2022 ridership on the WFL is used as a basis for the potential microtransit ridership, and then factored by 50%, 100%, and 150%, for an estimate of potential low, medium, and high ridership. With these assumptions, the fare revenue for the microtransit service is between \$20,200 and \$60,600.

Table 12: Potential Microtransit Fare Revenue

	Low Ridership	Medium Ridership	High Ridership
WFL 2022 Ridership	20,200	20,200	20,200
Ridership Factor	50%	100%	150%
Microtransit Ridership	10,100	20,200	30,300
Microtransit Fare Revenue	\$20,200	\$40,400	\$60,600

NEXT STEPS

The next steps for the Town to implement the expanded transit services are identifying potential funding for the capital and annual operating costs, entering contracts with partners to operate the services, and deploying communication strategies to broadcast to the availability of the new services to area residents, employees, and visitors.

ACTION ITEM MATRIX

Specific actions are needed to implement the expanded transit services and ensure the continued growth in quality and level of service. Table 13 outlines the actions along with the recommended timeline when they should be implemented.

Table 13: Action Item Matrix

Action	Description	Timeline				
		Ongoing	Year 1-2	Year 3-4	Year 5	
1	Secure additional funding for preferred transit service option operations.	Work with regional partners (CAMPO, GoRaleigh) to secure regional CFAP and LAPP funding for service. Incorporate funding into annual Town budget process.	X	X		
2	Procure contract for microtransit service.	Coordinate with third party operators (e.g. Via, Uber, Lyft) to enter into a contract to operate Southern Wake Forest Microtransit Zone		X		
3	Implement new bus stops.	Install new bus stops for the East and West loops, and the Southern Microtransit Zone if operated as a node-to-node service.		X		
4	Develop marketing and branding for new transit services.	Create communications and marketing plan, including messages to inform riders of changes to the WFL, and new branding for microtransit service.		X		
4	Conduct targeted outreach and marketing.	Make outreach to existing WFL about changes to the circulator routes. Conduct outreach to all residents within a 1/4-mile of bus stops/nodes and within the Southern Microtransit Zone.		X		
5	Conduct community wide outreach and marketing.	Market the service on social media, Town's website, printed collateral, and media.	X	X		
6	Add specialized messaging to bus stops.	Add "free" messaging to existing bus stop and add when implementing new bus stops.		X		

WAKE FOREST PUBLIC TRANSIT PLAN

Action		Description	Timeline			
			Ongoing	Year 1-2	Year 3-4	Year 5
7	Track performance metrics for extended transit services.	Collect ridership by bus stop, boarding and alighting (circulators), and trip lengths, origin and destination trips, wait times, and number of trips (microtransit) monthly.	X			
8	Report performance metrics for extended transit services.	Develop and present annual reports on performance metrics.	X			
9	Analyze ridership data for system optimization.	Analyze bus stop ridership (circulator), and trip origin and destination (microtransit) to identify opportunity for enhanced bus stop amenities, new bus stops/nodes, adjustments to routes, and adjustments to microtransit service area.			X	

WAKE FOREST
PUBLIC  **TRANSIT**
PLAN

Wake Forest Public Transit Plan

Phase 1 Outreach Summary

Prepared for the Town of Wake Forest

by Public Participation Partners

In Coordination with Toole Design

March 2023

Introduction

Phase 1 Outreach Background

The Town of Wake Forest continues to receive requests for additional services and amenities throughout town. In response to resident requests for more services and amenities, the Town of Wake Forest is developing a Public Transit Plan. The purpose of the Public Transit Plan is to:

- 1) evaluate existing service
- 2) understand the viability of alternatives to fixed-route services
- 3) recommend a solution for transit expansion, including the service model type, cost of expansion, and implementation steps

To better understand how well existing services are working for the public and to consider potential alternatives, Phase 1 of this engagement process was designed to share information and invite feedback to inform the Wake Forest Transit Plan. Phase 1 engagement included a pop-up event, an open house, and a survey of current and potential riders.

This engagement invited public feedback on existing service. It also asked for interest in future service, and options for transit expansion. Phase 1 outreach for the Wake Forest Transit Plan began on December 1st of 2022 and ended on February 19th of 2023.

December 2022 Pop-Up Summary

On December 2, 2022, the project team attended the Lighting of Wake Forest holiday event. This popup aimed to provide information and gather feedback for the Wake Forest Public Transit Plan. The pop-up took place from 5:00 pm through 8:00pm on East Owen St.

To draw people to the table, staff gave out glow sticks and candy. Attendees were invited to place a sticker on a map to indicate where they would like to be able to travel to via bus. Participants could also leave written comments with any thoughts or concerns on a posted board. They could also scan a QR code to reach the project website or complete a paper survey. During the event, 19 people scanned the QR code and 11 people completed a paper survey.

The map board received 224 responses of locations where participants would like to be able to ride the bus. The breakdown of locations is provided in the chart below.

Location	Number of Stickers
Wake Forest	68
Youngsville	12
Durham	25
RDU Airport	45
Research Triangle Park	16
Raleigh (including NC State)	45
Rolesville	10
Wendell	1
North and Northwest of Wake Forest	2

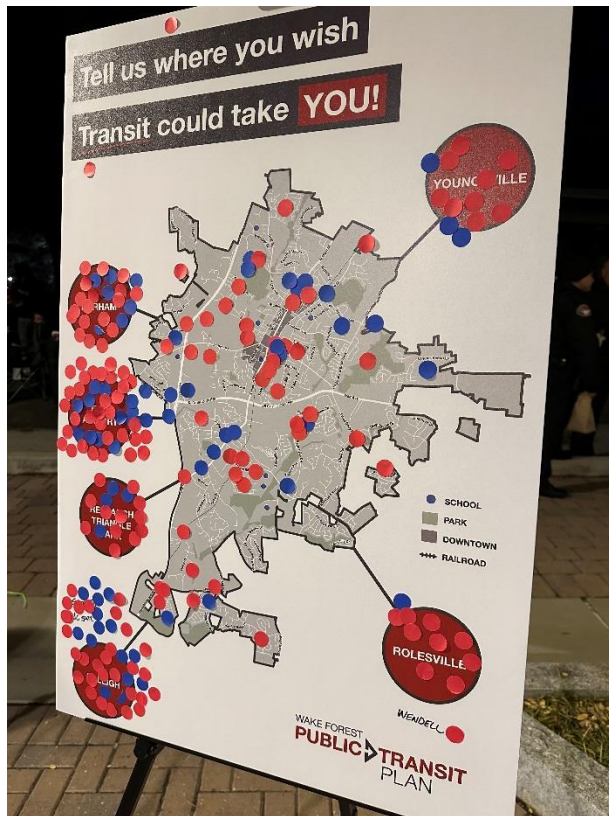
Additional locations were mentioned on the map board included:

- UNC Chapel Hill area (5 participants)
- Galaxy Fun Park
- Gateway Commons
- Wakefield
- Hobby Lobby in Raleigh
- Downtown Raleigh (2 participants)
- Downtown Durham
- Route to the airport with limited stops

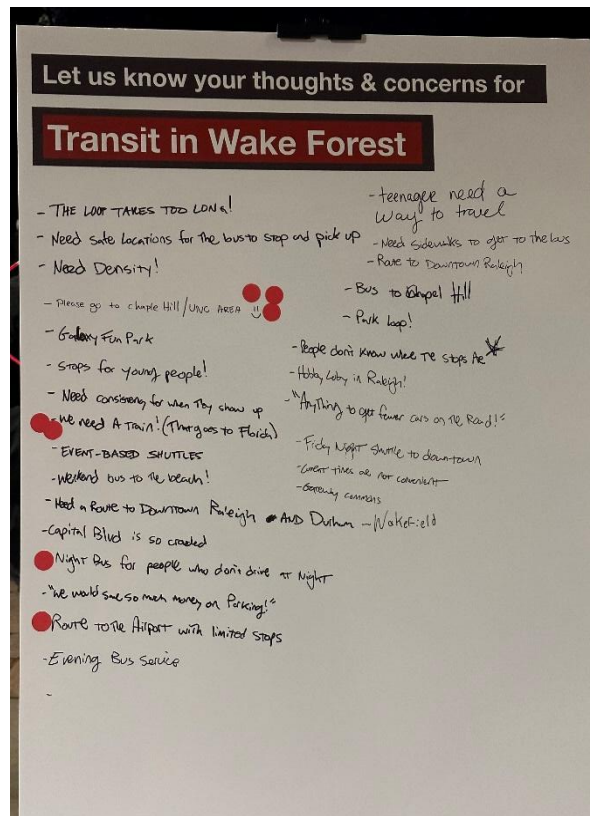
Additional comments from the comment board are provided below:

- The loop takes too long!
- Need safe locations for the bus to stop and pick up
- Need density!
- Stops for young people!
- Need consistency for when they show up
- We need a train! (That goes to Florida)
- Event-based shuttles
- Weekend bus to the beach!
- Capital Blvd is so crowded
- Night bus for people who don't drive at night (2 participants)
- We would save so much on parking!
- Evening bus service
- Teenagers need a way to travel
- Need sidewalks to get to the bus
- Park loop!
- People don't know where the stops are
- Anything to get fewer cars on the road!
- Friday night shuttle to downtown
- Current times are not convenient

MAP BOARD



COMMENT BOARD



Public Open House Overview

The Town of Wake Forest hosted two Public Open Houses on Thursday, February 2nd. The goal of these Open Houses was to provide residents and stakeholders with information on the Public Transit Plan. Residents were invited to share feedback on their preferred bus routes.

Meeting Format

Each open house meeting lasted 90 minutes. There were information stations and no formal presentation. Display boards offered project information at each station.

There was a total of seven board stations at each meeting. Four of the project boards were for adults and three were polling boards for children. The adult boards included:

- A System Map
- A Survey QR code
- A "Where Do You Want to Go" Map
- An Existing Conditions board

The children's boards included questions and prompts including:

- Board 1: Have you ever ridden the bus in Wake Forest? Did you know you can ride the bus for free?
- Board 2: If you could take a bus anywhere in Wake Forest, where would you go?
- Board 3: What do you think would make riding the bus fun? If you were in charge, what would taking the bus look like?

Children received a “passport” to collect stamps at each station they attended. A prize was given to all children who visited all three children’s polling boards.

Feedback

Feedback was collected using polling boards. A scavenger hunt activity was offered to children to get feedback on their transit needs. Three polling boards were offered to give youth a chance to offer feedback on their transit needs.

Comment and Response Summary

Participants offered a wide variety of feedback. The greatest number of comments were about connectivity. Participants wanted to see additional routes to green spaces and public parks, greater efficiency, and more park and ride lots. Several commenters highlighted the needs for seniors. These comments mentioned accessibility and safety, as well as specific locations for connections. Many participants were concerned about specific safety issues. These included a need for various crosswalks, sidewalks, and lighting. Many comments were shared about the need for more consistent bus shelters and bus shelters in specific locations.

Participants also offered several comments about strategies for communicating about transit services. A complete list of questions and comments (both adults’ and children’s’) can be found in Appendices A and B.

Survey Summary

Purpose of the Survey

Wake Forest released a community survey to learn more about the public transit preferences of residents. The feedback will be used to inform how the Town addresses public transit service needs. The community survey was made available to the public from December 1st, 2022, until February 19th, 2023. The survey was available in an online format and a paper form made available at the December 2022 popup event. The online survey was provided in English and Spanish. A total of 11 respondents filled out the paper survey.

The survey was advertised through multiple outlets. These included via Wake Forest email, social media, the project website, and a flyer at the popup meeting. The following summary includes the responses for both the paper and online survey.

There were 687 unique participants who answered at least one question on the survey. The majority of respondents took the survey online (98.4 percent), while 11 respondents filled out a paper copy. Most respondents learned about the survey through email (35 percent), social media

(35 percent), or through the mail (16 percent) and most reported living in Wake Forest (95 percent).

To learn more about who participated, the survey included several optional demographic questions. These questions had response rates ranging between 62 percent (income) and 85 percent (language proficiency). The percentages reported below are based on the number who provided responses, not the total number of survey participants. As such, summaries describe results for *question* respondents, not survey respondents.

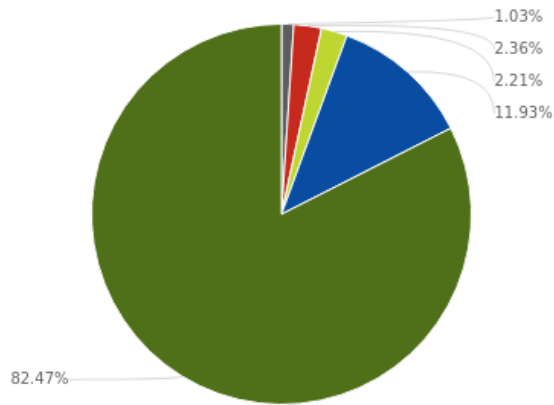
To explore the preferences among those who regularly ride the bus, survey results for respondents who take the bus at least a few times per month are also reported here. These survey participants are referred to as frequent riders.

The following summary includes responses for both the paper and the online survey.

Bus Usage Frequency

How often do you currently ride the bus?

Answered: 679 Skipped: 9



- Almost every day
- A few times a week
- A few times a month
- A few times a year
- Never

Choices	Response percent	Response count
Almost every day	1.03%	7
A few times a week	2.36%	16
A few times a month	2.21%	15
A few times a year	11.93%	81
Never	82.47%	560

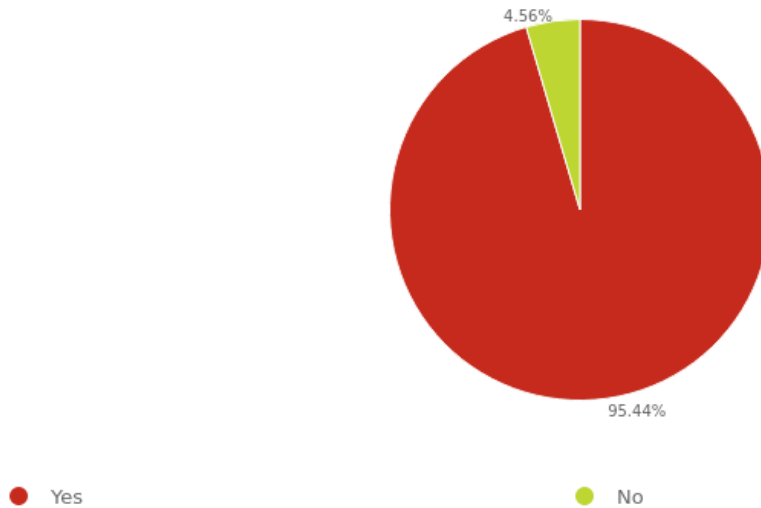
Of respondents, 82.4 percent indicated that they never ride the bus, 11.9 percent indicated that they ride a few times each year. Just over 5 percent indicated that they ride the bus with a minimum frequency of once per month, with 1 percent of these riding the bus almost every day. Survey responses for those who ride the bus at least a few times per month are also reported here. These survey participants are referred to as “frequent riders”. Information from frequent riders provides information on those who use the bus most frequently.

Frequent riders were more likely to be women (66 percent), more likely to be individuals with a disability (26 percent), and likely to report an annual household income of less than \$47,000 per year.

Personal Vehicle Access

Do you have access to a reliable personal vehicle?

Answered: 680 Skipped: 8



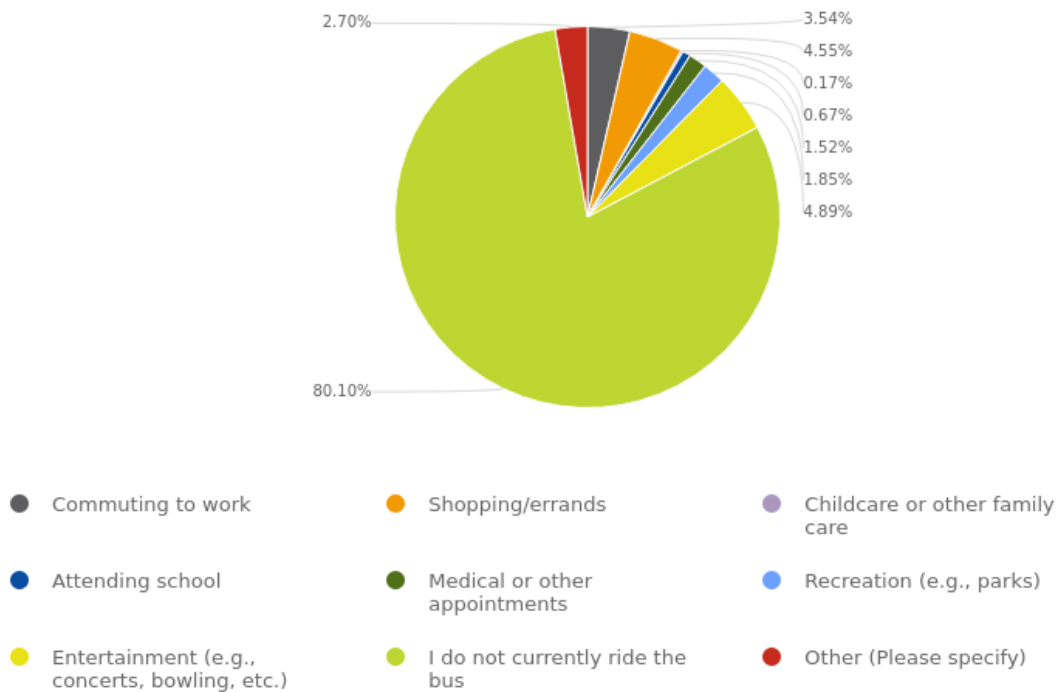
Choices	Response percent	Response count
Yes	95.44%	649
No	4.56%	31

The majority of riders have access to a personal vehicle, with over 95 percent indicating ownership of a reliable vehicle. Frequent riders were less likely to have access to a reliable vehicle (61%).

Primary Reason for Travel

If you currently ride the bus, what is the primary reason for your travel?

Answered: 593 Skipped: 95

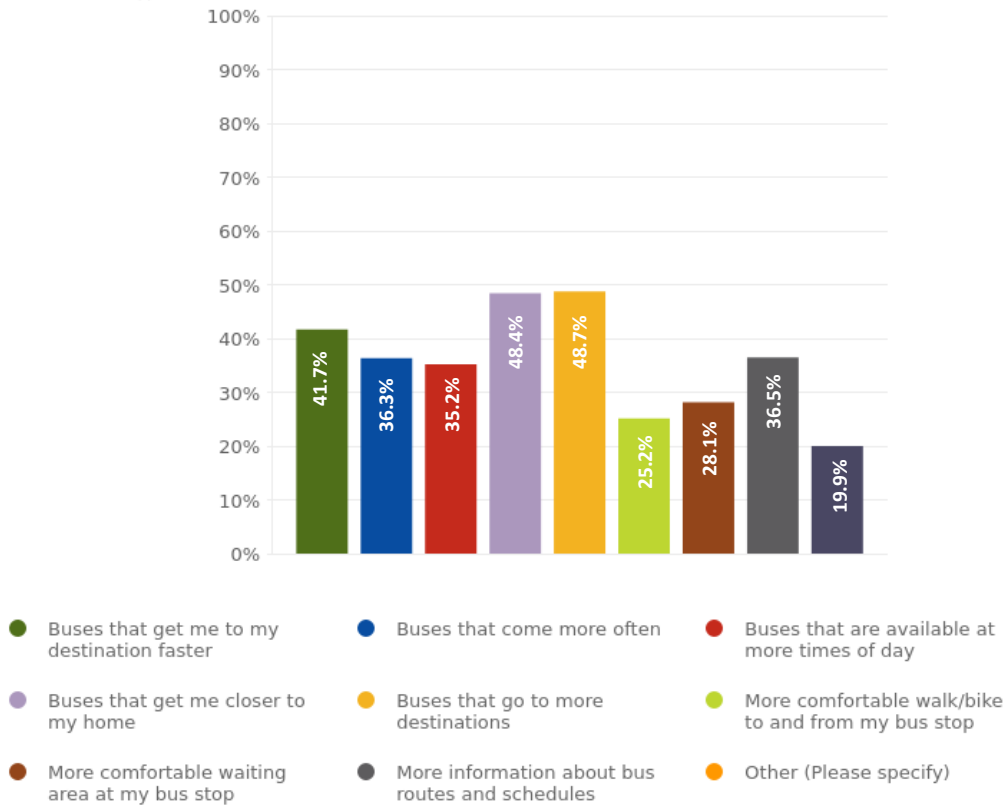


Of those who ride the bus, the top three reasons for travel include entertainment, shopping, and commuting to work. Nearly 5 percent indicated using it for entertainment, followed by 4.5 percent indicating primarily using it for shopping, and 3.5 percent using the bus to travel to or from work. Frequent riders were more likely to rely on public transit to get to work (40%), run errands (40%), and attend school (8%) than the sample at large.

Factors to Increase Motivation for using the Bus

What would encourage you to start riding the bus or ride the bus more often?
(Check all that apply)

Answered: 636 Skipped: 52



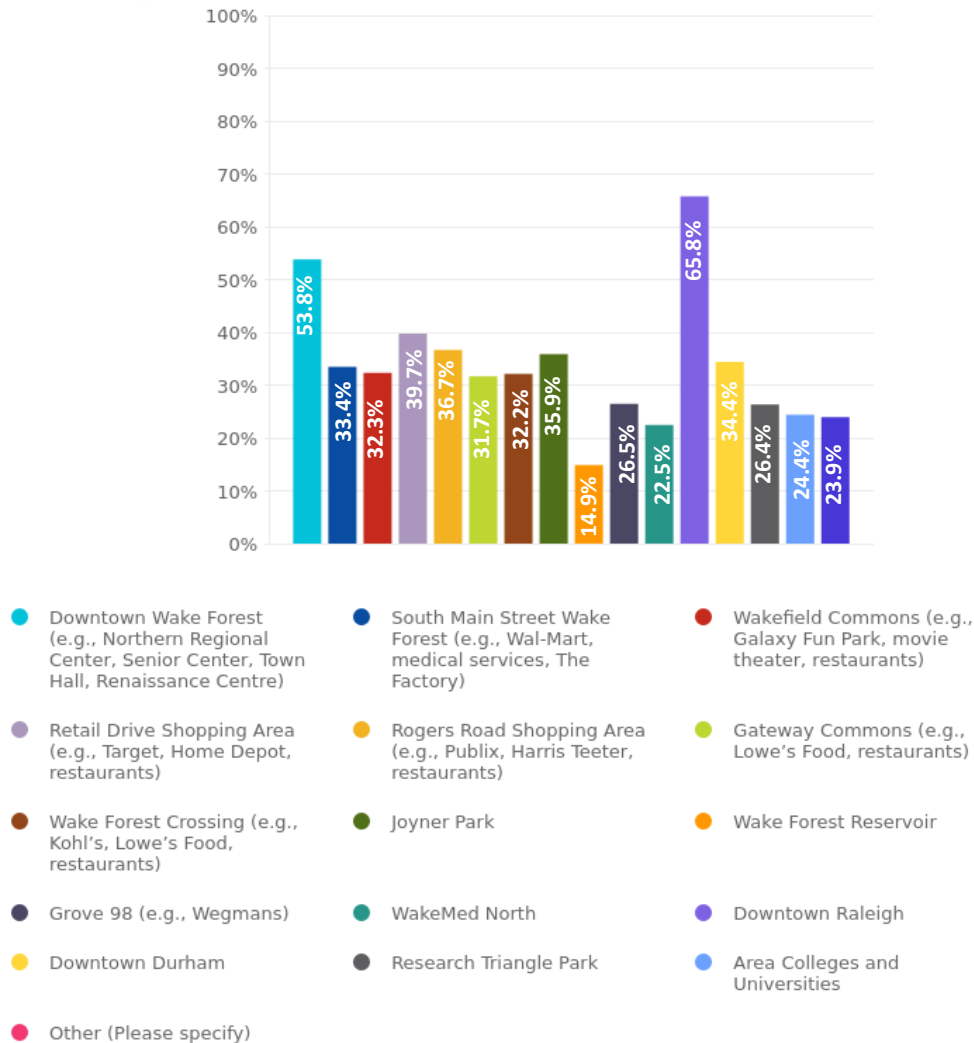
When asked what could entice them to ride the bus at all or ride the bus more often than they currently do, the most important factors relate to connectivity. Specifically, respondents said that they would like buses to get them closer to their homes (48%) and go to more destinations (49%). Other respondents were concerned with service, wanting buses that get them to their destinations faster (42%), that come more often (37%), and that are available at more times of the day (36%). Thirty-seven percent (37%) would consider taking the bus or taking it more often if they had more information about bus routes and bus schedules. Many other reasons were given for not riding the bus more often, with most of them indicating that there is no incentive that would encourage them to ride the bus.

Bus service and safety were higher priorities for frequent riders. At least half of these riders wanted buses to be available more times of the day (58%), buses that run more often (50%), and safer bus stops (50%).

Preferred Bus Destinations

Which destinations would you like to reach using the bus (check all that apply)?

Answered: 619 Skipped: 69



Respondents listed preferences for many different bus destinations, with the top destinations chosen being Downtown Raleigh (65.8 percent) and Downtown Wake Forest with 53.8 percent. Approximately one-third of respondents said that they would like to be able to reach South Main Street Wake Forest (34%), Wakefield Commons (33%), the Rogers Road Shopping Area (37%), Gateway Commons (32%), Wake Forest Crossing (32%), Joyner Park (36%), and Downtown Durham (34%) via bus. The most common destination offered as a suggestion by respondents was Raleigh-Durham Airport (RDU).

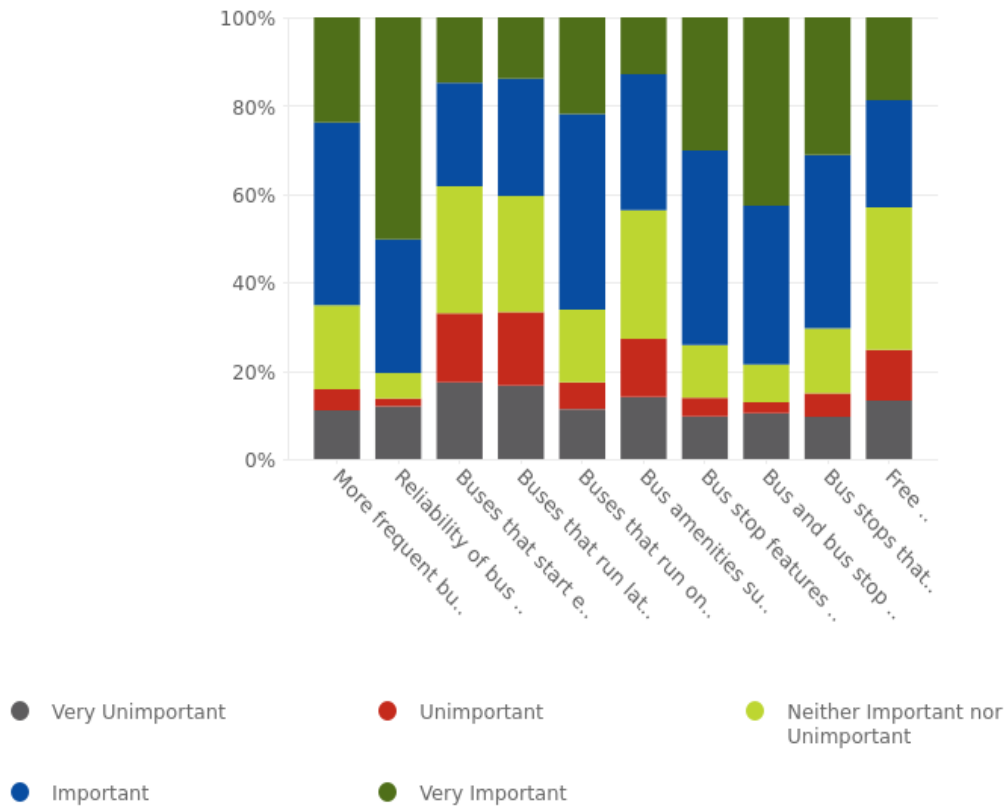
Neighborhood Bus Access

The survey asked respondents to indicate which neighborhoods they would like to see the Wake Forest bus travel to. The most frequently named communities were: Heritage/Heritage South (n=24), Traditions (n=17), Old Mill Stream (n=10), Holding Village (n=9), and Northampton (n=8).

Prioritization of Services and Amenities

How important to you are the following types of services and amenities?

Answered: 653 Skipped: 35



When asked to rank the importance of bus services and amenities, most respondents prioritized reliable bus schedules (81 percent), bus and bus stop safety (79 percent), and bus stops that connect to pedestrian and bike facilities (71 percent). Less important to respondents were amenities like free bus fare (25 percent), charging stations and Wi-Fi (27 percent), buses that run until midnight (34 percent), buses that run before 7 AM (33 percent).

Bus schedule reliability (90%) and safety on the bus and while waiting for the bus (86%) were also priorities among frequent riders. However, they were more likely to rate bus stop features like benches and shelters as important (89%) than the sample at large (74%).

Survey Demographics

Gender Identification of Respondents

A slight majority of question respondents identified as women (58 percent), while 37 percent identified as men and less than 1 percent as non-binary. Five percent (5 percent) indicated that they preferred to self-identify.

Age of Respondents

The largest proportion of respondents (63 percent) report being between 35 and 64 years old. Twenty percent (20 percent) are aged 65 or older and fourteen percent (14 percent) are younger than 35. Those under 24 years old (3 percent) and those 75 or older (5 percent) are the least represented in the survey.

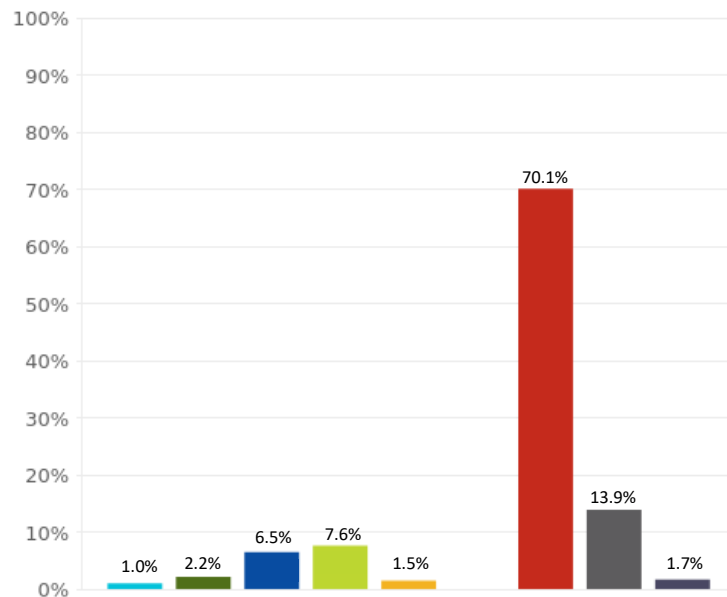
People with Disabilities

Asked if they had a disability, 10.2 percent indicated that they had a disability, 6.1 percent indicated that they did not wish to answer the question, and 83.7 percent indicated that they did not have a disability.

Racial Demographics

Which category best describes you? Select all that apply.

Answered: 605 Skipped: 83



● American Indian or Alaska Native (e.g., Navajo nation, Blackfeet tribe, Mayan, Aztec, Native Village or Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.)

● Asian (e.g., Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese, etc.)

● Black or African American (e.g., African American, Jamaican, Haitian, Nigerian, Ethiopian, Somali, etc.)

● Hispanic, Latino or Spanish Origin (e.g., Mexican, or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian, etc.)

● Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.)

● Native Hawaiian or Other Pacific Islander (e.g., Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, etc.)

● White or Caucasian (e.g., German, Irish, English, Italian, Polish, French, etc.)

● Prefer not to answer

● Some other race, ethnicity, or origin (Please self-identify)

To measure the racial composition of participants, the survey included a question prompting individuals to define themselves racially and ethnically using as many categories as desired. The

two most common identities among respondents who provided a response were white or Caucasian (70 percent), Hispanic or Latino (8 percent), and Black or African American (7 percent). Fewer respondents identified as Asian or Pacific Islander (2 percent), Middle Eastern or North African (2 percent), Native American or Alaskan Native (1 percent), or some other identity category (2 percent). Zero respondents (0 percent) identified as Native Hawaiian or Other Pacific Islander. Fourteen percent (14 percent) opted out of providing their racial identity.

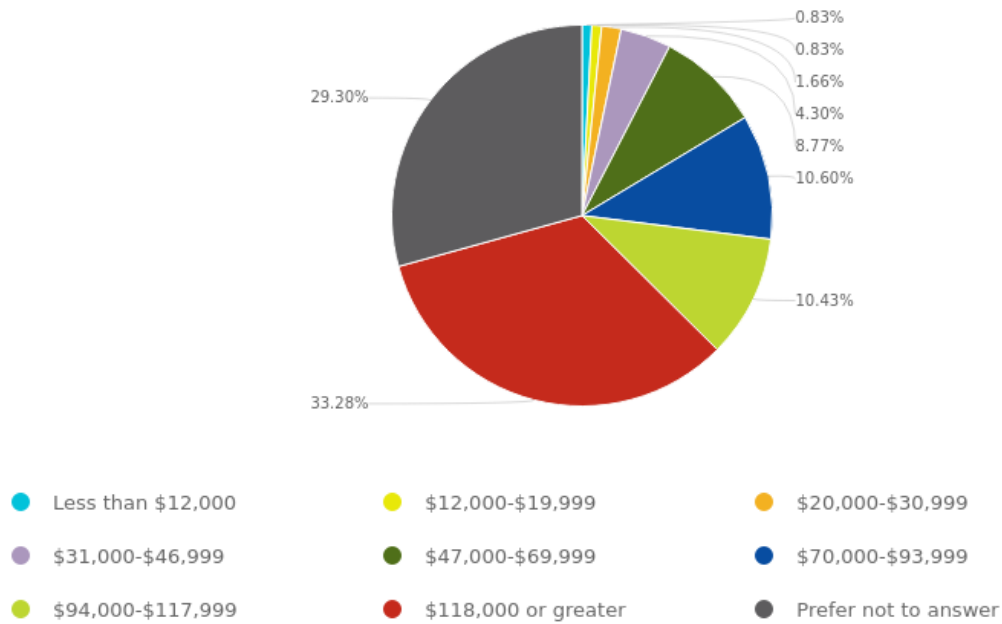
Nearly all question respondents indicated that they speak English very well (92 percent) or well (4 percent). Few respondents said that they speak English 'okay' (.5 percent), very little (.2 percent), or not at all (.2 percent).

The survey also inquired as to which language respondents speak at home most of the time. The vast majority primarily speak English (n=416). Others speak Spanish (n=8), Portuguese (n=2), Arabic (n=2), Cantonese (n=1), Chinese (n=1), Russian (n=1), Italian (n=1), Hindi (n=1), Japanese (n=1), Yiddish (n=1), Yoruba (n=1), and Slovak (n=1).

Household Income of Survey Participants

What is your approximate annual household income?

Answered: 604 Skipped: 84



Choices	Response percent	Response count
Less than \$12,000	0.83%	5
\$12,000-\$19,999	0.83%	5
\$20,000-\$30,999	1.66%	10
\$31,000-\$46,999	4.30%	26
\$47,000-\$69,999	8.77%	53
\$70,000-\$93,999	10.60%	64
\$94,000-\$117,999	10.43%	63
\$118,000 or greater	33.28%	201
Prefer not to answer	29.30%	177

When asked for their approximate annual household income, 33.3 percent indicated a household income of \$118,000 or greater and 29.3 percent indicated that they did not wish to answer the

question. Just higher than 20 percent of additional respondents indicated a household income between \$70,000 and \$117,999 per year. The remaining 7.6 percent indicated a household income of less than \$70,000 per year.

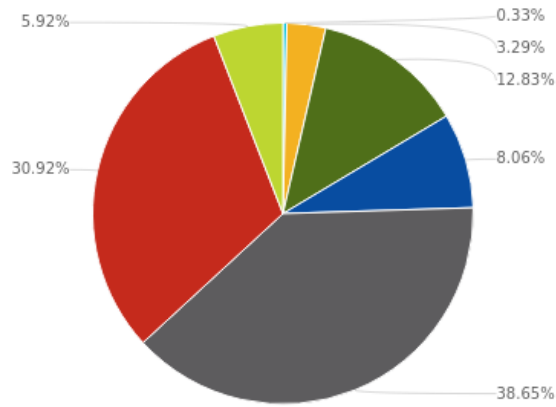
Homeownership Among Respondents

While most survey participants own their homes (85.2 percent), 6.8 percent rent their homes, and 8.1 percent preferred not to answer the question.

Educational Attainment of Respondents

Select your highest level of education attainment:

Answered: 608 Skipped: 80



- Some high school
- High school graduate
- Some college
- Associate degree
- Bachelor's degree
- Master's degree or higher
- Prefer not to say

Choices	Response percent	Response count
Some high school	0.33%	2
High school graduate	3.29%	20
Some college	12.83%	78
Associate degree	8.06%	49
Bachelor's degree	38.65%	235
Master's degree or higher	30.92%	188
Prefer not to say	5.92%	36

Most participants (90.5 percent) have attained at least some college education. Other participants indicated being a high school graduate (3.3 percent), having some high school education (.33 percent), or preferring not to say (5.9 percent).

Recommendations for Future Outreach

Efforts were made during this outreach to engage as many residents as possible. To continue to engage effectively and to increase future participation, additional efforts will need to be made.

The highest percentage of LEP individuals (2.3 percent) in this area speak Spanish. Outreach to Spanish-speaking populations was ineffective. Less than 1 percent of respondents indicated speaking “very little” or “no” English. To ensure that LEP populations are proportionately represented and included in future engagement, all public-facing materials should continue to be shared in English and Spanish at an 8th grade reading level standard or lower. Efforts should also be taken to distribute surveys via Spanish-language media channels.

Phase 1 engagement was effective in reaching a representative sample for most demographic categories, however, disproportionately fewer African Americans conducted the survey than other groups. The population of this group makes up 16.3 percent of area residents, but only made up 6.5 percent of survey respondents. Future outreach should increase targeted engagement through minority media outlets and community partners who work with these populations.

Phase 1 engagement was more effective in reaching riders and potential future riders with a household income of higher than \$47,000 per year. To ensure representative feedback, future outreach should consider ways to reach individuals more effectively with a household income of lower than \$47,000 per year.

Phase 1 engagement was most effective in reaching those ages 35 and older. Future engagement should consider ways of engaging residents younger than age 35. Those under 24 years old (3 percent) and those 75 or older (5 percent) are the least represented in the survey. Upcoming engagement should particularly focus on reaching those under than 24 years old and older than 75.

Appendix A - Open House Thoughts and Concerns (Mid-Day & Evening Sessions)

Communication Strategy Recommendations

- Facebook/social media campaigns to let people know bus in WF is free + links to route maps etc.
- Advertise bus info via homeowner's associations to inform the community. Let everyone know it's free!
- Social media – Let people know more about para transit services & how to access
- Sell advertising spaces on buses & use funds for sidewalk improvements + greenway improvements
- The WF loop is very good in general. Crossing high volume roads can be an issue. Maybe try to target surveying people in Sr. complexes, apts., and working service type jobs

Connectivity, Access, and Transit Time

- Connectivity to green ways
- Transit to Walnut Creek Amphitheatre for Concerts
- Transit to Durham/RTP for work hours
- Commuter rail. More efficient bus service
- I'd like to take a bus to north Hills, the State Fair, and RBC
- In Wake Forest the Hwy 98 by-pass should have bus access between the current bus route
- Maybe have the loop bus stop closer to Walmart front door
- Light rail services Wake Forest to Cary/Durham/Raleigh
- Move the stop at Chick-fil-a to in front of Goodberries
- Park + ride lots. Move bus stops. Keep seniors in mind i.e., distance between stops
- More Park n ride lots
- We need some buses – 2 or 3 – to travel to Raleigh in the middle of the day so we don't have to spend the whole day in Raleigh
- Lightrail to Raleigh. Trolley service
- The bus location near Wake Med needs periodic stops
- Travel 98 Calvin Jones Hwy
- Bus line down Calvin Jones (98) to connect multifamily developments.
- Buses to churches on Durham Road
- More transportation near Crabtree on Glenwood at CarMax in Raleigh
- Joyner Park
- Joyner Park bus service needed
- Would like a bus to go to Joyner Park – Right now people who do not have a car have no access to this beautiful park and community center
- Hwy 98 & Cap Blvd pedestrian crossing to NW College + Career Academy (under Hwy 1)
- It would be wonderful to have a bus go to TTC – maybe around noon!! Lots of us “oldsters” would like to go there but not at 7:30 AM
- Would like to see a bus go to *Stadium Dr to the Smith Field, Ross and Marshall's (Capital Outlet)
- Need a bus Rogers Rd & S. Franklin St.

- Would like for a bus to come to the neighborhood on South Franklin St.
- Bus Hailing in downtown area
- Connectivity to multi-modal transit center – bus/express bus/commuter rail/ride share
- More efficient roadways to accommodate the population growth – we are turning into “Cary”
- Make developers improve roads before they build new housing
- Wake Forest buses need to start running earlier for many service industry workers to take advantage of
- The arrival times of WRX buses are too close to the top of the hour to allow many workers to get to work on time. Offsetting routes even 15-20 min earlier could fix that
- Bus or train to RDU
- Bi-hourly bus on Friday and Saturday evenings between Wake Forest + downtown Raleigh ex. 6pm-12am
- Light Rail to/from W.F. + downtown Raleigh + RDU
- Idea if having WF loop get H.S. Students to H.S. (including charter schools) if they live in neighborhoods by route
- Later operation during Friday Nights on White
- Walmart
- The intersection of Wake Forest with Raleigh buses needs to have more connecting/better transfers to make bus transit viable for daily commute to workers not in downtown
- Neighborhood Routes
- I would love a larger range + timetable for buses so it can be an alternative to driving. Currently, the time + range of bus travel doesn't make it a good alternative for many
- Run WRX on Saturdays for people to go to a mall or downtown
- Similar to GoAccess -> micro transit or on call free transport to specific locations. Riders could apply and meet max income standard. Essentially expand GoAccess idea past just work and doc appointments to support groups, community events, etc.
- Tyler Run, Holding Ridge, South Main Street
- Triangle Mall
- Relocate the park &ride lot or place a stop next to it
- More routes and effective bus services to GoRaleigh and Durham
- More connections to everywhere

Safety and Accessibility

- Need a sidewalk on Huntington Spring Senior Bldg., S. Franklin St 1887
- Sidewalks everywhere hbd***
- Complete sidewalks on Rogers x Main & Heritage Lake
- Keep seniors in mind – will need more buses
- Crosswalk signals around the Seminary
- Stops at parks and schools
- Sidewalk on Durham Road
- Covered sheltered bus stops (check about Eagle Scout projects)
- Include pedestrian crossings in new development
- Include bus cut ins in new development
- Include concrete parking pads or busways – Bus tear up asphalt
- Sidewalks on NE side of town

- Sidewalks. If you can't walk safely to a bus stop, why use it?
- Ped. bridge over Capital
- Friday Night on White shuttle to neighborhoods to avoid drunk driving

Amenities

- Increase the number of bus shelters
- Add a save space to be dropped off on Retail Drive and 98 Hwy. No platform/shelter
- Bus Shelters. Reliability
- More bus shelters placed near already existing outdoor lighting
- Bike rack at select bus stops on main arterials
- App for bus schedule real time
- Lighting especially in historically African American neighborhoods
- Please use the QR code card for transit fee, much more efficient
- Make sure bus stops cover both sides of major roads/intersections so people aren't discouraged by dangerous crossings
- Solar powered lights in bus shelters

Questions

- Do you think people will give up their cars and take public transit?
- Is this the most cost-effective way to provide transportation to a small group of people?
- Smaller buses for WF loop until enough passengers to warrant current large size buses

Miscellaneous

- So excited about the light rail. Will be so good for economic situation of many WF + other towns residents
- More frequent stops! More buses = more riders!
- I never knew which bus goes which way – They both have “A.” I always ask the driver – 1 goes clockwise + 1 goes counterclockwise
- Maintain and build more roads to keep up with large increase in building. Do not be another Northern Va.
- It is good for people to get where they need to go without worrying about car payment and insurance that they can't afford. This is sooo needed!
- All around Heritage
- Have transit oriented zoned areas be developed by developers who target actual bus riders
- Joyner Park
- Transit is doing a good job at their job
- More bus stops
- Just get out of the house
- Music
- Ride the bus to school
- Color
- Going to School
- Fun
- Sing, friends, blue

Appendix B - Children's Responses "If you could take a bus anywhere in Wake Forest, where would you want to go"?

- Galaxy Fun Park
- Sprayground
- Wendy
- McDonalds
- Disneyland
- Raleigh
- Target
- Downtown
- Dominos
- Poughkeepsie
- School
- Raleigh
- Dog Park
- Walmart
- Joyner Park and nearby commercial area
- Jurassic Park
- Joyner Park
- Food Lion
- Health + human services/Library
- Pizzeria

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Rider Survey Summary Report

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Purpose of the Survey

This survey differed from the Online Community Survey distributed during Phase 1 of the engagement process. While the Online Community Survey engaged the broader community, the rider survey was designed primarily for riders who already use the fixed route system or the demand-response system in the Town of Wake Forest. The purpose of the Wake Forest Transit Plan Rider Survey was to better understand how existing riders use transit services and how services can be improved.

Survey Administration

The survey went live via the Zoho Survey engagement platform on March 12, 2023 and was open for survey respondents through April 6, 2023. Links to the survey were distributed via a QR code on signs at bus stops, on flyers, and on business cards.

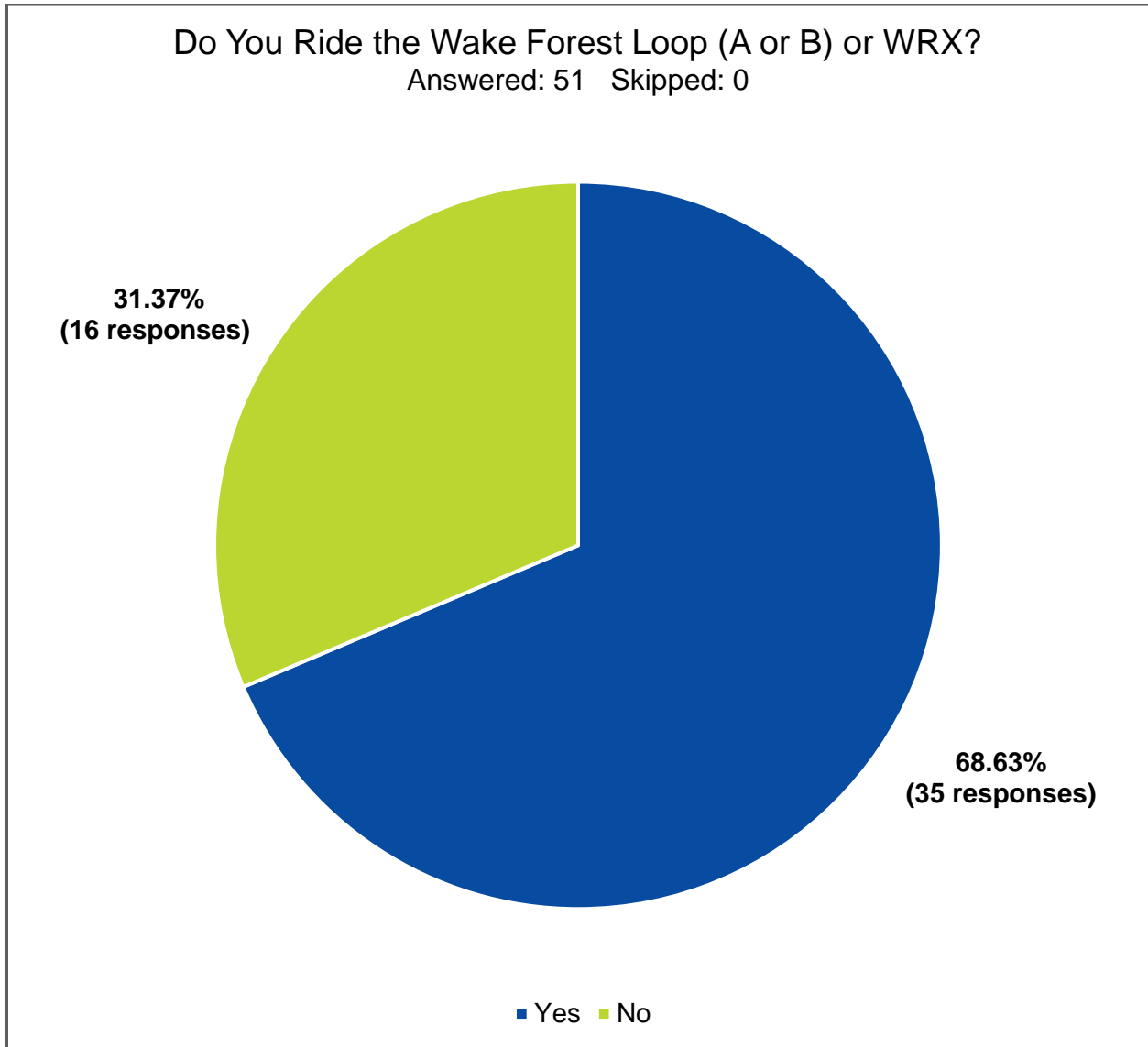
Survey Participants

There were 51 unique participants who answered at least one question on the survey. The survey included a set of voluntary demographic questions, which had response rates ranging between 38 percent (language spoken at home) and 54 percent (age and language proficiency). The percentages reported below are based on the number who provided demographic information, not the total number of survey participants. As such, summaries describe results for **question** respondents, not survey respondents.

General Survey Results

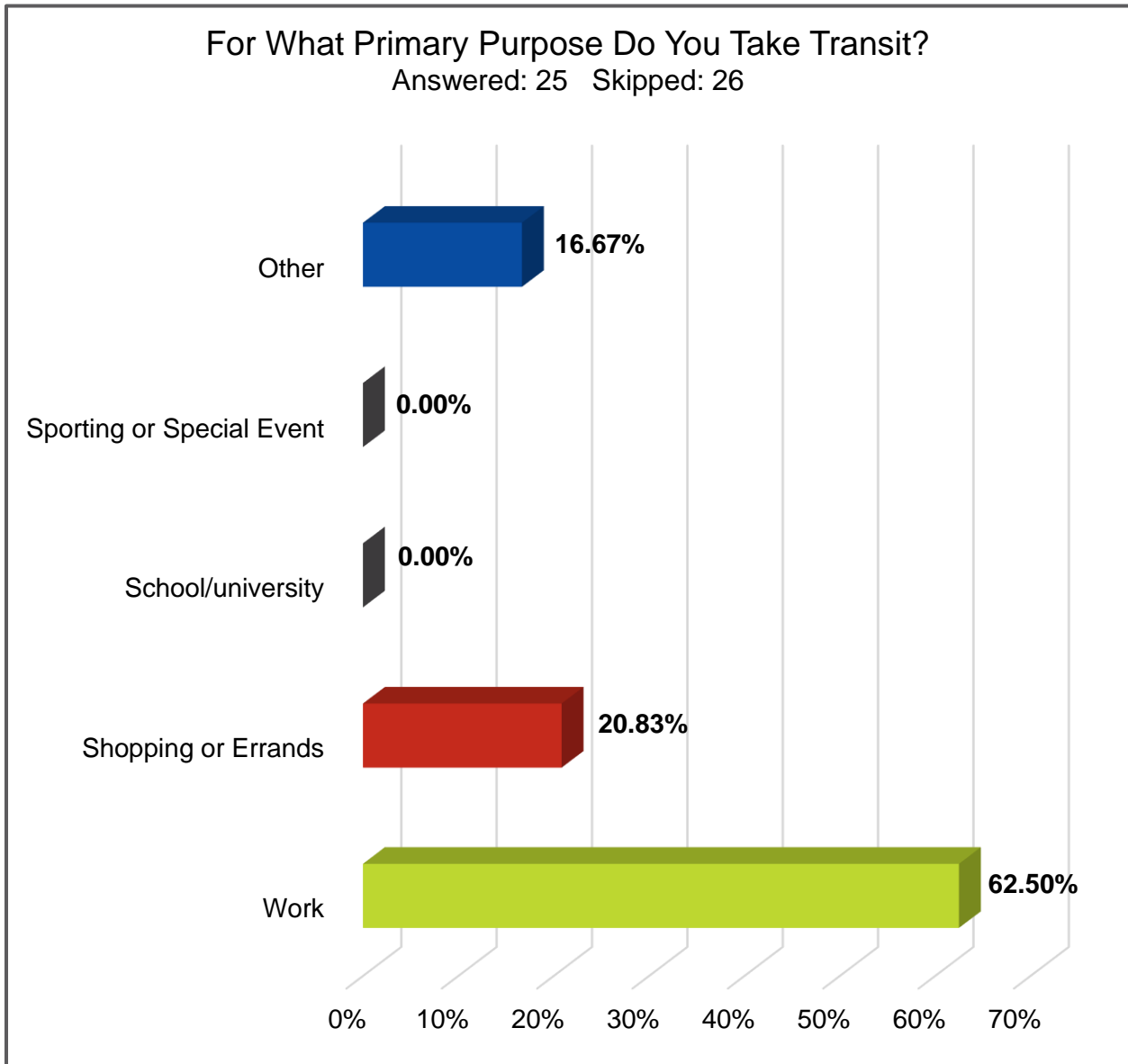
The rider survey was developed to better understand how existing riders use services and how services might be improved. Nine questions were asked to help inform how the Town addresses public transit needs.

Wake Forest Transit Use



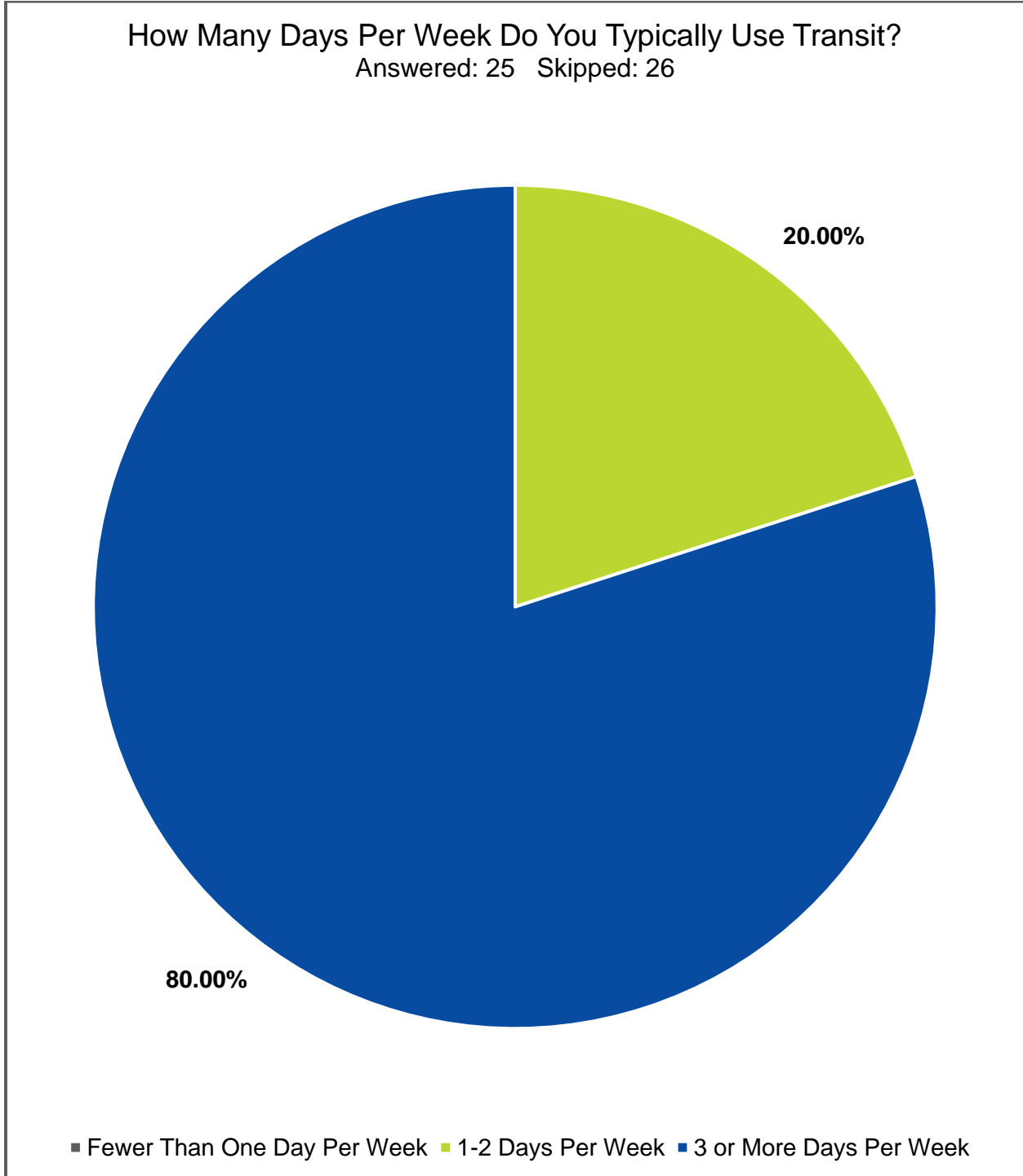
Nearly 69%, (68.6%) of survey respondents ride the Wake Forest A Loop, B Loop, or the WRX, while 31.4% say that they do not ride any of those routes.

Public Transit Destinations



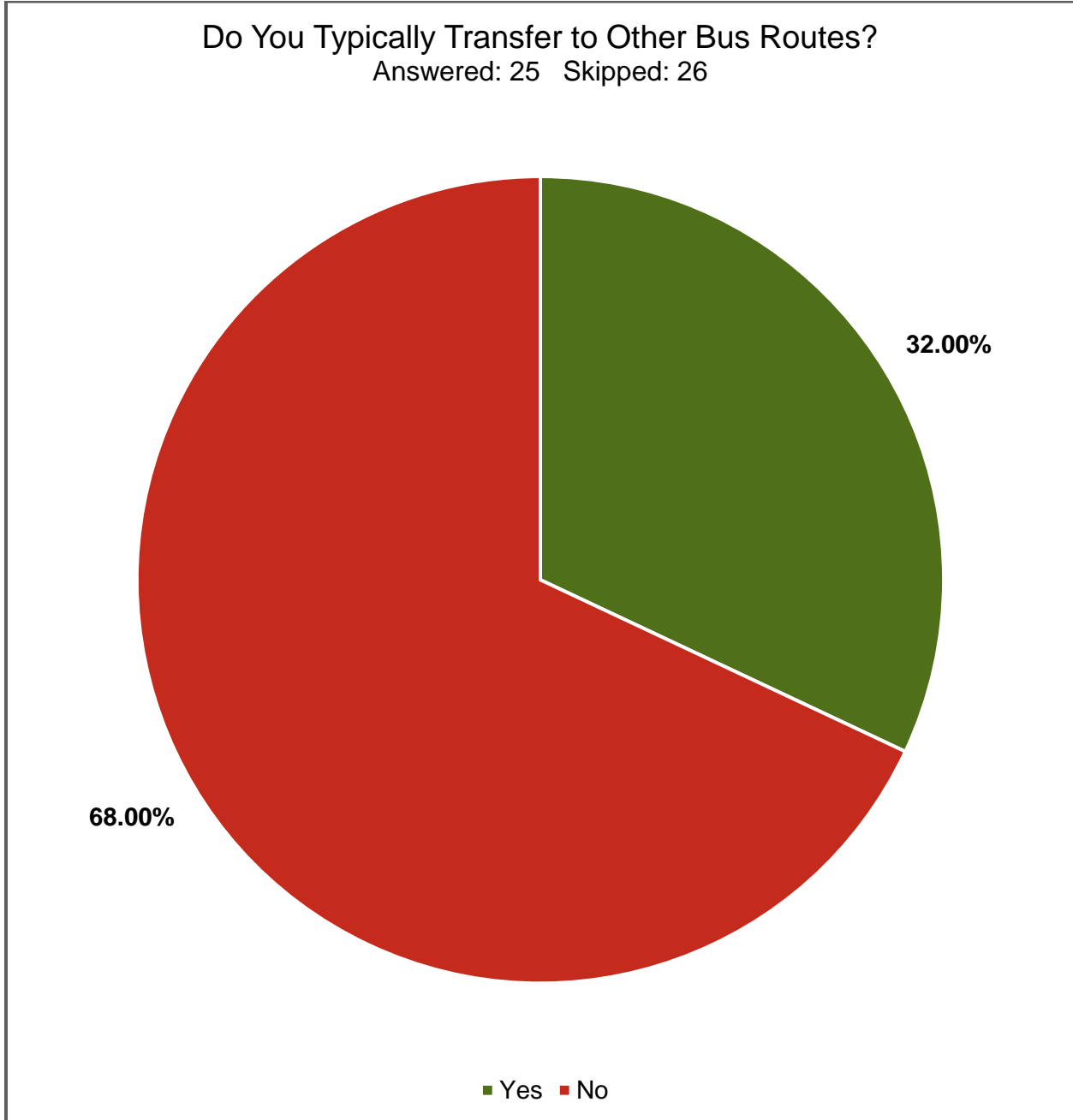
The majority of respondents, 62.5%, use public transit to get to work, while 20.8% use it to go shopping or run other errands. None of the respondents indicated that transit was used for going to school or special events. Other reasons for riding the bus included getting to the gym and just riding around at 16.7%.

Public Transit Frequency



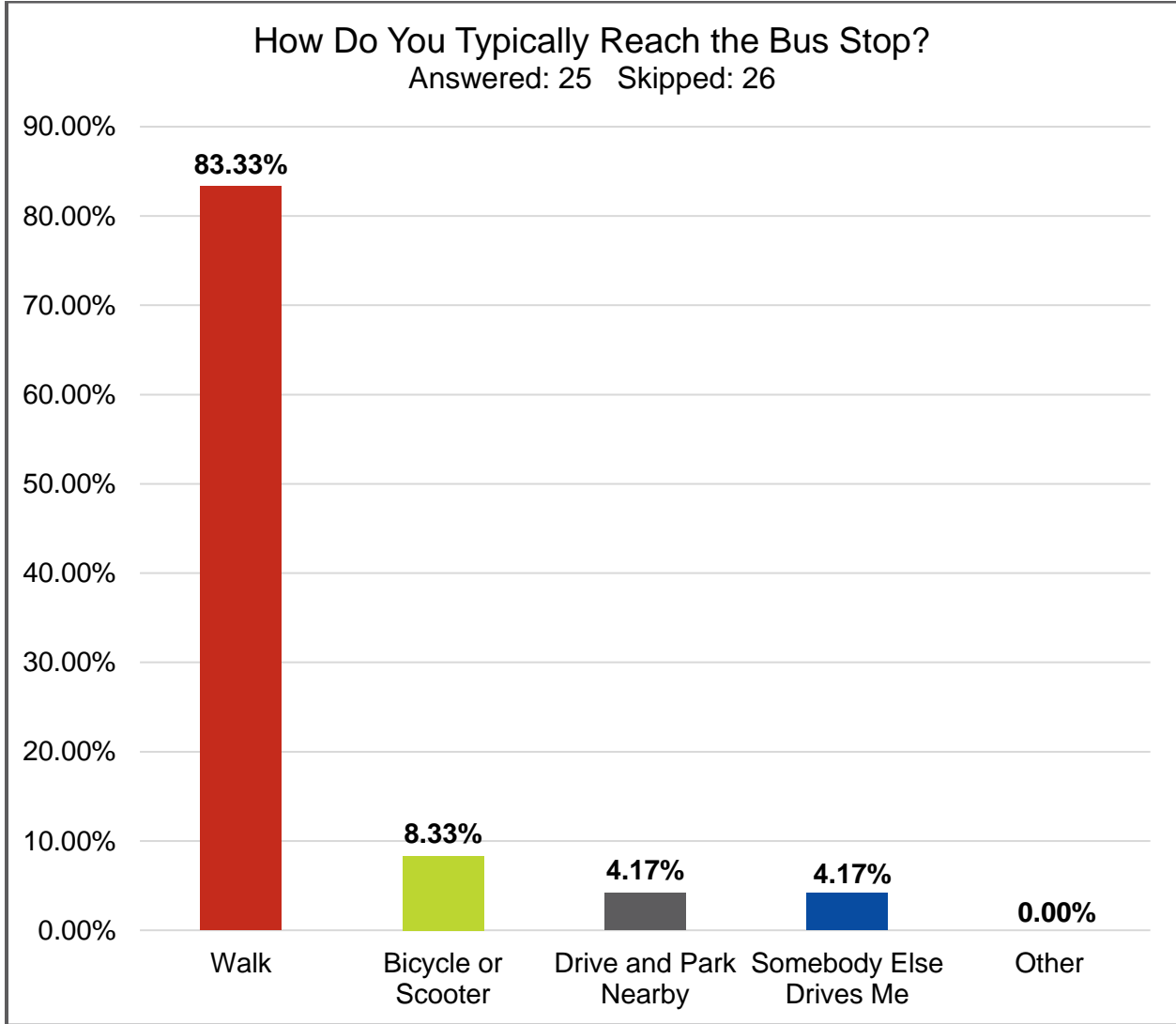
Eighty percent (80%) of respondents who use public transit do so at least three days per week, while 20% ride one or two days per week. There were no respondents that indicated they use public transit less than one day per week.

Transit Transfers



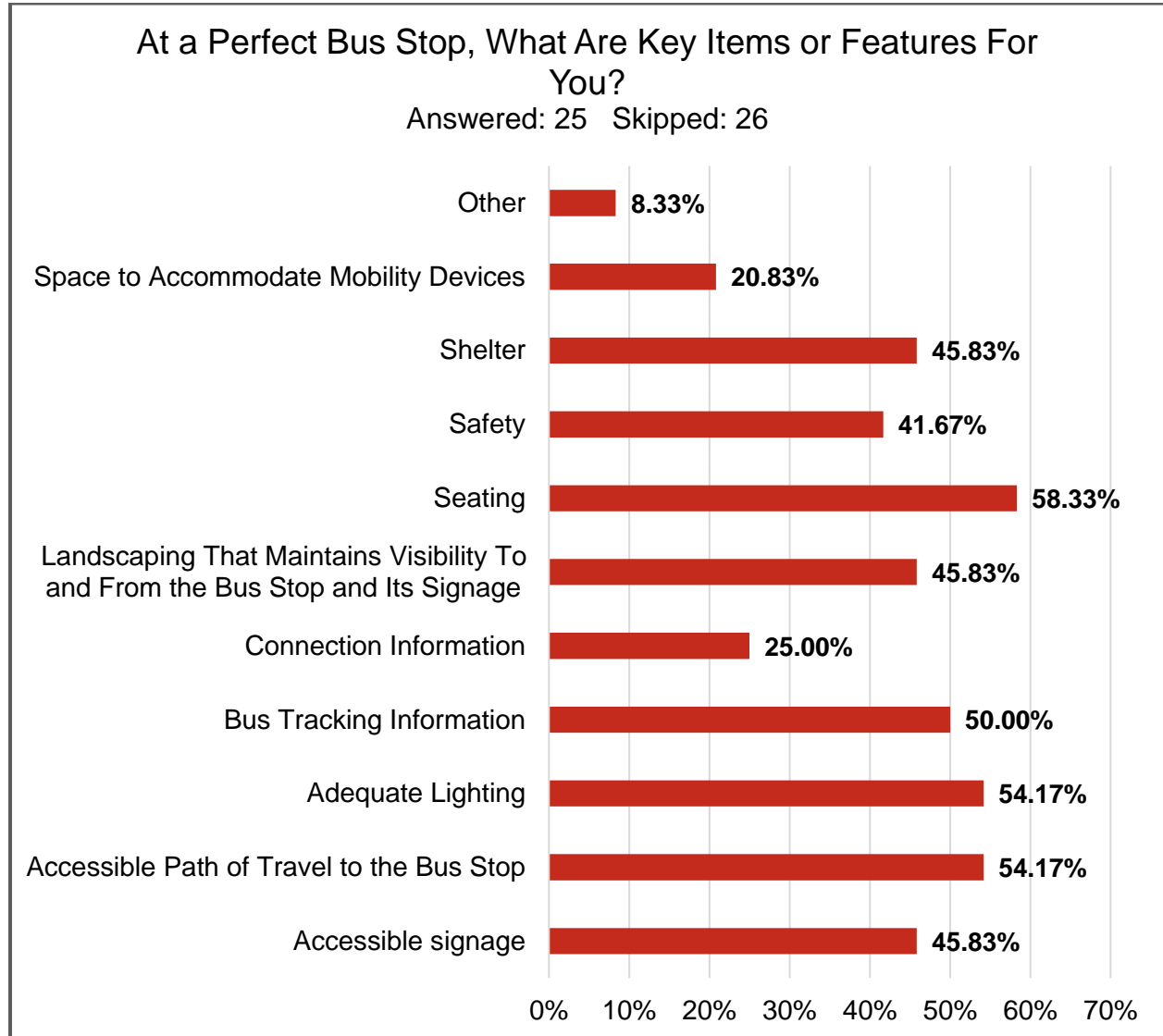
Sixty-eight percent (68%) of respondents indicated that they do not transfer to routes other than their own. Thirty-two percent of respondents indicated that they do transfer routes. Of the 32%, four respondents indicated that they transfer in order to ride a combination of the Wake Forest A Loop, B Loop, and WRX. Four respondents transfer to other bus routes, including the 300 and the 25L.

Trip to Bus Stop



Most respondents, 83.3% indicated that they walk to their bus stop. Fewer respondents indicated they use a bicycle or scooter at 8.3%, 4.2% drive and park nearby, or get dropped off by another driver.

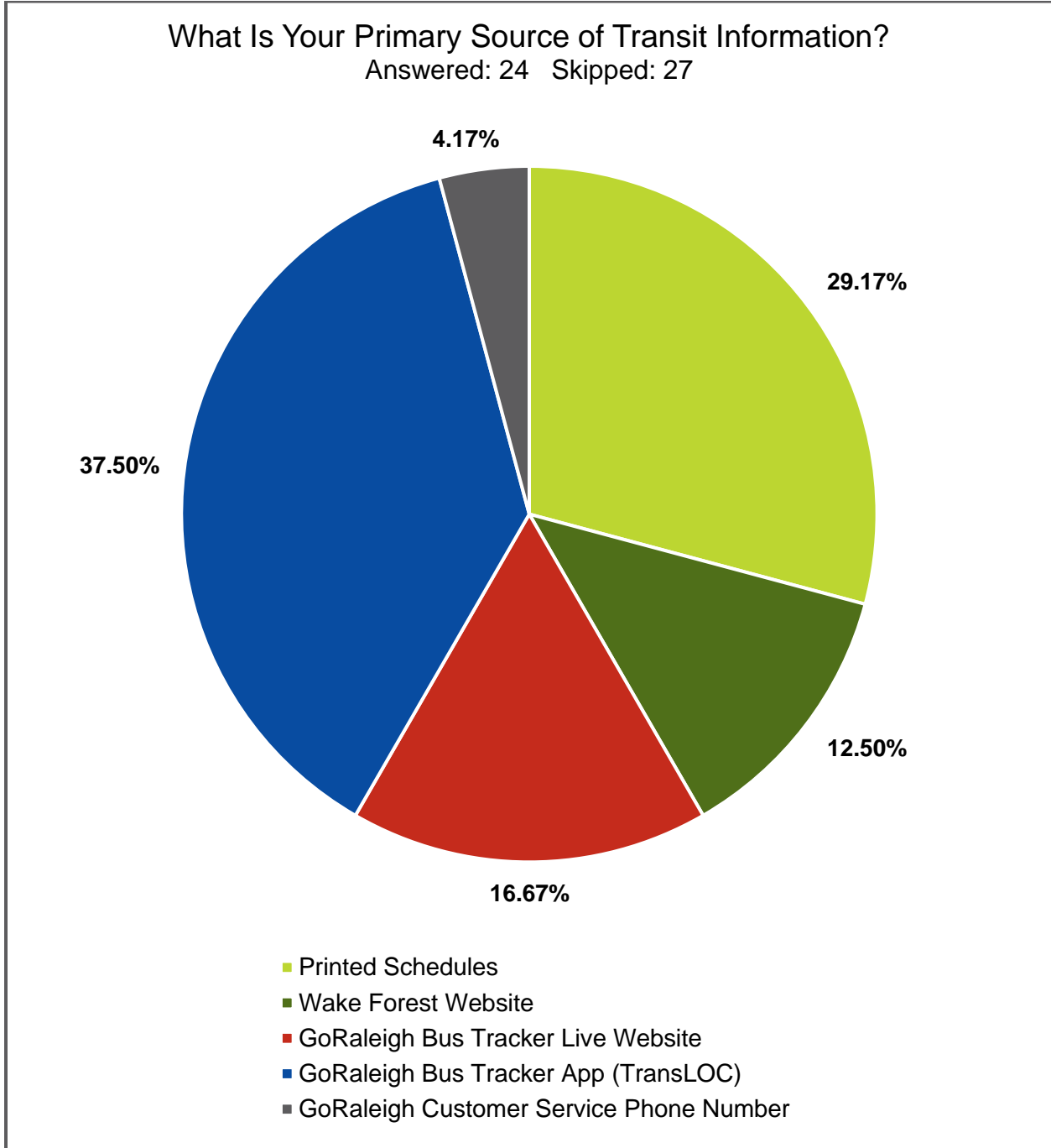
Preferred Bus Stop Amenities



Respondents were asked what key features their ideal bus stop would have. Twenty-five percent (25%) or less respondents preferred amenities such as connection information, accommodation for mobility devices and others. The most notably desired amenities are listed below.

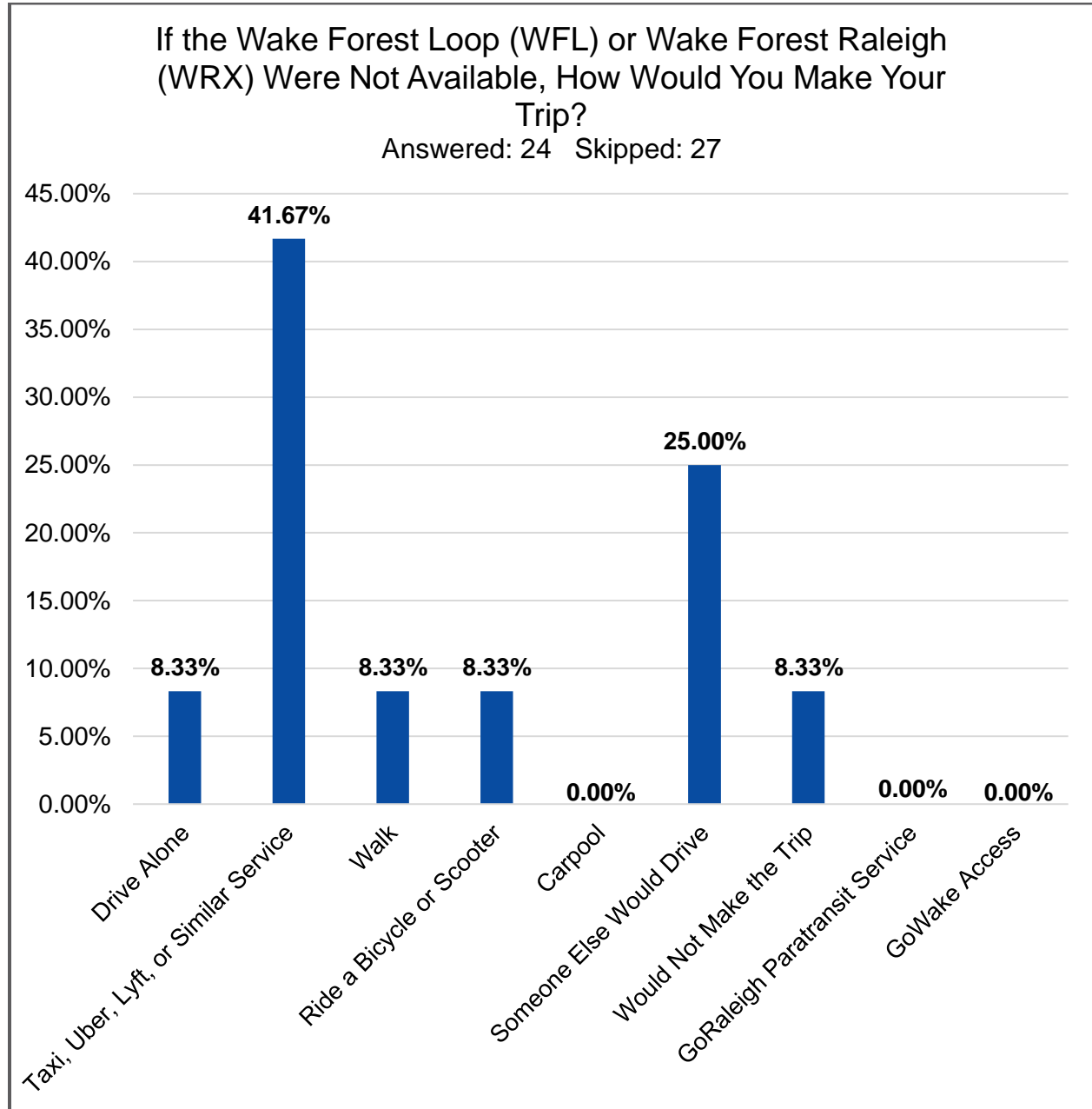
- 58.3% indicated seating
- 54.2% indicated accessible paths to the bus stop and adequate lights
- 50% indicated information to track buses
- 45.8% indicated accessible signage, bus stop shelters, and landscaping maintenance
- 41.7% indicated safety

Transit Information Sources



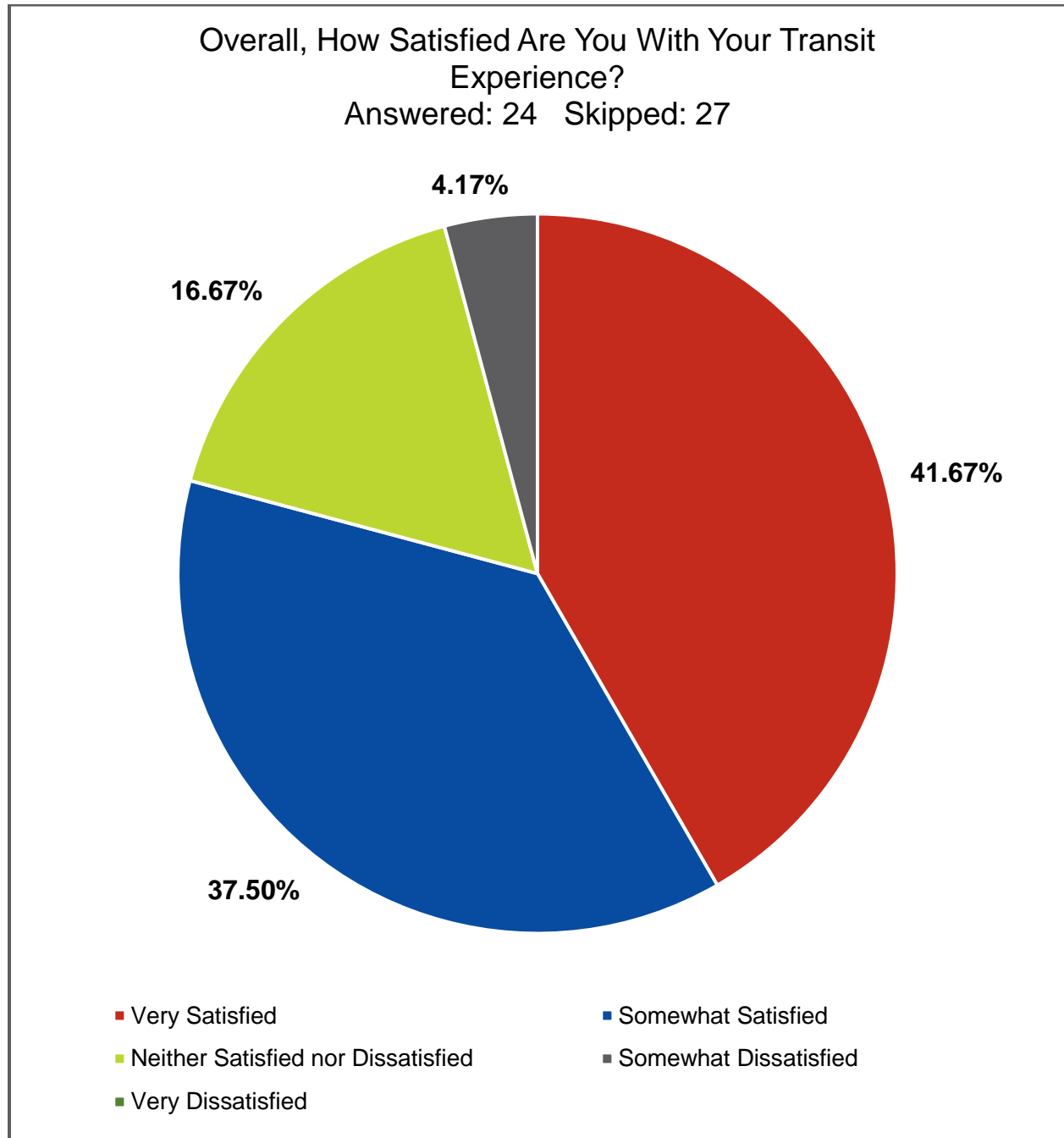
Respondents indicated that The GoRaleigh Bus Tracker App, 37.5%, and printed schedules, 29.2% were the most cited sources of transit information. Respondents were less likely to use the GoRaleigh Bus Tracker Live website, 16.7% or the Wake Forest website, 12.5%. Four percent (4%) of respondents use The GoRaleigh customer service phone line.

Transit Alternatives



When asked how they would get to their destinations if the Wake Forest Loop or Wake Forest-Raleigh (WRX) were not available, 41.7% of respondents indicated that they would most likely take a taxi or use a rideshare service. Twenty-five percent (25%) indicated that someone else would drop them off at their destination. Others indicated that they would drive, walk, or take a bike/scooter, 8.3%. Two respondents stated they would not make the trip if Wake Forest public transit were unavailable. Zero respondents would carpool, use paratransit, or take GoWake Access.

Satisfaction with Transit Experience

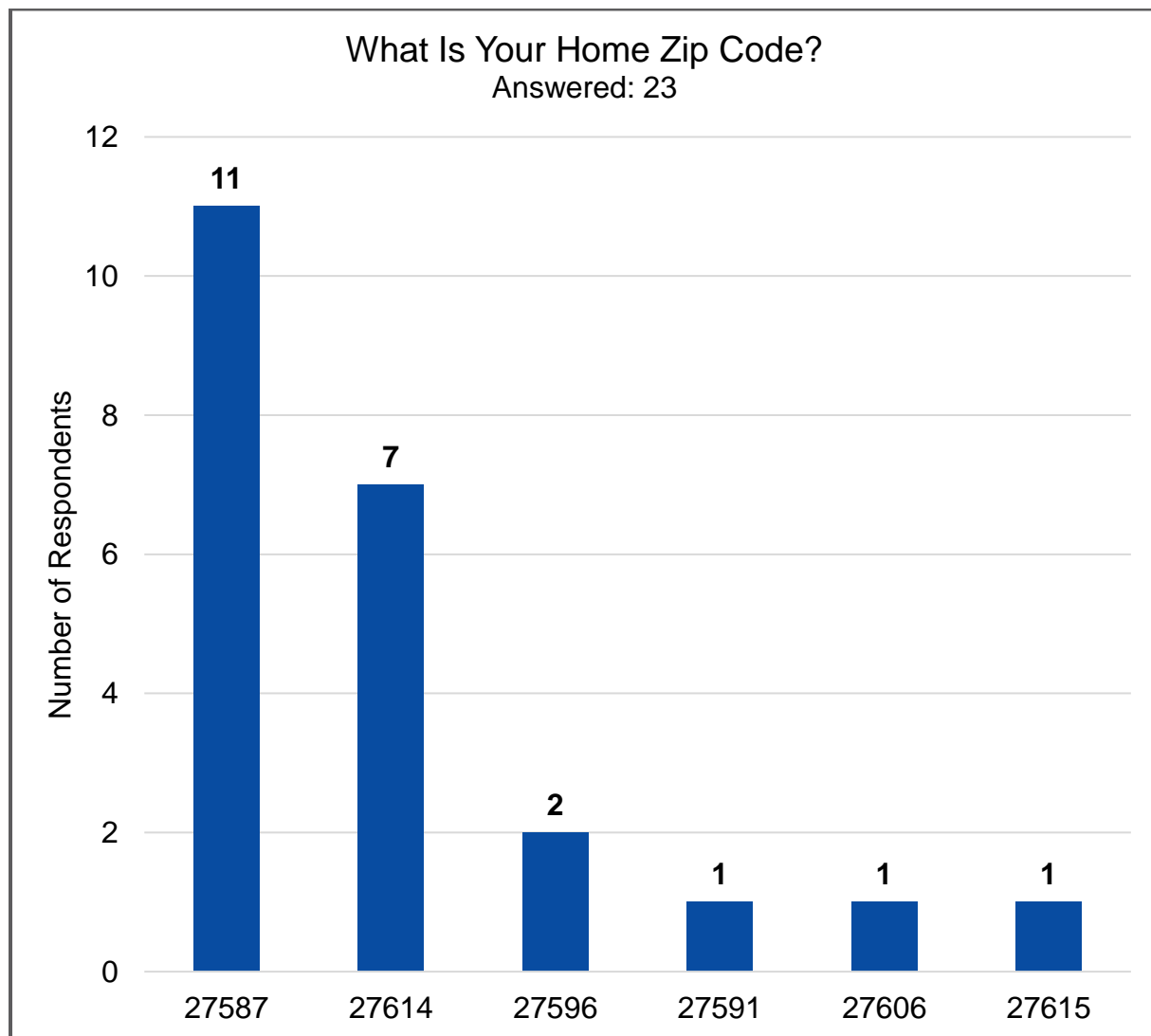


Most respondents, 41.7% are very satisfied with their transit experience, with 37.5% being somewhat satisfied. Nearly 16.7% of respondents said that they were neither satisfied nor dissatisfied. Approximately 4.2% of respondents stated they are somewhat dissatisfied with their transit experience. Notably, zero respondents expressed being very dissatisfied.

Voluntary Demographic Question Analysis

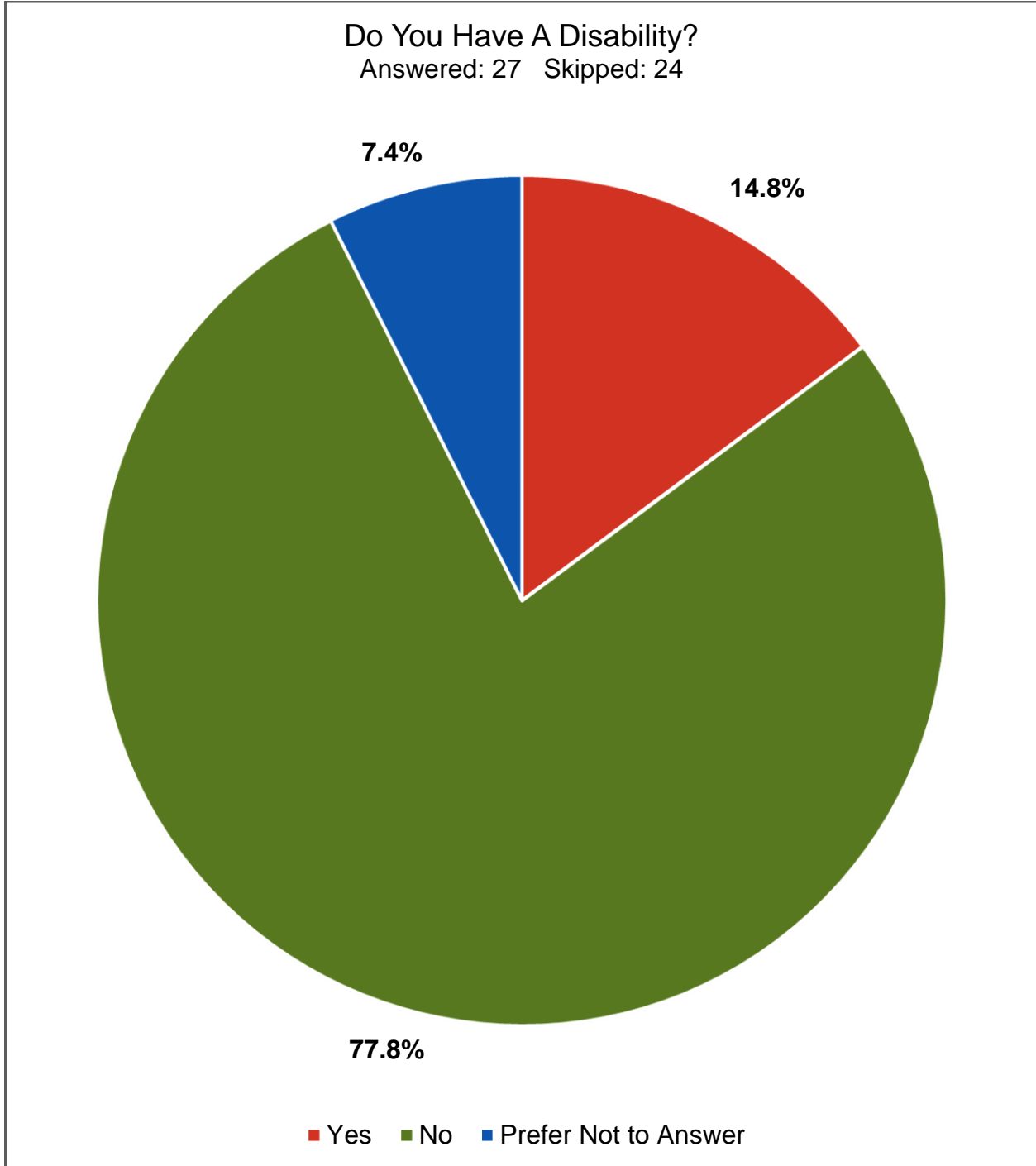
To learn more about who participated, the survey included several optional demographic questions. The broader goals of the Wake Forest Transit Plan engagement process were to engage 1 percent (1%) of residents in the study area, to match demographic representation in the surveys within 5 percent (5%) of relevant demographic categories.

Zip Codes



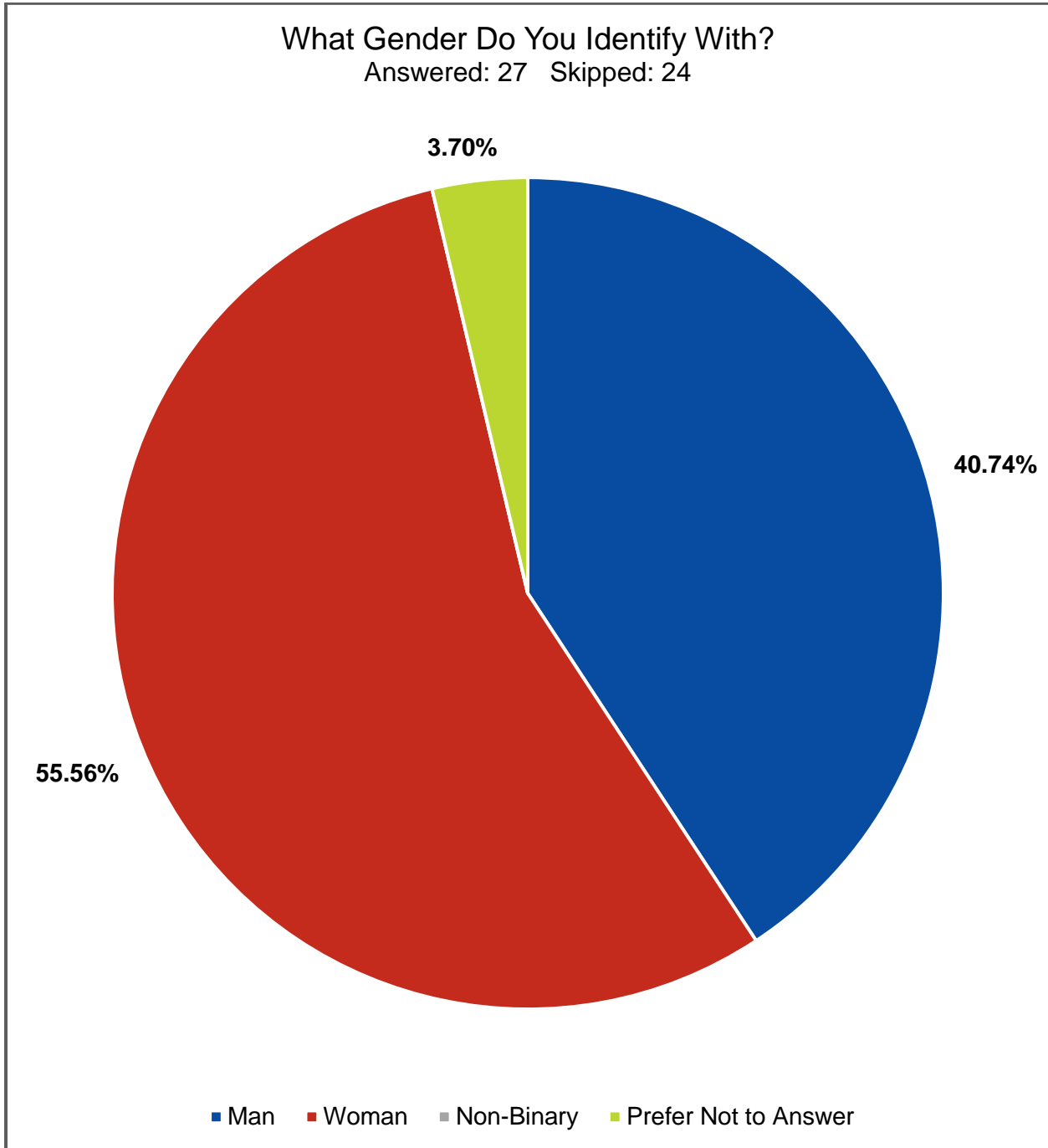
While less than half of survey respondents indicated their zip code, 11 of the of the 23 respondents who answered this question resided in a single zip code, 27587. This was followed by 7 residents who resided in 27614. Additional residents resided in the 27596, 27591, 27606, and 27615 zip codes.

Disability



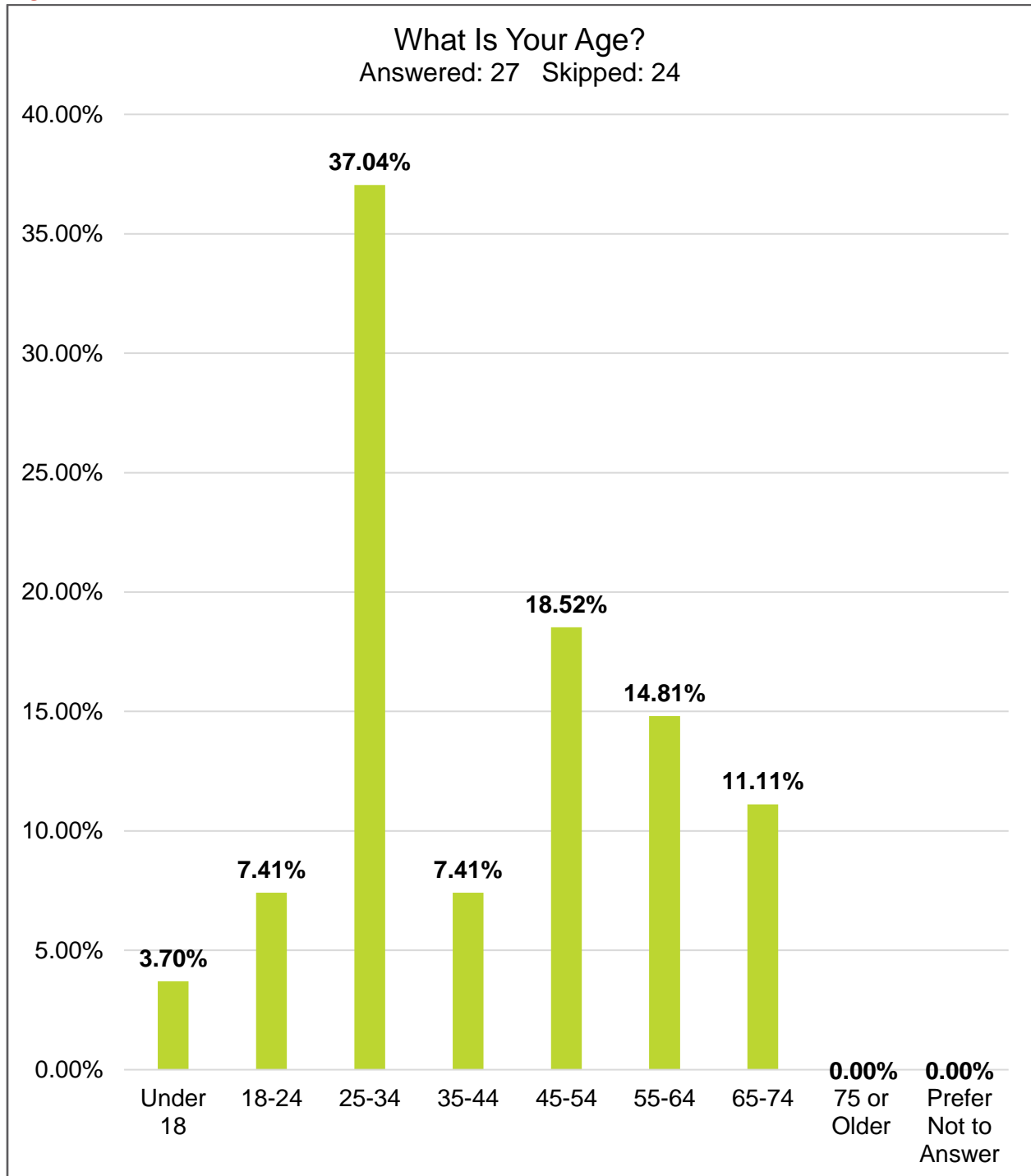
Nearly 15 percent (14.8%) of question respondents reported having a disability, while 77.8% stated they do not have a disability and 7.4% indicated that they preferred not to answer the question.

Gender Identity



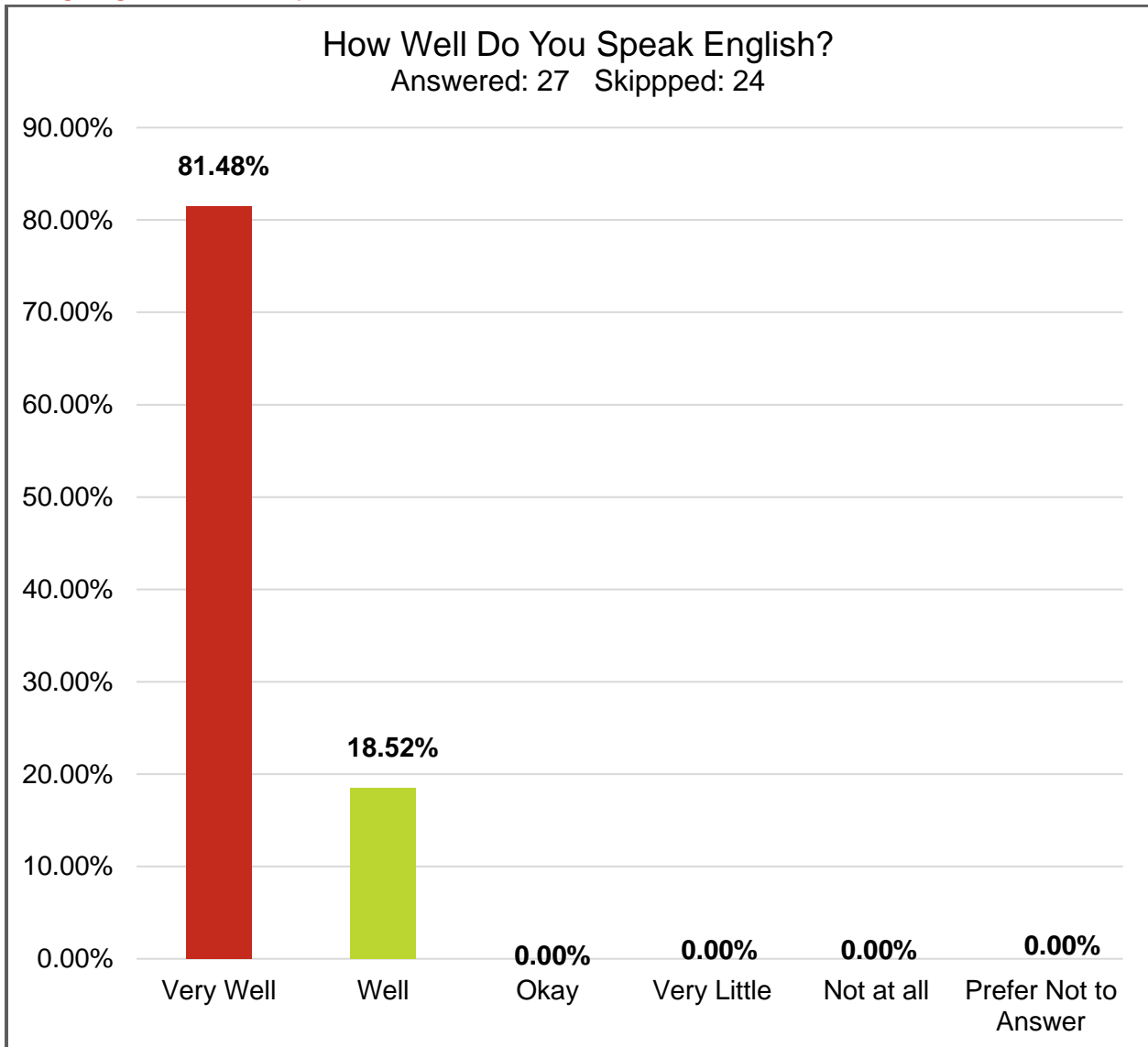
A slight majority of question respondents identified as women at 55.6%, while 40.7% identified as men and 3.7% chose not to offer their gender identity. Although it was provided as an option, non-binary was not selected as the preferred identity among any survey respondents.

Age



The largest proportion of question respondents, 37.0%, are aged between 25 and 34 years. Eleven percent (11.1%) report being younger than 25 years old or between 65 and 74 years old. Nearly 19 percent (18.5%) are between 45 and 54 years old and 14.8% are between 55 and 64 years old. Zero respondents indicated that they were 75 years or older.

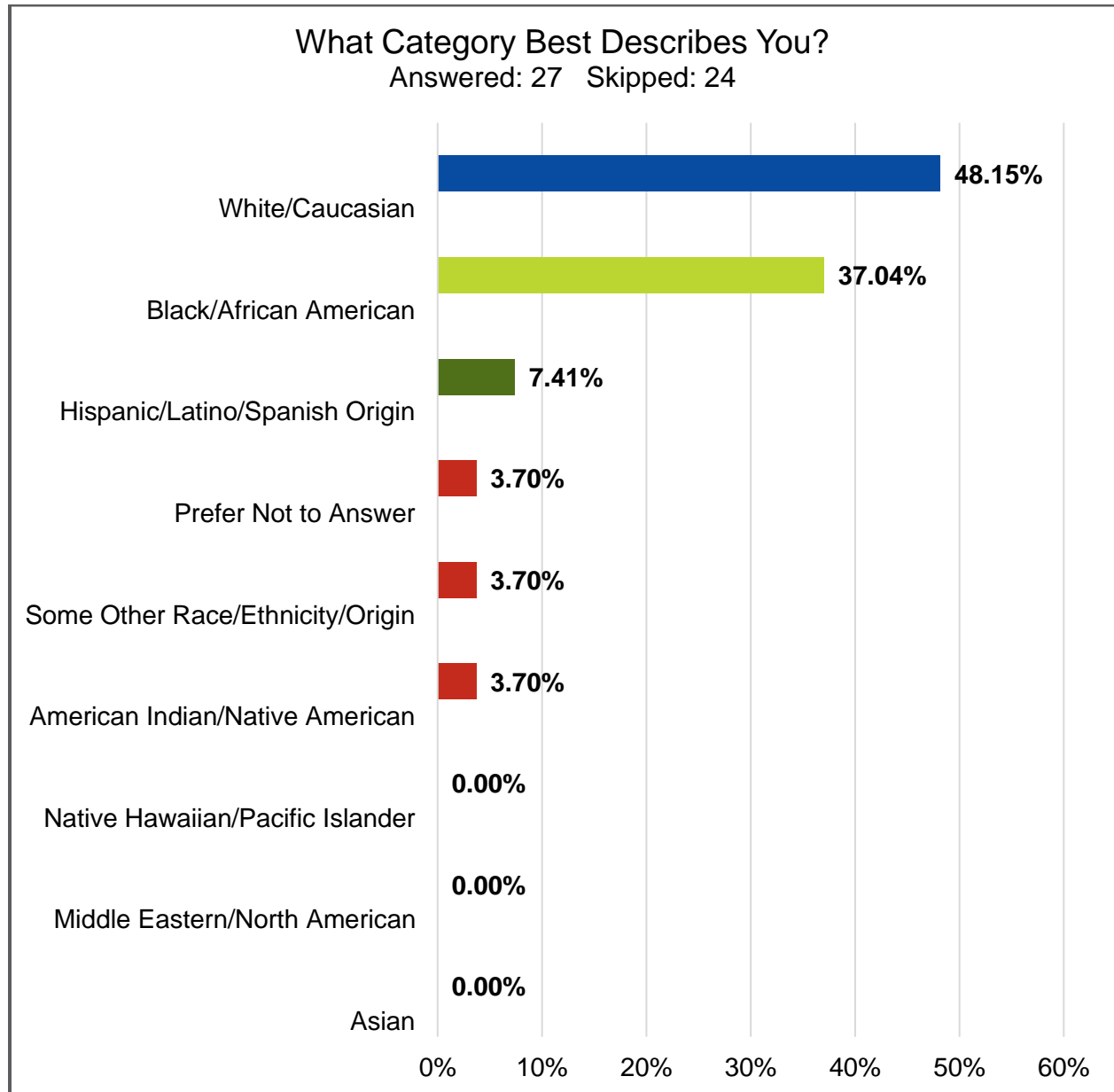
Language Proficiency and Preference



All question respondents indicated that they speak English either very well (81.5%) or well (18.5%). Zero respondents stated that they speak English 'okay,' very little, or not at all.

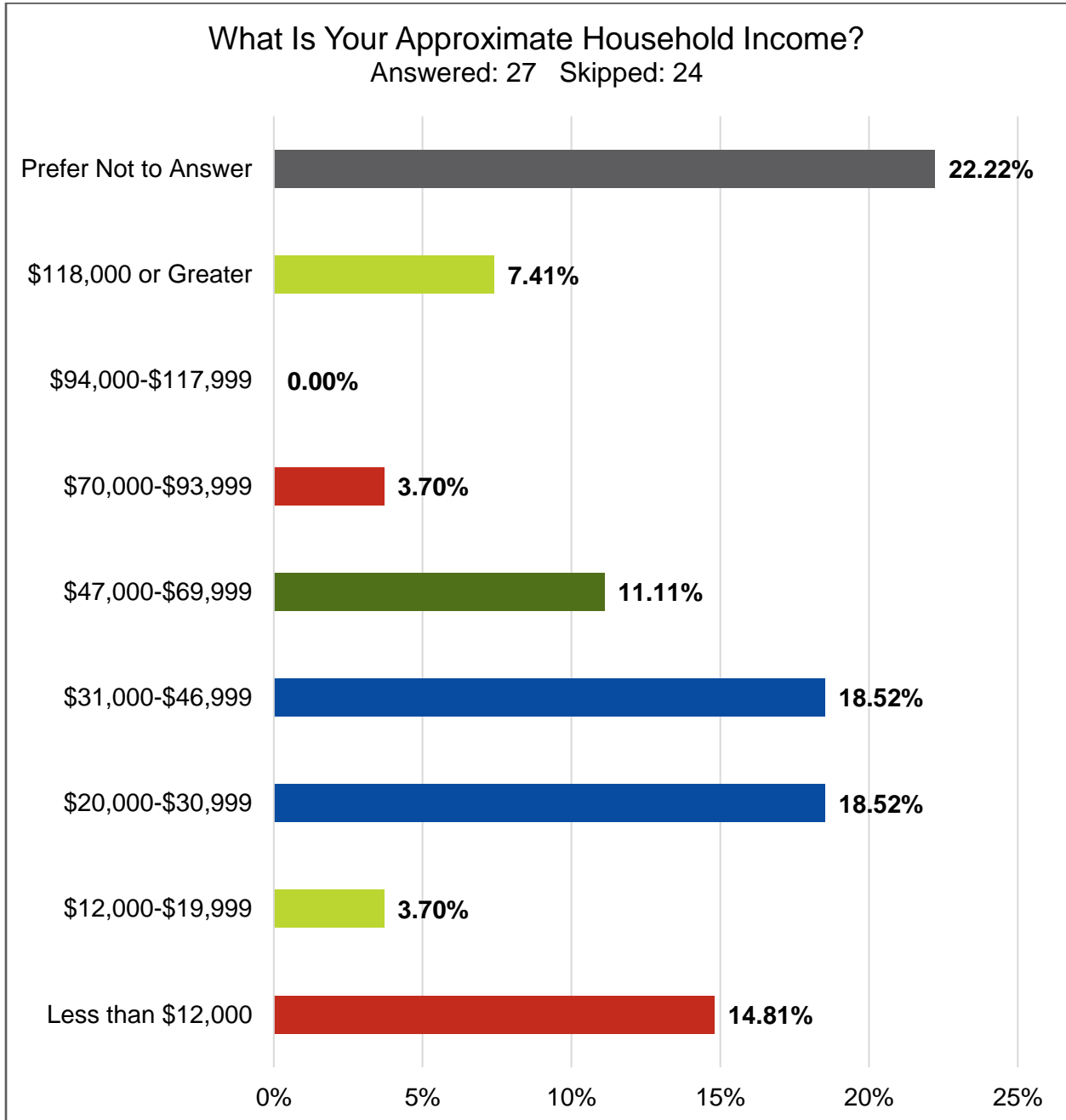
Of respondents offering what language they primarily speak at home the majority speak English (89.4%). Two respondents stated that their preferred language at home is Spanish.

Racial/Ethnic Identity



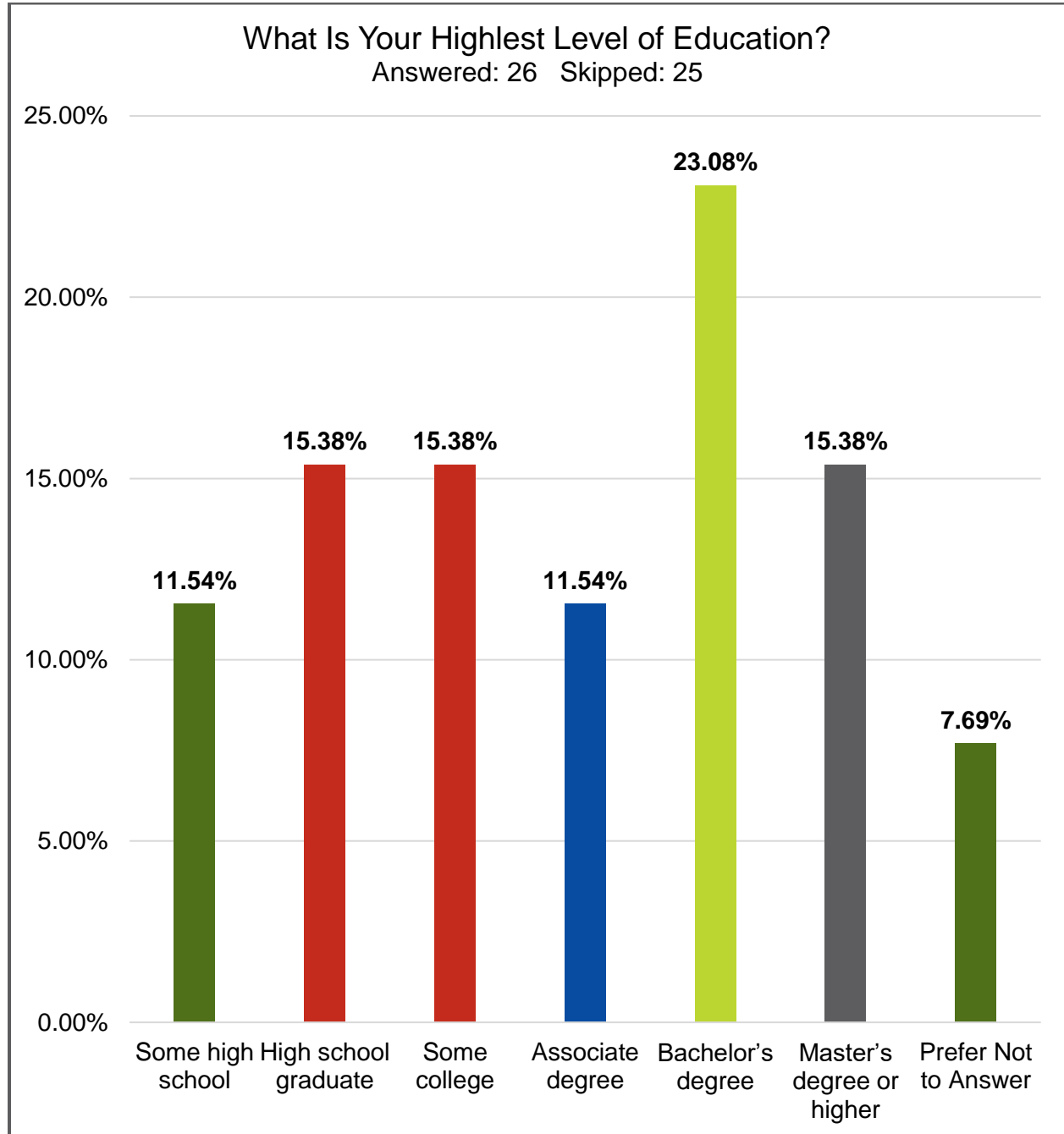
Most question respondents racially identify as white/Caucasian, 48.2% and/or Black/African American (37.0%). Slightly over 7% (7.4%) identify as Hispanic, Latino, or of Spanish origin. Few or no persons identifying as American Indian/Alaskan Native (n=1), Asian (n=0), Middle Eastern (n=0), or Native Hawaiian/Pacific Islander (n=0) were represented in the survey sample. Over 3% (3.7%) opted out of providing their racial identity.

Household Income



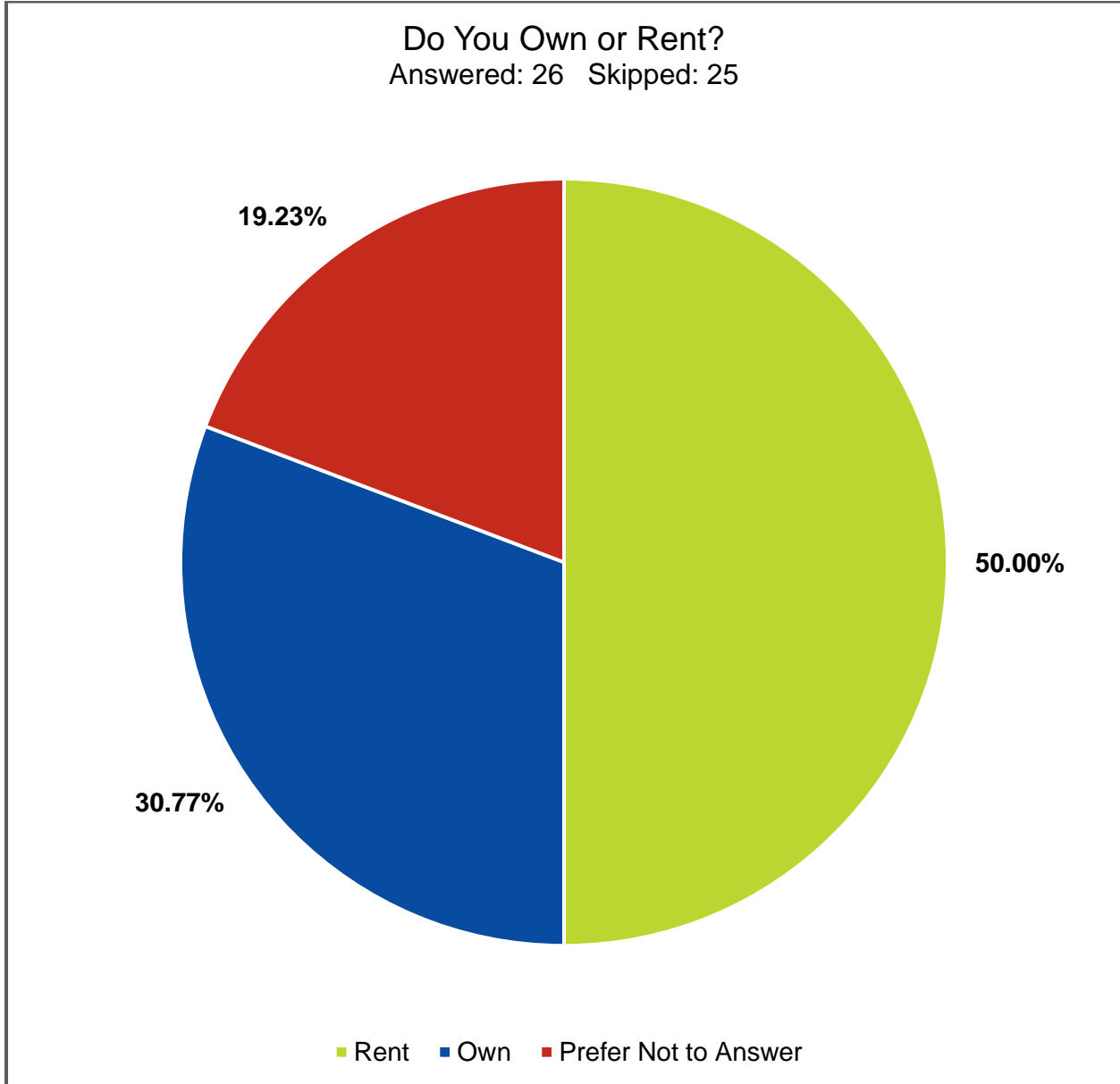
Nearly 19% (18.5%) of question respondents reported a household income between \$20,000 and \$30,999 per year. The same percentage (18.5%) of respondents reported a household income between \$31,000 and \$46,999 per year. Nearly 4 percent (3.7%) reported earning \$12,000 and \$19,999, as well as, \$70,000 and \$93,999. Less than 11 percent (11.1%) earn between \$47,000 and \$69,999, and 7.4% earn \$118,000 or more in annual income. Slightly over 22 percent (22.2%) of respondents declined to offer their income information.

Education



Slightly over 23% (23.1%) of questions respondents had at least a bachelor's degree, with 15.4% having a master's degree or higher. Twelve percent (11.5%) have an associate's degree, 15.4% completed some college, 15.4% have a high school diploma, and 11.5% report completing some high school. Two respondents declined to report their educational attainment.

Own or Rent



Fifty percent (50%) of survey respondents are renters. Nearly 31% (30.8%) of respondents are homeowners. Nineteen percent (19.2%) did not provide their residential status.

Recommendations for Future Outreach

This survey met demographic representation goals for populations living below the poverty level and minority populations. A total of 5% of the population of Wake Forest lives below the poverty level. Among survey respondents, 19% indicated an annual household income of less than \$20,000 per year. Minorities make up 28.3% of the population of Wake Forest. Over 40% of survey respondents identified as a member of a racial minority. This survey met demographic representation goals for populations living below the poverty level and minority populations.

Regarding Limited English Proficiency populations, although 2.3% of the population of Wake Forest speak Spanish as a primary language, the survey almost exclusively reached English-speaking populations, with 81.5% of respondents speaking English very well and 18.5% speaking English well.

Future outreach should consider increasing advertising to Spanish-language media, ensuring access to survey materials in Spanish, and translating advertising materials (flyers, business cards, and other materials) into Spanish. Additionally, Wake Forest could consider partnering with community organizations to increase feedback from community members who primarily speak Spanish.

Lastly, the project team may wish to increase advertising in the least represented zip codes.