**Section 1** 

**Title VI Notices and Actions** 



#### **Title VI Public Notice and Process**

GoRaleigh has provided a joint notice to the public addressing their rights under both Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act.

#### **Title VI Notice to the Public**

GoRaleigh hereby gives public notice of its policy to uphold and assure full compliance with American Disabilities Act/Title VI of the Civil Rights Act of 1964 and all related acts and statutes. ADA/Title VI and related statutes prohibiting discrimination in federally assisted programs require that no person in the United States of America shall, on the grounds of race, color, national origin or sex, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any GoRaleigh service, program or activity.

Any person who believes they have been aggrieved by discrimination and believes the discrimination is based upon race, color, national origin, gender, age, economic status , limited English proficiency, or disability status has the right to file a formal complaint. To request a copy of the Authority's ADA/Title VI program, contact the city's transit program at 919-996-4087. Complaints will be accepted verbally and in writing. Mail written complaints to: City of Raleigh, Transit Program, PO Box 590, Raleigh, NC 27602-0590. A complaint should be submitted within 180 days of the alleged discriminatory act (or latest occurrence). For more information regarding civil rights complaints, please contact: ADA/Title VI Compliance Officer, City of Raleigh, Transit Program, PO Box 590, Raleigh, Transit Program, PO Box 590, Raleigh, Transit Program, 2000, Raleigh, NC 27602-0590. A complaint should be submitted within 180 days of the alleged discriminatory act (or latest occurrence). For more information regarding civil rights complaints, please contact: ADA/Title VI Compliance Officer, City of Raleigh, Transit Program, PO Box 590, Raleigh, NC 27602-0590, or call 919-996-4087.

#### Translations

The Title VI Notice to the Public and the Complaint Form will be translated into Spanish. The Title VI Notice is posted on the City of Raleigh website, which can be translated into a wide variety of languages.

#### Locations Where the Notice is Posted

GoRaleigh posts its Title VI Public Notice on its website, in all vehicles, and in transit facilities. Locations include:

- GoRaleigh website <u>www.raleighnc.gov</u>
- GoRaleigh Buses

- GoRaleigh Bus Maintenance staff break-rooms
- Customer Service/Passenger Window at the GoRaleigh Transportation Center
- GoRaleigh Access Operations Driver's break-room
- GoRaleigh drivers' break-room
- GoRaleigh Transit Operations Center Break-room
- GoRaleigh Safety and Security Break-room
- GoRaleigh Access Office 1st Floor room 106.



#### CITY OF RALEIGH ADA / TITLE VI COMPLAINT FORM

#### Background

Recipients must create and make available an Americans with Disability Act (ADA) / Title VI Complaint Form for use by customers who wish to file an ADA / Title VI complaint. The complaint form shall be available on the recipient's website. A recipient's ADA / Title VI Complaint Form shall specify the type of complaint, ADA or Title VI.

The Civil Rights of 1964 (Title VI) identifies the three classes protected by Title VI—race, color, and national origin—and allow the complainant to select one or more of those protected classes as the basis/bases for discrimination.

If any of the Limited English Proficient (LEP) populations in your service area meet the Safe Harbor threshold (see Chapter III), then the procedure should be provided in English and in any other language(s) spoken by LEP populations that meet the Safe Harbor Threshold

This form is also used for Americans with Disability Act (ADA) complaints. The Americans with Disability Act of 1990 (ADA), provides protection that no individual with a disability shall on the basis of disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any GoRaleigh program, service or activity.

City of Raleigh is committed to providing non-discriminatory service to ensure that no person is excluded from participation in, or denied the benefits of, or subjected to discrimination in the receipt of its services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964 (Title VI) as well as providing protection that no individual with an disability shall on the basis of disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination as stated in the Americans with Disability Act of 1990 (ADA).

If you feel that you have been discriminated against, please provide the following necessary information to facilitate the processing of your complaint. If assistance is required to complete the form, or if you have questions, please do not hesitate to call the ADA/Title VI Coordinator at (919) 996-3030. Once completed, return a signed and dated copy to:

City of Raleigh Transit Special Investigations ADA / Title VI Coordinator City of Raleigh Transportation PO Box 590 Raleigh, North Carolina 27602

Note: The following information is necessary to assist us in processing your complaint. Should you require any assistance in completing this form, please call (919) 996-3030.

What is the nature of your complaint ADA or Title VI? Please check one of the following below:

( ) ADA or ( ) Title VI

	[FOR OFFICE USE ONLY]	
Complaint No		
Dort		

#### Part I.

Name			
Address			
Telephone (Home)	Telephone (Work)		
Electronic Mail Address:			
Accessible Format Requirements?			
TDD Large Print	Audio Tape	Other	

#### Part II.

Are you filling this complaint on your own behalf? Yes* No					
*If you answered "yes" to this question, go to Section III.					
If not, please supply the name and relationship of the person for whom you a	are complaining:				
Please explain why you have filed for a third party:					
Please confirm that you have obtained the permission of the aggrieved party if you are filing on behalf of a third party.	Yes	No			

#### Part III

I believe the discrimination I experienced was based on (check all that apply):				
[] Race	[] Color	[] National Origin		
Date of Alleg	ed Discrimination (Mon	th, Day, Year):		
Explain as clearly as possible what happened and why you believe you were discriminated against. Describe all persons who were involved. Include the name and contact information of the person(s) who discriminated against you (if known) as well as names and contact information of any witnesses. If more space is needed, please use the back of this form.				

\* You may use the back of this document for additional comments or attach any written materials or other information you think is relevant to your complaint.

#### Part IV

Have you previously filed a ADA / Title VI complaint with this agency?		Yes	No	
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#### Part V

Have you filed this complaint with any other Federal, State, or local agency, or with any Federal or State court?

If yes, check all that apply:[] Federal Agency:

[] Federal Court [] State Agency [] State Court [] Local Agency

Please provide information about a contact person at the agency/court where the complaint was filed.

Name: Title:

Agency: Address:

Telephone:

#### Part VI

Name of agency complaint is against: \_\_\_\_\_

Contact person:	 	
Title:		
Telephone number:		

To protect your rights, your complaint must be filed within <u>180</u> days following the date of the alleged discrimination. Failure to file within <u>180</u> days may result in dismissal of the complaint.

You may attach any written materials or other information that you think is relevant to your complaint.

Signature and date required below

Signaturo	Data
	Date
Signature	Dute

Please submit this form in person at the address below, or mail this form to:

ADA / Title VI Coordinator City of Raleigh Transportation Department PO Box 590 Raleigh, NC 27602

#### **ADA / Title VI Complaint Form**

The City of Raleigh's ADA / Title VI complaint form information is available in English on the City of Raleigh's website and presented in this report. The City of Raleigh's website also provides access to translation of the ADA / Title VI complaint form into other languages if needed.



#### LIST OF TRANSIT-RELATED TITLE VI INVESTIGATIONS, COMPLAINTS, AND LAWSUITS (GENERAL REQUIREMENT)

#### **Background**

#### From the Title VI Circular

FTA requires all recipients shall prepare and maintain a list of any of the following that allege discrimination on the basis of race, color, or national origin:

Active investigations conducted by FTA and entities other than FTA; Lawsuits; and Complaints naming the recipient.

This list shall include the date that the transit-related Title VI investigation, lawsuit, or complaint was filed; a summary of the allegation(s); the status of the investigation, lawsuit, or complaint; and actions taken by the recipient in response, or final findings related to the investigation, lawsuit, or complaint. This list shall be included in the Title VI Program submitted to FTA every three years.

Information regarding investigations, complaints, and lawsuits for the reporting period is provided below.

#### Investigations

There were **no** Title VI investigations during the reporting period.

#### Lawsuits

No Title VI lawsuits were filed.

#### Complaints

No complaints were received.

Complaints submitted to GoRaleigh are received, investigated, and resolved by GoRaleigh staff. For complaints, Findings are designated as follows:

<u>Cleared</u> - The investigation concludes there was no violating conduct by the employee.

**<u>Confirmed</u>**- Sufficient information has been obtained to determine the complaint as valid.

Incomplete - There is insufficient information to make a finding of "Cleared" or "Confirmed".

<u>Inconclusive</u> - An irresolvable discrepancy exists between the employee's and the customers account and no witness or evidence is available to corroborate either account.

### List of Investigations, Lawsuits and Complaints

Case No.	Investigation, Lawsuit, Complaint	Respondent	Race, Color, Sex, National Origin	Receiving Agency	Date Filed (MM,DD, YYYY)	Basis	Date of Report	Status/ Finding
None	None during this period							

# Section 2

## **Public Engagement**





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#### **1. INTRODUCTION**

City residents, workers and visitors participate in the public transportation decision-making process. Everyone who resides, work, travel, or play within the service area are stakeholders and should have ample opportunity to provide input in the planning and decision-making processes for transit services, fare changes, disparity studies, construction, etc. GoRaleigh is committed to providing timely public involvement opportunities and facilitating active participation. The public participation plan is intended to develop two-way communication systems between transit service partners, people, businesses, and leaders to collaboratively address transit needs and ensure the public, including minorities, low-income, and Limited English Proficient (LEP) populations, have meaningful opportunities to participate in the decision making process. GoRaleigh's plan is written to be in compliance with Federal Transit Administration (FTA) Title VI program which requires an inclusive Public Participation Plan to outline how requirements related to public participation will be met.

GoRaleigh, the City of Raleigh's Department of Transportation Transit Program, administers public transportation for the City, including a fixed route transportation system, paratransit service, and a free downtown circulator. The agency provides fixed-route service along 37 bus routes, including four express routes, six connectors, and one downtown circulator. Approximately 333,873 Raleigh residents live within one-third mile of a GoRaleigh transit route and are considered part of the agency's fixed route service area, according to American Community Survey 2013-2015 5-year estimates.

GoRaleigh serves the highest ridership of all transit providers in Wake County with an average daily ridership of 24,475 in 2019. GoRaleigh Access provides on-call paratransit service to individuals with functional disabilities that prevent their use of GoRaleigh's accessible fixed route bus services. The R-Line is a fare free circulator operating in Raleigh's central business district.

#### Purpose

This plan explains GoRaleigh's public participation strategies and procedures.

When developing an outreach program, careful consideration must be used to ensure the outreach program will result in the maximum exposure within all communities in GoRaleigh's service area regardless of socio-economic status, gender, race, ethnicity, geographic location or age. GoRaleigh should also use these outreach efforts as valuable opportunities to learn more and understand community needs, desires and vision. Local knowledge of an area can prove beneficial when determining emergency management plans or identifying system vulnerabilities. It is critical to ensure inclusive, equitable, and diverse public outreach and engagement, whether for real-time responses to the pandemic, existing projects, or future transportation funding and planning scenarios. The public outreach strategies listed within this plan are designed to provide the public with effective access to information and to provide a variety of efficient and convenient methods for receiving and considering public comment prior to implementing changes and additions. This people-based program ensures a community-led and coordinated approach that addresses everyone, even the most vulnerable and marginalized communities.

#### 2. FEDERAL REQUIREMENTS AND COMPLIANCE

GoRaleigh must comply with a wide variety of federal and state requirements. Key federal laws affecting public participation are identified in Table 1.

#### **Table 1: Key Federal Laws**

Federal Law	Requirement
Title VI of the Civil Rights Act of 1964	Prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance
Americans with Disabilities Act of 1990	Prohibits discrimination on the basis of disability
Executive Order 12898 "Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations"	Requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, or activities on minority or low-income populations
Executive Order 13166 "Improving Access to Services for Persons with Limited English Proficiency (LEP)"	Requires agencies to implement a system to provide meaningful access to services for those who do not speak English proficiently
National Environmental Policy Act (NEPA),	Requires federal agencies to examine the social, economic, and environmental impacts of their actions prior to making decisions

Federal Transit Administration (FTA) regulations and guidance shape how GoRaleigh operates. FTA Circular 4702.1B establishes requirements for GoRaleigh's Title VI program, a suite of policies, procedures, and data that must be submitted to FTA every three years. GoRaleigh must adopt an inclusive public participation plan as part of its Title VI program.

#### 3. PUBLIC PARTICIPATION PLAN GOALS

This plan is meant to guide GoRaleigh's public participation efforts into the future. The goals for this plan are:

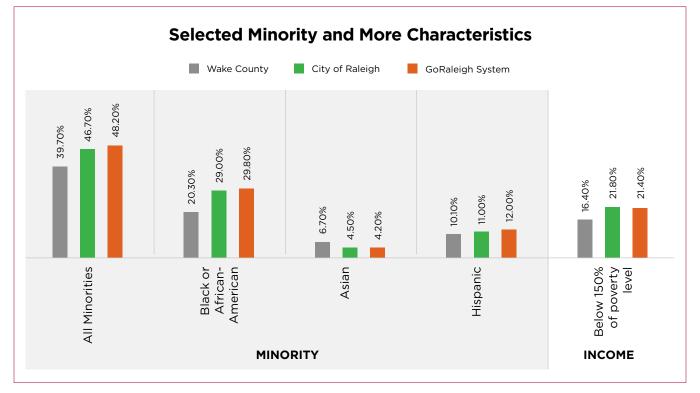
- The plan will be a useful, easy to understand resource for GoRaleigh and others working with them.
- The plan will provide for equitable engagement.
- The plan will provide an approach for ongoing engagement.
- The plan will expand approaches to include virtual methods.
- The plan will provide for measuring success.

#### 4. GORALEIGH CUSTOMERS

GoRaleigh is the transit system responsible for operating most of the public transportation services in Raleigh. It provides public transportation services throughout the city's municipal area and also operates regional/express bus routes in partnership with GoTriangle, the regional provider. GoRaleigh is also contracted to operate routes serving the Wake Tech Community College campus south of Raleigh and the Towns of Wake forest, Garner, and Knightdale. In addition to Fixed Route Services, GoRaleigh operates curb-to-curb paratransit services for persons with disabilities who are unable to use the fixed route system.

Raleigh is committed to equitable and inclusive public participation for our customers. GoRaleigh's system generally serves a higher percentage of minorities than are present in the general population of Raleigh, as shown in Figure 1. Low-income populations are served in approximately equal proportion to the overall population.

Because GoRaleigh's customers have a variety of needs, public participation may take a variety of formats. GoRaleigh strives to make its outreach accessible for persons with disabilities. Appendix A outlines our Language Assistance Plan, describing how GoRaleigh will assist those with limited English proficiency.



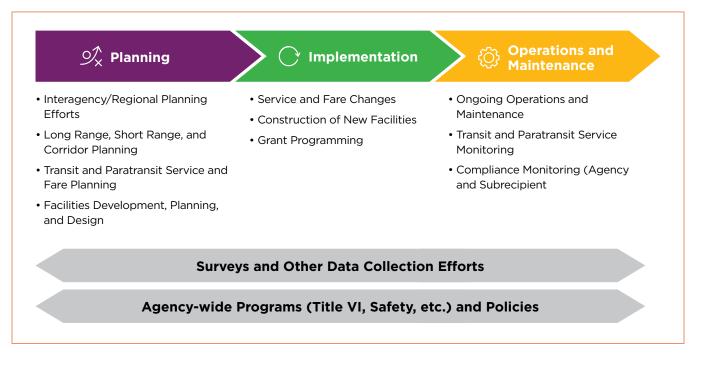
#### Figure 1: Selected Race, Ethnicity and Income Characteristics of the GoRaleigh System

Sources: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table B02001, "Race."; Table B03002, "Hispanic or Latino Origin by Race."; Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months." Data is shown for minority groups comprising greater than 1% of the population.

#### 5. PLANNING AND OPERATIONAL CONTEXT

GoRaleigh leads public participation efforts for a broad range of public transportation planning and operational initiatives. Key agency program areas and activities which public participation supports are illustrated in Figure 1. Appendix B outlines the public participation requirements for specific processes.





GoRaleigh works with a variety of regional and local planning and transportation partners, including

- Capital Area Metropolitan Planning Organization (CAMPO)
- North Carolina Department of Transportation (NCDOT)
- Raleigh Transit Authority (RTA)
- City of Raleigh Planning Commission
- Wake County
- GoWake Access
- GoCary
- Town of Cary
- GoTriangle
- Town of Apex

- Town of Fuquay-Varina
- Town of Garner
- Town of Holly Springs
- Town of Knightdale
- Town of Morrisville
- Town of Rolesville
- Town of Wake Forest
- Town of Wendell
- Town of Zebulon
- Research Triangle Park

GoRaleigh's public involvement process also integrates with and complements public involvement outlined in the Capital Area Metropolitan Planning Organization's (CAMPO) Public Involvement Plan (PIP) and the Wake Transit Plan Public Engagement Policy (PEP). GoRaleigh may develop public participation efforts collaboratively with any of its partners.

Board, Committee or Commission	Description
Raleigh Transit Authority (RTA)	Established by City Code to set general transit policy. It consists of nine members appointed by the Raleigh City Council and operates within funding and budgetary parameters approved by the City Council. The RTA consists of three committees: the Finance and Policy Committee, the Route Committee, and the Marketing Committee.
Wake County Transit Planning Advisory Committee (TPAC)	A staff-level advisory committee comprised of agencies and local governments with jurisdiction in Wake County, including GoRaleigh. The TPAC coordinates the planning and implementation aspects of the Wake Transit Plan and serves in a structured advisory role to the CAMPO Executive Board and GoTriangle Board of Trustees.
CAMPO Executive Board	Comprised of elected officials from member governments (including City of Raleigh) and stakeholders from other transportation agencies. This is the decision-making body for the metropolitan planning organization.
CAMPO Technical Coordinating Committee	Comprised of staff from member and stakeholder agencies, including GoRaleigh. This committee makes technical recommendations to the executive board.
CAMPO Mobility Coordinating Committee (MCC)	Comprised of staff from member agencies. The MCC manages and guides ongoing coordination activities in the urban area and is responsible for implementing goals and recommendations identified in the Coordinated Public Transit- Human Services Transportation Plan.

#### 6. GORALEIGH STAKEHOLDERS

Building a strong network of stakeholders is key to having successful and equitable public outreach to develop transportation improvements that are adopted by the community. Stakeholder contacts provide the foundation for developing the strategic partnerships needed for moving beyond project-level engagement to implementing community-oriented solutions. GoRaleigh develops partnerships such as these through existing stakeholder contacts and expands its network through strategic planning, community involvement, and engaging dialogue with stakeholders with focused meetings on how to better serve and meet the essential needs of the community it intends to serve.

GoRaleigh works with its network of stakeholders to enhance the reach of public engagement, and impact to communities by:

- Using various methods and strategies to increase the distribution of information concerning plans and programs;
- Providing more opportunities and trusted connections for the public to ask questions and provide feedback to help guide the planning and implementation of transit improvements; and
- Opening valuable avenues for reaching minority and LEP populations.

The primary roles that stakeholders facilitate include:

- Helping define outreach goals, approaches, and metrics
- Providing input on successes and opportunities for improvements
- Serving as a conduit between GoRaleigh and the broader public, including conducting future initiative-specific and ongoing outreach efforts themselves

GoRaleigh has a growing network of stakeholders that represent the needs of traditionally underserved populations in the transportation decision-making process. Equity considerations and community-led perspectives from these populations is essential for ensuring that outreach efforts and transit plan improvements are inclusive and effective. Stakeholder groups include

- Community / individuals,
- Community partners / non-profits,
- Governing and transportation agencies,
- Other transit agencies,
- Adjacent communities, and
- Others

Appendix C lists stakeholders working with GoRaleigh.

#### 7. METHODS

GoRaleigh uses a variety of public participation methods to facilitate public participation. Each public participation effort requires a well-defined goal and thoughtful planning. GoRaleigh's Public Participation Toolkit provides resources for staff engaging with the public. The toolkit walks users through understanding how engagement fits in the transportation planning process, preparing for engagement, working with partners, making sure engagement is equitable and providing language assistance, and choosing and implementing techniques.

Participation methods range from those used to inform the public, to those for gathering information, to those used to collaborate with the public.

Figure3 summarizes the methods GoRaleigh may consider for public participation and the factors that influence selection. The figure groups outreach tools and techniques by their function (Inform, Get Feedback, or Collaborate) and indicates each method's suitability for various transit processes. Ranges are provided to characterize the costs and resource needs associated with each technique. Each tool or technique is also characterized by its suitability for engaging non-traditional stakeholders.

Descriptions of key methods follow the figure.

#### Figure 3: Participation Methods

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																	Me	dia													active Activ	Meetir ities	gs/			ommı Even							ogran tners	ns & ships			
	Transit Process Phase	Community blogs/bulletins	Community to Community Outreach	Educational Videos	Flyers	Informational displays/kiosks	Informational handouts	Emails, listservs, and other e-communication methods	Newsletters	Presentations to non-profits, civic/community aroups, and underserved populations	edia po	ritten materials	visualization/Graphic novels		Websites - informational	Advertisements	Press releases and press kits	Public service announcements	Distribution in minority media outlets	Community canvassing	Community interviews	Interpreters at meetings	Listening Sessions		Photo/video submissions	Public hearing Social media sites - comments	s/Ques	Video Storytelling	Charrettes	rking Group	Games	meetings/events	Virtual Engagement		Conversations	nd Meetings	s/walk tours/accessibility audits	Pop-up events	leaders/amk	Community partner-led engagement		coordination		cations	Participatory Mapping	School-based outreach Staff liaicon/ narticination with organizations	S
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Maintenance	Transit and Paratransit Service Monitoring																															<b></b>												<u> </u>			
	Title VI Program																								▲ .																<b>x</b>						
Agency- or City-	EEO, ADA, and Other Programs																								▲ .																						
wide Programs	Cross-Departmental / City Initiatives																								<b></b>																						
	Cost	\$-\$\$	\$	\$-\$\$	\$-\$\$	\$\$	\$-\$\$	\$	\$\$	\$	\$\$	\$-\$\$	\$-\$\$	\$\$	\$-\$\$	\$\$	\$	\$	\$	\$	\$	\$\$	\$\$	\$\$ \$	-\$\$	\$\$ \$-\$	\$\$ \$-\$\$	\$\$ \$-\$\$	\$ \$\$	\$-\$\$	\$\$	\$-\$\$	\$\$ \$	\$\$	\$	\$	\$\$ \$	<b>\$\$</b> \$	-\$\$	\$\$	\$\$	\$ \$	5\$ \$·	- <b>\$\$</b> \$·	-\$\$	\$\$	\$\$
Other Criteria	Skills, Training, Staffing							<b></b>																	<b>▲</b> .								▲   .	<b>A</b> .													
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🔺 High	🔺 Medium	🔺 Low	+ Highly

/ Effective

✓ Supportive Activity \$ Low

#### **Description of Public Participation Methods**

<u>Open House</u> - An open house is an informal meeting where people join at any time to get project-specific information and talk one-on-one with representatives at pre-arranged stations. Guests get information at their own pace from the various exhibits and provided materials. Attendees are encouraged to provide their opinions, comments, and preferences for the record to project leads either in writing or spoken.

Online town hall - An online session with a facilitator-guided discussion or event.

<u>Virtual engagement</u> - Virtual engagement is a flexible approach for engaging with the intended audience online. Virtual engagement platforms focus on creating interactive online experiences..

<u>Informational handouts</u> - Information may be shared in conventional formats like factsheets, FAQs, or newsletters as well as in creative ways like graphic novels or other visualizations.

<u>Community Member to Community Member Engagement</u> - Community member to community member is a grassroots program to build community-wide awareness of any particular issue. This program relies on neighbor residents encouraging others to get informed and involved in a particular initiative by disseminating information through postcard writing, door to door canvassing, social media posts, phoning or texting.

<u>Social Media</u> - Social Media and web-based communication outreach strategies are the most convenient and cost-effective tools that provide information quickly to a wide and diverse audience. Web page and social media content is developed by or for the agency to engage and get the public's attention in high numbers. A variety of mediums can be published on-line for public consumption, such as videos, photos, documents and links to other resources. Social media posts are a great tool to share information and encourage participation. Posted content is sharable, thus helping to spread the information within the community. This tool is a great resource to engage the younger generation.

<u>Community Interviews</u> – Using pre-written questions, project team members will reach out to key stakeholders and community leaders to solicit feedback on a variety of local/neighborhood topics. This can be in a one-on-one or small group format. Responses can be used to help structure the outreach program as well as project recommendations. Questions that should be asked should include local issues, other leaders/groups to network with, and to rate existing services/programs.

<u>Surveys</u> - Surveys are a tool to extract quantitative or qualitative data to analyze and understand the perceptions, preferences, and needs of a particular population to be able to implement a successful plan.

<u>Community Canvassing</u> – Community canvassing techniques take engagement to the people. For transit, this often means conducting outreach at transit stations and centers to directly reach riders.

<u>Photo/video submission</u> - Not everyone likes to write or have the words to express exactly what they would like to convey. Allowing community members to submit comments using video

or photo gives them an opportunity to convey thoughts and ideas as precisely as possible. Submissions could be pictures of a particular location, issue, or best case example at another location. This allows for richer content.

<u>Videos</u> - Videos are a powerful visual and auditory tool to engage, educate, and tell a story about a particular topic, community, or area of interest. Video storytelling and educational videos are known for their capability to establish deeper understanding and engagement around a topic to meet key objectives. Video storytelling can be used to express a narrative through video. It can be used to help present a brand, allow users to connect, and explain the evolution of an organization.

<u>Workshops</u> - Workshops are interactive meetings that include facilitated exercises. A workshop typically includes an informational component as well as one or more interactive exercises or facilitated small group discussions. Fun and creative exercises like games or puzzles encourage everyone to participate.

<u>Onsite Meetings/Walking Tours</u> – A site tour or audit is a comprehensive examination of a site environment. Site tours/audits provide an interactive learning opportunity for members of the community to better understand the evaluative criteria of a particular area. Community members may have varying needs and expectations, or function differently in a common area, site tours/audits are a great way to bring everyone to work together to record the interests of diverse sectors of the population, define shared interests, and create community-based solutions.

<u>Charrettes</u> - A charrette integrates creative, intense working sessions in the form of a series of short feedback loops conducted for public engagement workshops, meetings, or at open houses. As an open, collaborative multidisciplinary planning process, this method harnesses the perspectives and ideas of all participating parties using written, illustrative, and narrative-based tools to develop a plan that captures the needs of the community representatives.

<u>Staffed booths at events</u> – The best way to get feedback from any community is to be where they are. Community events, festivals and fairs present a great opportunity to meet neighbors in a fun setting, but will also provide insight to travel patterns of visitors alike. Having a hands-on exercise and a chance to win a prize is a sure way to encourage participation (and friendly word of mouth nudges to visit the project booth).

<u>Pop-up events</u> - A pop-up meeting is a convenient way to expand project exposure by bringing information directly to the people instead of attending a meeting at a specific time and location. Pop-ups are a convenient and effective alternative to more traditional approaches. Pop-ups can be informal and flexible, as agencies can apply creativity and the right resources to have effective results with engaging the public. Pop-ups can take on a more traditional 'tent and tables' approach, or be an elaborate planning effort. The purpose of the pop-up can be informative which may include distributing pamphlets, displaying posters, or for "getting the word out" or participatory, which would include administering surveys, holding impromptu Q & A sessions, or obtaining comments.

<u>School Based outreach</u> - School-based outreach involves reaching out and involving interested parties and parents associated with a particular school district regarding an area of interest or concern. Agencies will contact all applicable school administration staff to determine what would be the most effective outreach methods for connecting with students and their families. Further coordination with school-based outreach would include working with these school-related contacts to involve them in a plan or project that will have an impact on their communities.

<u>Community Leaders/Ambassadors</u> - The Community Leader/Ambassador Program method is an engagement model contract with a member of a specific community that will lead community engagement efforts in a public process. The community ambassador will have deep and trusted connections with specific communities as he or she has established the confidence of both the people in their communities and the local agencies. He or she is known for navigating cultural and language differences. Essentially, this method utilizes intermediaries that open channels of communication and engage communities with the agency working to serve those communities.

<u>Community partner-led engagement</u> – Community-partner-led engagement gives community members within the study area an intentional and transformative role in the project-planning and decision-making process. Community partners should also guide the engagement program and lead outreach efforts, particularly those within their community/service area.

<u>Meeting in a box</u> - A "Meeting in a Box" method is a public engagement technique implemented for small groups that can meet at a convenient time and location to share their opinions about a plan or project in their community. Participant leads are given a meeting kit that contains everything they need to hold a facilitator-guided discussion, including instructions, questions, participant worksheets, questionnaires, and directions for recording and follow-up. Meeting kits can be paper-based or are provided through downloadable links or online platforms that host the meeting materials such as on a project or agency website.

<u>Pass programs</u> - Pass programs targeted to title VI populations - transportation is more than mobility; it is also a crucial link to the socio-economic and overall quality of life for residents. Providing low-to zero fare programs to Title VI/EJ communities will assist in expanding opportunities and access to quality education, better paying jobs, better medical services etc.

<u>Participatory mapping</u> - Participatory mapping is a group-based research process where participants provide information to facilitate the discussion for a given topic. Specifically, participants are asked to note their preferences, features, or concerns onto a project area map. Web-based applications allow users to digitally provide personal input to assemble ideas, comments, or suggestions and it also gives the public easy access to

#### 8. EQUITABLE ENGAGEMENT

GoRaleigh is committed to equitable engagement. Equitable engagement and participation relies on a commitment to include all community members and ensures the people most affected and marginalized, especially individuals and communities that have been historically left out of the transportation planning and decision-making, are able to make intentional contributions to the process. Commitment must be made to go beyond the minimum outreach activities and invest resources to learn, understand and acknowledge historical inequities and the social and economic impacts caused by these structural imbalances.

An equitable engagement program is a two-way collaborative process that can lead to decisions that are properly scaled to address mobility and access, equitable distribution of resources, and effective services and programs. Not only must the engagement plan target all members of the community, but to be successful, the program must foster community trust built on accountability and mutual respect.

Equitable engagement will be a key component of public participation for all GoRaleigh outreach efforts. Participation methods and techniques will be selected to encourage diverse participation. Key strategies for making engagement more equitable are described below.

- Locate meetings near transportation services. Events should be readily accessible for transitdependent individuals. In some cases, providing transportation options may be considered.
- Choose community/neighborhood locations. Neighborhood-scale engagement can help build trust and make it easy for people to attend.
- Bring engagement to where community members are. Attending a specific meeting requires people to commit their time and travel to the location of the meeting. Bringing engagement to where people already are removes the demands on participants' time and resources.
- Provide childcare/ kids activities. Parents can participate more readily in child-friendly events.
- Keep information clear, easy-to-read, and quick. Digesting complex information requires a commitment of mental energy. Keeping information easy to understand quickly also helps reduce demands on participants.
- **Provide services for visually or hearing-impaired individuals.** Accessibility is important for all forms of engagement. Making engagement more accessible ranges from providing information in multiple formats to providing sign language interpreters at meetings or braille translations of written materials.
- **Provide flexibility in days and times for meetings.** Consider the needs of individuals working different shifts and juggling other responsibilities.
- **Provide accessible, virtual options.** Most adults in the U.S. now have access to the internet in some form, often via smartphone. In recent months, the COVID-19 pandemic has forced agencies to focus more on virtual options for engagement. Virtual options provide a powerful tool in removing many of the barriers to participation for those who have internet access. Virtual meetings are accessible from wherever people are and can remove barriers associated with travel and caregiving responsibilities. Many virtual options also remove the barriers associated with scheduling people can participate whenever it is most convenient for them.
- **Provide translation/interpretation services.** Language assistance is a critical for inclusion of those with limited English proficiency. Appendix A details GoRaleigh's Language Assistance Plan.

#### 9. MEASURING SUCCESS

GoRaleigh is committed to determining the success of its public participation strategies through quantifiable performance measures. Both qualitative and quantitative approaches are employed by GoRaleigh to evaluate the effectiveness of outreach initiatives. Measures are generally selected as appropriate for each outreach effort. GoRaleigh may also use specific metrics to track performance agency wide. Figure 4 on the next page illustrates metrics that may be considered by GoRaleigh.

		/pes easu			orting ence	Sco	ope	
Metric	Quantity	Quality	Effectiveness	Agency-Oriented	Piublic Oriented	<b>Project or Plans Specific</b>	Agency-wide	Ease of Collecting Data
Accessibility								
Meeting/outreach event location(s) represent area demographics (minority, low-income, LEP persons, other characteristics of immediate v. project area)		~		~	~	~	~	**
Online engagement participation levels and diversity (total and % minority, low-income, LEP, and other demographics)	~	~		~	~	~	~	*
Distance/accessibility of meetings/events by transit		~		$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>Image: A start of the start of</li></ul>	~	*
All agency meetings/events are ADA accessible*		~		$\checkmark$	<ul> <li>Image: A second s</li></ul>	<ul> <li>Image: A start of the start of</li></ul>	~	*
Agency meetings/events have language accessibility°		~		$\checkmark$	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>	~	*
Effectiveness of notification methods (include a question on comment form about how they learned of the opportunity)		~	~	~		~	~	**
Reach								
Total number of attendees at meeting or outreach event (goal of ##)	~			~	~	~		*
Total number of relevant comments (goal of ##)	~			$\checkmark$	~	~		*
Number of people signed up for ongoing engagement (goal of ##)	~			~			~	*
Number of visits, time spent, and/or unique visitors to project webpage (goal of ##)	~			~		~		*
Number of articles or media coverage (goal of ##)	~			~		~	~	**
Likes and shares of social media posts (goals of ##, ##)	~			$\checkmark$	~	~	~	*
Number/Percent of online visitors engaging (comments, feedback, surveys)	~	~		~		~		*
Number/Frequency of community engagement opportunities (ongoing and initiative-based measures)	~			~	~	~	~	**

#### **Figure 4: Public Participation Metrics**

Diversity/Equity								
Demographic distribution of commenters as measured by voluntary demographic data collected via comment forms represents customer base and/or project or plan area		~		~	~	~	~	**
Geographic distribution of participants based on comment form addresses or zip codes (goal of ## percent of zip codes represented)		~		~	~	~		**
Number or percentage of meeting, event, or virtual activity attendees and/or comments received from minority, low- income, and/or LEP persons (goals of ## or ## percent)	~	~		~	~	~		**
Diversity of community organizations provided notifications or coordinated with for community events and cross-section of Title VI populations served (goal of ## organizations representing seniors, low-income, minority, LEP, and/or disabled populations)		~	~	~		~	~	**
# of non-profits engaged	~	~		~		~	~	**
# of other community partners	~	~	~	~		~	~	**
Community feedback on agency (e.g. "agency values its customers", "would recommend to others", "agency engages all community members equitably" or similar), disaggregated by race, income, or other characteristics using comment form or questionnaire			~	~	~		~	***
Decision Integration								
All comments are analyzed and summarized to the project team in a timely manner for decision-making (goal of meeting summaries prepared within ## business days)	~		~	~		~	~	**
All comments requiring response are responded to within ## business days	~		~	~		~	~	**
Comments requiring response and actions taken in response to comments are tracked			~	~	~	~	~	***
Integration of public and partner input into transit service and fare planning decisions (structured evaluation)			~	~	~		~	***
Change over time in customer satisfaction on transit service and fares (year to year survey comparisons)			~	~	~		~	***
Number/Percent of online visitors engaging (comments, feedback, surveys)	~	~		~		~		*
Number/Frequency of community engagement opportunities (ongoing and initiative-based measures)	~			~	~	~	~	**

\* Always Applies \*\* Applies when thresholds are met or data indicates language assistance is needed

APPENDIX A - LANGUAGE ASSISTANCE PLAN

#### **APPENDIX B - PUBLIC PARTICIPATION ACTIVITIES**

Process	Public Participation Activities or Requirements
$\mathscr{Y}^{}_{X}$ Planning	
Interagency/Regional Planning Efforts	GoRaleigh collaborates with regional and local partners to implement effective public participation around efforts such as the Wake Transit Plan and the CAMPO planning process. GoRaleigh's role and responsibilities depend on which agencies it is collaborating with and the specific effort.
Long Range, Short Range, and Corridor Planning	Most of GoRaleigh's planning efforts are conducted in collaboration with one or more partners. Public participation strategies are developed for each planning effort.
Transit and Paratransit Service and Fare Planning	GoRaleigh conducts public outreach to obtain feedback about proposed changes. For proposed changes to service, outreach may occur during long range and/or short-range transit planning and also includes public meetings and other outreach to announce and obtain feedback approaching implementation of proposed changes to routes.
Facilities Development, Planning, and Design	During the initial planning stage for construction of a new facility or expansion of an existing facility such as a vehicle storage facility, maintenance facility, operation center, park and ride, etc., GoRaleigh conducts a Title VI equity review. The equity review identifies if there is potential for any disproportionate adverse impacts or disparate burdens to minority and low-income populations as a result of the construction of the facility or improvements. As part of the process, GoRaleigh engages the public to receive its input about facility siting, planning and mitigation options.
C Implementation	
Service and Fare Changes	GoRaleigh complies with FTA public outreach requirements under Title VI and GoRaleigh's major service and fare change policies. This includes conducting equity analyses to determine if there are any disproportionate impacts or disparate burdens felt by minority and low-income populations as a result of the changes, and using public input to help determine alternatives or modifications to any proposed changes or identify opportunities for service enhancements or other strategies to mitigate any potential disproportionate impacts or disparate burdens.
Construction of New Facilities	For construction involving federal funds, GoRaleigh follows the stipulations set by the NEPA for project planning and design. This includes providing opportunities for the public input during the NEPA process and incorporating EJ and Title VI principles by ensuring meaningful participation by low-income and minority persons. GoRaleigh conducts public outreach and uses public input to evaluate alternatives, identify potential effects and, when necessary, to develop mitigation measures to address potential impacts. Throughout the process GoRaleigh works to ensure a high level of accessibility to public meetings, official documents, and notices to affected communities.

Process	Public Participation Activities or Requirements
C Implementation (continued)	
Grant Programming	GoRaleigh is the FTA's designated recipient of funding in the Raleigh-Cary urbanized area for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. GoRaleigh notifies the public and key stakeholders about the program's call for projects and eligibility requirements, administers grant funding, oversees and monitors the grants once they are awarded, and prepares and adopts a 5310 Program Management Plan (PMP), which was done most recently in 2020. Stakeholder and Public Outreach Activities for this program include:
	<ul> <li>Public engagement related to development and adoption of the PMP</li> </ul>
	<ul> <li>Advertising program funding availability</li> </ul>
	<ul> <li>Announcing a Call for Projects</li> </ul>
	<ul> <li>Conducting workshops and presentations to provide information about the program, eligibility requirements, and application process.</li> </ul>
	<ul> <li>Presentation of recommended grant awards and approvals at open meetings.</li> </ul>
Operations and Maintenance	
Ongoing Operations and Maintenance	GoRaleigh routinely interfaces with the public during its regular operations. GoRaleigh provides information, alerts, and updates as a part of daily service, special events, and emergency operations. The GoRaleigh <u>website</u> provides information about its service maps and schedules, fares and passes, and top news stories. Information about GoRaleigh Access paratransit service is provided on the City of Raleigh's <u>website</u> . Additionally, the public can receive updates through Twitter, Instagram, Facebook or sign up for bus alerts through MyRaleigh Subscriptions.

Process	Public Participation Activities or Requirements
Programs and Policies	
Title VI Program	Public participation is an integral part of the development and adoption of the Title VI Program. Specific outreach requirements include:
	<ul> <li>Providing a Public Notice of Rights under Title VI</li> </ul>
	<ul> <li>Publicly posting Title VI Complaint Procedures</li> </ul>
	<ul> <li>Develop a public participation plan to engage minority and LEP populations</li> </ul>
	<ul> <li>Develop a Language Assistance Plan for engaging with LEP populations</li> </ul>
	<ul> <li>Engage the public when developing policies to establish the disparate impact and disproportionate burden thresholds for use in determining adverse effects of major service changes or fare increases.</li> </ul>
	<ul> <li>Engage the public in the decision-making process to develop the major service change policy.</li> </ul>
	<ul> <li>Engage the public in the decision-making process to develop the major service change policy.</li> </ul>
	<ul> <li>Engage the public in evaluating and addressing the potential for proposed major service changes or any fare changes to create disparate impacts or disproportionate burdens to minority and low-income populations.</li> </ul>
Disadvantaged Business Enterprise (DBE) Program	GoRaleigh's Disadvantaged Business Enterprise (DBE) program is meant to ensure nondiscrimination and create a level playing field on which DBEs can fairly compete for contracts. This program involves outreach and public input for certain program activities, such as setting goals for DBE contracting as a percent of federal funds received.

#### APPENDIX C - STAKEHOLDERS

Stakeholder Type	Stakeholders
Community / Individual	<ul> <li>Transit riders <ul> <li>Fixed route</li> <li>Paratransit</li> </ul> </li> <li>Members of the general public</li> <li>Traditionally underserved populations <ul> <li>Low-Income</li> <li>Minority</li> <li>Low English Proficiency (LEP)</li> <li>Elderly</li> <li>Youth</li> <li>Persons with disabilities</li> </ul> </li> </ul>
Community Partners / Non-profits	<ul> <li>African American Caucus</li> <li>Alianza Latina Pro-Educación en Salud (ALPES)</li> <li>Alliance of Disability Advocates (ADA)</li> <li>Arc of the Triangle</li> <li>Arc of Wake County</li> <li>Boys and Girls Clubs</li> <li>Bicycle and Pedestrian Advisory Commission (BPAC)</li> <li>Business organizations</li> <li>Capital Area Friends of Transit</li> <li>Carroll's Kitchen</li> <li>CASA</li> <li>Center for Volunteer Caregiving (CVC)</li> <li>Centro para Familias Hispanas (CPFH)</li> <li>Chinese American Friendship Association of North Carolina</li> <li>Citizens Advisory Councils (CACs)</li> <li>Community Partner Network</li> <li>Community Partner Network</li> <li>Community United Church of Christ - Justice in Changing Climate</li> <li>Councils on Aging</li> <li>Downtown Living Advocates</li> <li>Downtown Raleigh Alliance (DRA)</li> <li>DHIC</li> <li>Dialysis center support groups</li> <li>Disability Rights North Carolina</li> <li>El Pueblo</li> <li>Family Promise of Wake County</li> <li>Family Support Network of Wake County</li> <li>Garner Senior Center</li> <li>Glenwood South Neighborhood Collaborative</li> <li>Habitat for Humanity</li> <li>Healing Transitions (Women's Shelter)</li> </ul>

Stakeholder Type	Stakeholders
Community Partners / Non-profits	<ul> <li>Homeowners associations (HOAs) &amp; neighborhoods on City contact lists</li> <li>Jobs for Life</li> <li>Justice Love Foundation</li> <li>Mayor's Committee for Persons with Disabilities</li> <li>NAACP</li> <li>Neighbor2Neighbor</li> <li>New Bern Corridor Alliance</li> <li>North Carolina Bicycle Club</li> <li>Oaks and Spokes</li> <li>Partnership Raleigh Program (City of Raleigh)</li> <li>Passage Home</li> <li>Raleigh bike share program representatives</li> <li>Raleigh Dream Center</li> <li>Raleigh Housing Authority</li> <li>Raleigh Rescue Mission</li> <li>Raleigh Rescue Mission</li> <li>Raleigh Youth Council</li> <li>Regional Transportation Alliance</li> <li>Resources for Seniors</li> <li>Retirement groups / AARP</li> <li>Sacred Heart Catholic Church</li> <li>Saint Augustine's University</li> <li>Salvation Army</li> <li>Shared mobility user groups (bike, run, walk)</li> <li>Shaw University</li> <li>Southeast Raleigh Assembly</li> <li>Southeast Raleigh Community Center</li> <li>Step Up Ministry</li> <li>Wake Tech University</li> <li>Wake County</li> <li>William Peace University</li> <li>William Peace University</li> <li>Willimington</li> </ul>
Governing and Transportation Agencies	<ul> <li>CAMPO</li> <li>City of Raleigh Planning Commission</li> <li>FTA</li> <li>NCDOT</li> <li>Raleigh City Council</li> <li>Raleigh Transit Authority (RTA)</li> <li>Resource/regulatory agencies</li> <li>Transit Citizen Advisory Committee (GoTriangle)</li> <li>Wake County Transit Planning Advisory Committee (TPAC)</li> </ul>

Stakeholder Type	Stakeholders
Other Transit Agencies	• GoCary • GoDurham • GoTriangle • GoWake Access • Wolfline
Adjacent Communities	<ul> <li>Contracted service recipients:</li> <li>Fuquay-Varina</li> <li>Knightdale</li> <li>Wake Forest</li> <li>Wendell</li> <li>Zebulon</li> <li>Other Wake County communities</li> <li>Apex</li> <li>Cary</li> <li>Durham</li> <li>Garner</li> <li>Holly Springs</li> <li>Morrisville</li> <li>Rolesville</li> </ul>
Other	<ul> <li>Media <ul> <li>News and Observer</li> <li>Carolinian</li> <li>Que Pasa</li> </ul> </li> <li>Property owners and developers</li> </ul>

# Summary of Outreach Efforts [Placeholder]

## **General Outreach Efforts**

## to minority, LEP, and other traditionally underserved populations

Outreach Event	Audience	Date
(Media relations, web/social media, standing committee,	(General public, Stakeholder	(MM/YYYY; or
community meeting, etc.)	Groups, etc)	ongoing)
Public Meetings re: January 2019 New Services (Southeast and	General Public	08/2018
Northwest Raleigh)		09/2018
Engagement/Outreach Events re: January 2019 New Services	General Public; Stakeholders	09/2018
(Southeast and Northwest Raleigh)		10/2018
		11/2018
		12/2018
		1/2019
Public Meetings re: New/Expanded Service in Knightdale, Garner,	General Public	04/2019
and Rolesville (Oct 2019)		06/2019
Engagement/Outreach Events re: New/Expanded Service in		09/2019
Knightdale, Garner, and Rolesville (Oct 2019)		10/2019
		11/2019
Engagement/Outreach of Proposed FY 21 Annual Work Plan	General Public; Stakeholders	02/2020
(i.e. Glenwood Package, Additional Services Route 20 and Route		
21)		
Stakeholder Meetings on Equity and Engagement	Community Organizations	11/2020
Virtual Engagement on Equity and Engagement	General Public	11/2020

## Section 2 Public Engagement

## B: Language Assistance Plan

# Language Assistance Plan

#### Introduction

The Raleigh Transit Authority (RTA) is a transportation policy-making board responsible for planning and prioritizing transportation projects within the Urbanized Area, as defined by the US Census Bureau. The RTA works with the public, planning organizations, government agencies, elected officials, and community groups to develop transportation plans and programs through a continuing, cooperative, and comprehensive planning process. GoRaleigh is the City of Raleigh agency responsible for planning and delivering transit service. The Language Assistance Plan describes how GoRaleigh will ensure that individuals with limited English proficiency have meaningful access to the transportation planning process.

The Language Assistance Plan provides an implementation process to address appropriate language needs identified in GoRaleigh's self-assessment.

#### Goals

- Provide meaningful access to vital GoRaleigh programs and services for Limited English Proficiency (LEP) persons identified using the four-factor analysis of the Limited English Proficiency Plan.
- Identify various resources, with or without associated costs, to ensure the organization can balance meaningful access to programs and services, while not incurring undue burdens on financial resources.
- Complete plan updates every three years and staff reviews annually to ensure resources identified remain consistent with identified needs.

## Title VI-Related Legislation

A variety of federal laws, regulations, court cases, and guidance establish requirements for agencies receiving federal assistance to conduct their business in a non-discriminatory fashion. Key federal laws, regulations, court cases or guidance relevant to this plan are summarized in Table 1.

Table 1: Federal Requirements	
Federal Law, Regulation, Case or Guidance	Requirement
Title VI of the Civil Rights Act of 1964 42	Prohibits discrimination on the basis of race, color, or
U.S.C. § 2000d	national origin in programs and activities receiving federal
	financial assistance
Department of Justice Regulations 42 U.S.C. § 2000d-1	Prohibits recipients of federal funds from "utilizing criteria or methods of administration which have the effect of subjecting individuals to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program as respects individuals of a particular race, color, or national origin"
Lau v. Nichols 414 U.S. 563 (1974)	Held that Title VI prohibits conduct that has a
	disproportionate effect on persons with limited English

**Table 1: Federal Requirements** 

	proficiency (LEP), because such conduct is tantamount to
	national origin discrimination
Civil Rights Restoration Act of 1987 Public	Broadened the scope of Title VI coverage by expanding the
Law 100-259 {S.557} March 22, 1988	definition of terms "programs or activities" to include all
	programs and activities of Federal Aid recipients, sub-
	recipients, and contractors, whether such programs and
	activities are federally assisted or not
Executive Order 12898 "Federal Actions to	Requires federal agencies to identify and address
Address Environmental Justice (EJ) in	disproportionately high and adverse human health or
Minority Populations and Low-Income	environmental effects of its programs, policies, or activities
Populations"	on minority or low-income populations
Executive Order 13166 "Improving Access to	Requires agencies to implement a system to provide
Services for Persons with Limited English	meaningful access to services for those who do not speak
Proficiency (LEP)"	English proficiently

## Limited English Proficiency

This plan addresses Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color or national origin and Executive Order 13166: Improving Access to Service for Persons with Limited English Proficiency signed on August 11,2000. The purpose of the Executive Order is to ensure accessibility to programs and services to eligible persons who have limited proficiency in the English language. The U.S. Department of Transportation (DOT) issued guidance requiring development of a Language Assistance Plan consistent with the fundamental mission of the organization, though not unduly burdening the organization. Table 2 compares the requirements of Title VI with Executive Order 13166.

Title VI of the Civil Rights Act of 1964	Limited English Proficiency Executive Order 13166
Federal Law	Federal Policy
Enacted in 1964	Enacted in August 2000
Considers all persons	Considers eligible population
Contains monitoring and oversight compliance	Contains monitoring and oversight compliance
review requirement	review requirement
Provides protection on the basis of race, color, national origin, and subsequently expanded to include sex, age, or disability	Provides protection on the basis of national origin
Focuses on eliminating discrimination in federally	Focuses on providing LEP persons with
funded programs	meaningful access to services using four factor
	criteria

Table 2: Title VI and Executive Order 13166

The DOT LEP Guidance recommends that all recipients, especially those that serve large LEP populations, should develop an implementation plan to address the needs of the LEP populations they serve. The DOT LEP Guidance notes that effective implementation plans typically include the following five elements:

1. Identifying LEP individuals who need language assistance:

- 2. Providing language assistance measures
- 3. Training staff
- 4. Providing notice to LEP persons
- 5. Monitoring and updating the plan

## Plan Summary

GoRaleigh developed this *Language Assistance Plan* to help identify reasonable steps for providing language assistance to persons with limited English proficiency (LEP) who wish to access services provided by the transit authority. As defined in Executive Order 13166, LEP persons are those who do not speak English as their primary language and have limited ability to read, speak, write or understand English.

This plan outlines how to identify a person who may need language assistance, the ways in which assistance may be provided, staff training that may be required, and how to notify LEP persons that assistance is available.

In order to prepare this plan, GoRaleigh undertook the U.S. DOT four-factor LEP analysis which considers the following factors:

- 1. The number or proportion of LEP persons in the service area who may be served or are likely to encounter a GoRaleigh program, activity or service.
- 2. The frequency with which LEP persons come in contact with GoRaleigh programs, activities or services.
- 3. The nature and importance of programs, activities or services provided by GoRaleigh to the LEP population.
- 4. The resources available to GoRaleigh and overall cost to provide LEP assistance.

A summary of the results of the four-factor analysis is in the following section.

## Four-Factor Analysis

# 1. The number or proportion of LEP persons in the service area who may be served or are likely to encounter a City of Raleigh program, activity or service.

GoRaleigh will assess the language needs of the population to be served. To identify the language and number of LEP persons GoRaleigh may encounter, staff will review:

- Census Data
- School system data
- Community agency data
- Interviews with staff and stakeholders to determine frequency of contact with LEP individuals and what language was encountered

The first step towards understanding the profile of individuals that could participate in the transportation planning process is a review of Census data. LEP individuals are those who speak English less than "very well" as reported in census data. An LEP population is identified when the total number of persons over the age of 17 in a particular language group who speak English less than "very well" comprises at least five percent of the total adult population and is at least 50 persons, or when the total

number of persons over the age of 17 speaking a particular language group and speaking English less than "very well" is 1,000 or greater. Populations that speak a particular language group and speak English less than "very well" of greater than 50 persons but less than five percent of the total population are identified as populations that may require language assistance.

Table 3 summarizes Census data regarding the prevalence of LEP in Wake County and the City of Raleigh. The City of Raleigh represents the core fixed route and paratransit service area. Wake County data is also presented because GoRaleigh serves some other communities within Wake County and administers grant funding to eligible entities with either an origin or destination in the Raleigh-Cary urbanized area that may serve areas elsewhere in Wake County or even beyond. Details are presented in Appendix A.

Percent 5	City of Ral Total 375,333	eigh Percent	Wake County Total	Percent	City of Raleig Total	h Percent	Wake Co Total	ounty Percent	City of R Total	0
5		Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
	375,333									
2 00.10/										
2 88.1%	332,565	88.6%								
5 7.6%	35,883	9.6%	38,396	4.5%	20,554	5.5%	26,549	3.1%	15,329	4.1%
0 4.4%	11,895	3.2%	30,272	3.6%	9,991	2.7	6,828	0.8%	1,904	0.5%
1 4.0%	10,797	2.9%	21,651	2.6%	5,819	1.6%	12,440	1.5%	4,978	1.3%
7 1.6%	8,574	2.3%	10,684	1.3%	6,404	1.7%	2,523	0.3%	2,170	0.6%
0 9 0	00 4.4% 91 4.0% 07 1.6%	00         4.4%         11,895           91         4.0%         10,797           07         1.6%         8,574	00         4.4%         11,895         3.2%           91         4.0%         10,797         2.9%           07         1.6%         8,574         2.3%	00         4.4%         11,895         3.2%         30,272           91         4.0%         10,797         2.9%         21,651           07         1.6%         8,574         2.3%         10,684	00         4.4%         11,895         3.2%         30,272         3.6%           91         4.0%         10,797         2.9%         21,651         2.6%           07         1.6%         8,574         2.3%         10,684         1.3%	00         4.4%         11,895         3.2%         30,272         3.6%         9,991           91         4.0%         10,797         2.9%         21,651         2.6%         5,819           07         1.6%         8,574         2.3%         10,684         1.3%         6,404	00         4.4%         11,895         3.2%         30,272         3.6%         9,991         2.7           91         4.0%         10,797         2.9%         21,651         2.6%         5,819         1.6%	00         4.4%         11,895         3.2%         30,272         3.6%         9,991         2.7         6,828           91         4.0%         10,797         2.9%         21,651         2.6%         5,819         1.6%         12,440           07         1.6%         8,574         2.3%         10,684         1.3%         6,404         1.7%         2,523	00         4.4%         11,895         3.2%         30,272         3.6%         9,991         2.7         6,828         0.8%           91         4.0%         10,797         2.9%         21,651         2.6%         5,819         1.6%         12,440         1.5%           07         1.6%         8,574         2.3%         10,684         1.3%         6,404         1.7%         2,523         0.3%	00         4.4%         11,895         3.2%         30,272         3.6%         9,991         2.7         6,828         0.8%         1,904           91         4.0%         10,797         2.9%         21,651         2.6%         5,819         1.6%         12,440         1.5%         4,978           07         1.6%         8,574         2.3%         10,684         1.3%         6,404         1.7%         2,523         0.3%         2,170

## Table 3: Limited English Proficiency in Wake County and City of Raleigh

US Census data indicate that the total population within Wake County is 1,044,708. 18.0% of Wake County's total population is age 5 and older and speaks a language other than English at home (187,807). In addition, 5.4% (56,607) of the total population of Wake County's service area are LEP individuals. Approximately 56.9% (32,186) of these LEP individuals speak Spanish. Table 4 summarizes the top ten languages spoken by LEP populations in Wake County (those that speak English less than very well). Details on the languages spoken in Wake County are presented in Appendix A.

Language	Speak English less than very well
Total LEP	47,223
Spanish	32,186
Chinese (including Mandarin, Cantonese)	4,490
Vietnamese	2,552
Korean	1,687
Tamil	1,331
Telegu	1,239
Gujarati	1,145
Arabic	1,039
Persian (including Farsi, Dari)	788
Swahili or other languages of Central, Eastern, and Southern Africa	766

Table 4: Top 10 Languages Spoken by LEP Populations

## School System Data:

Student enrollment data regarding enrollment for the 2019-2020 school calendar year was collected for Wake County Public School System. This data supplements baseline census information to provide additional information regarding local trends. Table 5 summarizes key statistics from regarding school enrollment, racial and ethnic data, and special programs including students identified as LEP.

The analysis shows that 9.1% of school students attending schools within Wake County are classified a LEP.

 Table 5: Wake County Public Schools 2019-2020

Wake County Public Schools Statistics	Number	%
Total Enrollment 2019-2020	161,907	
Race and Ethnicity		
American Indian	393	0.2
Asian	15,906	9.8
Black/African American	36,226	22.3
Hispanic	29,914	18.4
Pacific Islander	188	0.1
Two or more races	6,113	3.8
White	73,443	45.3
Special Programs		
LEP	14,771	9.1
Free and Reduced Lunch	50,843	31.4

The first factor identifies Spanish as the most significant language spoken by the LEP population in the Raleigh Urbanized Service Area.

# 2. The frequency with which LEP persons come in contact with City of Raleigh programs, activities or services.

Frequency with which LEP individuals come in contact with programs, activities or services. The City of Raleigh assesses the frequency of contact with LEP persons by documenting phone inquiries and surveying public meeting attendees. The City received request for several different forms of assistance for language assistance from individuals and groups. It is anticipated that the size of the LEP population will continue to increase and, as a result, so will the probability of future contact with the City of Raleigh, including GoRaleigh.

## **Critical Services**

## GoRaleigh and GoRaleigh ACCESS

GoRaleigh is the transportation resource for the City of Raleigh and Wake County, offering an integrated network of fixed, express, and commuter buses as well as resources for those who carpool, vanpool, walk or bike.

GoRaleigh is one of the triangle region's largest transit systems, providing roughly 6.4 million bus trips taken annually in the City of Raleigh and Wake County. Each weekday customers board GoRaleigh buses an average of 20,000 times. The 2019 GoRaleigh Customer Survey asked a sample of riders about their experience with GoRaleigh. The survey was available in English and Spanish, and 25 riders, or approximately 2% of the sample. While the number was small, there are LEP populations among GoRaleigh's ridership.

GoRaleigh ACCESS is a shared public transportation service for certified riders who are unable to use regular fixed-route buses due to a disability or health condition. GoRaleigh ACCESS service complements GoRaleigh's larger public fixed route transit service, operating in communities and at times when fixed route transit service is available. Rides are provided for any purpose.

GoRaleigh ACCESS's service area includes the areas that are served by GoRaleigh's all day local fixed route services. GoRaleigh ACCESS uses guidelines in the Americans with Disabilities Act (ADA) to determine eligibility. A person might be eligible if: they are unable to navigate the regular fixed-route bus system, or they are unable to board or exit the regular fixed-route bus at some locations, or they are physically unable to get to or from the regular fixed-route bus because of their disability or health condition within an area that the fixed-route serves. GoRaleigh ACCESS serves a small number of LEP individuals. A customer service survey of a sample of GoRaleigh ACCESS riders in 2019 showed no participants requesting to take the survey in Spanish or any other language, though three percent of riders surveyed identified as Hispanic or Latino.

## Accessible Taxi Service

Accessible vans and taxi are used for ADA Paratransit. ADA taxi rides must be reserved in advance. Taxi service is available for all ADA customers and supplements MVT with providing ADA service.

MVT

MVT is a shared-ride small bus contracted service used for ADA Paratransit. ADA rides must be reserved in advance. MVT van service is available for all ADA customers and supplements taxis with providing ADA service.

#### **Interactions with LEP Populations**

#### City of Raleigh ADA Call Center

GoRaleigh ACCESS's ADA Call Center monitors its interaction with LEP customer via its partnership with Language Line interpreter services. In addition, staff works with other colleges who are trained in other languages and accessible services. Over the previous 18 month period, the Call Center took 18 total calls from LEP customers seeking interpreter services

#### **City of Raleigh Dispatch Operations Center**

The City of Raleigh Dispatch Operations Center monitors its interaction with LEP customer when they are receiving calls, dispatching trips, handling the day to day operations of ADA paratransit. Over the previous 18 month period, the Call Center took 59 total calls from LEP customers seeking interpreter services

#### **City of Raleigh ADA Management Operations**

The City of Raleigh Operations Manager tracks its interaction of the staff and their interactions with LEP customer. Over the previous 18 month period, the Call Center took 47 total calls from LEP customers seeking interpreter services.

#### **City of Raleigh ADA Functional Assessments**

The City's ADA Functional Assessment Center tracks its interaction with LEP customer during it one on one Functional Assessment. Travel training is offered to all customers. Braille, interpreters, and other devices and individuals are brought into the office to serve the customer. Over the previous 18 month period, the Call Center took 39 total calls from LEP customers seeking interpreter services

#### **City of Raleigh Regional Call Center**

The Regional Call Center tracks its interaction with LEP customer. Staff is trained in several languages. Braille, interpreters, and other devices and individuals are brought into the office to serve the customer. Over the previous 18 month period, the Call Center took 96 total calls from LEP customers seeking interpreter services.

#### **Touch points For LEP Customers**

Touch Point	Frequency of Contact
Bus drivers – Fixed Route	Moderate
Taxi drivers	Moderate
Bus drivers - Map	Moderate
MVT Drivers	Moderate
Information line	Minimum
Operations center	Minimum
Route guides	Moderate

Functional assessment	Minimum
Reservationist	Moderate
Annual events	Moderate
On-street signage	Moderate
Web site	Minimum
Receptionist	Moderate
Field supervisors	Moderate
Print media	Minimum
Broadcast media	Minimum
Public relations media	Minimum

## **Coordination through Partners**

Coordination with other City of Raleigh work programs partners is important to the process of planning for LEP populations, including anticipating future contact. RTA board meetings, board committee meetings, planning studies and special projects, along with extensive community engagement activities, are conducted throughout the year. The City of Raleigh also coordinates task forces and subcommittees that provide planning support to land use and transportation-related issues and other agency concerns, including the Mayor's Committee for Persons with Disabilities and the Alliance of Disability Advocates. All can provide insights relative to potential contact with LEP groups.

## **Governor Morehead School (GMS)**

The City's Transit Division works with the Governor's Morehead School for the Blind (GMS) on several levels. The school is a testing partner. GMS works with transit on new ideas and information that goes out for public use and LEP persons. The staff and students will test information and review draft documentation on accessible devices, use tactile feedback on fare media, and test audio equipment used on transit and paratransit vehicles.

#### **Alliance of Disability Advocates**

The City's Transit Division works with the Alliance of Disability Advocates with travel training with customers that are referred for the City's Functional Assessment Center and all LEP persons. The Alliance conducts customer service training, driver training, and customer conflict and concerns resolutions with the City's Transit program.

#### Mayor's Committee for Persons with Disabilities

The City's Transit program works with the Mayor Committee for Persons with Disabilities matters of concerns for individuals with disabilities or any LEP persons. These needs may include addressing environmental and attitudinal barriers preventing equal access by citizens with disabilities to education, recreation, employment, transportation and housing. The City works with the committee to Inform citizens with disabilities of programs, services and opportunities available to them within the public and private sectors.

# 3. The nature and importance of programs, activities or services provided by GoRaleigh to the LEP population.

GoRaleigh provides fixed route transit and ADA paratransit services. These services provide transportation for critical needs including employment, medical appointments, education, and other nutritional, health, and social needs. Some transportation needs are daily, such as employment; some are several times a week, such as dialysis patients needing transportation to medical appointments; while others are less frequent but still important to riders' overall well-being.

The COVID-19 pandemic has highlighted the critical importance of transit services, particularly for populations of concern. Immigrants and LEP populations may also be transit-dependent for daily, weekly, or other needs.

## 4. The resources available to GoRaleigh and overall cost to provide LEP assistance.

The City of Raleigh has identified resources for potential recipients and associated costs for services. The organization maintains a file with specific contact information for service providers and volunteer-based programs, allowing timely updates. Costs are often determined by the type and scope of services provided. As a result, some resources list "indeterminable" as an associated cost until a specific project is identified.

Resource	Associated Cost	Application
Translation (Spanish)	\$5.00 per page *estimate	Spanish translation services for
	(Form)	standard City of Raleigh forms
		and documents in-house
		bilingual staff members for
		basic translation
Translation (General)	\$0.25 and up/word *industry	Translation of standard City of
	average	Raleigh forms and documents
		for other languages
Interpretation Services	\$50-\$75 per hour *minimum 1	Services for interpretation at
	hours	City of Raleigh public hearings
		in-house bilingual staff
		members for basic
		interpretation
Website Portal	Minimal cost for automated	The City of Raleigh website
	translations	includes translations in 91
		languages. The GoRaleigh
		website has translations into
		Arabic, Chinese (simplified),
		Filipino, Spanish, and
		Vietnamese.
Notice	Indeterminable	Notification of the availability of
		free language services to LEP
		persons is included within
		meeting notices advertised in
		the newspaper. Additionally,
		when the organization provides
		notice in the community

		newspaper, efforts are made to also ensure advertisement is included in Spanish language newspaper. Notice is provided on the organization's website and on appropriate materials developed for meetings, events, and public hearings.
Accessible Notifications	Printing costs, variable	Accessible devices and interpreters are available at City of Raleigh meetings, hearings and events to identify individuals with limited English proficiency who are unknown to the organization. This identification provides a means to monitor changing demographics better anticipate future needs.
Phone System	Indeterminable	Currently, the City's phone recording includes an option for information in Spanish.

Based on the four-factor analysis, the RTA developed its LEP Plan as outlined in the following section.

## Language Assistance Techniques

## Outreach Techniques:

Translation resources are available in this region.

When staff prepares a document, or schedules a meeting, for which the target audience is expected to include LEP individuals, then documents, meeting notices, flyers, and agendas will be printed in an alternative language based on the known LEP population.

Bus schedules maps, and other transit publications will be made available in an alternative language when and if a specific and concentrated LEP population is identified.

Current Services Area	Description						
Notification	Special assistance notice in newspaper, LEP-specific notice on all						
	agendas, targeted ads in Spanish publications (when vital)						
City Website	LEP-related notification available in Spanish via the						
	organization's website. Spanish language interpreters for						
	mportant information and contact. City website is available in						
	91 languages.						
Internal / Partners	Access to notification resources of all members of the City of						
	Raleigh partnership						

Direct Mail	On request, ability to customize direct mail by requested
	language
Outreach Materials	General information brochure available in Spanish
Community Survey	Customized Spanish-language surveys available
Targeted Forms	Complaint form available in accessible formats able to identify
	additional language needs
Phone Message	Callers provided the opportunity to speak to a Spanish-speaking
	staff member
Public Hearing	Bilingual employees, Spanish language brochures, Spanish
	language forms, notice in Spanish newspaper
Bilingual employees	City of Raleigh bilingual employees communicate in English and
	Spanish

## Additional Partners and Resources

The City's transit system is a regional transportation partnership. GoRaleigh's local funding partners also provide language assistance services. Additionally, GoRaleigh's consultant teams often have bilingual staff available for translation and interpretation. In an effort to provide meaningful access to the broadest population of those with limited English proficiency, GoRaleigh will seek assistance from local funding partners and community partners for notification and access to translation and interpretation resources that already exist. Examples of partner resources include:

- City of Raleigh Dispatch Operations Center customer service representatives
- City of Raleigh: Bilingual staff in Office of Public Communications
- State Library for the Blind and Physically Handicapped: GoRaleigh works with the State Library for the Blind on a variety of tasks. Braille documents, screen readers, and other accessible devices are used to assist LEP persons. Applicants, Customers, and LEP persons use the State Library for translation and employment assistance.
- Translators and Interpreters: The City has access to translators and interpreters to provide assistance in many languages.
- Emergency Communications Center (<u>http://www.raleighnc.gov/</u>): As a staff resource, the City's Emergency Communications Center maintains a comprehensive database of international and national translation associations that extend to languages not commonly encountered in Raleigh and Wake County. The center provides a language line the interprets 128 languages.

## Notification Procedure

GoRaleigh will publicize the availability of Spanish interpreter services, free of charge, prior to board and committee meetings, workshops, and public hearings. Notification will be provided on the organization's website, within meeting notices, and on each agenda.

When appropriate, additional notification will be provided using the following outreach tools:

- Signage
- Public outreach materials
- Partner outreach materials
- Via community-based organizations

• Local Spanish newspapers/publications

The need for additional notification will be determined, in part, by the nature of the meeting or event and the degree in which such assistance is anticipated.

## Standard notification regarding language assistance will read:

...Persons who require translation services, which are provided at no cost, should contact City of Raleigh at (919) 996-3030 or by email at art@raleighnc.gov at least three business days prior to the event.

## How the City of Raleigh staff may identify an LEP person who needs language assistance:

- Examine records to see if requests for language assistance have been received in the past, either at meetings or over the phone, to determine whether language assistance might be needed at future events.
- When the City of Raleigh sponsors an event, have a staff person greet participants as they arrive. By informally engaging participants in conversation it is possible to gauge each attendee's ability to speak and understand English.
- Have Language Identification Placards available at City of Raleigh events near the registration table. Individuals self-identifying as persons not proficient in English may not be able to be accommodated with translation assistance at the event, but it will assist the sponsoring agency in identifying language assistance needs for future events.
- Have Language Identification Placards on all transit vehicles to assist vehicle operators in identifying specific language assistance needs of passengers. If such individuals are encountered, vehicle operators will be instructed to try to obtain contact information to give to the transit system manager for follow-up. Dispatchers and schedulers will also be instructed to obtain contact information from LEP individuals they encounter, either in person or over the phone.
- Language Identification Placards will be available at the Moore Square Bus Station and at the main office reception desk. It will be especially important for the agent to have these cards available since the station serves both the local transit system and national intercity bus carriers.
- Vehicle operators and other front-line staff, like dispatchers, ADA schedulers, and service development planners, will be surveyed annually on their experience concerning any contacts with LEP persons during the previous year. The survey will be conducted once each year.

## Staff Training

- The following training will be provided to City's Transit staff:
- Information on the Title VI Policy and LEP responsibilities.
- Description of language assistance services offered to the public.
- Use of the Language Identification Placards.
- Documentation of language assistance requests.
- Use of the City's Language line service.
- How to handle a potential Title VI/LEP complaint.

## Monitoring and Updating the LEP Plan

This plan will be updated every three years to: (1) ensure compliance with federal and state law, (2) update demographic statistics to accurately track the City of Raleigh's population and language needs, (3) confirm the Raleigh Transit Authority Board's commitment to providing services for persons with

limited English proficiency, and (4) provide an assessment of the plan's effectiveness in addressing nondiscrimination objectives. The plan will be reviewed annually by staff to ensure effectiveness.

Updates will include the following:

- The number of documented LEP person contacts encountered annually.
- How the needs of LEP persons have been addressed.
- Determination of the current LEP population in the service area.
- Determination as to whether the need for translation services has changed.
- Determine whether local language assistance programs have been effective and sufficient to meet the need.
- Determine whether transit system's financial resources are sufficient to fund language assistance resources needed.
- Determine whether the City of Raleigh have fully complied with the goals of this LEP Plan.
- Determine whether complaints have been received concerning the agency's failure to meet the needs of LEP individuals.

## Dissemination of the City's Transit Program LEP Plan

A link to the City's Language Assistance Plan will be included on the City of Raleigh website, <u>www.raleighnc.gov</u>. Any person or agency with internet access will be able to access and download the plan from the City of Raleigh website. Alternatively, any person or agency may request a copy of the plan via telephone, fax, mail, or in person, and shall be provided a copy of the plan at no cost. LEP individuals may request copies of the plan in translation which the City of Raleigh will provide, if feasible.

Language assistance is a component of GoRaleigh's Title VI program. Individuals with concerns or complaints regarding Language Assistance may contact GoRaleigh or use the Title VI Complaint process. A complaint form is posted on the GoRaleigh Access website. Complaints will also be accepted verbally or in writing and should be directed to the City of Raleigh Transit Program.

## Appendix A: Detailed Language Data

## Limited English Proficiency in Wake County and City of Raleigh

	Overall	,	, 0		Speak English	n only or spe	ak English "vei	ry well"	Speak Ei	nglish less t	han "very	well"
	Wake County City of Raleigh		eigh	Wake County	/	City of Raleig	h	Wake Co	ounty	City of Raleigh		
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Population 18 years and over	849,055		375,333									
Speak Only English	748,052	88.1%	332,565	88.6%								
Speak Spanish	64,945	7.6%	35,883	9.6%	38,396	4.5%	20,554	5.5%	26,549	3.1%	15,329	4.1%
Speak Other Indo-European Languages	37,100	4.4%	11,895	3.2%	30,272	3.6%	9,991	2.7	6,828	0.8%	1,904	0.5%
Speak Asian and Pacific Island Languages	34,091	4.0%	10,797	2.9%	21,651	2.6%	5,819	1.6%	12,440	1.5%	4,978	1.3%
Speak Other Languages	13,207	1.6%	8,574	2.3%	10,684	1.3%	6,404	1.7%	2,523	0.3%	2,170	0.6%
Population 5 years and over	1,044,708	(X)	448,223	(X)	988,101	94.6%	419,272	93.5%	56,607	5.4%	28,951	6.5%
Speak Only English	856,901	82.0%	364,674	81.4%	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Speak a language other than English	187,807	18.0%	83,549	18.6%	131,200	69.9%	54,598	65.3%	56,607	30.1%	28,951	34.7%
Spanish	89,424	8.6%	48,523	10.8%	57,238	64.0%	29,479	60.8%	32,186	36.0%	19,044	39.2%
5 to 17 years old	24,479	2.3%	12,640	2.8%	18,842	77.0%	8,925	70.6%	5,637	23.0%	3,715	29.4%
18 to 64 years old	61,164	5.9%	33,744	7.5%	36,067	59.0%	19,349	57.3%	25,097	41.0%	14,395	42.7%
65 years old and over	3,781	0.4%	2,139	0.5%	2,329	61.6%	1,205	56.3%	1,452	38.4%	934	43.7%
Other Indo-European languages	42,843	4.1%	13,445	3.0%	35,001	81.7%	11,142	82.9%	7,842	18.3%	2,303	17.1%
5 to 17 years old	5,743	0.5%	1,550	0.3%	4,729	82.3%	1,151	74.3%	1,014	17.7%	399	25.7%
18 to 64 years old	31,614	3.0%	10,038	2.2%	25,998	82.2%	8,277	82.5%	5,616	17.8%	1,761	17.5%
65 years old and over	5,486	0.5%	1,857	0.4%	4,274	77.9%	1,714	92.3%	1,212	22.1%	143	7.7%
Asian and Pacific Island languages	40,304	3.9%	11,914	2.7%	26,769	66.4%	6,752	56.7%	13,535	33.6%	5,162	43.3%

	Overall			Speak English	eak English only or speak English "very well"			Speak English less than "very well"				
	Wake County		City of Rale	eigh	Wake County		City of Raleigh		Wake County		City of Raleigh	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
5 to 17 years old												
	6,213	0.6%	1,117	0.2%	5,118	82.4%	933	83.5%	1,095	17.6%	184	16.5%
18 to 64 years old												
	30,120	2.9%	9,331	2.1%	20,165	66.9%	5,200	55.7%	9,955	33.1%	4,131	44.3%
65 years old and												
over	3,971	0.4%	1,466	0.3%	1,486	37.4%	619	42.2%	2,485	62.6%	847	57.8%
Other languages												
	15,236	1.5%	9,667	2.2%	12,192	80.0%	7,225	74.7%	3,044	20.0%	2,442	25.3%
5 to 17 years old												
	2,029	0.2%	1,093	0.2%	1,508	74.3%	821	75.1%	521	25.7%	272	24.9%
18 to 64 years old												
	11,883	1.1%	7,424	1.7%	9,725	81.8%	5,587	75.3%	2,158	18.2%	1,837	24.7%
65 years old and												
over	1,324	0.1%	1,150	0.3%	959	72.4%	817	71.0%	365	27.6%	333	29.0%
Source: US Census Bureau, Ar	ource: US Census Bureau, American Community Survey 1-year Estimates (2019), Table S1601, "Language Spoken at Home."											

## Primary Languages Spoken in Wake County

Language	Wake County, North Carolina
Total:	1,044,708
Speak only English	856,901
Spanish:	89,424
Spanish: Speak English very well	57,238
Spanish: Speak English less than very well	32,186
French (incl. Cajun):	5,810
French (incl. Cajun): Speak English very well	5,218
French (incl. Cajun): Speak English less than very well	592
Haitian:	1,259
Haitian: Speak English very well	1,259
Haitian: Speak English less than very well	0
Italian:	1,006
Italian: Speak English very well	831
Italian: Speak English less than very well	175
Portuguese:	1,798
Portuguese: Speak English very well	1,664
Portuguese: Speak English less than very well	134
German:	3,002
German: Speak English very well	2,858
German: Speak English less than very well	144
Yiddish, Pennsylvania Dutch or other West Germanic languages:	477
Yiddish, Pennsylvania Dutch or other West Germanic languages: Speak English very well	372
Yiddish, Pennsylvania Dutch or other West Germanic languages: Speak English less than very well	105
Greek:	250

Language	Wake County, North Carolina
Greek: Speak English very well	207
Greek: Speak English less than very well	43
Russian:	2,070
Russian: Speak English very well	1,092
Russian: Speak English less than very well	978
Polish:	463
Polish: Speak English very well	410
Polish: Speak English less than very well	53
Serbo-Croatian:	269
Serbo-Croatian: Speak English very well	269
Serbo-Croatian: Speak English less than very well	0
Ukrainian or other Slavic languages:	1,409
Ukrainian or other Slavic languages: Speak English very well	989
Ukrainian or other Slavic languages: Speak English less than very well	420
Armenian:	0
Armenian: Speak English very well	0
Armenian: Speak English less than very well	0
Persian (incl. Farsi, Dari):	3,055
Persian (incl. Farsi, Dari): Speak English very well	2,267
Persian (incl. Farsi, Dari): Speak English less than very well	788
Gujarati:	4,035
Gujarati: Speak English very well	2,890
Gujarati: Speak English less than very well	1,145
Hindi:	7,358
Hindi: Speak English very well	6,634
Hindi: Speak English less than very well	724
Urdu:	2,818

Language	Wake County, North Carolina
Urdu: Speak English very well	2,342
Urdu: Speak English less than very well	476
Punjabi:	1,715
Punjabi: Speak English very well	1,043
Punjabi: Speak English less than very well	672
Bengali:	2,306
Bengali: Speak English very well	1,612
Bengali: Speak English less than very well	694
Nepali, Marathi, or other Indic languages:	3,003
Nepali, Marathi, or other Indic languages: Speak English very well	2,442
Nepali, Marathi, or other Indic languages: Speak English less than very well	561
Other Indo-European languages:	740
Other Indo-European languages: Speak English very well	602
Other Indo-European languages: Speak English less than very well	138
Telugu:	6,641
Telugu: Speak English very well	5,402
Telugu: Speak English less than very well	1,239
Tamil:	4,344
Tamil: Speak English very well	3,013
Tamil: Speak English less than very well	1,331
Malayalam, Kannada, or other Dravidian languages:	2,910
Malayalam, Kannada, or other Dravidian languages: Speak English very well	2,852
Malayalam, Kannada, or other Dravidian languages: Speak English less than very well	58
Chinese (incl. Mandarin, Cantonese):	11,349
Chinese (incl. Mandarin, Cantonese): Speak English very well	6,859
Chinese (incl. Mandarin, Cantonese): Speak English less than very well	4,490

Language	Wake County, North Carolina
Japanese:	1,369
Japanese: Speak English very well	800
Japanese: Speak English less than very well	569
Korean:	3,438
Korean: Speak English very well	1,751
Korean: Speak English less than very well	1,687
Hmong:	579
Hmong: Speak English very well	257
Hmong: Speak English less than very well	322
Vietnamese:	4,773
Vietnamese: Speak English very well	2,221
Vietnamese: Speak English less than very well	2,552
Khmer:	0
Khmer: Speak English very well	0
Khmer: Speak English less than very well	0
Thai, Lao, or other Tai-Kadai languages:	456
Thai, Lao, or other Tai-Kadai languages: Speak English very well	112
Thai, Lao, or other Tai-Kadai languages: Speak English less than very well	344
Other languages of Asia:	1,650
Other languages of Asia: Speak English very well	1,219
Other languages of Asia: Speak English less than very well	431
Tagalog (incl. Filipino):	1,317
Tagalog (incl. Filipino): Speak English very well	891
Tagalog (incl. Filipino): Speak English less than very well	426
Ilocano, Samoan, Hawaiian, or other Austronesian languages:	1,478
Ilocano, Samoan, Hawaiian, or other Austronesian languages: Speak English very well	1,392

Language	Wake County, North Carolina
Ilocano, Samoan, Hawaiian, or other Austronesian languages: Speak English less than very well	86
Arabic:	3,569
Arabic: Speak English very well	2,530
Arabic: Speak English less than very well	1,039
Hebrew:	448
Hebrew: Speak English very well	448
Hebrew: Speak English less than very well	0
Amharic, Somali, or other Afro-Asiatic languages:	2,243
Amharic, Somali, or other Afro-Asiatic languages: Speak English very well	1,650
Amharic, Somali, or other Afro-Asiatic languages: Speak English less than very well	593
Yoruba, Twi, Igbo, or other languages of Western Africa:	2,371
Yoruba, Twi, Igbo, or other languages of Western Africa: Speak English very well	2,145
Yoruba, Twi, Igbo, or other languages of Western Africa: Speak English less than very well	226
Swahili or other languages of Central, Eastern, and Southern Africa:	4,844
Swahili or other languages of Central, Eastern, and Southern Africa: Speak English very well	4,078
Swahili or other languages of Central, Eastern, and Southern Africa: Speak English less than very well	766
Navajo:	0
Navajo: Speak English very well	0
Navajo: Speak English less than very well	0
Other Native languages of North America:	562
Other Native languages of North America: Speak English very well	562
Other Native languages of North America: Speak English less than very well	0
Other and unspecified languages:	1,199

Language	Wake County, North Carolina
Other and unspecified languages: Speak English very well	779
Other and unspecified languages: Speak English less than very well	420
Source: US Census Bureau, American Community Survey 1-year Estimates (2019), Table B16001, "Language S by Ability to Speak English for the Population 5 Years and Over."	poken at Home

Over the past 18 months, how many times, did each of the following take calls requesting interpreter services?

- GoRaleighACCESS ADA Call Center
- Dispatch Operations Center
- ADA Management Call Center
- ADA Functional Assessment Center
- Regional Call Center

## **Touch points For LEP Customers**

Touch Point	Frequency of Contact
Bus drivers – Fixed Route	Moderate
Taxi drivers	Moderate
Bus drivers - Map	Moderate
MVT Drivers	Moderate
Information line	Minimum
Operations center	Minimum
Route guides	Moderate
Functional assessment	Minimum
Reservationist	Moderate
Annual events	Moderate
On-street signage	Moderate
Web site	Minimum
Receptionist	Moderate
Field supervisors	Moderate
Print media	Minimum
Broadcast media	Minimum
Public relations media	Minimum

## Section 2 Public Engagement

**C:** Minority Representation on Planning and Advisory Boards



## **Minority Representation on Committees and Councils**

Raleigh City Council members may advise and/or appoint citizens on standing committees that meet regularly and make recommendations to the full City Council. The public is encouraged to attend, in person or virtually, the Raleigh City Council and committee meetings and hearings and express their points of view on matters before the Council.

## **Representation on Transit Committees**

The processes used for appointing members to transit-related boards and other planning and advisory committees vary between committees. Members of boards and some committees are appointed by the Raleigh City Council using a process governed by the City of Raleigh and Capital Area Metropolitan Organization bylaws. Other committees consist of a combination of members appointed by the Council and locally elected officials or rely on mechanisms or formulas specific to that committee.

The demographic profiles of key committees relevant to GoRaleigh are summarized in the table below along with the demographic makeup of the City of Raleigh.

Body	Total Member s / Pop.	Caucasian	Hispanic / Latino	African American	Asian	Native American and Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Two or More Races
Raleigh Population	457,159	267,220 58.5%	50,130 11.0%	132,492 29.0%	20,514 4.5%	1,662 0.4%	304 0.1%	21,356 4.7%	13,611 3.0%
Raleigh Transit Authority	10	6 60%	0	4 40%	0	0		0	0
Transit Planning Advisory Committe e	21	17 80.9%	0	4 19.1%	0	0	0	0	0
LEP committee (volunteer)	5	0	3 60%	0	2 40%	0	0	0	0

#### **Minority Representation on Committees and Councils**

#### **Raleigh Transit Authority**

The Raleigh Transit Authority is the official decision-making body for the City of Raleigh Transit Program. The composition of the Raleigh Transit Authority is determined through a submission and election process. Members are appointed by the City Council.Each City Council member is elected at large for a four-year term of office, and each City Council member represents and resides in the district in which they are elected; therefore, City or Raleigh has no ability to ensure that there is adequate representation of minorities on this body.

#### **Transit Planning Advisory Committee**

The Transit Planning Advisory Committee reviews the long-range transit system planning and proposed operating and capital programs from the community's perspective and makes recommendations to Raleigh City Council regarding GoRaleigh. While it is not a policy-making body, its recommendations fulfill the requirement levied by the Interlocal Agreement that the City Council and Transit Authority ensures public involvement in transit planning. The Transit Planning Advisory Committee is made up of members of the community appointed by the Wake County Board of Commissioners, the Raleigh City Council, and each of the twelve Cities and Towns in Wake County.

#### **LEP Committee**

The GoRaleigh LEP committee is a group of volunteers that assists with bilingual interpretation of documentation and signage.

#### **Process for Encouraging Diversity**

The Raleigh City Council has taken many steps to promote and encourage participation from minority populations on these committees. This has included several in-person and virtual meetings, both larger-scale (with community partner organizations) and smaller one-on-one meetings with community organizations that work with equity issues and have significant relationships with providing service to or cultivating leadership among people of color, people with disabilities, youth, and our community'; selders.

In addition to in-person and virtual meetings, the Council has promoted openings for committees

widely, including the following:

- The Council's website and extensive email network
- Social media accounts, aimed at both general and targeted audiences in the community
- Promotion to traditional and niche media (ethnic media, Access Press, Hispanic press)
- Online display ads in several outlets during the application periods
- Worked with partner agencies to communicate information about the openings through their channels (community-based organizations, local governments, etc.)

## **Section 3**

# **Subrecipient Compliance and Monitoring**



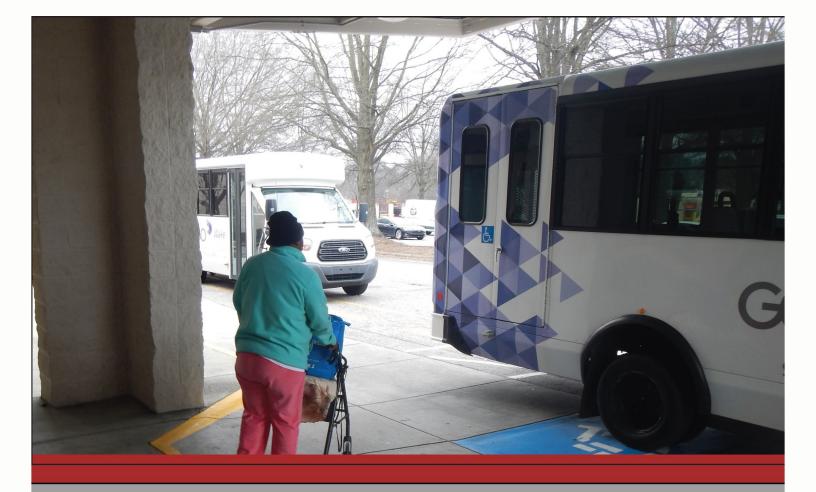
## **Sub-Recipient Compliance with Title VI Monitoring Policy**

The City of Raleigh Transit Program, which administers and oversees the GoRaleigh Transit System, extends federal financial assistance to sub-recipients through the competitive selection process.

The City of Raleigh monitors its sub-recipients through the sub-recipient agreements that the City of Raleigh executes with all of its subrecipients, which outline the Federal clauses, certifications, required record keeping, and mandatory quarterly reporting,

As needed, sub-recipients are instructed to attend orientation meetings onsite at the City of Raleigh facilities in order to ensure compliance with the agreements in place. When applicable, the City of Raleigh has conducted site visits to the sub-recipients' facilities to verify compliance with the grant requirements.

Procedures for sub-recipient selection and monitoring are detailed in the "5310 Program Management Plan" for subrecipients of FTA Section 5310 Enhanced Mobility of Seniors and People with Disabilities program. The "Policies and Procedures for FTA Procurement" describes the procurement process and associated monitoring procedures. Both documents are attached.



# GoRaleigh

# 5310 Program Management Plan



Prepared for:



Prepared by:



Approved by the Raleigh Transit Authority- September 10, 2020

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## 1.1 Introduction

This Program Management Plan (PMP) describes GoRaleigh policies and procedures for administering the Federal Transit Administration (FTA) Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. GoRaleigh developed this PMP in accordance with current Federal Transit laws and regulations as well as Circular 9070.1G. The 5310 Program Management Plan (PMP) outlines the 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program requirements for the Raleigh-Cary Urbanized Area. This document updates the Section 5310 PMP prepared in 2015, as amended.

## 1.2 Goals and Objectives

The goal of this PMP is to describe the process for managing the Federal Transit Administration (FTA) 5310 program for the Raleigh-Cary Urbanized Area. Toward this goal, FTA provides financial assistance for transportation services planned, designed, and carried out to meet the special transportation needs of elderly individuals and individuals with disabilities. The program requires coordination with other federally assisted programs and services in order to make the most efficient use of federal resources. As part of this process, the following objectives will be completed:

- Ensure the plan meets current federal requirements and meets the intent of the Section 5310 funding program.
- Provide a framework by which proposed projects requesting Section 5310 funding can be solicited and selected through a fair and equitable process.
- Identify, contact and inform public agencies, community organizations and non-profit and eligible private for-profit organizations providing service for seniors and persons with disabilities, as to the availability of 5310 program grant funds;
- Outline a process for soliciting and evaluating 5310 program funding proposals;
- Assure that proposals selected for program funding are responsive to one or more of the needs identified in the locally adopted Coordinated Transportation Plan;
- Establish the requirements for the selected projects to enter into grant agreements; and,
- Summarize the requirements for managing and reporting the progress for implementing the funded projects.

This PMP is a living document. It will continue to be updated, as needed, to incorporate any expansions and enhancements of the 5310 program, as well as any revisions to the programs' management, requirements, or guidelines. The locally adopted coordinated plan is available

online at the Capital Area Metropolitan Planning Organization's (CAMPO) <u>Locally Coordinated</u> <u>Human Services Public Transportation Plan</u>.

## 1.3 Funding Programs

Federal funding for transportation is apportioned by a federal transportation authorization, currently the Fixing America's Surface Transportation (FAST) Act. The FAST Act retains changes to the 5310 program made in the previous authorization, Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) of 2012. Under the FAST Act, 5310 program funds are allocated directly to designated recipients in Urbanized Areas with populations greater than 200,000. In the Raleigh-Cary Urbanized Area, the 5310 program funds are directed to the City of Raleigh (GoRaleigh), who is the designated recipient appointed by the Governor. A map of the urbanized area is shown in Appendix A. As the designated recipient, GoRaleigh will apply to FTA for funds to be awarded under this program. If funds are to be passed through by GoRaleigh to other agencies or organizations, it will be done through a competitive selection process, with the awardees being subrecipients of GoRaleigh. If GoRaleigh applies for funds directly, it is subjected to the same competitive process as other applicants.

GoRaleigh is responsible for developing a Program Management Plan, advertising and awarding the funding, and managing applicants who are awarded funding. In its role as the designated recipient, GoRaleigh may use 10 percent of total grant dollars for the administration of grant funds to subrecipients. GoRaleigh works collaboratively with CAMPO to carry out its responsibilities, and CAMPO actively participates in the selection process.

MAP-21 consolidated two programs from prior transportation authorizations (*Transportation for Elderly Persons and Persons with Disabilities-Section 5310* and *New Freedom Program-Section 5317*) to create the Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310 program). This program enhances mobility for seniors and people with disabilities, and the activities that were eligible for funds under the former New Freedom Program are now eligible for Section 5310 funding. The Section 5310 program funds apportioned to large urban areas are allocated using American Community Survey (ACS) 5-year data based on each area's share of seniors (i.e., persons 65 and older) and people with disabilities.

MAP-21 specifies that at least 55 percent of program funds be used for traditional Section 5310 capital projects for seniors and people with disabilities. This is discussed in more detail later in the PMP. The remaining funds (up to 45 percent) may be used for projects that seek to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990. Funding is available for the Federal Fiscal Year for which it is awarded plus two additional years.

## 1.4 Purpose

Each designated recipient is required to have an approved PMP on file with the appropriate FTA regional office and to update it regularly to incorporate any changes in program management or new requirements. The PMP provides essential information for the understanding and implementation of the Federal Transit Administration (FTA) Section 5310 grant program managed and administered by the City of Raleigh and GoRaleigh.

FTA Circular 9070.1G – Enhanced Mobility of Seniors and Individuals with Disabilities Program Guidance and Application Instructions provides guidance for Section 5310 projects. It covers project requirements, administration procedures, and other relevant components of the federal Section 5310 program. This PMP serves as a local companion to Circular FTA C 9070.1G, describing the roles and mechanisms for carrying out policies and procedures in the urbanized area, satisfying the FTA requirement for a Program Management Plan.

The FTA will review and approve the PMP. It will be kept on file with the FTA regional office and updated regularly to incorporate any changes in program guidelines or new requirements. The PMP will also be reviewed by the FTA as part of its triennial review of GoRaleigh.

# 2. Coordinating and Related Plans

## 2.1 Locally Coordinated Human Services Public Transportation Plan

Proposals for 5310 program funding must meet a need or fill a service gap identified in the local Coordinated Human Services Transportation Plan. Wake County's Coordinated Plan, Locally <u>Coordinated Human Services Public Transportation Plan</u>, is updated every four to five years, most recently in 2019 and is available from CAMPO . The plan identified transportation needs for low income populations, individuals with disabilities and seniors. The plan development included survey outreach and a public workshop that was marketed to transportation providers, non-profit groups and transit customers. Appendix J Section 5 of the Coordinated Plan describes the needs and service gaps identified through analysis and stakeholder engagement; Appendix B summarizes stakeholder and community engagement.

The GoRaleigh Program Management Plan is evaluated for changes on the same cycle as the Locally Coordinated Human Services Public Transportation Plan. This updated Program Management Plan aligns with the 2019 updates to the Locally Coordinated Human Services Public Transportation Plan.

## 2.2 Transportation Improvement Program (TIP)

Projects awarded 5310 program funding must be reflected in CAMPO's Metropolitan Transportation Improvement Program (TIP). The TIP is a program of projects receiving federal transportation funding in the metropolitan area. The project may be included in the TIP under a generalized or more detailed project description. Some needs in the Coordinated Plan may not meet 5310 eligible activities. The TIP will need to be updated if a project is selected and awarded and not already accounted for in the TIP.

## 2.3 5310 Program Management Plan Development

Section 5310 grant cycles were held annually from 2015 to 2017. Beginning in 2017, GoRaleigh shifted to biannual grant cycles, with the most recent in 2019. The 2019 Section 5310 PMP incorporated outreach and feedback from partners and stakeholders during these program cycles, as well as input from the Raleigh Urbanized Area (Raleigh UZA) / Wake County 2019 Coordinated Human Service Public Transportation Plan. Outreach for review and approval of the 2019 Section 5310 PMP is anticipated to include interagency consultation, stakeholder notifications, and online engagement by GoRaleigh in coordination with CAMPO.

# 3. Section 5310 Program Performance Measures

The Government Performance Results Act (GPRA) requires the FTA to establish performance goals and indicators to be used in measuring relevant outputs, service levels, and outcomes for each of its programs. The performance measures described here are designed to fulfill FTA's obligations under this Act. These measures will be used at a program level and will not be used to assess individual grants. The reporting and data collection measures for the Section 5310 Program will be prescribed in the grant agreements with subrecipients. The Circular 9070.1G presents the program measures in Chapter II, at page II-2 and in Chapter VI, at page VI-17.

The following measures are targeted to capture overarching program information as part of the annual report that each state and designated recipient submits to FTA. The designated recipient should submit both quantitative and qualitative information as available on each of the following measures.

## 3.1 Traditional Section 5310 Projects

- A. <u>Gaps in Service Filled</u>. Provision of transportation options that would not otherwise be available for seniors and individuals with disabilities measured in numbers of seniors and people with disabilities afforded mobility they would not have without program support as a result of traditional Section 5310 projects implemented in the current reporting year.
- B. <u>*Ridership.*</u> Actual or estimated number of rides (as measured by one-way trips) provided annually for individuals with disabilities and seniors on Section 5310–supported vehicles and services as a result of traditional Section 5310 projects implemented in the current reporting year.

## 3.2 Other Section 5310 Projects

- A. Increases or enhancements related to geographic coverage, service quality, and/or service times that impact availability of transportation services for seniors and individuals with disabilities as a result of other Section 5310 projects implemented in the current reporting year.
- B. Additions or changes to physical infrastructure (e.g., transportation facilities, sidewalks, etc.), technology, and vehicles that impact availability of transportation services for seniors and individuals with disabilities as a result of other Section 5310 projects implemented in the current reporting year.

C. Actual or estimated number of rides (as measured by one-way trips) provided for seniors and individuals with disabilities as a result of other Section 5310 projects implemented in the current reporting year.

The designated recipient (GoRaleigh) should ensure that the above information is reported for all recipients and subrecipients of Section 5310 funding in projects selected by the designated recipient. Subrecipients will be required to report these performance measures on a quarterly basis and on an annual basis as required by GoRaleigh and the FTA. GoRaleigh may consolidate information for all projects in an annual report for any open Section 5310 grant awarded. If Section 5310 funds have been awarded to other designated recipients pursuant to a supplemental agreement with the designated recipient, the other designated recipient may report on behalf of itself and any subrecipients.

## 4. Biannual Program of Projects Development and Approval Process

GoRaleigh will adhere to the schedule below in developing a Program of Projects for the 5310 program\*.

Action	Tasks
Advertise 5310 Program Funding Availability	Notify public and private transportation
	providers, non-profit groups and other
	relevant stakeholders of funding
	availability
Call for Projects	GoRaleigh will accept applications within a
	four (4) week application window
Applicant Workshop	During the application window, GoRaleigh
	will host a workshop to assist applicants in
	completing their project applications
Application Review	GoRaleigh will forward eligible applications
	to the CAMPO Application Review
	Subcommittee. The subcommittee will
	score applications according to the
	selection criteria noted in the PMP
Develop Program of Projects	GoRaleigh will submit the Program of
	Projects to FTA
Subrecipient Notification	CAMPO will provide letters to approved
	project applicants advising the applicant
	that their application was recommended
	for funding and describing their
	responsibilities as a subrecipient

\*This schedule describes the sequence of events for the grant application period. Precise dates will vary each grant cycle.

## 5. Eligible Subrecipients

Under the federal guidelines, eligible subrecipients under Section 5310 include:<sup>1</sup>

- State and local governmental agencies
- Public and private transportation providers
- Social service agencies
- Tribal governments
- Non-profit organizations.

To be eligible for funding from the 5310 programs, proposed projects must be located within or have an origin or destination within the Raleigh-Cary Urbanized Area. Additional detailed information for typical subrecipients is outlined below.

## 5.1 Private Non-Profit Organization

A private non-profit organization includes a corporation or association determined by the United States Secretary of the Treasury to be an organization described by 26 U.S.C 501(c), or one which has been determined under State law to be non-profit and for which the designated State agency has received documentation certifying the status of the non-profit organization.

Applicants qualifying as private non-profit organizations must provide current verification of the applicant's incorporation number and current legal standing as a private non-profit from the state of North Carolina or show proof that they are a corporation or association determined by the U.S. Treasury to be tax-exempt under 26 U.S.C. 501(c).

## 5.2 Governmental Authority

A Governmental Authority subrecipient may be of two types:

- 1. Is approved by the state to coordinate services for elderly individuals and individuals with disabilities; or
- 2. Certifies that no nonprofit corporations or associations are readily available in an area to provide the service.<sup>2</sup><sup>2</sup>

## 5.3 Private Taxi Operators as Subrecipients

Private operators of public transportation are eligible subrecipients. The definition of "public transportation" includes "... shared-ride surface transportation services ..." Private taxi companies that provide shared-ride taxi service to the general public on a regular basis are operators of public transportation, and therefore eligible subrecipients. "Shared-ride" means two or more

<sup>&</sup>lt;sup>1</sup> Further information regarding eligible subrecipients can be found on FTA Circular 9070.1G, Chapter III, Sections 5 - 7 <sup>2</sup> 49 U.S.C. 5310(b)(1) and (b)(2).

passengers in the same vehicle who are otherwise not traveling together. Similar to general public and ADA demand response service, every trip does not have to be shared-ride in order for a taxi company to be considered a shared-ride operator, but the general nature of the service must include shared rides.

Local (municipal/state) statutes or regulations, or company policy, will generally determine whether a taxi company provides shared-ride or exclusive-ride service. Taxi companies that provide only exclusive-ride service are not eligible subrecipients; however, they may participate in the Section 5310 program as contractors. Exclusive-ride taxi companies may receive Section 5310 funds to purchase accessible taxis under contract with a state, designated recipient, or eligible subrecipient such as a local government or nonprofit organization. The designated recipient (GoRaleigh) is encouraged to hold the title or record a lien against the title to vehicles; however, the taxi company may hold title to the accessible vehicle(s) as long as the agreement between the state, designated recipient or subrecipient, and the taxi company establishes satisfactory continuing control. Examples of acceptable means of establishing satisfactory continuing control include:

- The state, designated recipient, or subrecipient may hold a lien on the vehicle purchased by the taxi company, or
- The contract includes provisions that require the accessible taxi to be used to provide transportation for seniors and people with disabilities, and state that the vehicle may not be removed from service or disposed of prior to the end of its useful life without the express written consent of the FTA recipient or subrecipient.

The designated recipient accepts responsibility to ensure continued public transit use of the vehicles, particularly use for Section 5310 purposes by the recipient or subrecipient, regardless of whether the recipient holds a title or lien against the title,

## 6. Subrecipient Monitoring and Oversight

The purpose of this section is to assist GoRaleigh and its subrecipients in maintaining compliance for federally funded projects and understanding the requirements and responsibilities of being a designated recipient, subrecipient, third party contractor or lessee receiving funds through federally funded projects. All grant management will be conducted in accordance with FTA C 5010.1D.

Any grantee under FTA programs is required to comply with all applicable Federal civil rights statutes and with the implementing regulations for the statutes. FTA implements the Civil Rights Act of 1964 by prohibiting discrimination under projects, programs or activities receiving financial assistance because of race, color, creed, national origin, sex or age. The laws include: Title VI of the Civil Rights Act of 1964, Equal Employment Opportunity, Disadvantaged Business Enterprise and Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA).

The requirements for Civil Rights compliance are extended to subrecipients. Subrecipient assurances under Title VI and the other civil rights requirements are included in the application for assistance, in the required Annual Certifications and Assurances and in the contract with GoRaleigh. Subrecipient grantees are also required to identify any lawsuits or complaints alleging discrimination in service filed with the grantee. Civil rights monitoring will concentrate on how the grantee is providing service. Title VI also assures that funds are passed through to subrecipients and their project without regard to race, color, or national origin.

#### 6.1 Definitions

#### A. Designated Recipient

The term designated recipient refers to an entity designated to receive and apportion funds to urbanized areas of 200,000 or more in population. GoRaleigh is the designated recipient, authorized by the governor for the Raleigh-Cary urbanized area.

#### B. Subrecipient

The term subrecipient refers to an entity that receives federal assistance awarded through an FTA designated recipient rather than by FTA directly. The term "subrecipient" also includes "subgrantee" but does not include "third party contractor".

#### C. Third Party Contractor/Lessee

The term third party contractor/lessee refers to any entity that is awarded a contract, purchase order, or lease agreement from the designated recipient or subrecipient financed in whole or in part with federal assistance awarded by FTA.

### 6.2 Application and Award Process

Both the designated recipient and all subrecipients are required to follow all federal requirements when using funds from federal grants. When subrecipients are involved, the FTA requires the designated recipient to monitor the project to ensure the use of federal funding by the subrecipient adheres to all federal rules and regulations.

#### 6.2.1 Budget Authorization

Prior to any applications for a request to receive and use federal funds, the project needs to demonstrate that it meets all local, state and FTA requirements and that it is eligible to receive federal funds. At this time, all matching funds must be identified and approved. Local match funding requirements and percentages can vary. Any match funding source outside the standards established by FTA must receive written approval from FTA to be used. Match funding should adhere to the following:

- A. Must be from an eligible funding source under FTA guidelines;
- B. Must be available at the time of the grant award;
- C. Match funding must be spent to qualify as a match;
- D. No federal funds may be drawn without authorization and availability of a sufficient match funding source;
- E. Subrecipients must certify the use of local match with the submission of each invoice;
- F. Subrecipients are required to provide quarterly reports that account for the use of local funds as match.

#### 6.2.2 Grant Application Process

- A. During the Application process, subrecipients shall submit the following:
  - 1. Complete forms for project description/detail and budget and timeline/milestones.
  - 2. FTA Certifications and Assurances, which should be completed annually for each new federal fiscal year, beginning on October 1.
  - Proof of acceptable audit in accordance with the latest Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) if \$750,000 or more of federal funds are expended on an annual basis (includes all federal sources).
  - 4. Construction projects/environmental requirements (e.g., Categorical Exclusions, State Historic Preservation Office, etc.).
  - 5. List of any revenue vehicles and/or changes to existing fleet plan.

- 6. A confirmation letter indicating that sufficient local match funds will be available that identifies revenue sources and amounts for local match funds; includes specific amounts as shown in the project budget; and is signed by an authorized representative of the organization submitting the application.
- B. No late applications will be accepted. Follow-up contact or requests may occur if clarification is needed regarding an on-time, complete application.
- C. Applications will be scored by a group with expertise to review applicant information (e.g. subcommittee) as designated by CAMPO.
- D. The Executive Board of CAMPO reviews and approves the recommendation. Approved recommendations will be provided to GoRaleigh so that it may administer funds as the designated recipient.
- E. A letter from CAMPO to the subrecipient shall be provided advising the applicant whether their application was recommended for funding. The letter to applicants recommended for funding will describe their responsibilities as a subrecipient (see Appendix C).

#### 6.2.3 Grant Award

- A. Once a federal grant is awarded, the designated recipient shall identify a project manager responsible for grant administration and oversight. Subrecipients shall also establish a project manager responsible for grant administration and oversight. The GoRaleigh project manager shall work closely with the subrecipient project manager to monitor all grant activity. The GoRaleigh project manager will serve as the main point of contact with the FTA. All grant management will be conducted in accordance with FTA C 5010.1D.
- B. Upon execution of the federal grant, a Subrecipient Grant Agreement (SGA) shall be created by the designated recipient and signed by all applicable parties. The subrecipient shall complete the FTA's Annual Certifications and Assurances, provide a copy of an acceptable audit in accordance with the latest Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), if it has expended \$750,000 or more of federal funding from all sources, or audited financial statements if the \$750,000 threshold has not been met, and provide copies of other documents as GoRaleigh and/or FTA requires. The SGA shall specify all applicable federal requirements including, but not limited to:
  - 1. Procurement;
  - 2. Disadvantaged Business Enterprise (DBE);
  - 3. Program-specific concerns;
  - 4. Prior approvals;

- 5. Reporting requirements;
- 6. Invoicing;
- 7. Allowable activities per the work scope;
- 8. Allowable costs for the work scope per the approved budget.
- C. The Subrecipient is responsible for adhering to the work scope and budget as approved by FTA and as outlined in the SGA. Prior approvals are required for some activities even if they are included in the work scope and budget, as identified in the SGA. In order to receive full reimbursement of eligible expenses, Subrecipient Project Managers should read thoroughly the SGA and any appendices to make sure all federal regulations are being adhered to.
- D. All changes to the work scope require prior written approval from the GoRaleigh Project Manager. Requests for reimbursement may begin as soon as the SGA is executed. Invoices must be for the net expense (i.e., total expense less match) actually incurred in direct support of the project. No reimbursement payments prior to the execution of the SGA are allowed. Advance payments to subrecipients for expenditures not yet incurred are not allowed under the program.
- E. The Subrecipient must certify the use of local match with each invoice submitted. A financial report that includes a completely documented accounting of the use of local funds as match is required each quarter based on the federal fiscal year.

#### 6.3 Subrecipient Monitoring

- A. Monitoring of subrecipients shall be conducted to ensure that all federal guidelines are being adhered to when using federal funds. A project progress report is required with each invoice along with a detailed accounting of the expenditure of the local match.
- B. In addition to State or Federal program specific monitoring requirements, all monitoring activities should address the following areas:
  - 1. All applicable requirements of Title VI of the *Civil Rights Act of 1964*.
  - 2. The applicable core monitoring areas, as defined by the Uniform Guidance.

Currently, the core monitoring areas include but are not limited to:

- a. Activities allowed or unallowed;
- b. Allowable costs/cost principles;
- c. Cash management;
- d. Davis-Bacon Act; eligibility;

- e. Equipment and real property management;
- f. Period of availability of funds;
- g. Procurement, suspension and debarment;
- h. Program income;
- i. Buy America Requirements;
- j. Equal Employment Opportunity (EEO);
- k. Disclosure form to Report Lobbying;
- I. Real property acquisition and relocation assistance;
- m. Reporting and special tests and provisions.
- C. At least annually, GoRaleigh will collect updated information and documentation on subrecipients' financial processes and controls, through either the Uniform Guidance or an annual financial statement when the subrecipient is excluded from Uniform Guidance audit requirements. In addition, GoRaleigh may perform desk audits of a sample of sub-invoices, site visits to review processes, systems and controls, or other procedures as deemed appropriate.
  - If an unfavorable audit report has been received from a subrecipient, the appropriate GoRaleigh Project Manager will review the checklist (Appendix D) to confirm that the subrecipient has provided sufficient documentation. For the elements that are out of compliance, the subrecipient must develop a Corrective Action Plan. GoRaleigh will monitor progress to ensure that the corrective action plan is followed and findings are appropriately resolved by subrecipient. The Corrective Action Plan should cover:
    - a. What elements are missing or incorrect.
    - b. What actions need to be taken.
    - c. A date by which information will be provided.
    - d. Additional information and recommendations to maintain compliance are included below.
  - 2. Examples of corrective action that can be taken as a result of unfavorable audit reports include but may not be limited to the following:
    - a. Discuss need for special monitoring with Program personnel;
    - b. Ask for extra contact between Program leads;
    - c. Ask for more frequent technical reporting;
    - d. Add more detailed or frequent invoicing requirements;

- e. Add requirement for expenditure backup materials;
- f. Tie receipt of technical progress reports or other deliverables to payments;
- g. Require on-site monitoring (technical and financial);
- h. Add more stringent termination or stop-work language for failure to comply with requirements.

# 7. Eligible Projects

Section 5310 funds are available for capital and operating expenses to support the provision of transportation services to meet the specific needs of seniors and individuals with disabilities. All projects must serve trips that have an origin and/or destination within the Raleigh-Cary urbanized area to qualify for Section 5310 Urbanized Area funds.

At least 55 percent of any rural, small urbanized area, or large urbanized area's annual apportionment must be utilized for traditional public transportation capital projects that are planned, designed, and carried out to meet the specific needs of seniors and individuals with disabilities. It is not sufficient that seniors and individuals with disabilities are merely included (or assumed to be included) among the people who will benefit from the project. Section 7.1 describes projects that are eligible for consideration as capital projects.

In addition to the above required traditional projects, up to 45 percent of an area's apportionment may be utilized for non-traditional public transportation projects that exceed the ADA minimum requirements; improve access to fixed-route service and decrease reliance by individuals with disabilities on ADA-complementary paratransit service; or provide alternatives to public transportation that assist seniors and individuals with disabilities with transportation.

Such projects must be targeted toward meeting the transportation needs of seniors and individuals with disabilities, although they may be used by the general public. It is not sufficient that seniors and individuals with disabilities are included (or assumed to be included) among the people who will benefit from the project. FTA encourages projects that are open to the public as a means of avoiding unnecessary segregation of services.

Recipients must clearly identify the projects or project elements that are part of the required 55 percent traditional capital projects as part of the grant activity line item narrative descriptions. Many projects may be eligible under both the required and optional criteria, but a discrete set of expenses that meet the required traditional criteria constituting at least 55 percent of the grant amount, exclusive of administrative expenses, must be identified.

Alternatively, the grant application may assign less than the required 55 percent to nontraditional projects if other grants in the same fiscal year utilize more than the required 55 percent, so long as at least 55 percent of the total annual apportionment will be used for traditional projects. In such cases, a list of the other grants and the funding amounts must be included within the new grant application.

## 7.1 Traditional Capital Expenses

Funds for the Section 5310 program are available for traditional capital expenses as defined in Section 5302(3) to support public transportation capital projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, unavailable, or inappropriate. Examples of traditional capital expenses that meet the 55 percent requirement, which must be carried out by an eligible recipient or subrecipient as described in section 5 of this chapter above, include, but are not limited to:

- A. Rolling stock and related activities for Section 5310-funded vehicles
  - 1. Acquisition of expansion or replacement buses or vans, and related procurement, testing, inspection, and acceptance costs;
  - 2. Vehicle rehabilitation; or overhaul;
  - 3. Preventive maintenance;
  - 4. Radios and communication equipment; and;
  - 5. Vehicle wheelchair lifts, ramps, and securement devices.
- B. Passenger facilities related to Section 5310-funded vehicles
  - 1. Purchase and installation of benches, shelters and other passenger amenities.
- C. Support facilities and equipment for Section 5310-funded vehicles
  - 1. Extended warranties that do not exceed industry standard;
  - 2. Computer hardware and software;
  - 3. Transit-related intelligent transportation systems (ITS);
  - 4. Dispatch systems; and
  - 5. Fare collection systems.
- D. Lease of equipment when lease is more cost effective than purchase.

Note that when lease of equipment or facilities is treated as a capital expense, the recipient must establish criteria for determining cost effectiveness in accordance with FTA regulations, "Capital Leases," 49 CFR part 639 and OMB Circular A–94, which provides the necessary discount factors and formulas for applying the same;

E. Acquisition of transportation services under a contract, lease, or other arrangement.

This may include acquisition of ADA-complementary paratransit services when provided by an eligible recipient or subrecipient as defined in section 5 of this chapter, above. Both capital and operating costs associated with contracted service are eligible capital expenses. Arrangements to provide subsidies to users are eligible expenses. Funds may be requested for contracted services covering a time period of more than one year. The capital eligibility of acquisition of services as authorized in 49 U.S.C. 5310(b)(4) is limited to the Section 5310 program;

F. Support for mobility management and coordination programs among public transportation providers and other human service agencies providing transportation.

Mobility management is an eligible capital cost. Mobility management techniques may enhance transportation access for populations beyond those served by one agency or organization within a community. For example, a nonprofit agency could receive Section 5310 funding to support the administrative costs of sharing services it provides to its own clientele with other seniors and/or individuals with disabilities and coordinate usage of vehicles with other nonprofits, but not the operating costs of service. Mobility management is intended to build coordination among existing public transportation providers and other transportation service providers with the result of expanding the availability of service. Mobility management activities may include:

- 1. The promotion, enhancement, and facilitation of access to transportation services, including the integration and coordination of services for individuals with disabilities, seniors, and low- income individuals;
- 2. Support for short-term management activities to plan and implement coordinated services;
- 3. The support of state and local coordination policy bodies and councils;
- 4. The operation of transportation brokerages to coordinate providers, funding agencies, and passengers;
- 5. The provision of coordination services, including employer-oriented transportation management organizations' and human service organizations' customer-oriented travel navigator systems and neighborhood travel coordination activities such as coordinating individualized travel training and trip planning activities for customers;
- 6. The development and operation of one-stop transportation traveler call centers to coordinate transportation information on all travel modes and to manage eligibility requirements and arrangements for customers among supporting programs; and
- 7. Operational planning for the acquisition of intelligent transportation technologies to help plan and operate coordinated systems inclusive of geographic information

systems (GIS) mapping, global positioning system technology, coordinated vehicle scheduling, dispatching and monitoring technologies, as well as technologies to track costs and billing in a coordinated system, and single smart customer payment systems. (Acquisition of technology is also eligible as a standalone capital expense).

G. Capital activities.

Capital activities to support ADA-complementary paratransit service (e.g., acquisition of rolling stock and related activities, acquisition of services, etc.) may qualify toward the 55 percent requirement, so long as the service is provided by an eligible recipient/subrecipient as defined in section 5, above, and is included in the coordinated plan.

Section 5310(b) provides that of the amounts apportioned to states and designated recipients, not less than 55 percent shall be available for traditional Section 5310 projects—those public transportation capital projects planned, designed, and carried out to meet the specific needs of seniors and individuals with disabilities when public transportation is insufficient, unavailable, or inappropriate. Notably, this 55 percent is a floor, not a ceiling—recipients may use more than 55 percent of their apportionment for the types of project listed above. For example, mobility management and ITS projects may be eligible under both categories; the difference to note, in order for the project to qualify toward the 55 percent requirement, is that the project must meet the definition of a traditional capital project, be specifically geared toward the target population, and be carried out by an eligible subrecipient, which is limited for this category of projects. The list of eligible activities is intended to be illustrative, not exhaustive. FTA encourages recipients to develop innovative solutions to meet the needs of seniors and individuals with disabilities in their communities and discuss proposed projects with FTA regional staff to confirm eligibility.

## 7.2 Other Eligible Capital and Operating Expenses

Up to 45 percent of 5310 funds may be used for operating expenses that provide transportation services that exceed the requirements of the ADA or improve access to fixed route services and decrease reliance by individuals with disabilities on ADA complementary transit service.<sup>3</sup>

- A. Public transportation projects (capital only) planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable;
- B. Public transportation projects (capital and operating) that exceed the requirements of ADA;
- C. Public transportation projects (capital and operating) that improve access to fixed route

<sup>&</sup>lt;sup>3</sup> Further information regarding eligible activities can be found on FTA Circular 9070.1G, Chapter III, Sections 13. – 15.

service and decrease reliance by individuals with disabilities on ADA-complementary paratransit service; or;

D. Alternatives to public transportation (capital and operating) that assist seniors and individuals with disabilities with transportation.

#### 7.2.1 Projects that Exceed the Requirements of the ADA

The following activities are examples of eligible projects meeting the definition of public transportation service that is beyond the ADA.

Enhancing paratransit beyond minimum requirements of the ADA. ADA-complementary paratransit services can be eligible under the Section 5310 program in several ways:

- 1. Expansion of paratransit service parameters beyond the three-fourths mile required by the ADA;
- 2. Expansion of current hours of operation for ADA paratransit services that are beyond those provided on the fixed-route services;
- 3. The incremental cost of providing same-day service;
- 4. The incremental cost (if any) of making door-to-door service available to all eligible ADA paratransit riders, but not on a case-by-case basis for individual riders in an otherwise curb-to-curb system;
- 5. Enhancement of the level of service by providing escorts or assisting riders through the door of their destination;
- 6. Acquisition of vehicles and equipment designed to accommodate mobility aids that exceed the dimensions and weight ratings established for wheelchairs under the ADA regulations, 49 CFR part 38 (i.e., larger than 30" × 48" and/or weighing more than 600 pounds), and labor costs of aides to help drivers assist passengers with oversized wheelchairs. This would permit the acquisition of lifts with a larger capacity, as well as modifications to lifts with a 600-pound design load, and the acquisition of heavier duty vehicles for paratransit and/or demand-response service in order to accommodate lifts with a heavier design load; and
- 7. Installation of additional securement locations in public buses beyond what is required by the ADA.
- B. Feeder services. Accessible "feeder" service (transit service that provides access) to commuter rail, commuter bus, intercity rail, and intercity bus stations, for which complementary paratransit service is not required under the ADA.

#### 7.2.2 Public Transportation Projects that Improve Accessibility

The following activities are examples of eligible projects that improve accessibility to the fixedroute system.

- A. Making accessibility improvements to transit and intermodal stations not designated as key stations. Improvements for accessibility at existing transportation facilities that are not designated as key stations established under 49 CFR 37.47, 37.51, or 37.53, and that are not required under 49 CFR 37.43 as part of an alteration or renovation to an existing station, so long as the projects are clearly intended to remove barriers that would otherwise have remained. Section 5310 funds are eligible to be used for accessibility enhancements that remove barriers to individuals with disabilities so they may access greater portions of public transportation systems, such as fixed-route bus service, commuter rail, light rail, and rapid rail. This may include:
  - 1. Building an accessible path to a bus stop that is currently inaccessible, including curb cuts, sidewalks, accessible pedestrian signals, or other accessible features;
  - Adding an elevator or ramps, detectable warnings, or other accessibility improvements to a non-key station that are not otherwise required under the ADA;
  - 3. Improving signage or wayfinding technology; or
  - 4. Implementation of other technology improvements that enhance accessibility for people with disabilities including ITS.
  - 5. Travel training. Training programs for individual users on awareness, knowledge, and skills of public and alternative transportation options available in their communities. This includes travel instruction and travel training services.

## 7.2.3 Alternatives to Public Transportation Projects that Assist Seniors and Individuals with Disabilities with Transportation

The following activities are examples of projects that are eligible alternatives to public transportation.

A. Purchasing vehicles to support accessible taxi, ridesharing, and/or vanpooling programs. Section 5310 funds can be used to purchase and operate accessible vehicles for use in taxi, ride-sharing, and/or vanpool programs provided that the vehicle meets the same requirements for lifts, ramps, and securement systems specified in 49 CFR part 38, subpart B, at a minimum, and permits a passenger whose wheelchair can be accommodated pursuant to part 38 to remain in his/her personal mobility device inside the vehicle.

- B. Supporting the administration and expenses related to voucher programs for transportation services offered by human service providers. This activity is intended to support and supplement existing transportation services by expanding the number of providers available or the number of passengers receiving transportation services. Vouchers can be used as an administrative mechanism for payment of alternative transportation services to supplement available public transportation. The Section 5310 program can provide vouchers to seniors and individuals with disabilities to purchase rides, including: (a) mileage reimbursement as part of a volunteer driver program; (b) a taxi trip; or (c) trips provided by a human service agency. Providers of transportation can then submit the voucher for reimbursement to the recipient for payment based on predetermined rates or contractual arrangements. Transit passes or vouchers for use on existing fixed-route or ADA complementary paratransit service are not eligible. Vouchers are an operational expense which requires a 50/50 (federal/local) match.
- C. <u>Supporting volunteer driver and aide programs.</u> Volunteer driver programs are eligible and include support for costs associated with the administration, management of driver recruitment, safety, background checks, scheduling, coordination with passengers, other related support functions, mileage reimbursement, and insurance associated with volunteer driver programs. The costs of enhancements to increase capacity of volunteer driver programs are also eligible. FTA encourages communities to offer consideration for utilizing all available funding resources as an integrated part of the design and delivery of any volunteer driver/aide program.

## 7.3 Administration, Planning and Technical Assistance

Up to 10 percent of the recipient's total fiscal year apportionment may be used to fund program administration costs including administration, planning, and technical assistance for projects funded under this program. Recipients may pass any portion of funds available for administrative expenses, up to the allowable 10 percent, on to subrecipients for the same purpose. Program administration costs may be funded at 100 percent federal share.

The state and the designated recipient in urbanized areas have pre-award authority to incur administrative costs for Section 5310. Because the program is continuously managed, the oldest funds available are drawn first regardless of the year of award for program activity. FTA encourages recipients to identify all the available Section 5310 administrative funds they intend to use routinely in each biannual grant application. However, recipients may choose to accumulate Section 5310 administrative funds within their period of availability to augment the funds available for a special administrative need in a subsequent year. Recipients may accumulate Section 5310 administrative funds in the year of apportionment plus two years.

If a recipient includes program administration expenses in excess of the 10 percent in its grant application, it must document the unused Section 5310 administrative funds from prior years available to augment the amount of Section 5310 administrative funds in the current apportionment.

The recipient must document the availability of Section 5310 administrative funds in each grant application. The grant application should include a list of all other grants for administrative expenses that utilize funds from the same apportionment. The list must include the total amount of administrative funds included in each grant and the fiscal year in which the funds were apportioned. The list should account for all funds for administrative expenses added through grant budget revisions or amendments. The list should include all other pending grant applications, budget revisions, or amendments that include administrative expenses that utilize funds from the same apportionment.

Allowable administrative costs may include, but are not limited to, general administrative and overhead costs, staff salaries, office supplies, and development of specifications for vehicles and equipment.

Guidance on eligible costs is in Office of Management and Budget (OMB) Circular A–87 (codified at 2 CFR part 225). The program administration budget line item may also include technical assistance and planning activities, including allocations to subrecipients to support the local coordinated planning process. Any general overhead costs must be supported by an indirect cost allocation plan that has been approved by FTA or another cognizant federal agency.

These eligible program administrative costs may be used directly by the designated recipient or may be passed through by the designated recipient to subrecipients for administration, planning, or technical assistance purposes. GoRaleigh will determine whether administrative costs will be used directly or passed through for each funding cycle, The funds can be obligated before the completion of the coordinated planning process and project selection process in order to assist with either activity.

## 8. Funding

#### 8.1 Federal Share of Costs / Local Match

Section 5310 funds may be used to finance capital and operating expenses. The federal share of eligible capital costs shall be in an amount equal to 80 percent of the net cost of the activity. The federal share of the eligible operating costs may not exceed 50 percent of the net operating costs of the activity. Recipients may use up to 10 percent of their apportionment to support program administrative costs including administration, planning, and technical assistance, which may be funded at 100 percent federal share.

The determination of whether an expense is a capital or operating expense for the purposes of calculating the federal and local match share is different from the determination of whether a project is a traditional capital project or another eligible project. Traditional projects generally have capital costs, while non-traditional eligible project types may include a mix of capital and operating costs. GoRaleigh calculates the funding split between traditional capital projects and other eligible projects based on individual expenses. Refer to the FTA Uniform System of Accounts (USOA) to determine if expenses should be considered capital expenses or operating expenses. The budget template provided in the application packet demonstrates how expenses are allocated to determine if they contribute to the required percentage for traditional capital projects.

Capital expenses are related to purchasing a capital asset or making an improvement to a capital asset that materially increases its value or useful life. Examples of capital assets include vehicles, buildings, and equipment. Capital expenses also include the capital cost of contracting, which refers to capital consumed during the course of the contract. The capital cost of contracting relates to costs attributable to privately owned assets, not assets purchased with Federal, State, or local government assistance (with the exception of the use of FTA funds from the Over-the-Road Bus Accessibility program to finance incremental costs of contracting with ADA for a privately-owned public transportation vehicle). Examples of capital costs of contracting include:

- Depreciation of privately-owned vehicles used for public transportation during the contract period,
- Depreciation of maintenance facilities or equipment used for a maintenance contract, or
- A proportionate share of the interest paid by the contractor as the contractor purchases capital assets and makes them available to the recipient.

Operating expenses refer to the expenses a recipient incurs in providing eligible public

transportation services. Examples include salaries and benefits, training and travel, volunteer trips, services, fuel and lubricants, vehicle maintenance, materials and supplies, utilities, leases, and insurance.

The local share of eligible capital costs shall be not less than 20 percent of the net cost of the activity, and the local share for eligible operating costs shall be not less than 50 percent of the net operating costs. The local share may be provided from an undistributed cash surplus, a replacement or depreciation cash fund or reserve, a service agreement with a state or local service agency or private social service organization, or new capital. Some examples of these sources of local match include: state or local appropriations; dedicated tax revenues; private donations; revenue from service contracts; transportation development credits; and net income generated from advertising and concessions. Non-cash share such as donations, volunteered services, or in-kind contributions is eligible to be counted toward the local match as long as the value of each is documented and supported, represents a cost which would otherwise be eligible under the program, and is included in the net project costs in the project budget.

Income from contracts to provide human service transportation may be used either to reduce the net project cost (treated as revenue) or to provide local match for Section 5310 operating assistance. In either case, the cost of providing the contract service is included in the total project cost. No FTA program funds can be used as a source of local match for other FTA programs, even when used to contract for service. All sources of local match must be identified and described in the grant application at the time of grant award.

In addition, the local share may be derived from federal programs that are eligible to be expended for transportation, other than DOT programs, or from DOT's Federal Lands Highway program. Examples of types of programs that are potential sources of local match include: employment, training, aging, medical, community services, and rehabilitation services. Program information for other types of Federal funding is available on FTA's <u>Coordinating Council on</u> <u>Access and Mobility Federal Program Guide</u> website.

#### 8.2 Exceptions to Local Match Requirements

The federal share may exceed 80 percent for certain projects related to ADA and Clean Air Act (CAA) compliance as follows:

A. Vehicles. The federal share is 85 percent for the acquisition of vehicles for purposes of complying with or maintaining compliance with ADA (42 U.S.C. 12101 et seq.) or the CAA. A revenue vehicle that complies with 49 CFR part 38 may be funded at 85 percent federal share.

B. Vehicle-Related Equipment and Facilities. The federal share for project costs for acquiring vehicle-related equipment or facilities (including clean-fuel or alternative-fuel vehicle-related equipment or facilities) for purposes of complying or maintaining compliance with the CAA, 42 U.S.C. 7401 et seq), or required by the ADA, is 90 percent. FTA considers vehicle-related equipment to be equipment on and attached to the vehicle.

### 8.3 Funds Availability

Section 5310 funds are available for obligation during the fiscal year of apportionment plus two additional years. Thus, for example, funds apportioned in FY 2013 are available until the end of FY 2015 (September 30, 2015). Any funds remaining unobligated at the end of the period of availability are added to the next year's program apportionment and are reapportioned among all areas.

#### 8.4 Transfer of Funds

- A. <u>Transfer to Other FTA Programs.</u> Transfers of Section 5310 funds to other programs are not permitted.
- B. <u>Transfer to Other Areas within the Program.</u> A State may use funds apportioned for small urbanized and rural areas for projects serving another area of the State if the Governor of the State certifies that all of the objectives of the Section 5310 program are being met in the specified areas. For example, if all objectives of the Section 5310 program are being met in rural areas, funds designated for rural areas may be transferred to urbanized areas of less than 200,000 in population. Funds apportioned to small urbanized and rural areas may also be transferred for use anywhere in the State, including large urbanized areas, if the State has established a statewide program for meeting the objectives of the Section 5310 program. A recipient may transfer apportioned funds only after consulting with responsible local officials, publicly owned operators of public transportation, and nonprofit providers in the area from which the funds to be transferred to other areas.
- C. <u>Transfer of FHWA Flexible Funds.</u> Flexible funds from the Federal Highway Administration (FHWA) may be transferred to the Section 5310 program for use by the recipient. The funds will be treated under the Section 5310 program requirements, with the exception of the local match and the minimum requirement for 55 percent to be spent on traditional Section 5310 projects. The FHWA funds will maintain the FHWA eligible match, including the application of the sliding scale for a higher federal share. The funds are available for

obligation by the state for two additional years after the year in which they are transferred.

D. For transfers of flexible funds to Section 5310, the recipient must notify both FHWA and FTA and request FHWA to transfer the funds to the appropriate FTA account. The transfer must be completed prior to grant award.

## 9. Selection Criteria

FTA allows but does not require the use of selection criteria for awarding 5310 funding. Selection criteria were developed to guide application review and project selection. The following criteria were developed and are consistent with GoRaleigh's past Job Access and Reverse Commute Program (JARC)/New Freedom Program Management Plan (2008), Wake County's Locally Coordinated Human Services Public Transportation Plan (2019), FTA's 5310 guidance and review of peer agency Program Management Plans.

### 9.1 Basic Screening Criteria

Applications will be evaluated to verify that the project meets the following basic screening criteria before the full scored evaluation:

- Is the project of a type that meets the basic goals of the Section 5310 program, i.e. it has a primary focus of serving seniors and individuals with disabilities?
- Is the project application complete, including attachments providing the budget and certified local match sources?
- Does the project serve trips that have an origin and/or destination within the Raleigh-Cary urbanized area?

If the answer to any of the basic screening criteria is "no", the project is ineligible for funding and will not be scored.

## 9.2 Scoring Criteria

#### 1. Project Needs (20 points)

Project applications should clearly state the need for the project and demonstrate how the project is consistent with the objectives of the Section 5310 grant program. The project application should indicate how the project will enhance transportation for the urbanized area's elderly and disabled populations. The connection between the project and the Locally Coordinated Human Services Public Transportation Plan should be clearly described in the application.

#### 2. Project Planning and Implementation (20 points)

For all projects, applicants must provide a well-defined service operations plan and/or capital procurement plan and describe the implementation steps and timelines for carrying out the plan. The applicant's plan should include coordination, eligibility

determination, marketing and service delivery details.

#### 3. Project Budget and Grants Management (15 points)

Applicants must submit a complete project budget, indicating anticipated project expenditures and revenues, including documentation of matching funds. The application should address long- term efforts and identify potential funding sources for sustaining the service beyond the grant period.

#### 4. Program Effectiveness and Evaluation (20 points)

The project will be scored based on the applicant's identification of clear, measurable outcome- based performance measures, including customer satisfaction, to track the effectiveness of the service. The applicant should monitor and evaluate the service throughout the period of performance.

#### 5. Organizational Preparedness and Technical Capacity (25 points)

Projects should be a good fit in the applicant's organization, meaning they should align with the organization's mission and expertise.. The applicant must demonstrate that it has staff with the technical experience to manage or operate a transportation service, such as correct levels of insurance for operations. In addition, the applicant must show that they are prepared to monitor and provide safe services.

Project Evaluation Criteria	<b>Possible Points</b> (100 Maximum)
1. Project Needs	20
Does the project support the 5310 grant program's objectives?	0 or 5
To what degree will the project increase or enhance the availability of transportation for the elderly and disabled populations in and around the Raleigh-Cary Urbanized Area's?	0-5
How well does the project address needs identified in the Locally Coordinated Human Services Transportation Plan?	0-5
Does the project provide a service that otherwise would not be available?	0 or 5
2. Project Planning and Implementation	20
To what degree does the project include coordination and/or partnerships with transportation providers or other relevant stakeholders?	0-5
Is the project timeline realistic?	0 or 5
To what extent does the applicant include plans to market to the target group and promote public awareness of their project?	0-5
Is there evidence the applicant has done all the necessary planning and is ready to begin the project upon being funded?	0-5
3. Project Budget and Grants Management	15
Does the submitted budget clearly identify anticipated project expenditures and revenues?	0 or 5
Does the documentation demonstrate the matching funds are identified and available?	0 or 5
How well does the agency demonstrate continued commitment to the life of the project beyond the availability of the requested grant resources?	0-5
4. Program Effectiveness and Evaluation	20
How well does the application describe collecting data and/or documenting the delivery and utilization of services?	0-10
Does the applicant propose monitoring measurable indicators of success?	0-10
5. Organizational Preparedness and Technical Capacity	25
How closely does the proposed project align with the organization's mission and objectives?	0-5
How experienced is the applicant staff in managing transportation projects and/or operating passenger transportation?	0-5
How experienced is the applicant with financial responsibilities such as quarterly reporting, annual audits, and/or other forms of financial reporting?	0-10
If the applicant has previously been awarded a Section 5310 grant by GoRaleigh, does its documented past performance indicate that it may struggle to successfully manage the project and/or operate passenger transportation? <i>Note: This question</i> <i>allows points gained for experience to be reduced based on previous performance.</i>	-5 - 0
Does the applicant describe activities such as: training, vehicle maintenance, inspection, or monitoring to manage risk and to provide safe services?	0-5
Total Score	0-100

## **10. Other Provisions**

### **10.1 Private Sector Participation**

Federal law requires the public to be involved in the transportation planning process, and specifically requires that private providers be provided an opportunity to be consulted in developing transportation plans and programs in both urbanized and rural areas. Public involvement processes must be proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement throughout the transportation planning and programming process.

Therefore, each applicant for funds from GoRaleigh's Section 5310 program must describe their plans to comply with this policy and provide documentation of these planned efforts in their application.

### **10.2 Civil Rights**

The recipient agrees to comply with all applicable civil rights statutes and implementing regulations including, but not limited to, the following:

- A. **Nondiscrimination—Title VI.** The recipient agrees to comply, and assures the compliance of each third-party contractor and each subrecipient at any tier of the project, with all of the following requirements under Title VI of the Civil Rights Act of 1964:
  - 1. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d *et seq.*), provides that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.
  - U.S. DOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act," 49 CFR part 21.
  - 3. FTA Circular 4702.1B "Title VI Requirements and Guidelines for Federal Transit Administration Recipients." This document provides FTA recipients and subrecipients with guidance and instructions necessary to carry out DOT Title VI regulations (49 CFR part 21), and DOT Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient (LEP) Persons.

- 4. U.S. DOT Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons (70 FR 74087, December 14, 2005). This guidance clarifies the responsibilities of recipients of federal financial assistance from DOT and assists them in fulfilling their responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and Executive Order 13166.
- 5. FTA Circular 4703.1 "Environmental Justice Policy Guidance for Federal Transit Administration Recipients." This document provides FTA recipients and subrecipients with guidance and instructions necessary to carry out U.S. DOT Order 5610.2 to Address Environmental Justice in Minority Populations and Low-Income Populations, and Executive Order 12898 on Environmental Justice that describes the process that the Office of the Secretary of Transportation and each operating administration will use to incorporate environmental justice principles into existing programs, policies, and activities.
- 6. U.S. DOT Order to Address Environmental Justice in Minority Populations and Low- Income Populations. DOT Order 5610.2 describes the process that the Office of the Secretary of Transportation and each operating administration will use to incorporate environmental justice principles (as embodied in Executive Order 12898 on Environmental Justice) into existing programs, policies, and activities.

Contractors and subcontractors are not required to submit a Title VI report. However, they are responsible for complying with the Title VI Program of the recipient with whom they are contracting. Recipients and subrecipients are responsible for ensuring that their contractors are complying with their Title VI Program and Title VI regulations.

- B. **Nondiscrimination in Federal Transit Programs.** The recipient agrees to comply and assures the compliance of each third-party contractor at any tier and each subrecipient at any tier under the project, with the provisions of 49 U.S.C. 5332. These provisions prohibit discrimination on the basis of race, color, religion, national origin, sex, age, and disability, and prohibit discrimination in employment or business opportunity.
- C. **Nondiscrimination on the Basis of Disability.** The recipient agrees to comply and assures the compliance of each third-party contractor and each subrecipient at any tier of the project, with the applicable laws and regulations, discussed below, for nondiscrimination on the basis of disability.

- 1. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), prohibits discrimination on the basis of disability by recipients of federal financial assistance.
- 2. ADA, as amended (42 U.S.C. 12101 et seq.), prohibits discrimination against qualified individuals with disabilities in all programs, activities, and services of public entities, as well as imposes specific requirements on public and private providers of public transportation.
- 3. DOT regulations implementing Section 504 and the ADA include 49 CFR parts 27, 37, 38, and 39. Among other provisions, the regulations specify accessibility requirements for the design and construction of new transportation facilities and vehicles; require that vehicles acquired (with limited exceptions) be accessible to and usable by individuals with disabilities, including individuals using wheelchairs; require public entities(including private entities "standing in the shoes" of a public entity as a subrecipient or under a contract or other arrangement) providing fixed-route service to provide complementary paratransit service to individuals with disabilities who cannot use the fixed-route service; and include service requirements intended to ensure that individuals with disabilities are afforded equal opportunity to use transportation systems.

Providers of demand responsive service must utilize accessible vehicles, as defined at 49 CFR 37.7 or meet the applicable equivalent service standard. For private and public entities, the service must be equivalent in regard to schedules, response times, geographic areas of service, hours and days of service, availability of information, reservations capability, constraints on capacity or service availability, and restrictions based on trip purpose.

Providers of fixed-route service must generally utilize accessible vehicles. Private entities may utilize nonaccessible vehicles if they can provide equivalent service in terms of schedules and headways, in addition to the equivalent service requirements described above for demand responsive service. Public entities must also provide complementary paratransit service to fixed-route service as defined in 49 CFR 37.121.

4. In addition, recipients of any FTA funds should be aware that they also have responsibilities under Titles I, II, III, IV, and V of the ADA in the areas of employment, public services, public accommodations, telecommunications, and

other provisions, many of which are subject to regulations issued by other federal agencies.

- D. **Disadvantaged Business Enterprise (DBE).** To the extent required by federal law, regulation, or directive, the recipient agrees to take the following measures to facilitate participation by DBEs:
  - The recipient agrees and assures that it will comply with MAP-21 Section 1101(b) (23 U.S.C. 101 note), which directs the Secretary of Transportation to expend not less than 10 percent of authorized federal funds with DBEs. This 10 percent national goal is aspirational and is used by DOT to help monitor and evaluate DBE participation in DOT- assisted contracting opportunities.
  - 2. The recipient agrees and assures that it will comply with DOT regulation, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs," 49 CFR part 26. Among other provisions, this regulation requires certain recipients of DOT federal financial assistance, namely state and local transportation agencies, to establish goals for the participation of disadvantaged entrepreneurs and certify the eligibility of DBE firms to participate in their DOT-assisted contracts.
  - 3. The recipient agrees and assures that it shall not discriminate on the basis of race, color, sex, or national origin, in the award and performance of any third-party contract, or subagreement supported with federal assistance derived from DOT, or in the administration of its DBE program, and will comply with the requirements of 49 CFR part 26. The recipient agrees to take all necessary and reasonable steps set forth in 49 CFR part 26 to ensure nondiscrimination in the award and administration of all third-party contracts and subagreements supported with federal assistance derived from DOT.

As required by 49 CFR part 26 and approved by DOT, the recipient's DBE program is incorporated by reference and made part of the grant agreement or cooperative agreement. The recipient agrees that implementation of this DBE program is a legal obligation, and that failure to carry out its terms shall be treated as a violation of the grant agreement or cooperative agreement. Upon notification by DOT to the recipient of a failure to implement its approved DBE program, DOT may impose sanctions as provided for under 49 CFR part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001, and/or the Program Fraud Civil Remedies Act, (31 U.S.C. 3801 *et seq*).

For further guidance, refer to the federal laws, regulations, and executive orders cited in this chapter. FTA's regional civil rights officers or headquarters civil rights staff will also provide current guidance upon request.

E. **Equal Employment Opportunity (EEO)**. GoRaleigh and Section 5310 Program subrecipients must ensure that no person in the United States shall on the grounds of race, color, religion, national origin, sex, age, or disability be excluded from participating in, or denied the benefits of, or be subject to, discrimination in employment under any project, program, or activity receiving federal financial assistance under the federal transit laws.

Each Section 5310 Program contract between GoRaleigh and a subrecipient for the provision of FTA funding shall contain language that requires the subrecipient to comply with FTA regulations related to EEO. In addition, private providers under contract with subrecipients are required to comply with these regulations.

#### **10.3 Assurances**

GoRaleigh annually signs the FTA Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements, which binds GoRaleigh to all civil rights requirements.

Through biannual grant agreements, subrecipients agree to comply with all applicable civil rights statutes and regulations. These include Title VI of the Civil Rights Act, Equal Employment Opportunity, and Americans with Disabilities Act. As subrecipients to GoRaleigh, Section 5310 Program subrecipients must comply with the FTA's Annual List of Certifications and Assurances as stated in their grant agreements with GoRaleigh.

## 10.4 Buy America

Title 49 U.S.C. 5323(j) provides that with limited exceptions, FTA may not obligate funds for a public transportation project unless the steel, iron, and manufactured goods used in the project are produced in the United States. Section 5310 recipients and subrecipients must comply with FTA regulations, 49 CFR part 661. FTA's Buy America requirements at 49 CFR part 661 differ from Federal Buy American regulations at 48 CFR part 25. The former applies to all purchases, including materials or supplies funded as operating costs when funded by FTA, if the purchase exceeds the threshold for small purchases (currently \$100,000), whereas the latter applies to direct federal procurements. FTA strongly advises recipients to review 49 CFR part 661 as well as the current FTA Circular 4220.1, "Third Party Contracting Guidance," before undertaking any procurement. In addition, 49 U.S.C. 5323(j)(9) allows a party adversely affected by an FTA action the right to seek

review. FTA has created a Buy America website to provide an overview of these requirements as well as policies, procedures, and letters of interpretation: <u>http://www.fta.dot.gov/buyamerica</u>.

### 10.5 Drug and Alcohol Testing

Recipients or subrecipients that receive only Section 5310 program assistance are not subject to FTA's drug and alcohol testing rules, but must comply with the Federal Motor Carrier Safety Administration (FMCSA) rule for all employees who hold commercial driver's licenses (49 CFR part 382). Section 5310 recipients and subrecipients that also receive funding under one of the covered FTA programs (Section 5307, 5309, or 5311) should include any employees funded under Section 5310 projects in their testing program.

An FTA compliant testing program, as required by the receipt of FTA operating or capital funding (5307, 5309, 5311), may be used for Section 5310 employees; there is no need to have separate testing programs. Employees of a subrecipient of Section 5310 funds from a state or designated recipient of another FTA program (e.g., 5307 or 5311) should also be included in the designated recipient's testing program.

States and designated recipients that receive funds for Sections 5307, 5309, or 5311, in addition to Section 5310, should consult FTA's regulation at 49 CFR part 655, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations." The regulation applies to recipients of funds identified above. The regulation requires that FTA recipients follow the drug and alcohol testing procedures found in applicable FTA (49 CFR part 655) and DOT (49 CFR part 40) regulations.

Technical assistance materials and training information to help recipients implement the rules are available at FTA's website <u>http://www.fta.dot.gov</u> or through contacting the FTA Office of Safety and Oversight, FTA Headquarters.

#### **10.6 Restrictions on Lobbying**

Federal financial assistance may not be used to influence any member of Congress or an officer or employee of any agency in connection with the making of any federal contract, grant, or cooperative agreement. The state, subrecipients, and third-party contractors at any tier awarded FTA assistance exceeding \$100,000 must sign a certification so stating and must disclose the expenditure of nonfederal funds for such purposes (49 CFR part 20).

Other federal laws also govern lobbying activities. For example, federal funds may not be used for lobbying congressional representatives or senators indirectly, such as by contributing to a lobbying organization or funding a grass-roots campaign to influence legislation (31 U.S.C. 1352). These laws do not prohibit general advocacy for transit. Providing information to legislators about the services a recipient provides in the community is not prohibited, nor is using nonfederal funds for lobbying, so long as the required disclosures are made.

### **10.7 School Bus Transportation**

Title 49 U.S.C. 5323(f) prohibits the use of FTA funds for exclusive school bus transportation for school students and school personnel. The implementing regulation (49 CFR part 605) does permit regular service to be modified to accommodate school students along with the general public ("tripper service"). For the purpose of FTA's school bus regulation, Head Start is considered a social service, not a school program. Rules for the Head Start program limit the types of vehicles that may be used to transport children participating in a Head Start program.

## 11. Section 5310 Program Management

#### 11.1 Maintenance

Consistent with federal requirements, each subrecipient must maintain its facilities (and substantial facility components), vehicles, and other substantial assets.

Subrecipients would be required to submit an annual Owned Rolling Stock Inventory. The inventory will include the following information:

- 1) Year/Make/Model or other ID
- 2) Vehicle Identification Number
- 3) Agency Vehicle Number
- 4) Condition
- 5) Age
- 6) Remaining Useful Life
- 7) Replacement Cost
- 8) ADA Accessibility

The information obtained from these inventories will become part of the inventory record.

Recipients and sub-recipients shall maintain equipment maintenance and inspection records for equipment procured with 5310 funds. Recipients will be required to service the vehicle(s) and equipment, at a minimum, in accordance with the maintenance schedules, and to keep records to show that service was completed. Each recipient will submit certification that service is completed at least as scheduled per the owner's manuals. Request for certification will be sent out annually by GoRaleigh.

During an annual inspection, and/or audit, GoRaleigh will request maintenance records and will select maintenance reports to review to ensure compliance with these provisions and all applicable FTA requirements.

#### **11.2 Procurement**

<u>General.</u> When procuring property, supplies, equipment, or services with funds from an FTA grant, designated recipients that are not states and their subrecipients must comply with FTA procurement requirements at 49 CFR part 18 and guidance contained in the current FTA Circular 4220.1.

#### **11.3 Pre-Award and Post-Delivery Reviews**

Procurements for vehicles, other than sedans or unmodified vans, must be audited in accordance with 49 CFR part 663, "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases." Additional guidance is available in the manual, "<u>Conducting Pre-Award and Post-Delivery Reviews for Bus</u><u>Procurement</u>" on FTA's website. The regulation requires any recipient or subrecipient that purchases rolling stock for use in revenue service with funds obligated after October 24, 1991, to conduct a pre-award and post-delivery review to ensure compliance with its bid specifications, Buy America requirements, and federal motor vehicle safety requirements, and to complete specific certifications. Purchase of more than twenty vehicles for use in areas under 200,000 in population (more than ten, for large urbanized areas), other than unmodified vans or sedans, requires in-plant inspection. In the case of consolidated state procurements on behalf of multiple subrecipients, the in-plant inspection requirement is triggered only if a single subrecipient will receive more than ten or more than twenty vehicles, depending on area size.

## References

Capital Area Metropolitan Planning Organization, Locally Coordinated Human Services Public Transportation Plan, 2019

Chicago Regional Transit Authority, Section 5310 Enhanced Mobility for Seniors and People with Disabilities Program Management Plan, 2018

City of Asheville, Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) Funds Program Management Plan, 2019

City of Raleigh/Capital Area Metropolitan Planning Organization, Program Management Plan for Job Access Reverse Commune and New Freedom Funds, 2008

Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, Program Management Plan Section 5310 Grant: Enhanced Mobility for Seniors and Individuals with Disabilities, 2014

GoRaleigh 5310 Program Management Plan, 2015

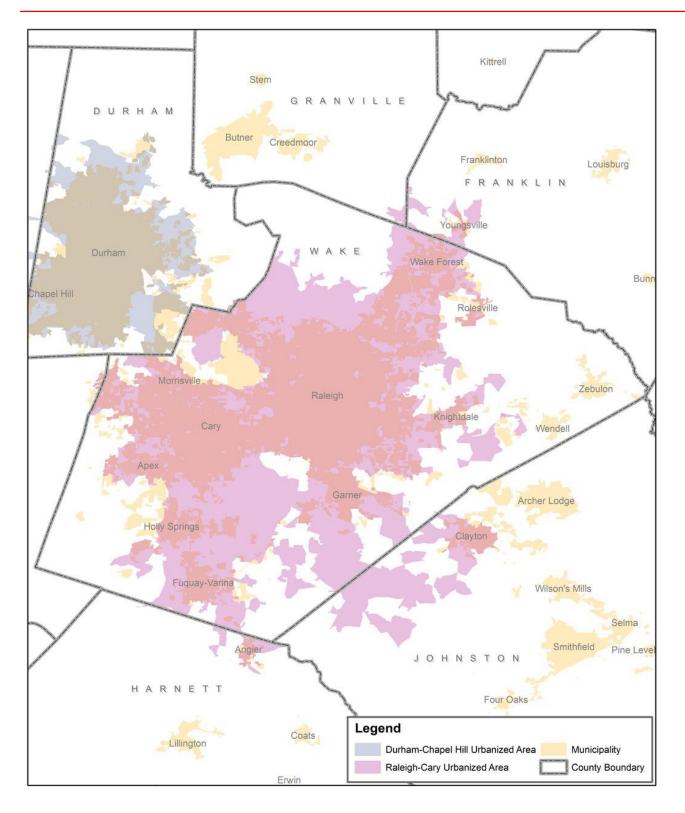
US Department of Transportation, Federal Transit Administration, Circular FTA C9070.1G

## **Appendices**

Appendix A: Cary-Raleigh Urbanized Area Appendix B: Section 5310 Application Form Appendix C: Subrecipient Application Letter Appendix D: Checklist for Project Manager Review of Uniform Audit Requirements for Federal Awards (Uniform Guidance) Appendix E: Definitions

Appendix F: Governing Documents

# **Appendix A: Raleigh-Cary Urbanized Area**



# **Appendix B: Section 5310 Application Form**

# 5310 Funding Program Application

Please complete Parts I-III of the 5310 Funding Program Application. Return the completed application to GoRaleigh as noted in the Application Process section.

## Part I – Funding Request

Applicant Information	ו		
Organization Name:			
Contact Person:			 
Address:			 
City, State, Zip:			
Telephone:		Fax:	 
Email:		Website:	
Project Description			
Title:			 
Brief Description:			
Project Type:			
Service days/hours (if a	pplicable):		 
Estimated Cost per One	e-Way Trip (if appli	cable):	 
Estimated Daily Riders	per Weekday/Wee	kend (if applicable):	 

*Copies of submitted applications may be requested by submitting a <u>Public Records</u> <u>Request</u> to the City of Raleigh.* 

*Translation assistance is available through the City's Language Line Service. GoRaleigh staff will arrange for translations or interpretation services as needed in support of applicants with Limited English Proficiency.* 

## Part II – Project Narrative

Please complete the Project Narrative questions below for your application. These questions closely align with the Project Selection Criteria included in the 5310 Program Management Plan and 5310 Application Package.

#### **Expanded Project Description**

*Please use this space to expand on your project description beyond the brief description provided in Part I of the application if needed.* 

#### **Project Needs**

*How is the proposed project consistent with eligible 5310 program activities and objectives of the 5310 funding program?* 

*Describe how the project will increase or enhance the availability of transportation for the elderly and disabled populations in the Raleigh-Cary Urbanized Area?* 

*What need(s) does the project address in the <u>Locally Coordinated Human Services Public</u> <u>Transportation Plan</u>? Please provide the page number(s) in the <u>Locally Coordinated Human</u> <u>Services Public Transportation Plan</u>.* 

*Does the project provide a service or investment that otherwise would not be available? If so, please explain.* 

#### **Project Planning and Implementation**

*Describe how the proposed project might coordinate or link with other transportation providers or transportation stakeholders?* 

Describe the project timeline and project lifespan.

*Please note how you plan to market your proposed project. If it is an existing service, note how your service is currently marketed.* 

When could your project begin upon receiving funding? Describe the process your organization would take to implement the project.

## **Project Budget**

*In addition to filling out the Proposed Project Budget, note any plans for continued investment and/or maintenance for the proposed project after the 5310 funds are spent. Describe any other funds available currently or for future investments in this project.* 

#### **Program Effectiveness and Evaluation**

How does your organization plan to collect information to monitor quality control and customer satisfaction related to implementing the proposed project? Include in your description any measurable indicators you propose to use.

#### **Organizational Preparedness**

Describe how your proposed project aligns with the overarching mission of your organization.

Describe the staffing plan for this project. Who would be the primary staff person responsible for managing the grant? What other staff would be involved? Describe any relevant past experience these staff have in working on the type of project proposed.

*Please note any experience your organization has with financial reporting such as quarterly reports, annual audits and/or other forms of financial reporting.* 

Describe any training, maintenance, inspections and/or service monitoring you plan to do focused on managing risk and providing safe services.

## Part III – Proposed Project Budget

#### **Project Funding**

Local matching funds are required for all application submittals. For projects requiring operating funds the required match is 50% from non-federal transportation funds. For capital projects the required match is 20%+ from non-federal transportation funds. Some potential capital match exceptions are noted in the FTA guidance and the GoRaleigh 5310 Program Management Plan. An example budget is provided below; applicants should tailor project items as appropriate but submitted budgets should resemble this template.

#### Applicant

						Funds	Requested						Notes
				Traditiona	I			Other					
Line Item	(Appli) re	litional Ca ed to 55% quiremer	6 floor		tal (Tradi d to 55% t uirement	floor	Traditiona l Total	Other Cap (Applied to 459 req.)		Oth Opera (Applied ceiling	tions to 45%	Other Total	
	Fed'l Reques t (80%)*	Local Match (20%)*	Fed'l + Local Reques t	Fed'l Request (85%)	Local Match (15%)	Fed'l + Local Reques t		Fed'l Request (80%)	Local Match (20%)	Fed'l Reques t (50%)	Local Match (50%)	Fed'l + Local Reques t	
Rolling Stock (vehicle,													
lettering, camera)													
Signal and Communication Equipment													
Radio													
Support Equipment & Facilities													
Mobile Surv/Security Equip (Cameras/AVL)													
Personnel Expenses													
Salary & Wages													
Benefits (health, dental, etc)													
Payroll Expenses													
Office Expenses													
Office Supplies													
Printing & Copying													
Occupancy Expenses													
Rent & Utilities													

Repairs & Maintenance Bldg.												
Other Operating Expenses												
Materials & Supplies												
Business Insurance												
Travel												
Mobility Management												
Marketing												
Contractual Services												
Direct Purchase Service												
Direct Purchase Service												
					\$	\$						
Total Budget	0	0	0	\$-	-	-	0	0	0	0	0	

Funding Type	Capital and Operating Funds Totals			Traditional Capital and Other Funds Totals			
	Federa			Traditiona			
	1	Local	Total	1	Other	Total	
	\$	\$	\$				
ADA Capital Funds	-	-	-				
	\$	\$	\$				
Capital Funds	-	-	-				
	\$	\$	\$				
Operating Funds	-	-	-				

\*Modify as needed if the applicant is seeking a 90% Federal, 10% local match funding split for vehicle related equipment and facilities.

Note: The applicant must demonstrate a commitment to provide local funds and provide appropriate documentation. Documentation may be in the form of a letter or other supporting documentation noting where funds will be drawn from.

Prior to any applications for a request to receive and use federal funds, the project needs to demonstrate that it meets all local, state and FTA requirements and that it is eligible to receive federal funds. Any match funding source outside the standards established by FTA must receive written approval from FTA to be used. Match funding should adhere to the following:

- A. Must be from an eligible funding source under FTA guidelines;
- B. Must be available at the time of the grant award;
- C. Match funding must be spent to qualify as a match;
- D. No federal funds may be drawn without authorization and availability of a sufficient match funding source;
- E. Subrecipients must certify the use of local match with the submission of each invoice;
- F. Subrecipients are required to provide quarterly reports that account for the use of local funds as match.

# **Appendix C: Subrecipient Application Letter**

Date Name Address City, State Zip

Re: Subrecipient Project X, Federal Transit Administration Apportionment GoRaleigh Application for Federal Transit Administration funding Dear Subrecipient:

The City of Raleigh (GoRaleigh), as the designated recipient of Federal Transit Administration (FTA) funds for the Raleigh-Cary Urbanized Area, will make an application for FTA to support the above referenced project. By accepting these federal funds, your organization will be recognized as a subrecipient and, as such, is subject to all FTA federal requirements.

I have been assigned as GoRaleigh's project manager for project oversight and will coordinate the process with you. The subrecipient agreement will be processed concurrently with the federal application to help shorten the process; however, no agreement can be executed until the federal award is received.

As part of the application process, you will be required to complete the application form that provides the project detail, budget and milestones. You will also be required to submit your current audit in accordance with the latest Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) and sign the FTA Certifications and Assurances. No application for federal funds will be made until this information is received and accepted.

Please send all questions regarding compliance or needs for approval directly to me so I can track the required approvals or changes to your project. I will forward requests to the appropriate staff to obtain approvals or interpretations.

Please note that Certifications and Assurances must be completed annually for the duration of your active grant. All organizations are required to certify compliance with numbers one and three. If other certifications apply to this project and your organization, you also should certify those.

Once the application is processed and awarded, GoRaleigh will be able to enter into a subrecipient agreement with your organization. Until the Subrecipient agreement is signed, you do not have funding.

I look forward to working with you throughout the grant process.

Regards, Project Manager's Name

Project Manager's Title

# Appendix D: Checklist for Project Manager Review of Uniform Guidance Audit Findings

# SUBRECIPIENT MONITORING – AWARD PHASE COMPLIANCE CHECKLIST

Subrecipient:		
Reviewer:	Date	
Program/Contract Type:		
Contract Number:		

Distribute, collect, and revi documents (certifications a assurances, award agreen Title VI certifications; see a

		Con	nple	te?		
Area	Requirement	Yes / Dat e	N 0	n/ a	Corrective Action	Due Dat e
Pre-Award R	equirements					
Application Letter	Subrecipient shall submit a complete application to GoRaleigh for FTA grant funds and received notification from GoRaleigh that its application has been received.					
Local Match Documentat ion	Subrecipient shall provide GoRaleigh with documentation of a local match for FTA grant funds requested.					
Timeline and Milestones	Subrecipient shall complete forms for project description/detail, budget, and timeline/milestones.					
Certification	Subrecipient shall provide Authorized Representative					
s and Assurances	and Applicant Attorney Signatures in trAMS or on the annual assurances document for Required Certifications and Assurances. ( <i>Applies to all</i> <i>subrecipients;</i> <u>pages 17-18</u> )					
Post-Award		1				
Award Agreements	GoRaleigh and Subrecipient shall execute an award agreement within 90 days of award. Subrecipient shall receive a copy of the fully executed agreement and interlocal agreement. ( <i>Applies to all</i> <i>subrecipients</i> )					
Title VI (First-time applicants)	Entities applying for FTA funding for the first time shall provide information regarding their Title VI compliance history if they have previously received funding from another Federal agency. ( <i>Applies to all</i> <i>subrecipients</i> ; <u>FTA C 4702.1B III-1</u> .)					

# **Appendix E: Definitions**

- Aging Population: See "Senior."
- Americans with Disabilities Act (ADA) is Public Law 336 of the 101st Congress, enacted July 26, 1990 (42 U.S.C. 12101 et seq.), and later amended January 1, 2009. The ADA prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, state, and local government services, public accommodations, commercial facilities, and transportation.
- **Capital Expense** means an expense directly related to the acquisition, construction, and improvement of facilities or equipment used for public transportation purposes, including, but not limited to, vehicles and related equipment.
- **Coordinated Human Services Transportation** means transportation services provided by or on behalf of a human service agency to provide access to agency services and/or to meet the basic, day-to-day mobility needs of transportation-disadvantaged populations, especially individuals with disabilities, older adults, and people with lower income.
- **Designated Recipient**: An entity designated, in accordance with the planning process under sections 5303 and 5304 of title 49, United States Code, by the governor of a state, responsible local officials, and publicly owned operators of public transportation, to receive and apportion amounts under 49 U.S.C. 5336 to urbanized areas of 200,000 or more in population; or a state or regional authority, if the authority is responsible under the laws of a state for a capital project and for financing and directly providing public transportation.
- **Disability:** The term disability has the same meaning as in section 3(1) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102). The term "disability" means, with respect to an individual -
  - a physical or mental impairment that substantially limits one or more major life activities of such individual;
  - a record of such an impairment; or
  - being regarded as having such an impairment.
- **Equipment:** An article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost that equals or exceeds the lesser of the capitalization level established by the governmental unit for financial statement purposes, or \$5,000. Equipment includes rolling stock and all other such property used in the provision of public transit service.
- **Grant:** An award of financial assistance, including a cooperative agreement, in the form of money, or property in lieu of money, by the federal government to an eligible recipient or recipients. Used interchangeably with grant agreement.
- **Human Service Transportation**: Transportation services provided by or on behalf of a human service agency to provide access to agency services and/or to meet the basic, day-to-day mobility needs of transportation-disadvantaged populations, especially individuals with disabilities, seniors, and people with low incomes.

- Individual With a Disability means an individual who, because of illness, injury, age, congenital malfunction, or other incapacity or temporary or permanent disability (including an individual who is a wheelchair user or has semi-ambulatory capability), cannot use effectively, without special facilities, planning, or design, public transportation service or a public transportation facility. 49 U.S.C. 5302(a)(5).
- Job Access and Reverse Commute Program (JARC) means the FTA formula grant program under SAFETEA-LU for projects relating to the development and maintenance of transportation services designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment, and for public transportation projects designed to transport residents of urbanized areas and nonurbanized areas to suburban employment opportunities. 49 U.S.C. 5316. This program was eliminated under MAP-21.
- **Large Urbanized Area:** An urbanized area (UZA) with a population of 200,000 or more individuals, as determined by the Bureau of the Census.
- Local Government Agency includes a political subdivision of a state; an authority of at least one state or political subdivision of a state; an Indian tribal government; and a public corporation, board, or commission established under the laws of a state.
   Master Agreement: The FTA official document containing FTA and other cross-cutting federal requirements applicable to the FTA recipient and its project(s). The master agreement is generally revised annually in October. The master agreement is incorporated by reference and made part of each FTA grant, cooperative agreement, and amendment thereto.
- **Mobility Management** consists of short-range planning and management activities and projects for improving coordination among public transportation and other transportation-service providers carried out by a recipient or subrecipient through an agreement entered into with a person, including a government entity, under 49 U.S.C. Chapter 53 (other than Section 5309). Mobility management does not include operating public transportation services.
- **Net Project Cost:** The part of a project that reasonably cannot be financed from operating revenues (i.e., farebox recovery).
- New Freedom Program means the FTA formula grant program under SAFETEA-LU for new public transportation services and public transportation alternatives beyond those required by the Americans with Disabilities Act of 1990 (ADA) (42 U.S.C.12101 et seq.) that assist individuals with disabilities with transportation, including transportation to and from jobs and employment support services. 49 U.S.C. 5317. This program was eliminated under MAP-21.
- **Nonprofit Organization**: A corporation or association determined by the Secretary of the Treasury to be an organization described by 26 U.S.C. 501(c) which is exempt from taxation under 26 U.S.C. 501(a) or one which has been determined under state law to be nonprofit and for which the designated state agency has received documentation certifying the status of the nonprofit organization.
- Older Adults: See "Senior."
- **Operating Expenses:** Those costs necessary to operate, maintain, and manage a public

transportation system. Operating expenses usually include such costs as driver salaries, fuel, and items having a useful life of less than one year.

- **Paratransit** means comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed-route public transportation systems.
- **Pre-award Authority** means authority given under specific and limited circumstances to incur costs for eligible projects before a grant is made without prejudice to possible Federal participation in the cost of the project(s). Applicants must comply with all Federal requirements. Failure to do so will render a project ineligible for FTA financial assistance.
- **Program of Projects** means a list of projects to be funded in a grant application submitted to FTA by a recipient. The program of projects (POP) lists the subrecipients and indicates whether they are private non-profit agencies or local governmental authorities, designates the areas served (including rural areas), and identifies any tribal entities. In addition, the POP includes a brief description of the projects, total project costs, Federal share for each project, and the amount of funds used for program administration from the 10 percent allowed.
- **Public Transportation**: Regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income and does not include: intercity passenger rail transportation provided by Amtrak, intercity bus service, charter bus service, school bus service, sightseeing service, courtesy shuttle service for patrons of one or more specific establishments, or intraterminal or intrafacility shuttle services.
- **Recipient:** For purposes of this circular, a designated recipient or a state that receives a grant under Section 5310 directly.
- **Rural Area:** An area encompassing a population of fewer than 50,000 people that has not been designated in the most recent decennial census as an urbanized area by the Secretary of Commerce.
- **Senior:** An individual who is 65 years of age or older.
- **Small Urbanized Areas:** A UZA with a population of at least 50,000 but less than 200,000, as determined by the Bureau of the Census.
- **Subrecipient:** For the purposes of this circular, a state or local governmental authority, a private nonprofit organization, or an operator of public transportation that receives a grant under Section 5310 indirectly through a recipient.
- **Traditional Section 5310 Projects:** Those public transportation capital projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.
- **Transportation Improvement Plan (TIP)** is a six-year program of highway and transit projects for the urbanized areas. It is a compilation of projects from the various federal, state, and local funding programs for all the cities and counties in the Region, as well as for the state DOT and the local transit agencies.
- **Urbanized Area (UZA):** An area encompassing a population of not less than 50,000 people that has been defined and designated in the most recent decennial census as an urbanized area by the Secretary of Commerce.

# **Appendix F: Governing Documents**

Federally Required Documents and Other Modal Clauses

Refer to Appendix A of the FTA **<u>Best Practices Procurement Manual</u>** 

# Placeholder

# Procurement Manual (pending consideration)



# Schedule of Subrecipient Title VI Program Submissions

	Organization	Most Recent Title VI
		Program submittal
		to GoRaleigh
1.	Universal Disability Advocates d/b/a Alliance of Disability Advocates	June 5, 2020
2.	Arc of the Triangle	June 5, 2020
3.	Center for Volunteer Caregiving	June 5, 2020
4.	Community and Senior Services of Johnston County	June 5, 2020
5.	GoTriangle	June 5, 2020
6.	GoWake Access	June 5, 2020
7.	Western Wake Crisis Ministry	June 5, 2020

# Section 4

# **Facilities and Corridor Development**

# **Facilities and Corridor Development Project Log**

Project Status (Draft Complete, Final Complete, Study Initiated)	Equity or EJ Analysis Timing (Planning, NEPA)	Document Date (MM/YYYY)	Title VI/ EJ Population Identified? (Y/N)	Title VI/ EJ Impacts Identified? (Y/N)	Mitigation Identified (Y/N/N/A)
Complete	NEPA	05/26/2020	N	N	N/A
Draft	NEPA	In Progress	In Progress	In Progress	In Progress
	(Draft Complete, Final Complete, Study Initiated) Complete	(Draft Complete, Final Complete, Study Initiated) Complete Complete Kerker Ker Ker Kerker Ker Kerker Ker Kerker Ke	(Draft Complete, Final Complete, Study Initiated)Analysis Timing (Planning, NEPA)Date (MM/YYY)CompleteNEPA05/26/2020	(Draft Complete, Final Complete, Study Initiated)AnalysisDate (MM/YYY)Population Identified? (Y/N)CompleteNEPA05/26/2020N	(Draft Complete, Final Complete, Study Initiated)Analysis Timing (Planning, NEPA)Date (MM/YYYY)Population Identified? (Y/N)Impacts Identified? (Y/N)CompleteNEPA05/26/2020NN

## **INFORMATION REQUIRED TO INITIATE NEPA**

**A CHECKLIST** 

For FTA to determine the extent of environmental analysis required for a proposed project, we must have a clear idea of what it may do to the environment. This includes the **natural environment** (soil, water, air, flora/fauna) *and* the **human environment** (socioeconomics, land use, traffic, etc.). Additionally, FTA must determine whether any Federal funding is sought (now or in the future) for the proposal and if FTA is required to make a decision or approval (e.g., approval for incidental use of property).

#### INFORMATION REQUIRED

- □ Sources of federal, state, and local funds and transit nexus
- Description of existing property with a clear map showing the Area of Potential Effect (APE)
- □ Street address or coordinates
- □ Photos of property, any buildings on property and the surrounding area directly adjacent to the project site.
- Photos of surrounding buildings visible from property
- Description of complete project with site plan. Be specific for each action of the project.

- List of actions required upon existing property to achieve complete project (e.g., clear 5 acres of wooded land, demolish building, culvert and cover
   Logical termini, alignment, mode, and technology (if a linear project).
- List of any public involvement done for the project, to date, if any

#### **QUESTIONS to be ADDRESSED**

Is the project a Federal Action eligible for FTA funding?

What are the Existing conditions? Cleared land? Forested land? Any water? Urban area? Rural area? Suburban neighborhood? Gently rolling, flat or hilly land? Modern visual intrusions in the area, such as cell towers, modern buildings, etc.?

Are there possible environmental areas of concern at the site or in its surroundings? Any known hazards? Existing buildings contain lead paint/asbestos? Standing water on site? Industrial site? Industrial sites within a block of the project site? In a historic district?

What are the characteristics of the natural environment of the property? Provide photos of the land in all directions and of any buildings or structures on the land. Might any of the buildings be historic? Are the buildings in use? Are the buildings safe? Who/what industry occupies the building? Are there any nearby buildings that may be historic? Any new construction visible from the project site? Number of stories of the buildings surrounding the project site.

What physical changes will be made to the existing site? Any digging or other ground disturbing activities such as clearing and grubbing? Will a building be constructed? Will an existing building be renovated or rehabilitated? Will parking be added or subtracted? Any changes to the traffic amount or flow due to the project? Provide any renderings that are available of the existing project site and the planned work. Be specific about actions, such as replacement of windows/doors, new construction, etc.

Are there physical changes that are not obvious in the site plan? (e.g., excavation for a basement, fuel storage)

Has thorough planning for the proposed project occurred? (3 out of 4 are typically enough to begin NEPA.) Any feasibility or environmental studies been completed? If so, please attach to the checklist document. Has the community affected by the project been informed? If so, when was the community engaged/informed? Is there any potential controversy? Are there any local organizations that should be informed?

The more information FTA knows about a project, the more accurate we can be in assigning the most appropriate level of environmental analysis.

#### Sources of federal, state and local funds and transit nexus:

Federal funding from the Urbanized Area Formula Program (Section 5307) is anticipated for the project. Matching funds are being provided through the local municipality's general funding. The proposed project is included in the 2018-2027 CAMPO Amended Transportation Improvement Program (TIP) and the North Carolina Department of Transportation (NCDOT) Division 5 State Transportation Improvement Program (STIP), with a request for STIP ID and its anticipated approval in June 2020.

#### **Description of Existing Property:**

The proposed project will be located on the north side of Navaho Drive from 720 feet west of Pinecrest Drive to Bush Street in Raleigh, Wake County *(see Project Maps)*. The terminus of the proposed sidewalk project is located directly across from Wake Technical Community College Campus and Duke Raleigh Hospital at Wake Forest Road. The proposed project will be constructed within undeveloped, existing right of way, with no additional right of way acquisition or easement needed. An unnamed tributary of Crabtree Creek is carried under existing Navaho Drive in a 72-inch corrugated metal pipe. Crabtree Creek and its tributaries are Class C; NSW; 303(d) impaired waters. The Neuse River Basin buffer rules apply to this stream.

#### **Street Address or Coordinates:**

Project limit is nearest 1198 Navaho Drive Raleigh, NC 27609



**Photos of building on property:** Not applicable

#### Photos of surrounding buildings visible from property:



#### Description of complete project with site plan:

The purpose of the proposed project is to improve pedestrian safety, mobility and connectivity from Wake Forest Road to the Wake Technical Community College Campus on Navaho Drive.

Sidewalk exists along both sides of Navaho Drive from Wake Forest Road to approximately 800 feet west of Pinecrest Drive. Existing sidewalk on the north side of Navaho Drive extends further than sidewalk on the south side, ending approximately 720 feet west of Pinecrest Drive.

The completion of this segment of sidewalk will provide direct access from the Wake Technical Community College campus on Navaho Drive to Duke Raleigh Hospital on Wake Forest Road. Currently, a bus connects the Wake Tech campus to Duke Raleigh Hospital.

The only missing section of sidewalk between Wake Tech and Duke Raleigh Hospital is the section currently proposed. Students and area residents wishing to walk to and from these locations must either walk in yards or on the street if they choose not to take the bus.

The proposed project involves constructing a six-foot wide sidewalk on the north side of Navaho Drive from 720 feet west of Pinecrest Drive to Bush Street in Raleigh, Wake County. Curb and gutter, sidewalk, guardrail, retaining walls, and handrails will be added along the north side of Navaho Drive. The project is approximately 1,575 feet long.

In addition to the proposed sidewalk, an approximately 284-foot long retaining wall and handrails will be required at the Navaho Drive crossing of an unnamed stream. No instream work is proposed, the project will not extend the existing pipe. Rock plating will be placed between the proposed retaining wall and the existing wingwalls of the pipe. A Neuse riparian buffer permit may be required for the placement of this rock plating. Curb and gutter will be constructed within the project limits along the north side of Navaho Drive in areas where it does not currently exist. The existing guardrail on the north side of Navaho Drive will be replaced with new guardrail placed between the curb and the sidewalk. An approximately 485-foot long retaining wall will be constructed on the north side of Navaho Drive between Pinecrest Drive and Bush Street.

#### List of actions required upon existing property to achieve complete project:

- Curb and gutter along the corridor where the sidewalk is being constructed;
- A 6-foot wide sidewalk on the north side of the roadway; and,
- Retaining walls to limit impacts to the existing properties along the corridor.

#### Logical termini, alignment, mode, and technology:

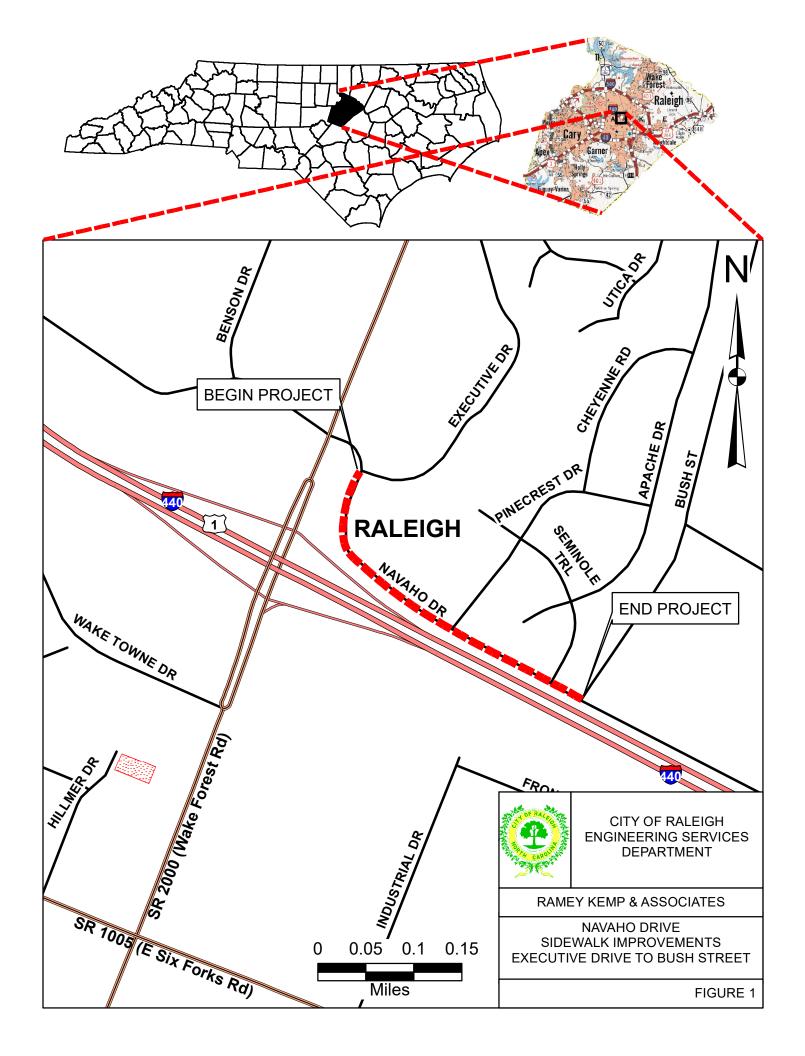
Not applicable.

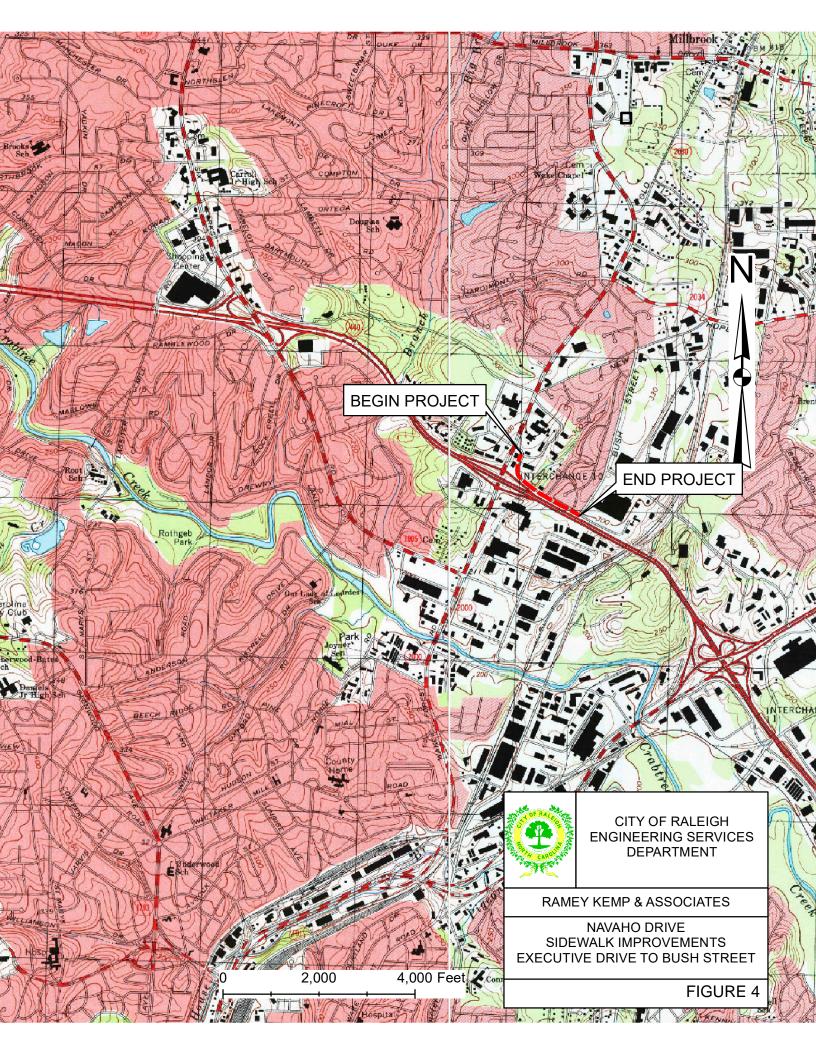
#### List of any public involvement done for the project:

- A public meeting was held on March 10<sup>th</sup> from 5pm to 6:30pm, located at Wake Technical Community College, nearest the project site
  - $\circ$   $\;$  Public comments were collected from March 10^{th} until March 24^{th}
  - o 9 attendees to the public meeting; 2 comments received at the meeting in support of the project









From:	Walker, Julia (FTA) <julia.walker@dot.gov></julia.walker@dot.gov>
Sent:	Tuesday, May 26, 2020 12:44 PM
To:	Simmons, Morgan
Cc:	Orr, Parris (FTA)
Subject:	Navaho Drive NEPA Determination
Importance:	High
Follow Up Flag:	Follow up
Flag Status:	Flagged

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you verify that the attachment and content are safe. If you believe this email is suspicious, please click the 'Phish Alert' link in the banner to report this message.

#### Morgan,

FTA has reviewed the documentation relating to the proposed Navaho Drive Sidewalk project and FTA has determined that the proposed project qualifies for a Listed Categorical Exclusion. Specifically, CE #5:

(5) Activities, including repairs, replacements, and rehabilitations, designed to promote transportation safety, security, accessibility and effective communication within or adjacent to existing right-of-way, such as: the deployment of Intelligent Transportation Systems and components; installation and improvement of safety and communications equipment, including hazard elimination and mitigation; installation of passenger amenities and traffic signals; and retrofitting existing transportation vehicles, facilities or structures, or upgrading to current standards.

The Section 106 required for this proposed project is complete per the documentation submitted to FTA on 5/15/2020 that complies with 36 CFR Part 800.

NEPA is complete for this proposed project. Please note that it is the responsibility of your office to inform FTA of any changes to the proposed project as FTA will need to reevaluate the NEPA to determine if there is a change to the NEPA class of action.

Please attach this email to your grant in TrAMS.

Best, Carrie

#### Federal Transit Administration Region 4

230 Peachtree St. NW, Ste. 1400 Atlanta, GA 30303 *O: (404) 865-5645* julia.walker@dot.gov **Section 5** 

**Title VI Program** 

# **Placeholder** Title VI Board Approval for 2021 Update

Records / TrAMS | Recipient Organizations

# Raleigh, City Of | RALEIGH CITY OF | 1065

Summary

Applications/Awards TrAMS Users Locations

Designated Recipient Suballocations News

Related Actions

1/3

# Certifications & Assurances | FY 2020 C&A Affirmations

#### **Recipient Details**

**Recipient ID** 

1065

#### **Certification and Assurance Information**

Fiscal Year 2020

Assigned Date 2/28/2020

Due Date 5/28/2020

#### **Published Certifications and Assurances**

FTA CERTIFICATIONS AND ASSURANCES

#### Public Transportation Agency Safety Plan (PTASP)

On or before December 31, 2020, applicants and recipients of Section 5307 grants and rail transit agencies that are subject to the State Safety Oversight Program must certify to Category 2: Public Transportation Agency Safety Plans. Due to the Coronavirus Disease 2019 (COVID-19) public health emergency, FTA has issued a Notice of Enforcement Discretion stating that FTA will refrain from taking enforcement action related to the PTASP regulation until January 1, 2021. While applicants and recipients are encouraged to certify by the original deadline of July 20, 2020, to the extent practical, those who do not certify compliance until December 31, 2020, remain eligible for Chapter 53 grant funds.

List of All Applicable Agencies

PTASP Technical Assistance Center

#### **Certifications and Assurances**

#### **Certification History**

Certification Date: 4/28/2020 | Official: Ruffin Hall | Attorney: Robin Currin Ce rti Category Title fie d 01 Certifications and Assurances Required of Every Applicant  $\checkmark$ 02 Public Transportation Agency Safety Plans  $\checkmark$ 03 Tax Liability and Felony Convictions 04 Lobbying 05 Private Sector Protections ~ 06 Transit Asset Management Plan 07 Rolling Stock Buy America Reviews and Bus Testing 08 Urbanized Area Formula Grants Program 09 Formula Grants for Rural Areas Fixed Guideway Capital Investment Grants and the Expedited Project 10 Delivery for Capital Investment Grants Pilot Program

**Recipient Name** Raleigh, City Of

C&A Form

Original Certification Date 4/28/2020 Latest Certification Date 4/28/2020

C&A Form

Category	Title	Ce rti fie d
11	Grants for Buses and Bus Facilities and Low or No Emission Vehicle Deployment Grant Programs	
12	Enhanced Mobility of Seniors and Individuals with Disabilities Programs	
13	State of Good Repair Grants	⊘
14	Infrastructure Finance Programs	•
15	Alcohol and Controlled Substances Testing	•
16	Rail Safety Training and Oversight	•
17	Demand Responsive Service	•
18	Interest and Financing Costs	⊘
19	Construction Hiring Preferences	•
20	Cybersecurity Certification for Rail Rolling Stock and Operations	•
	1 - 20	of 20

#### Documents

#### **Existing Documents**

Document	Description	Uploaded By	Date					
No items available								

#### **Affirmation of Applicant**

Affirmation of Applicant BY SIGNING BELOW, on behalf of the Applicant, I declare that it has duly authorized me to make these Certifications and Assurances and bind its compliance. Thus, it agrees to comply with all federal laws, regulations, and requirements, follow applicable federal guidance, and comply with the Certifications and Assurances as indicated on the foregoing page applicable to each application its Authorized Representative makes to the Federal Transit Administration (FTA) in federal fiscal year 2020, irrespective of whether the individual that acted on his or her Applicant's behalf continues to represent it. FTA intends that the Certifications and Assurances the Applicant selects on the other side of this document should apply to each Award for which it now seeks, or may later seek federal assistance to be awarded during federal fiscal year 2020.

The Applicant affirms the truthfulness and accuracy of the Certifications and Assurances it has selected in the statements submitted with this document and any other submission made to FTA, and acknowledges that the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq., and implementing U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR part 31, apply to any certification, assurance or submission made to FTA. The criminal provisions of 18 U.S.C. § 1001 apply to any certification, assurance, or submission made in connection with a federal public transportation program

In signing this document, I declare under penalties of perjury that the foregoing Certifications and Assurances, and any other statements made by me on behalf of the Applicant are true and accurate.

Official's Name Ruffin Hall

I accept the above

authorized by 49 U.S.C. chapter 53 or any other statute.

Certification Date Apr 28, 2020

#### **Affirmation of Attorney**

Affirmation of Applicant'sAs the undersigned Attorney for the above-named Applicant, I hereby affirm to the Applicant that it has authority underAttorneystate, local, or tribal government law, as applicable, to make and comply with the Certifications and Assurances as<br/>indicated on the foregoing pages. I further affirm that, in my opinion, the Certifications and Assurances have been legally

#### C&A Form

	made and constitute legal and binding obligations on it.
	I further affirm that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these Certifications and Assurances, or of the performance of its FTA assisted Award.
Attorney's Name	Robin Currin
	I accept the above
Certification Date	Apr 28, 2020
CANCEL	



February 27, 2018

Ms. Dee Foster Civil Rights Officer, FT A Region IV Federal Transit Administration 230 Peachtree, NW Suite 1400 Atlanta, GA 30303

Dear Ms. Foster:

The City of Raleigh Transit Program provides transportation services to include fixed route bus service, express bus, and Americans with Disabilities Act (ADA) paratransit service through it transit program known as GoRaleigh ACCESS. In 2015, the City of Raleigh submitted a report to the Federal Administration (FTA) providing for a program that ensures that transit and paratransit services in the City of Raleigh and Wake County are made available, are equitably distributed, and provide equal access and mobility to any person without regard to race, color, or national origin. This program is updated every three years and has received approval from the FTA through February 1, 2018.

This update for 2018-2020 has been prepared pursuant to the Title VI of the Civil Rights Act of 1964; FTA Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" published October 1, 2012. This update also summarizes the City of Raleigh's transit service provisions since the last program was approved. This update will provide compliance with all parameters of the FTA Title VI Compliance Checklist for transit providers operating 50 or more fixed –route vehicles in peak service and located in an urbanized area of 200, 000 or more in population.

If you have any questions or comments regarding the Title Vi program update for the City of Raleigh, please do not hesitate to contact Richard Vinson, Senior Transit Planner, either by through email at <u>Richard.Vinson@raleighnc.gov</u> or by telephone at 919-996-4087.

Sincerely,

David Eatman Transit Administrator



U.S. Department of Transportation Federal Transit Administration

REGION 4 Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the US Virgin Islands 230 Peachtree, NW Suite 1400 Atlanta, GA 30303

September 30, 2019

Marie Parker, General Manager City of Raleigh, NC, Recipient ID: 1065 222 W HARGETT ST RALEIGH, NC 27601

Re: Triennial Title VI Program Update

Dear Marie Parker, General Manager,

The Federal Transit Administration (FTA) has received and reviewed City of Raleigh, NC's initial Title VI program submitted on 3/23/2018. This Title VI program will be effective until January 31, 2021. The Department of Transportation (DOT) requires recipients of DOT funds to demonstrate compliance with Title VI of the Civil Rights Act of 1964 through regular compliance reports. The Federal Transit Administration's (FTA) Circular 4702.1B, "Title VI Program Guidelines for Federal Transit Administration Grantees" sets forth the information that should be included in these updates, and requires they be submitted as Title VI Programs submitted every three years.

FTA's review of your Title VI program considered all elements required by the Department of Transportation regulations found at 49 C.F.R. § 21, as outlined in Circular 4702.1B. The Review Assessment attached to this letter identifies the specific areas reviewed, any concerns, and relevant reviewer comments. To assure you are implementing Title VI program requirements in accordance with the regulations, you must promptly address and correct any concerns identified with a "no" in the Review Assessment. Your program status is now *Concur. Please note that your next triennial Title VI program submission was due to FTA is due by no later than* February 1, 2021. Please retain documentation as needed to demonstrate the corrections noted have been addressed. FTA typically verifies corrections have been made and implemented at the next oversight opportunity, but can request this information at any time.

**For Everyone:** Your Title VI program demonstrates your agency has the procedures and resources to ensure public transportation services are provided in a nondiscriminatory manner, as required by Title VI of the Civil Rights Act of 1964. FTA's review and concurrence on a Title VI program does not relieve recipients from the requirements and responsibilities outlined in Circular 4702.1B or of the DOT Title VI regulation at 49 CFR part 21. You must properly implement your program to ensure nondiscriminatory service, including full and fair participation in public transportation decision-making, and meaningful access to transit-related programs and activities by persons with limited English proficiency. If you use contractors or have subrecipients, you must monitor their compliance with Title VI. You can find these

monitoring responsibilities in Chapter 2, Section 6 (Contractors) and Chapter 3, Section 12 (Subrecipients) in the FTA Title VI Circular. As a basic requirement for Title VI compliance, you must develop a language assistance plan (LAP). Your LAP must include a Four Factor Analysis—you can find information on this analysis in Chapter 3, Section 6 of the FTA Title VI Circular. If you believe that your agency only serves an English-speaking population, you still must complete a Four Factor Analysis to demonstrate this.

**For 200/50 Recipients:** Prior to implementing any major service changes or any fare change, transit agencies operating more than 50 vehicles in large urbanized areas must complete an equity analysis, and submit it for board review and approval. You can find more information on SAFE Analyses in Chapter 4, Section 7 of the FTA Title VI Circular. Large transit agencies must also collect and report demographic data, including data gathered through rider surveys, and monitor transit service relative to system-wide service standards and service policies. If you need technical assistance with you Service and Fare Equity (SAFE) Analysis, please contact your Regional Civil Rights Officer.

**For State DOTs:** Your Title VI program must include a demographic profile of your state that includes the locations of minority populations. You must also submit additional data and information as outlined in Chapter 5, Section 2 of the FTA Title VI Circular. If you pass through funds to any Metropolitan Planning Organizations (MPO), then you must collect Title VI programs from them on a schedule that you determine.

**For MPOs:** Your Title VI program must include a demographic profile of your metropolitan area that includes the locations of minority populations. You must also submit additional data and information as outlined in Chapter 6, Section 2 of the FTA Title VI Circular. FTA is committed to providing technical assistance to help correct your Title VI program and to implement your program consistent with the regulations and guidance.

FTA is committed to providing technical assistance to help correct your Title VI program and to implement your program consistent with the regulations and guidance. In order to preserve paper, we are issuing this letter electronically via email and it is attached to your profile in TrAMS. In the attached document, you will see the results of your Title VI Program Review. Please do not hesitate to contact me directly at 404-865-5639 or at sarah.majdiak@dot.gov if you have any questions or would like to talk further about Title VI or any of your other Civil Rights programs.

Sincerely,

Sarah Majdiak/s/ Civil Rights Officer, Region 4

cc: Yvette G. Taylor, FTA Region 4, Regional Administrator Monica McCallum, FTA Civil Rights, Director of Regional Operations

# **Title VI Program Review Assessment:**

Items below identified as "YES" are included in the Title VI program review, and no changes are needed. Items identified as "NO" were not included or were insufficient and must be corrected. Carefully address all insufficient items, as indicated in this review letter, to ensure you are implementing your Title VI program in accordance with the regulations.

# Chapter 3: GENERAL REQUIREMENTS AND GUIDELINES

Does the program submission include appropriate documentation demonstrating that the transit board of directors has approved the Title VI program? *Yes* 

## **Public Notice**

Does the submission include a copy of the public notice informing the public of the protections against discrimination afforded to them under Title VI? *Yes* 

Is there a list of public locations where the notice is posted? No

Did you verify the notice is posted on the agency's website and in public areas of the agency's offices? *Yes* 

Does the public notice include how to request additional information on your Title VI obligations? *Yes* 

Does the public notice include how to file a complaint? Yes

## **Complaint Procedures**

Did you include the (internal to the agency) procedures for investigating and tracking Title VI complaints filed against them? *Yes* 

Did you include the instructions it gives to members of the public about how to file a Title VI discrimination complaint? *Yes* 

Are the procedures for filing a Title VI discrimination complaint available on the agency website? *Yes* 

# **Complaint Form**

Does the program include a copy of the complaint form that specifies the three classes protected by Title VI (race, color, and national origin)? *Yes* 

Is the complaint form available on the agency's website? Yes

Did you include a list of any of the following that allege discrimination on the basis of race, color, or national origin: active investigations conducted by entities other than FTA; lawsuits; and/or complaints naming the recipient? N/A - no complaints received

# **Public Participation Plan**

Did you include a Public Participation Plan that describes the proactive strategies, procedures, and desired outcomes of public participation activities? *Yes* 

Does the Public Participation Plan include information on how the grantee considers the needs of, and engages minority and LEP populations in public participation activities? *Yes* 

Did you summarize the public outreach and involvement activities undertaken in the last 3 years? *No* 

## **Board Selections**

Did you select members to transit-related, non-elected planning boards, advisory councils or committees? *Yes* 

If you select members, did you provide a table with a racial breakdown of the membership of those boards, councils, or committees? *Yes* 

Did you describe how they encourage minorities to participate on these boards, councils, and committees? *Yes* 

## **Subrecipient**

Does the program indicate if you have subrecipients? Yes

If you have subrecipients, did you provide the monitoring procedures and/or efforts you use to ensure subrecipients comply with Title VI? *No* 

Did you describe the process used to provide assistance to subrecipients, when needed? No

## LEP Four-Factor Analysis & Plan

Did you include a Language Assistance Plan? Yes

Does the Language Assistance Plan include a Four-Factor Analysis that determines the appropriate level of LEP assistance and outreach efforts needed? *Yes* 

Did your Language Assistance Plan NOT include something? Not Included

# **Facility Site Equity Analysis**

Did you identify a site or location for a new facility (excluding bus shelters) or construct a facility during the period covered by your program? *Yes* 

Did you complete and submit an equity analysis conducted during the planning stage for all projects requiring land acquisition and the displacement of persons from their residences and businesses? *Yes* 

Did the site analysis include outreach to persons potentially impacted by the siting of facilities? *Yes* 

Did the site analysis compare the equity impacts of alternative locations prior to selecting the preferred site? *Yes* 

Did you give attention to other facilities with similar impacts in the area to determine if any cumulative adverse impacts might result? *No* 

Did you determine that the location of the project will result in a disparate impact on the basis of race, color, or national origin? *No* 

Did you provide a substantial legitimate justification for the project location? To do so, you must demonstrate that either 1) no alternative locations are available, or 2) any alternative locations, if identified, would result in the same or more disparate impact on the basis of race, color, or national origin. *Yes* 

# Chapter 4: FIXED ROUTE TRANSIT PROVIDER REQUIREMENTS

## **Service Standards**

Did you include your service standards and policies for each specific fixed route mode of service you provide? *Yes* 

Which service standards, if any, are NOT included? *No service standards were missing from the submission* 

# **Service Policies**

Are the current service policies included? Yes

Is there a description of how service policies are adopted to ensure service design and operations practices do not result in discrimination on the basis of race, color, or national origin? *Yes* 

Which service policies, if any, are NOT included? None - All service policies are included

# Large Urbanized Fixed Route Requirements

## **Demographic Data**

Are demographic and service profile maps and charts (demographic data) included? Yes

Is the demographic data current as of the most recent decennial census or American Community Survey? *Yes* 

Does the program include a description of how demographic data is prepared prior to proposed service reductions or eliminations? *Yes* 

Does the demographic data include a base map of the transit service area? Yes

Does the base map include overlays of the required data? Yes

Do the demographic maps appropriately identify areas where the minority population exceeds that of the service area as a whole? *Yes* 

Do the demographic maps appropriately identify areas where the low-income population exceeds that of the service area as a whole? *No* 

# **Ridership Surveys**

Do you collect demographic ridership and travel patterns using customer surveys? Yes

Which requirements of the ridership and travel pattern surveys are NOT met, if any? *Not Included* 

### Monitoring

Do you include the results of monitoring service standards and policies? Yes

Which required transit monitoring methods are NOT included, if any? Not Included

### SAFE Analysis

Did you include the written policies and procedures for your service and fare equity analyses process? *Yes* 

What required service and fare equity analysis policies or procedures are missing, if any? *No required policies and/or procedures were missing from the submission* 

Did you identify any service and/or fare equity analyses from the last 3 years? Yes

Did you include the results of the service and/or fare equity analyses conducted in the last 3 years? *Yes* 

If there were service and/or fare equity analyses conducted in the last 3 years, what required documentation is NOT included, if any? *No documentation elements were missing from the submission* 

#### **FTA Reviewer Comments:**

Your Title VI Notice to the Public, and your instructions on how to file a complaint needs to be updated to include the right to file a Title VI complaint with the FTA Civil Rights HQs. Please update you Notice, Instructions, and make sure that anywhere this information is posted it is corrected to language and address listed in the paragraph below. the FTA Office of Civil Rights in DC. The address for complaints to FTA Civil Rights HQs is provided below. The FTA 4702.1B Circular's Appendix B-1 can also be referenced for an example. A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Ave., SE, Washington, DC 20590.

I was not able to locate where you have your Title VI Notice to the public posted. Please make sure that you table of contents identifies the Pg. location in your next Title VI Report submission.

Your Title VI Notice of Rights on Pg. 11 of your 2018 Report includes Basis's that are not covered under Title VI. Please either separate by statue Title VI (Race, Color, National Origin) from any other Statues and Basis. Your complaint form is titled Title VI but again lists basis's that are not covered under Title VI. (You have included gender, age status under Title VI.) Please either change the complaint form to a more generic title such as Non-Discrimination or make it Title VI only and have a separate form for other statues you accept complaints over. The Public is frequently confused by what Title VI does and does not cover and what they can file under. This can especially be difficult depending on the population base and if there are literacy issues. Additionally, please include the hyperlinks to your websites Title VI information.

I was not able to locate a summary of the targeted Title VI/LEP public outreach and involvement activities undertaken during the reporting period. Please make sure to update your next submission to include this. Your public participation plan should have metrics to include goals and outcomes and your outreach should be related to your plans goals.

*I was not able to locate you monitoring procedures and/or efforts it uses to ensure subrecipients comply with Title VI. You have included a large amount of* 

information related to 5310 and subrecipeients but I did not locate your Title VI reporting requirements related to subrecipients.

I was not able to locate a description of how you train employees to understand their LEP obligations to provide timely and reasonable language assistance to LEP populations. Please update your LAP to include this.

I was not able to locate your demographic maps also identify low-income populations for environmental justice considerations. Per the requirements of Chapter IV.

The CAT maps starting on Pg. 546 related to service changes did not identify a base layer with legend within the map showing nearby minority and low-income populations. Please reference Appendix K Exhibit 2 for an example of providing GIS map data related to service changes.

Please submit you 2021 Title VI Report with a Table of Contents that includes all required reporting elements and the exact location (page number) where they are located in your Report. Please only submit documentation that is directly related to the Circular reporting requirements for Title VI/LEP. Please update your Report to only include material related to Title VI/LEP reporting.

Also, please visit the FTA Civil Rights webpage for more information:

https://www.transit.dot.gov/title6

# Civil Rights Compliance | Title VI Program

# **Recipient Details**

Recipient ID	Recipient Name
1065	Raleigh, City Of
Program Status	
Status Date	Due Date
Sep 30, 2019	Feb 1, 2021
Program Status	Expiration Date
Concur	Mar 31, 2021

### **Status History**

Status	Date 4	User
Concur	9/30/2019 6:46 PM GMT+00:00	Sarah Majdiak
In Review - Submitted to FTA	3/23/2018 8:31 PM GMT+00:00	Kelli Yeager
Concur	3/16/2015 10:00 AM GMT+00:00	
In Review - Submitted to FTA	1/30/2015 10:00 AM GMT+00:00	

# **Existing Document Details**

Document Type	Document Name	Program Begin and End Dates	Date Uploaded	Uploaded By
Title VI	City of Raleigh Title VI 2018	4/1/18 - 3/31/21	3/23/2018 8:30 PM GMT+00:00	Kelli Yeager
Title VI	City of Raleigh, NC, 1065, 9-26-19	02/01/2019-01/31/2021	9/30/2019 7:19 PM GMT+00:00	Sarah Majdiak

MANAGE DOCUMENTS

# **Section 6**

# **System-wide Standards and Policies**



# **System-wide Service Standards and Policies**

## Background

Because the communities within the GoRaleigh service area are significantly diverse and constantly changing, GoRaleigh has developed guidelines that are outlined within this System-wide Service Standards and Policies document in order to allow for consistent and continual evaluation of services. Given the varying needs of the individuals in our service area, GoRaleigh provides multiple service delivery options such as fixed-route transit, vans, taxi, and paratransit (GoRaleigh Access) services.

Raleigh Transit Authority (RTA) is required by the Federal Transit Administration (FTA) to establish written service standards and policies for its fixed route services. The service standards and policies are required for six transit indicators: vehicle load, vehicle headway, on-time performance, service availability, distribution of transit amenities, and vehicle assignment. This is done in accordance with the requirements of FTA Circular 4702.1B (Title VI Program Guidelines for Urban Mass Transit Administration Recipients) because GoRaleigh operates in an Urbanized Area with a population greater than 200,000. GoRaleigh follows FTA's effective practices to fulfill the service standard and policy requirements provided in Chapter IV pages 5-7 of the Circular. Transit service standards are also needed to comply with 49 CFR Section 21.5(b)(2) and (7), Appendix C to 49 CFR part 21.

The service standards and policies that the RTA utilizes are broader than the core federal requirements and identify four primary areas of focus for monitoring the quality of service delivery, which is an essential element of prevailing Title VI requirements. These focus areas include Bus Service Delivery Standards, Policies for Transit Amenities and Vehicle Assignment, Capital Investments, and Specialized Services. Application of these Service Standards provides assistance in achieving a balance between quality, equity and the cost-effective use of limited resources. The availability of financial resources, represented by the annua budget, is an important factor in how these standards are applied. Service expansions, reductions, and adjustments may occur in conjunction with transportation need, timing, and the availability of operating and financial resources, as determined by the RTA and the Raleigh City Council.

The City of Raleigh's transit service standards provide a means to support its mission to provide a safe, clean, reliable, cost effective transportation system, which meets transportation needs, contributes to growth and development, and improves the quality of our metropolitan community. The standards are reviewed annually to provide a continual analysis of the effectiveness of the services being provided to the public. In addition, the City of Raleigh uses the resulting standards during the course of a year as a measure to ensure that there is an on-going quality of service and system integrity. Monitoring procedures for applying these standards can be found in a document titled "GoRaleigh Title VI Service Monitoring Procedures".

# **Summary of Service Standards and Policies**

FTA requires all fixed route transit providers of public transportation to develop quantitative standards for the following indicators. Individual public transportation providers will set these standards; therefore, these standards will apply to each individual agency rather than across the entire transit industry.

#### Service Standards

- Vehicle load for each mode: Generally expressed as the ratio of passengers to the number of seats on a vehicle, relative to the vehicle's maximum load point. For example, on a 40-seat bus, a vehicle load of 1.3 means all seats are filled and there are approximately 12 standees. Transit providers can specify vehicle loads for peak vs. off-peak times, and for different modes of transit.
- Vehicle headways for each mode: The amount of time between two vehicles traveling in the same direction on a given line or combination of lines.
- On-time performance for each mode: A measure of runs completed as scheduled.
- Service availability for each mode: A general measure of the distribution of routes within an agency's service area

#### Service Policies

- Distribution of transit amenities: Ensures equitable distribution of amenities for rider comfort, convenience, and safety throughout the system.
- Vehicle assignment: Describes how vehicles are assigned to depots and routes.

### **Service Standards and Policies**

#### Service Standards (Bus Service Delivery Standards)

#### Vehicle Load

**Definition**: Vehicle load is generally expressed as the ratio of passengers on board to the number of seats on a vehicle.

**Standard**: The average of all loads should not exceed vehicles' achievable capacities. When maximum load factors are reported as being exceeded, the ridership will be monitored to determine if the load factor is being exceeded on a regular basis. If load factors are exceeded regularly, GoRaleigh will evaluate whether frequency on that route should be adjusted within the confines of the expected funding levels, then determine to either substitute a larger vehicle or make minor modification to routes or schedules in order to bring the service within the vehicle load standards.

#### Average Passenger Capacities:

	Full capacity w/o wheelchair(s)	Full capacity w/ 1 wheelchair	Full capacity w/ 2 wheelchairs
40' Low Floor Bus	39	36	32
35' Low Floor Bus	36	33	29
29' Low Floor Bus	26	23	20

#### Passenger Load LOS

LOS	Passenger Load factor (p/seat)	Comments
А	0.00-0.50	No Passengers need to sit next to each other
В	0.51-0.75	Some passengers will need to sit next to others
С	0.76-1.00	All passengers can sit through choices will be limited
D	1.01-1.25	Some passengers required to stand
E	1.26-1.50	Maximum load of passengers achieved (seated & standees)
F	>1.50	Crush load

#### Headway

**Definition**: Bus Headway is defined as the interval of time between buses traveling in any given direction (inbound/outbound) on any given route.

**Standard**: Headways shall vary between peak periods and off-peak periods where demand dictates as in order to minimize operating expenses and provide the most efficient service during weekday peak demand periods. Headways shall be at their maximum when minimum service is provided during off-peak periods. Further, GoRaleigh has established the following headways where economically feasible:

- Peak period headways shall not exceed 30 minutes;
- Off peak headways shall not exceed 60 minutes;
- Peak period headways on connecting services shall be no greater than 35 minutes.

Headways are reviewed when vehicle load issues arise based on review of stop-level data, when customer service or operator complaints are received, or when public requests for additional services are received through the various opportunities for public input. When funding is available, headways are increased on routes without excess capacity or in areas that, because of development patterns, have greater density to successfully support increased transit service. When adjustments are made to

headways, the GoRaleigh Planner reviews the system to ensure that there are no disparate impacts created from the frequency adjustments.

The following factors are examined if and when adjusting headways needs to be considered:

- Load factor
- Passenger demand
- Route length
- Running time
- Passenger volume
- Proximity of route terminal to operating facilities of other routes
- Equipment allocation

#### **On-time performance**

**Definition**: On-time performance is a measure of the trips completed no later than 5 minutes after the scheduled time. A bus is determined to be late if it departs it's scheduled "time point" more than five minutes later than the published time. Buses are considered early if they depart from a published "time point" any time prior to the scheduled departure.

**Standard**: GoRaleigh strives to meet an on-time performance objective of 85 percent or greater on every trip. GoRaleigh continuously monitors on-time performance and system results are published and posted as part of monthly performance reports covering all aspects of operations.

#### Service availability

**Definition**: Service availability is a measure of the population with access to a transportation provider's fixed route services.

**Standard**: GoRaleigh's goal is to ensure that 90 percent of all residents within the service area are within a 1/3 mile radius of bus service.

Efficient bus stop placement will be examined to determine if it optimizes service delivery. The areas that RTA evaluates for these standards include bus stop spacing, special considerations such as destinations, sidewalk availability, safety and convenience, and schedule adherence. The City of Raleigh gives special and weighted consideration for the placement of bus stops near schools, facilities for seniors and individuals with disabilities, public facilities and government offices, and major ridership generators (such as apartment complexes, shopping centers, and major tourist attractions).

ADA service accessibility: GoRaleigh makes every effort to ensure that transit services are accessible to all persons in the GoRaleigh service area and are provided in a manner consistent with the Americans with Disabilities Act (ADA) of 1990. Paratransit service is provided to eligible individuals with disabilities for trips beginning and ending within 3/4 mile from a fixed route transit stop.

Transit access is annually reviewed to determine whether there are areas without access and develop a cost feasible financial plan to provide service in the future. In addition, all commercial plans are

reviewed and must be signed off on by the City's transit staff as part of the City of Raleigh's plan review process. This process also encourages GoRaleigh to continue working with other city/county departments and other agencies to review and approve development in areas with existing transit service or require new developers to assist in providing additional transit service, access paths, bench, pad and/or shelter prior to approval.

#### Additional Transit Service Availability related standards and practices:

- **Span of Service** span of service is defined as the hours that service will operate at any given point within the system.
- Level of Service by County and Minority Group GoRaleigh provides service throughout the majority of Wake County. It is GoRaleigh's goal that its service is provided to the majority of minority census tracts, as funding permits.
- **Route Service Tracts** GoRaleigh, during its Section 5310 program outreach makes an effort to encourage agencies serving these areas to seek grant funds to provide programs or services that assist with transit access. This practice enhances service availability outside of the fixed route and paratransit systems.
- Service Extensions Based on the urbanized area characteristics, service could be extended to major commercial/employment uses based on overall square footage and/or number of employees/patrons, including the following thresholds.
  - Individual businesses of 250 or more employees
  - Shopping centers of more than 1,200 square feet of leased retail space
  - Medical facilities with more than 325 beds
  - Academic institutions with an enrollment of 1,000 full time students
  - o Government agencies that attract substantial daily patrons
- **Bus Stop Spacing** The bus stop spacing standards for the network will be implemented based on population density along the route and based on roadway speed as listed below.
  - An average of 4 bus stops per mile where roadway speeds are 35 miles per hour or lower.
  - An average of 2 bus stops per mile where roadway speeds are 45 miles per hour or higher.
  - The roadway speed impacts customer safety when accessing stops and also the safety of vehicles when the bus is entering and exiting the travel lane to pick up and drop off customers. Stops will also be placed closest to signalized intersections, as appropriate on higher speed roadways.

#### Service Policies

#### **Distribution of transit amenities**

**Definition**: The City of Raleigh has defined a service amenity as any item or service that is provided specifically to increase the comfort and/or convenience of using the GoRaleigh system. Currently available amenities include shelters, trash cans, and schedule information.

**Policy**: The standard measure for all amenities is to determine equitable distribution within facilities and throughout the GoRaleigh service area based on need, activity and geographical location. This is in accordance with the tenets of Title VI and each amenity is, and will continue to be, calculated and

monitored separately to ensure that service amenities are equitably distributed. Minimum activity thresholds for siting various stop amenities are presented in the table below.

#### **Transit Amenity Minimum Thresholds**

Amenity	Minimum Threshold
Shelter placement	Average of 10 or more boardings per weekday
Stand-alone seating options	As needed for stops that have either not met the boarding requirements, where shelters are not appropriate, or where right-of-way constraints exist
Park and Ride and Transfer Stations	As needed to meet ridership demand
Real-Time Passenger Advisory Signage	As needed for high ridership locations with potential service to multiple routes and that exhibit transfer opportunities

GoRaleigh is solely responsible for distribution of transit amenities for the system, throughout Wake County. Distribution is prioritized by attempting to provide amenities so as to serve the largest number of passengers. Placement of amenities is also considered where there is need brought from our passengers. This policy is set with consideration of available resources and right-of-way leading to eventual placement of transit amenities. Within incorporated areas, GoRaleigh coordinates the distribution and siting of transit amenities with each municipality.

**Bus Shelter/Bench Program** - The primary objective of GoRaleigh's Non-Advertising Bus Shelter/Bench Program is to promote quality of service, as well as the equitable distribution of bus shelters and benches at designated bus stops within GoRaleigh's service area. The Bus Shelter/Bench Program is designed to provide customers with protection from the elements along with a level of comfort to as many bus passengers as financially feasible. The Bus Shelter/Bench Program supports the following strategic initiatives:

- **Customer Focus** GoRaleigh provides this transit amenity to bus stops in Title VI areas where the value to the customer is maximized for dollars invested.
- **Continuous Quality Improvement** Installing shelters/benches at bus stops is another way of continuing to enhance our system to better serve customers.
- **Transit Advocacy** Providing more shelters in locations where the demand and needs are apparent solidifies GoRaleigh as a good neighbor and encourages partnerships with municipalities and businesses.
- **Safety considerations** GoRaleigh strives to provide a safe, inviting, hospitable environment for our bus riders as they wait to continue their travel. In order to accentuate the effort, the process of site selection for bus shelters and benches is predominantly based on the GoRaleigh service standard criteria of "Daily Boardings" at a particular location. However, other criteria such as location in Title VI Area, proximity to other shelters or benches and proximity to activity centers such as senior centers and shopping centers are utilized to score and rank new non-advertising bus shelters and bench sites for eventual construction.

Currently, GoRaleigh's non-contracted stop and shelter-related amenities include trash cans, and schedule information. These amenities are uniformly distributed and available throughout the GoRaleigh system with easy access for seniors and individuals with disabilities, as well as, all patrons in general. Additionally, they are routinely maintained by GoRaleigh's contractor on an on-going basis.

#### **Other Transit Service Amenities**

The array of other transit service amenities provided and maintained by the City of Raleigh for customer convenience includes the following:

- Vehicle Amenities Vehicle amenities are additional amenities offered on GoRaleigh's transit vehicles, such as bus network displays, bike racks on buses, and stop announcements.
- Information Booth GoRaleigh's information booth provides customers information that enables them to access and use GoRaleigh facilities with convenience and ease. The information provided by the booth includes bus schedules, trip itinerary planning services and general information. Customer Information Operators inform customers about services offered by GoRaleigh and provide telephone numbers and referrals to other bus transit systems in the metropolitan area, such as Wake, Orange and Durham Counties. In addition, RTA will mail bus route schedules and system maps to riders, upon request. Customers can also request travel information by contacting the call center via the City of Raleigh website. In this connection, the region has developed its website to serve as an information portal for various audiences including current riders, elected officials, business and community leaders, non-riders, special event riders, state/regional and local government officials, as well as, taxpayers.

#### **Vehicle Assignment**

**Definition**: Vehicle assignment refers to the manner in which vehicles are assigned to routes and garages.

**Policy**: In order to be in compliance with Federal Transit Administration (FTA) Title VI regulations, it is the policy of the City of Raleigh that GoRaleigh operators be assigned GoRaleigh vehicles on a random basis based on passenger demand by route, type of service offered by route (i.e. fixed route, demand response, cross-town, etc.), equipment availability, timing of operator assignment (i.e. day of week, holiday, etc.), and any other factors. On a daily basis, GoRaleigh shall maintain a daily log of all vehicle assignment practices consistent with this policy for Transit Division inspection.

The random daily assignment prevents specific vehicles being placed on specific routes and also ensures that all routes will have access to newer vehicles. While the vehicle assignment process is random, GoRaleigh does review APC data during the process to ensure that the vehicle size meets the capacity requirements on each route. It is important to note that some routes have vehicle size restrictions based on the operating environment; therefore, the vehicle assignments on those routes are based on vehicle size rather than random selection of the entire fleet.

The vehicle assignments take into account the operating characteristics of 40', 35' and 29' bus lengths, which are matched to the operating characteristics of the route. All buses have the same amenities available to all riders. Every bus is low-floor with a ramp accessible for persons with disabilities. Routes with higher ridership and/or during peak periods are assigned 40' buses and the remaining vehicles are

utilized throughout the service area. The majority of the routes have multiple communities and diverse populations. GoRaleigh observes strict standards with respect to adherence to preventive maintenance schedules.

Revenue vehicles are assigned to routes based on contractual obligations. At a minimum, they are rotated every four months to manage the accumulation of mileage. Certain vehicle types such as articulated buses are used on high passenger volume routes. Vehicles equipped with Automatic Passenger Counters (APC) or Automated Vehicle Locators (AVL) may be assigned to certain routes to fulfill data gathering objectives. Depending on availability, same series/type buses are assigned to the same route to minimize operating characteristic deviations.

#### Capital Investments

#### Planning and Programming to Support Transit Service Delivery

A primary area of focus for monitoring the quality of service delivery is capital investments. Capital investments will be based on the city's transit program's Capital Improvement Program (CIP). The CIP supports the maintenance of assets including facilities, revenue, rolling stock; and a vast array of tools and equipment. RTA develops its CIP with the full consideration of how capital investments must be equitably distributed throughout the service area. In addition, capital investments are also reviewed from the vantage point of how they will facilitate equal access and the equitable delivery of transit services to minority, low income, transit dependent and choice rider areas in comparison. Both Regional and Short-Range activities are addressed.

The City's capital investment projects are accordingly programmed into the annual update of the budget and the Capital Area Metropolitan Planning Organization's (CAMPO) Transportation Improvement Program (TIP). CAMPO, which is also governed by Title VI, provides a process for early consultation and public involvement to citizens, affected public agencies, and representatives of transportation agencies, private providers of transportation, other interested parties, and local jurisdiction concerns. CAMPO presents all key issues to its technical committees. This process provides RTA with an opportunity to acquire additional information that can be used to address Title VI considerations during the planning process going forward, which is continuous, coordinated and cooperative.

In addition, public hearings are also held on the Long-Range Transportation Plan and TIP prior to adoption by the CAMPO. The public involvement process is as follows:

- Once annually, the Transit program will develop a Program of Projects proposed to be funded with federal funding. This Program of Projects will be incorporated into the TDP. Comments received on the TIP during the City's public participation process for the TDP will be reviewed by city staff and any appropriate revision will be made to the TIP at that time.
- The Program of Projects will then be incorporated into TIP and submitted to CAMPO for consideration.
- CAMPO will then complete a public involvement process that includes consulting with technical and citizens committees, holding a public hearing and final adoption.
- Public comments received regarding the Program of Projects or TIP will be considered by the RTA throughout the adoption process and incorporated into final programs.

#### Wake Transit Plans: 10-Year Capital and Operating Plan and Short Range Bus Plan

The purpose of the 10-Year Capital and Operating Plan and Short Range Bus Plan is to identify ways to increase mobility in the Capital Area in the short and long term. The plans address how an improved bus transit system can accommodate and serve the anticipated growth in the Capital Area. Furthermore, they are intended to help identify areas of deficiency and allow for a more streamlined and cost effective system that is easy and safe to use without compromising or adversely affecting any racial group or populations.

#### ADA Specialized Services

The City of Raleigh ADA program provides subsidized curb-to-curb transportation service from origin to destination through participating vendors within a 3/4 mile boundary of GoRaleigh's fixed routes. A person must be at least 13 years old to participate in the program without being accompanied by a guardian/Personal Care Attendant (PCA). Paratransit service is available depending on eligibility. Paratransit customers are individuals who qualify for Paratransit services as described below.

ADA Trips are eligible for Paratransit service only if the trip begins and ends within 3/4 miles of GoRaleigh fixed route bus service. Other eligibility requirements may apply. ADA service provides a high level of discount for trips that are eligible (no more than double the cost of the city bus fare). Service animals (e.g. a guide dog) ride at no additional charge but must be properly controlled. They must ride on the floor, or, if appropriate, on the lap of the customer. They may not use vehicle seats. Customers are responsible for the behavior and hygiene needs of their animals. Service can be refused or discontinued if a service animal is seriously disruptive.

ADA Paratransit service is reviewed from a Title VI/Environmental Justice point of view to ensure that it is equitably applied and administered. GoRaleigh's ADA service is for persons with disabilities, who are unable to negotiate the GoRaleigh fixed route system. RTA certifies passengers as eligible through a two-part application process (client and doctor). RTA measures this service by monitoring on-time performance, customer complaints per 1,000 passengers, accidents per 10,000 miles and adherence to 0% trip denial requirement.

### Service Monitoring and Reporting

GoRaleigh's standards and policies provide benchmarks to ensure that service design and operational practices do not result in discrimination on basis of race, color, or national origin. GoRaleigh performs ongoing monitoring and evaluation of the existing service and analyzes the performance of the system across all service types. Monitoring procedures for applying the standards and policies can be found in a document titled "GoRaleigh Title VI Service Monitoring Procedures". Results of the analysis (Service Monitoring Report) will be submitted triennially (in conjunction with the Title IV Program Update submission) to the FTA.

In accordance with FTA Circular 4702.1B, the Service Monitoring Report must be reviewed and approved by the Board and included in the next Title VI Program Update.

#### Disparate Impact Policy - Transit Service Levels and Quality of Service

Levels and quality of service will be analyzed regularly for potential disparities. Specific analysis of potential discrepancies on the basis of race, color, or national origin will be applied to the results of transit service monitoring. The Raleigh Transit Authority's service standards and policies are reviewed regularly to ensure equitable transit service to all persons in the City of Raleigh and Wake County. All persons are encouraged to participate in the public comment process for the Title VI Program Update.

Failure to exactly comply with all elements of this policy shall constitute a failure of public process, thus rendering any actions or decisions invalid.

# Section 7

# **Data Collection and Reporting**

# GoRaleigh Demographic Profile

The following maps and charts present a profile of the demographics of the GoRaleigh system, along with key system layers of the GoRaleigh transit system. All data is sourced from the Census American Community Survey (ACS) 5-Year estimates, 2014-2018. Data is examined at the Census Block Group level. GoRaleigh's service area is defined as those Census Block Groups that lay within one-third of a mile of a GoRaleigh bus route. Maps display all Census Block Groups within Wake County. For a breakdown of demographic data for minority and low-income populations, see Table 1.

#### **Minority Population**

Figure 1 shows the GoRaleigh system including planned BRT routes along with transit activity generators such as schools and hospitals.

Figure 1 - GoRaleigh Transit System

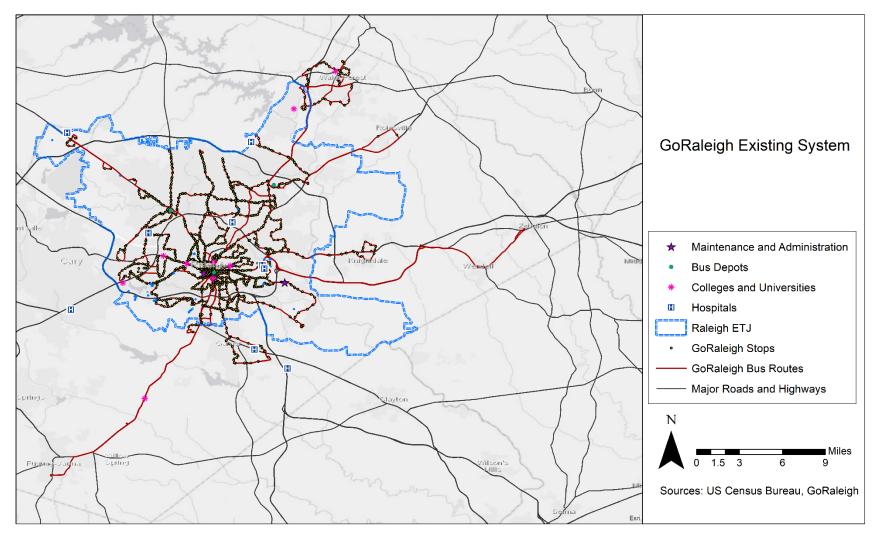


Figure 2 shows Census Block Groups displaying the minority population (defined as the total population excluding the White, non-Hispanic population). The highest concentrations of minority populations are near the east of downtown and the western portion of Wake County.

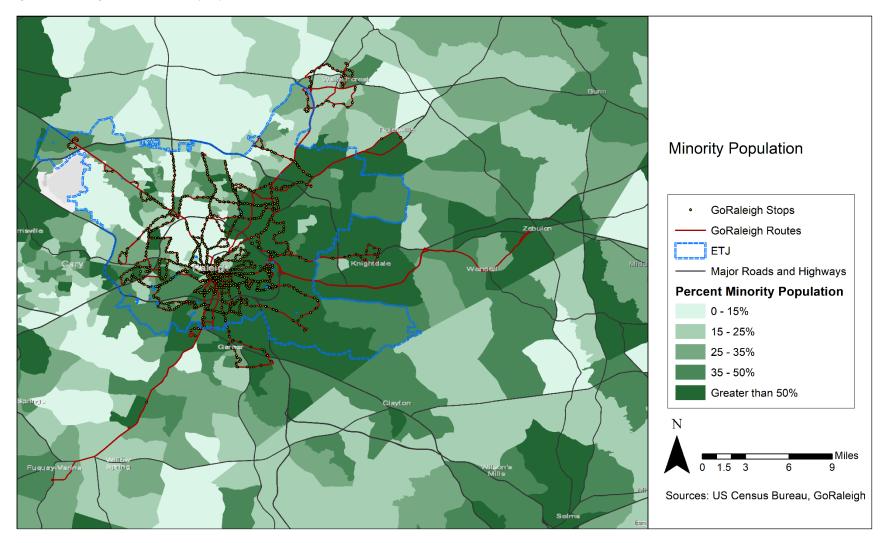
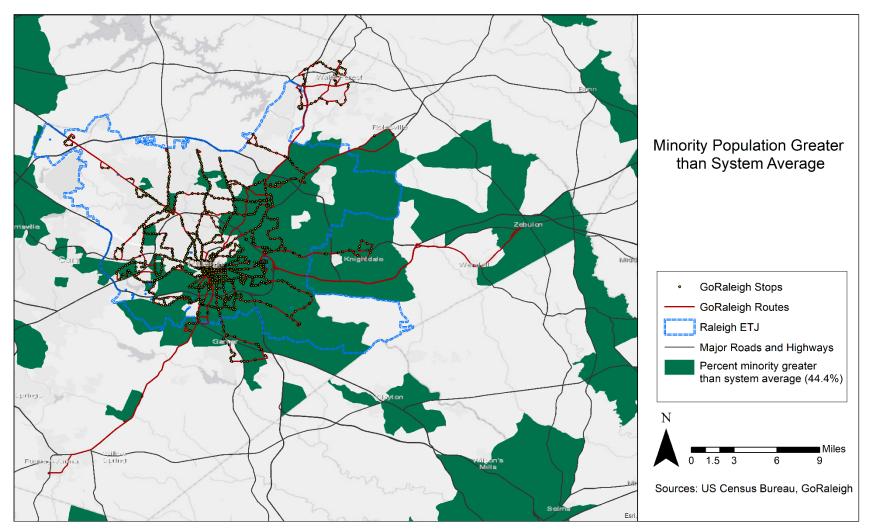


Figure 2 - GoRaleigh Service to Minority Populations

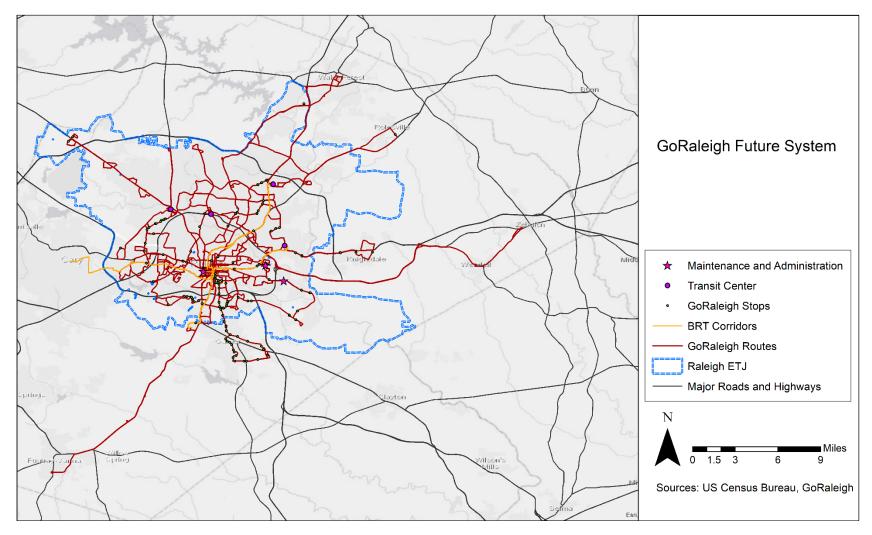
Census Block Groups with a minority population that exceeds GoRaleigh's system average (44.4%) are on the western central border of Wake County and dispersed to the east and northeast of downtown Raleigh shown in Figure 3.



#### Figure 3 – Minority population greater than system average

Figure 4 shows the planned route network for 2027, including Bus Rapid Transit (BRT) corridors, as well as transit facilities that were recently replaced, improved, or are scheduled for an update.

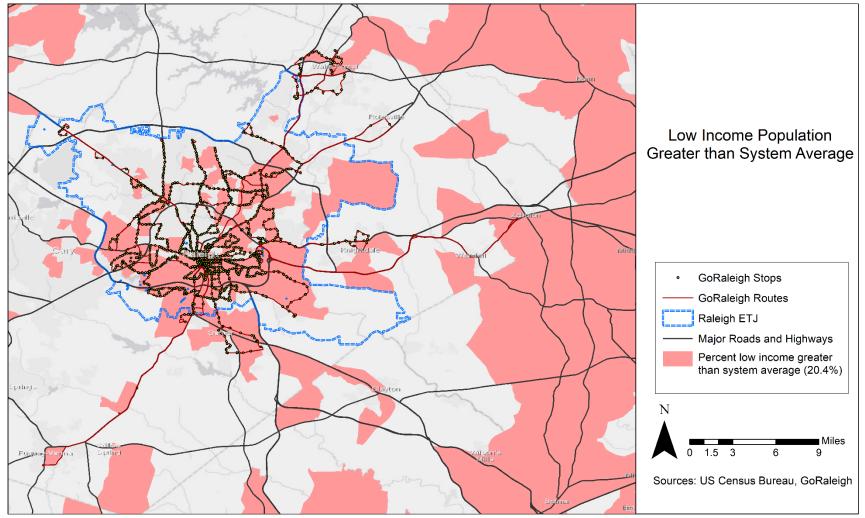
Figure 4 - GoRaleigh Future System



#### Low-Income Population

Low-income population is defined as households with an income level under 150% of the Federal poverty level. Figure 5 displays Census Block Groups with a low-income population below GoRaleigh's system average of 20.4%, which are concentrated around downtown Raleigh and also occur in the southern and eastern parts of Wake County.





#### Table 1 - Demographic Profile

		Wake Co	Wake County City of Raleigh			GoRaleig	GoRaleigh System	
		Total	Total	Total	Total	Total	Total	
		Numbers	Percent	Numbers	Percent	Numbers	Percent	
Population	Total	1,046,558		457,159		633,531		
Minority	All Minorities	415,361	39.7%	213,294	46.7%	281,147	44.4%	
	Black or African- American	212,597	20.3%	132,492	29.0%	171,028	27.0%	
	Asian	69,931	6.7%	20,514	4.5%	23,679	3.7%	
	Native American	3,675	0.4%	1,662	0.4%	2,084	0.3%	
	Hawaiian Native and Pacific Island	434	0.0%	304	0.1%	314	0.0%	
	Hispanic	105,361	10.1%	50,130	11.0%	71,246	11.2%	
	Other (including 2 or more races)	71,712	6.9%	34,967	7.6%	48,613	7.7%	
Non-minority	White, non-Hispanic	631,197	60.3%	243,865	53.3%	352,384	55.6%	
Income	Total population for whom poverty status is determined	1,024,221		437,586		612,581		
	Below 150% of Poverty Level	167,609	16.4%	95,512	21.8%	124,927	20.4%	



# An Onboard Survey of GoRaleigh Customers

# 2019

A study conducted by:



In Conjunction with:



# **Project conducted by:**

- Hugh M. Clark, Ph.D. Project Director
  - Ronny Kraft, Sampling and Manager of Data Collection
  - Deanna Byrd, Assistant supervisor, Data Collection
  - Navo Emmanuel, Data analysis
  - Katie Maloney, Analysis, charts, and editing



An Onboard Survey of GoRaleigh Customers



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**Executive Summary** 



### Introduction

In early October 2019, CJI Research conducted an onboard survey of GoRaleigh customers. The GoRaleigh survey includes 1,123 responses and has a margin of error of +/-2.9% at the 95% level of confidence.

The 2019 survey is intended to provide a baseline for comparison to later annual surveys.

#### PERCEPTION OF MAJOR SERVICE IMPROVEMENTS

- The survey obtained customer ratings of overall GoRaleigh service and nineteen specific elements of service. A seven-point scale was used, on which a score of 1 means very poor, and 7 means excellent. The percent rating GoRaleigh service overall as 7 is 27%. Another 21% rated service as 6 on the same scale, meaning that the total rating service as excellent or very good is 48%.
- Top rated elements with scores of 6 or 7 include:
  - Usefulness of printed information (60%)
     Fare medium options (59%)
  - Bus operator courtesy/helpfulness and usefulness of telephone operators (56% each)
- Three operational aspects of service with more than 50% of customers giving the two top scores of 6 and 7 deserve note:
  - Weekday service frequency (53%)
  - Weekday service hours (52%)
  - Ease of transfer within the GoRaleigh system (51%)
- There was a slight decline in the overall top score of service (6, and 7 on the 7 point scale. This change appears to be directly related to the increased extent to which customers are also using ridesharing.
- When asked to rank areas for improvement:
  - "Buses running on time" is by far the most frequently cited aspect of service to improve. It was cited by 44% of customers as first, second, or third most important to improve among the nineteen specific aspects of service examined. The 44% represents a major decrease in concern with this since 2018 when 64% put ontime performance (OTP) as one of the top three. This change is probably related not to a change in OTP which remained constant, but to increased service on the high frequency network.
  - Second most important in this sense is "Total average trip time" (23%)
  - Third Weekday service frequency and Saturday service frequency (22% each).
  - Fourth most important to improve was Sunday bus hours (21%)
- Another way to consider service improvement priorities is to examine the correlation of each aspect of
  service with the overall service rating. That technique identified six priorities that are used by virtually all
  customers and would have a significant impact on the overall GoRaleigh service rating: Total average
  time to make a trip, buses running on time, and service to all destination desired (coverage). In addition,
  it identified three services that are used by most but not all customers that would also have a significant
  impact: Saturday and Sunday service frequency, and Saturday service hours.
- GoRaleigh has important economic impact. Trip purpose is primarily oriented to employment (64%) and School/College (13%), and many other customers also use GoRaleigh for shopping (7%).



- Demographics
  - GoRaleigh provides a key support for employment and education. Of all GoRaleigh customers,
     53% are employed full time and another 22% part time. Another 21% are students, for a total of
     96% of customers being employed or students.
  - 61% of GoRaleigh customers identify themselves as African-American, 22% identify themselves as Caucasian/White, 6% Hispanic, 6% Asian, 2% Native American, and 4% "Other.
  - Like most bus systems in the United States, the ridership of GoRaleigh is young, with 48% younger than thirty-five.
  - Similar to the ridership of many bus systems, many GoRaleigh customer households report that they have extremely low household incomes. In this survey, 35% report income of less than \$10,000 and only 13% report household incomes of \$50,000 or more.
  - Customers are quite transit dependent, with 78% reporting that they have either no vehicle or no licensed driver (or neither) in the household.
- Travel characteristics
  - 39% of GoRaleigh customers say they are using GoRaleigh more often than in the previous year and 17% say they began riding only in 2019. Only 9% say they are riding less often now.
  - When using other systems in the Triangle Region, GoRaleigh customers are more likely (21%) to use GoTriangle than the other systems.
- Ridesharing
  - 52% have used Uber or Lyft at least once in the thirty days prior to the survey.
  - Of the 52% using Uber or Lyft in the previous thirty days, 60% (31% of all GoRaleigh customers) used Uber or Lyft to replace a GoRaleigh trip.
  - Of that 52% who have used Uber or Lyft, 46% (or 24% of all customers) have used them as part of a GoRaleigh trip.
- Fare media
  - The largest percentage of GoRaleigh customers (37%) boarded with a day-pass purchased either on the bus (23%) or ahead of time (14%).
  - Twenty-three percent (23%) paid their fare in cash.
  - Thus, combining the cash fare and the day-pass purchase on the bus, a total of 60% make a fare transaction on the bus
  - 39% make a prior pass purchase or use a free pass such as GoPass or a university ID, thus avoiding the delay of conducting a transaction while boarding.
- Mobile Communication
  - A transit app has been downloaded by 59% of GoRaleigh customers.
  - This represents a dramatic increase in adoption of this app in only one year, from 37% in 2018 to 59% in 2019.



Introduction and Methodology



### Background

As part of a regional customer satisfaction measurement program, CJI Research, LLC conducted a survey of customers onboard GoRaleigh buses from October 23 - 26, 2019. Similar surveys were conducted during the previous three weeks with customers of GoTriangle, GoCary, and GoDurham.

The questionnaire used in the survey was initially developed by Hugh Clark of CJI Research, LLC refined a coordinating committee from GoTriangle and CAMPO led by Elizabeth Raskopf of GoTriangle, the agency coordinating the multi-system project. The committee included representatives of all four transit agencies and CAMPO. GoRaleigh staff provided additional input.

### Methods: How the Survey Was Conducted

#### SAMPLE

A random sample of runs was drawn from a list of all GoRaleigh runs. This initial sample was examined to determine whether the randomization process had omitted any significant portion of the GoRaleigh system's overall route structure. The sample was adjusted slightly to take any such omissions into account.

Survey data collection occurred onboard the buses. On the bus, survey staff approached all customers rather than a sample. The only exception was that customers who appeared younger than sixteen were not approached, both for reasons of propriety and because children are typically unable to provide meaningful answers to several of the questions.

Because all customers were asked to participate rather than a sample of customers on the bus, there was little or no opportunity for a survey staff member to introduce bias in selection of persons to survey. In effect, a bus operating within a specified window of time became a sample cluster point in a sample of such clusters throughout the total system.

The GoRaleigh survey includes 1,123 respondents and has a margin of error of +/-2.9% at the 95% level of confidence. When the distribution of responses is other than 50:50 on a specific question, the sample error for a given sample size decreases somewhat. If a sub-sample is used, sample error increases somewhat. However, with an overall sample of more than 1,123 respondents, this would affect the findings only in a few circumstances in which only small sub-segments of the ridership were being examined separately.

Although this sample is sufficient to support an overview of the ridership as a whole, it is not large enough to be broken down at the route level. The design of the total regional study of the four area systems (GoRaleigh, GoTriangle, GoRaleigh, and GoCary) calls for conduct of a large sample in one subsystem every three years. GoRaleigh's was completed in 2018, large samples of GoTriangle and GoCary riders were conducted in 2019 and the large sample of GoDurham will be conducted in 2020.)

#### **DATA COLLECTION**

Temporary workers from the Greer Group Inc., Quality Staffing, and Robert Half, Inc. of Durham and Raleigh, NC were trained to administer the surveys under the supervision of CJI Research, LLC staff. Surveyors wore smocks identifying them in large print as "Transit Survey" workers. This uniform helps customers visually



understand the purpose of why an interviewer would be approaching them, thus increasing cooperation rate.

In most cases, the survey personnel met the bus operators at the beginning of their shifts and rode the buses throughout the driver's assignment. Ina few cases, in order to assure broader coverage of certain routes, surveyors rode partial runs and then transferred to another route or run.

The questionnaire was self-administered. Survey personnel handed surveys and a pen to customers and asked them to complete the survey.

At the end of each sampled trip on a given run, the survey personnel placed the completed surveys in an envelope marked with the route, the run, the time, and the day and reported to the survey supervisors who completed a log form detailing the assignment. A total of 308 trips were sampled and recorded in this manner.

#### **PARTICIPATION RATES**

A total of	3,309	adults (	16 years old or older) were riding during the surveyed trips and had a chance to participate	
Of t	his total	719	said they had already completed the survey	25%
	thus,	2,590	had not yet completed the survey	78%
	and	1,268	of those who had not yet completed the survey refused outright	49%
	and	71	customers spoke a language other than English or Spanish	3%
	thus	1,251	accepted the survey form with the apparent intention of finishing it	48%
Thus, these	1,251	custom	ers represent, the total "effective distribution, " i.e., the raw sample	
	Of these	128	accepted the survey form but did not complete it on the bus	14%
	and	1,044	completed the survey on the GoRaleigh bus	86%
		79	completed the survey and returned it to an operator on another bus	1%
	Finally:	1,123	returned useable survey questionnaires. They comprise the base sample	90%
(	Of all adults	s riding o	n a surveyed vehicle, including those who had already completed the survey, this represents:	34%
		Of	all adults riding on a surveyed vehicle who had not yet completed the survey, this represents:	43%
		01	an addits hung on a surveyed venicle who had not yet completed the survey, this represents.	-370

Of the 1,123 GoRaleigh respondents:

- 1,112, or 99% of the sample completed the customer satisfaction questions
- Only 11 respondents, or 1%, failed to complete 20 or more responses
- 855, or 76% completed all questions in the survey.
- Another 146, or 13% completed all but the final question, household income, which always has a high refusal rate
- 1,001 therefore completed all questions or all but the income question
- This means that 89% of the sample answered 98% of the questions

In the analysis, those who did not respond to a question are eliminated from the computation of percentages and means unless there was a way to infer the response. For example, if a rider gave as a trip purpose *getting to or from school,* it was apparent that this was a student, and that employment could be coded as "student," even if the respondent had not responded to the employment question.



### QUESTIONNAIRE

The questionnaire was self-administered. It is reproduced in Appendix A.

The questionnaires were serial numbered so that records could be kept for the route and day of the week on which the questionnaire was completed. This is a more accurate method than asking customers which route they are riding when completing the survey.

The survey is printed in English on one side and in Spanish on the other. In the survey of GoRaleigh customers, 77 customers, or 7% of the effective final unweighted sample identified themselves as Hispanic, but only 25, or 2% of the completed questionnaires were completed in Spanish. Stated in another way, only one-third (33%) of the customers identifying themselves as Hispanic completed the survey in Spanish.

### **ANALYSIS**

Analysis consists primarily of crosstabulations and frequency distributions. Tables were prepared in SPSS, version 26 and charts in Excel 2016. The GoRaleigh survey will be archived by CJI Research, LLC so that it will be available for further analysis as needed.

With a few exceptions, all percentages are rounded to the nearest whole number. In a few cases, when this could have caused important categories to round to zero, or when comparisons between charts would appear inconstant if tenths were not included, percentages are carried to tenths. Rounding causes some percentage columns to total 99% or 101%. These are not errors and should be ignored.

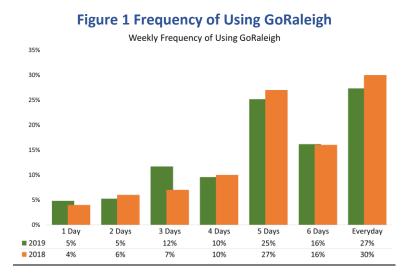


# **Rider Profile**



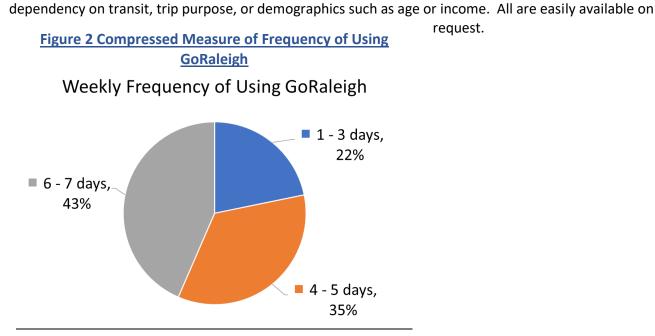
# **Frequency of Using GoRaleigh**

Riders were asked on how many days in a typical week they use GoRaleigh. For purposes of further analysis, the customers are grouped into three sets, or "segments," depending upon how frequently they use



involved with planning or marketing.

Other breakdowns may also be of interest, and by request such breakdowns can be provided quickly because the survey data is maintained live to meet such requests. Such breakdowns might include level of



request.

(22%)

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GoRaleigh. We refer to them as:

• One- to three-day: Those who use

GoRaleigh one, two, or three-days a week

GoRaleigh four- or five-days a week (35%) Six-to-seven-day: Those who use

GoRaleigh six-or-seven-days a week (43%)

Why segment the sample in this manner? The frequency of using public transit is the

most basic differentiating characteristic

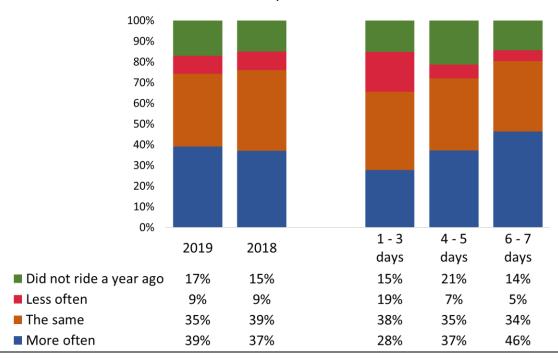
within the ridership. Understanding the

ridership in groups rather than as a

monolith is generally useful to those

Four-to-five-day: Those who use





### Figure 3 Compared to a Year Ago, Do You Ride More Often, Less Often or the Same?

### Service Use Compared to Last Year

## **Riding Frequency Compared to a Year Ago**

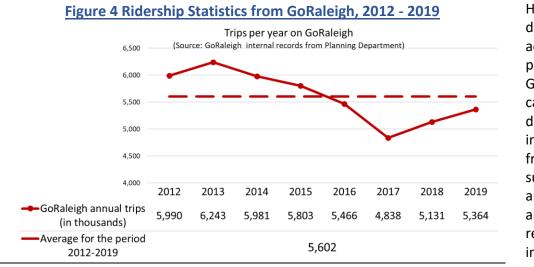
Overwhelmingly, respondents say that they are riding either with same frequency (35%) or more often (39%) than a year ago, and 17% say they are new riders. Only 9% say they are riding less often. The four-to-five-day riders are the most likely to be new riders (21%), while the most frequent riders are more likely (46%) than the other segments to say they are riding more often.

Change in this regard since 2018 has been minimal and is within the margin of sample error.

The percentages each year saying they had not been GoTriangle riders in the previous year might lead one to conclude that there was a massive increase in ridership. That is not the case as figures on the following page will show. Thus, we must conclude that there is a great deal of turnover within the ridership. In turn this suggests that one key, and perhaps the best opportunity for increasing ridership, is to increase rider retention. Unfortunately, we do not know from these results what percent ceased riding GoTriangle entirely between 2018 and 2019, nor is there any simple means of accessing former riders in a systematic manner<sup>1</sup>.

What can be done with the 2019 survey data, however, is to create tables that isolate those who say they are new riders, those who say they are riding more, and all others, comparing their demographics (age, employment, etc.) their use of ridesharing, and other factors, for example. This can be done at no cost upon request from GoRaleigh.

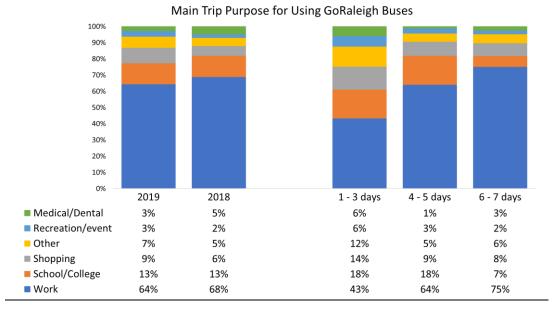
<sup>&</sup>lt;sup>1</sup> It would not be a random or representative sample, but it could be useful to use a systematic social media survey to gain input from former GoTriangle riders. This could provide data which, though not projectable to the population, could show contrasts between former and current riders.



How do the survey data relate to the actual ridership data provided by GoRaleigh? With the caveat that we cannot directly infer changes in overall ridership from survey data, the survey responses among current riders are consistent with the recent ridership increase.

GoRaleigh ridership saw a long decline from 2012 to 2017 followed by a 4.5% increase from 2017 to 2018 followed by another 4.4% increase from 2017 to 2019. A net ridership increase, like that reported in Figure 4, consists of pluses and minuses. Pluses include a combination of new riders and riders using GoRaleigh more often, minus riders using it less often and those who have ceased riding entirely.

### Figure 5 Trip Purpose



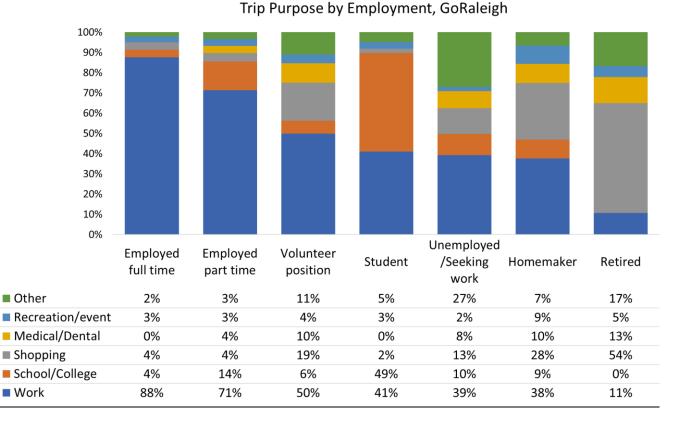
# Trip Purpose: Use of GoRaleigh for Various Purposes, by Segment

Customers were asked to name the single main purpose for which they use GoRaleigh.

- Getting to or from work is the primary trip-purpose, with 64% of customers citing that as their most frequent trip purpose.
- School and college trips make up another 13% of trips. Thus, GoRaleigh is carrying a large proportion of its customers (77%) for either work or school trips, an indication of its economic impact through the labor force.
- Another 9% of the customers indicate that they use GoRaleigh to make shopping trips, a set of trips with immediate economic impact.
- Medical and recreational trips account for 6%

Three-fourths of the six-to-seven-day riders (75%) and almost two-thirds of the four-to-five-day riders (64%) had made work-trips. The one-to-three-day a week riders are more likely than the other segments to have used GoRaleigh for each of the non-work purposes. It is interesting, however, that even among these least frequent customers, work trips are common (43%). They must either be working part-time or using different modes on different days.



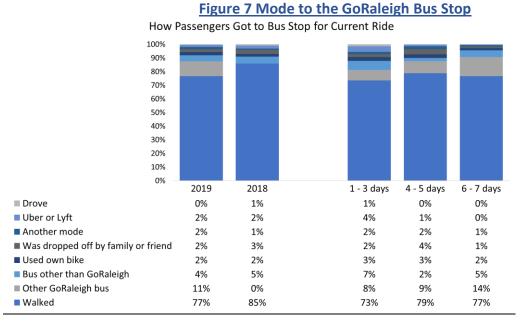


# Figure 6 Employment and Trip Purpose

# **Employment and Trip Purpose**

That employment would be closely related to trip purpose is self-evident. However, there are some variations. As expected, 88% of those employed full time use GoRaleigh to go to or from work, while 71% of part-time workers are headed for work. However, another 4% of full time and 14% of part time employed riders are headed for school. This is not too surprising since we know that many students also work.

Less expected is that 39% of those who say they are unemployed say they are going to or coming from, work. Probably they are in temporary jobs of some sort while looking for work and consider themselves to be unemployed. Similarly, 11% of retirees say they are making a work trip, probably working part time but still considering themselves to be primarily retired. Many homemakers too (38%) say they are going to work. Possibly they are working part time but consider homemaker to be their main occupation. Students, as expected, are going either to work (41%) or to school (49%).



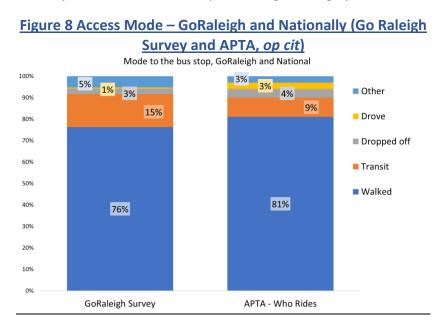
# Mode to the Bus Stop

In 2019, most GoRaleigh customers, 77%, usually walk to their GoRaleigh bus stop. The four to five day riders are slightly more likely than the two other segments to walk to their stop. However, the relationship is not strong, and more than 70% of all three frequency segments

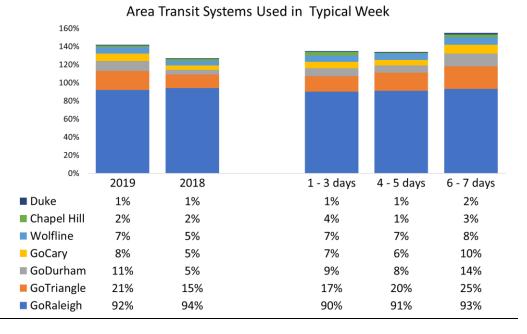
walk to their stops.

The criteria in the question were changed significantly from 2018 to 2019, a change that makes the comparison of 2018 to 2019 somewhat problematic. In 2018 the question asked about access to the "... first GoRaleigh bus you boarded for this trip." The 2019 survey asked: "How did you get to the stop where you got on this GoRaleigh bus?" This difference accounts for the change in the percent saying they used another bus to get to the stop.

With respect to the mode to stop, GoRaleigh is roughly in line with national norms. Nationally, 81% of bus



system riders walk to their stops, while 76% of GoRaleigh riders do so. While 9% of bus riders nationally, use public transit to access the stop, the same is true for 15% of GoRaleigh riders.



### Figure 9 Bus Systems Used in a Typical Week

### **Use of Area Bus Systems**

Respondents were asked which of the transit systems in the region they use in a typical week. Since they can use multiple systems, the sums of the percentages exceed 100% in Figure 9.

As expected, most riders (92%) said they use GoRaleigh in a typical week. Conversely, this suggests that about 8% do not use GoRaleigh in a typical week and were encountered in the survey in one of their multisystem trips, or that they use GoRaleigh only occasionally, and not in a "typical week."

For all segments in 2019, GoRaleigh customers use GoTriangle more than any other local system (21% overall). As one would expect, given that as we shall see in a later chart, they are less likely to have a personal vehicle available, the six-to-seven-day riders are more likely than others to use multiple systems.



### Figure 10 GoRaleigh Fares at the Time of

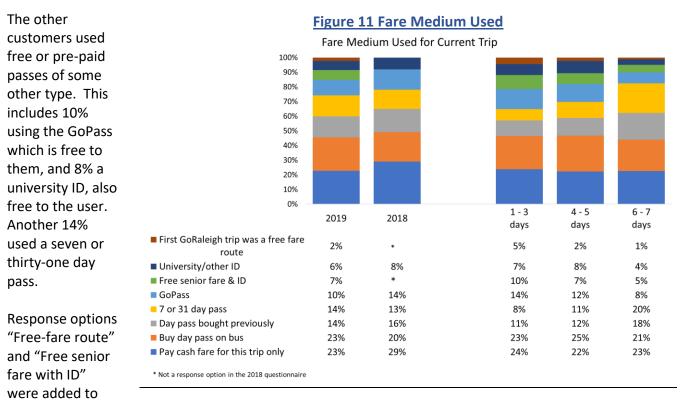
the Survey							
GoRaleigh Fare Schedule							
	Full Fare	Discounted Fare					
Single Ride Fare	\$ 1.25	\$ 0.60					
GoRaleigh Day Pass	\$ 2.50	\$ 1.25					
GoRaleigh 7-Day Pass	\$ 12.00	\$ 6.00					
GoRaleigh 31-Day Pass	\$ 40.00	\$ 20.00					
Senior or Youth with ID	Free	NA					
GoPass provided by some employers	Free	NA					

# **GoRaleigh Fares at the Time of the Survey**

The table in Figure 10, based on fares posted on the GoRaleigh website<sup>2</sup>, displays the several types of pass media and special fares available at the time of the survey in 2019. In addition to the fares listed, the GoPass is accepted from customers affiliated with certain institutions.

### **Type of Fare Used**

The largest percentage of GoRaleigh customers (37%) boarded with a day-pass purchased either on the bus (23%) or ahead of time (14%). This was unchanged since 2018. Twenty-three percent (23%) paid their fare in cash. Thus, combining the cash fare and the day-pass purchase on the bus, a total of 46% make a fare transaction on the bus.

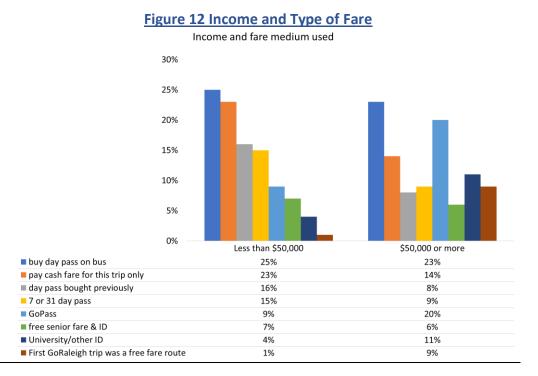


the survey in 2019. The former was used by 2%, the latter by 7%.

The use of cash or on-bus purchase of a day pass were very similar among the ridership market segments. However, the use of pre-paid passes (day pass previously purchased and 7-31 day pass) was greater among the most frequent riders (38%) than among four to five day riders (23%) or one to three day riders (19%).

<sup>&</sup>lt;sup>2</sup> Source of fare information: https://www.raleighnc.gov/services/content/PWksTransit/Articles/BusRates.html



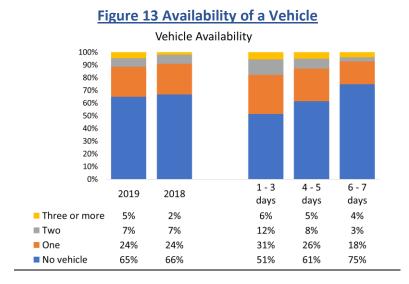


# Income and Fare Medium Used

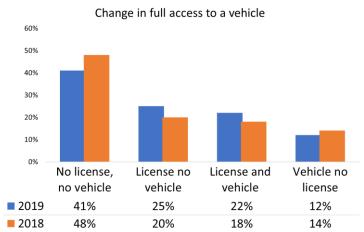
Differing levels of household income are associated with differences in fare-media choices. Those with incomes under \$50,000 are almost twice as likely to pay cash fares (23%) as those with higher incomes (14%). They are also more likely to purchase either a day pass in advance or a 7 or 31 day pass (total of 31%) compared to higher income customers (17%). They are also much *less* likely than the higher income customers to use a GoPass (9%) or a university ID (4%), compared to 20% and 11%, respectively. Very similar percentages of customers purchased a day pass on the bus, 25% for lower income and 23% for higher income levels.

Overall, 21% of those with incomes under \$50,000 paid no fare when boarding the bus on which they were surveyed, while 46% of those with higher levels of income traveled free. On the other hand, 56% of customer with incomes under \$50,000 took advantage of a discounted fare by using a pass of some type rather than paying cash.





### Figure 14 Aspects of Mode Choice: Having a License and Having a Vehicle



# Availability of a Vehicle

Availability of a vehicle was basically unchanged between 2018 and 2019. The notable difference was in the households with three or more vehicles. Given that there was relatively little change in household income among riders from 2018 to 2019 (see Figure 20, page 310), this is a bit surprising.

Customers who use GoRaleigh one to three days a week are more likely than others to have a vehicle available.

# **Aspects of Mode Choice**

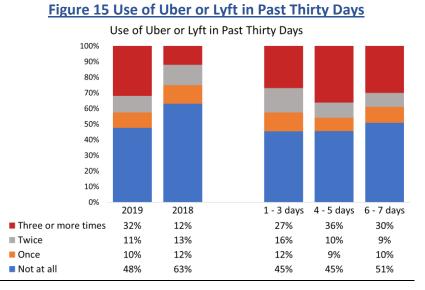
Having a choice of local transportation mode depends not only on the availability of a vehicle but also on having a valid driver's license. Figure 13 indicated that there had been very little change in availability of a vehicle.

The percent of riders with a diver's license (not shown in the chart) increased by only 2% from 44% in 2018 to 46% in 2019. However, Figure 14 indicates that the percent of riders with both a vehicle and a diver's license increased.

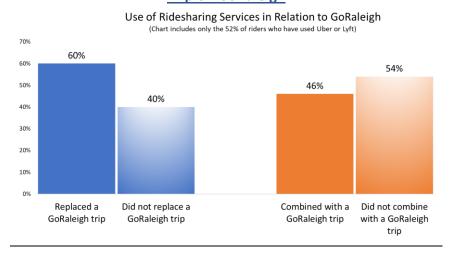
Figure 14 indicates that a large minority of customers (totaling 41%) have neither a vehicle nor a license. This is down from 48% in 2018. At the same time, having both a license and a vehicle rose from 18% to 22%. In at least one other system study (Westchester County, NY), this kind of change was associated with declining ridership, but that is not the case for GoRaleigh.

# Use of Uber or Lyft in past thirty days

Mode choice is no longer simply about owning or leasing a personal vehicle. Since 2015, car sharing has become mainstream. Of all GoRaleigh customers, 48% say they have not used car sharing services in the past thirty days. Conversely, this means that 52% have used one of the car-sharing services, including 10% who



### Figure 16 Use of Uber and/or Lyft to Supplement or Replace a Trip on GoRaleigh



have used them only once, 11% twice, and 32% who have used them three or more times<sup>3.</sup>

Ridesharing has grown rapidly since 2018 with users rising from 37% to 52%, and those using ridesharing three or more times rising from 12% to 32% of riders.

The market segments do not manifest extreme differences in use of ridesharing, but the four to five day riders are more likely than the other segments to have used it three of more times in the previous thirty days.

# Use of Uber and/or Lyft to Supplement or Replace a Trip on GoRaleigh

How have ridesharing trips interacted with GoRaleigh? Figure 16 provides basic answers.

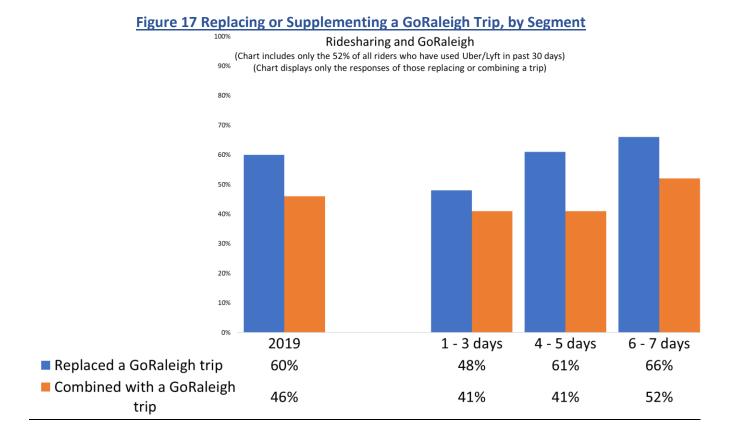
Of the 52% of GoRaleigh customers who have used Uber or Lyft locally in the past thirty days, 60% say they replaced a GoRaleigh trip with the ridesharing trip. This amounts

to 31% of all GoRaleigh customers up from 27% in 2018 (i.e. 60% of 52% = 31%).

Of the 52% of customers who have used Uber or Lyft, almost half, 46%, say they combined a ridesharing trip with a GoRaleigh trip. This amounts to 24% of the ridership, up from 18% in 2018 (i.e., 46% of 52% = 24%) of the ridership) who have used a ride-sharing service, say that they have used it as part of a bus trip.

<sup>&</sup>lt;sup>3</sup> In future surveys, it may be useful to determine if customers using shared rides are doing so with dependents because that may be no more costly than multiple cash bus fares.

We do not know for what purpose some Uber/Lyft riders have combined a rideshare trip with a GoRaleigh trip. However, in Figure 7 (Mode to the GoRaleigh Bus Stop) only 2% said they used Uber/Lyft to get to the bus stop for their current trip. Other customers must have used ridesharing for other purposes. This issue will be worth exploring in some manner in the coming years, if only on an informal basis. One question that would be helpful to understand is whether use of ridesharing is filling gaps in coverage, span, or in weekend service.



# Replacing or Supplementing a Trip, by Segment

As we saw in previous charts, 52% of GoRaleigh customers say they have used Uber or Lyft in the past thirty days. Of this 52% set of riders, 60% (i.e. 31% of all riders) say they replaced a GoRaleigh trip with a trip on a rideshare service, while 46% (i.e., 24% of all riders) have combined a rideshare trip with a GoRaleigh trip.

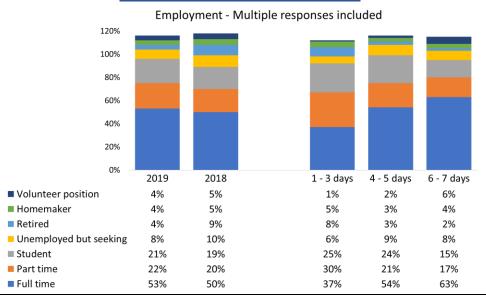
The practice of using rideshare to replace a GoRaleigh trip varies significantly among the rider segments. The more one rides GoTriangle, the more one also replaces a GoTriangle trip with a ridesharing trip. The four-to-five-day (61%) and the six-or-seven-day riders (66%) are more likely than the one-to-three-day riders (48%) to do so. On the other hand, for reasons not apparent in the data, the six-to-seven-day riders (52%) are also more likely than others (41%) to say they combine a rideshare with a GoRaleigh trip. This suggests that there is some type of unmet transportation need among the most frequent GoRaleigh customers.

Although there are some differences among the rider segments, the differences should not obscure the main finding, that a significant proportion of riders are supplementing and even replacing some GoRaleigh trips with ridesharing trips. It is also important to remember that the percentages cited here are percentages of riders, not of the trips they make. Riders were not asked to estimate the number or proportion of their trips replaced in this manner. This may be a useful question to include in a future survey.



Demographics





### **Figure 18 Employment of Customers**

# **Employment of Customers**

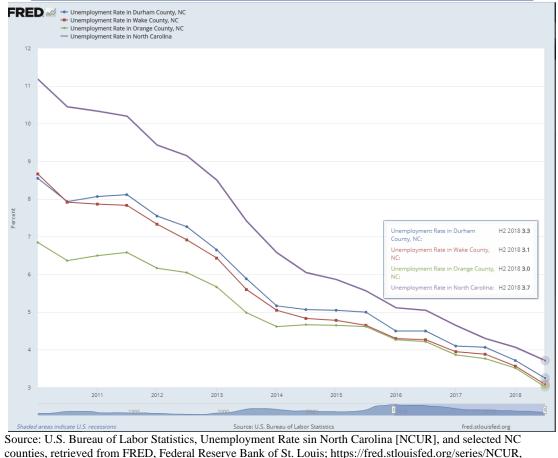
Note: In the chart above, multiple responses were allowed for those with multiple roles. Therefore, the sum of the percentages exceeds 100% by the percent who have more than one job.

Respondents were asked about their employment. In 2018, a total of 50% of GoRaleigh customers reported being employed full time. The percentages in 2019 are similar, but with a few changes at the margins. For example, full time employment increased from 50% to 53% and part time employment increased from 20% to 22%, while Unemployed, seeking work decreased from 10% to 8%. All of these changes are within sampling error of the smaller 2019 sample. However, they are both consistent with overall economic trends, a factor that suggests the differences are likely to be representative of real change.

Full time employment is somewhat more frequent among the six-to-seven-day riders (63%) than among the four-to-five-day riders (54%), and considerably more likely than the one-to-three-day riders (37%). On the other hand, the one-to-three-day riders are more likely than the other segments to be students (30%) than the four-to five riders (21%) or the six-to-seven-day riders (17%).







February 15, 2019.

## **Unemployment Rates in NC, Wake, Durham, and Orange Counties**

In the survey, 8% indicated that they consider themselves unemployed. We also saw in Figure 6 that 39% of these "unemployed" riders said that their trip purpose was getting to or from work. Thus, they are employed in terms used by the Department of Labor, although their employment may be only an interim tactic while seeking a new job. This would amount to about 3% of the ridership, leaving 5% unemployed and not working in the interim. How do these figures compare to the official unemployment figures in the region?

The substantial decrease in unemployment in the Triangle Region since the Great Recession is shown clearly in Figure 19. At the time of the survey, the rate was 3.7% statewide and 3.3% in Durham County. If 3% of the riders are "unemployed" but working and thus not counted in the federal figures, this would put the rate among riders at approximately 5%, somewhat higher than the total adult population, but given the relationship of income to transit use, that is not surprising.

Coupled with the fact that more than 90% of GoRaleigh riders are either employed or students (or in some cases both) the service to those between jobs and seeking employment is another illustration of the important role of GoRaleigh as a major factor in labor mobility and emphasizes its critical economic role in supporting the local labor force.



#### Household Income 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2019 2018 1 - 3 days 4 - 5 days 6 - 7 days More than \$100,000 3% 2% 7% 2% 2% **\$75,000 to \$100,000** 4% 3% 7% 5% 1% \$50,000 to \$74,999 6% 8% 9% 8% 4% 5% 7% **\$35,000 to \$49,999** 5% 5% 3% \$25,000 to \$34,999 10% 11% 9% 6% 14% **\$20,000 to \$24,999** 18% 17% 9% 16% 23% ■ \$15,000 to \$19,999 7% 7% 5% 10% 7% \$10,000 to \$14,999 12% 12% 18% 9% 11% Less than \$10,000 35% 35% 34% 34% 36%

### Figure 20 Income of Rider Households

### **Income of Rider Households**

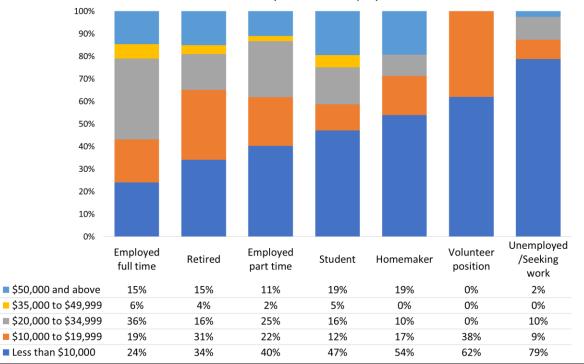
As is true of riders in many transit-passenger surveys of other systems, most GoRaleigh riders have very low household incomes. In 2019, as in 2018, 35% report household incomes of less than \$10,000. Another 19% in both years report their incomes as ranging from \$10,000 to just under \$20,000, while the balance, 46%, report incomes of \$20,000 or more.

The income distribution varies less than expected among the three levels of riding frequency. Among the three segments the percentage with incomes of less than \$20,000 varies only from 53% to 57%.



### Figure 21 Employment and Income

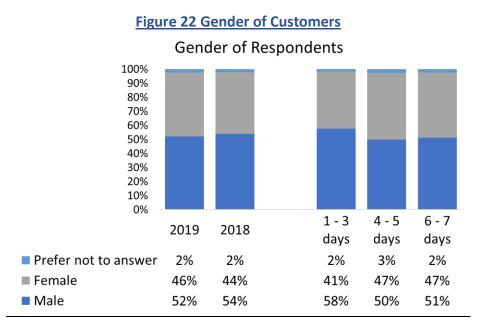
Household Income by Customer Employment



## **Employment and Income**

In 2018, a household income for someone with full time employment below \$10,000 seems unlikely. However, in a minimum wage job (\$7.25 in NC), even if a person worked full time for 2,000 hours a year, the income would be only \$14,500. Among full time employed GoRaleigh riders, 24% report incomes below \$10,000, and another 19% below \$20,000.

Frequently such low wage jobs do not provide a full 2,000 hours of work, with the result that incomes can fall below that level. It is important to remember that responses to the income question in surveys are approximations. For example, the real income of a household with earning income under \$10,000 is likely to be supplemented by such programs as SNAP and Medicaid. And the real incomes of those who are employed and have fully paid health insurance, and those who are sixty-five or older and on Medicare, or students on scholarships (etc.) have income supplements that are unlikely to be accounted for in a quick survey response about household income. Thus, the actual income levels may be understated. The point remains, however, that the income levels are very low.



#### Figure 23 Ethnicity of Customers Ethnic Background of Respondents 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2019 2018 1 - 3 days 4 - 5 days 6 - 7 days Native American 2% 3% 2% 1% 2% Other/multiracial 4% 6% 2% 4% 6% Hispanic 6% 7% 5% 6% 6% Asian 6% 5% 2% 5% 16% White 22% 21% 22% 22% 22% African American 61% 59% 53% 63% 62%

# **Gender of the Customers**

GoRaleigh customers are more often male (52%) than female (46%), with 2% preferring not to state a gender identity. The gender balance does not differ significantly among the rider segments except for the one to three day riders who are considerably more likely than the other segments to be male.

The GoRaleigh gender split is the reverse of the national figures cited in the CJI APTA report "Who Rides Public Transportation." Among bus customers nationally, 56% are women.

# **Ethnicity of Customers**

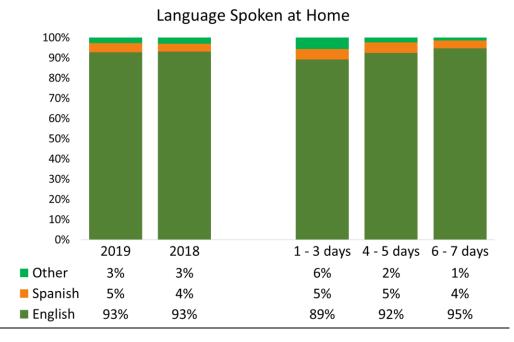
In 2019, 61% of the respondents identified themselves as African American/Black and 22% as Caucasian/White. These two groups total 83% of the ridership.

Those identifying as Hispanic account for 6% of the ridership, Asian as 6%, and Native American as 2%. The "Other" category allowed for

a handwritten response. But the write-ins were predominantly expressions of nationality or cultural groups (Greek, Egyptian, Jewish, etc.) or notation such as "mixed," or sardonic (e.g. American, Human) and in this context are not at all helpful.

The distribution of ethnicity differs somewhat among the rider segments, with the four to five day (63%) and six to seven day (62%) customers considerably more likely to identify as African American compared to one to three day riders (53%).





## Figure 24 Language Spoken Most Often at Home

# Language Spoken Most Often at Home

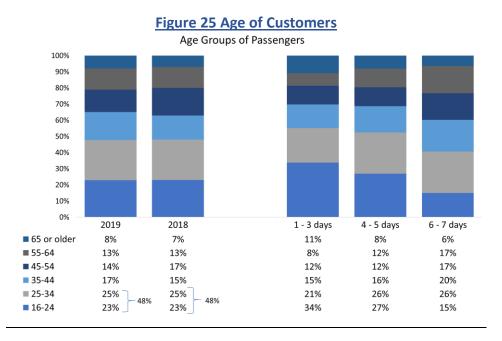
The overwhelming majority (93%) of GoRaleigh customers most often speak English at home while only 5% speak Spanish at home. The rider frequency segments do not vary significantly in the percent who speak Spanish at home. The one to three day riders, however, have 6% who speak a language other than English or Spanish at home. The languages reported are French, Hindi, Arabic, German, Portuguese, and Russian, all with only a few speakers.

In the survey of GoRaleigh customers, 77 customers, or 7% of the effective final unweighted sample identified themselves as Hispanic, but only 25, or 2% of the completed questionnaires were completed in Spanish. Stated in another way, only one-third (33%) of the customers identifying themselves as Hispanic completed the survey in Spanish.



Age of the Customers





# Age of Customers

Like most bus transit systems in the United States, GoRaleigh has a young ridership. Of all GoRaleigh riders, close to half, 48%, are under the age of thirty-five. This percentage actually underestimates the youth somewhat because for reasons of data validity and ethical practice, we did not attempt to survey anyone who appeared to be younger than sixteen.

The age distributions differ somewhat among the three rider segments. The most notable variation is in the total percentage of the ridership younger than thirty-five. Among the six-to-seven-day customers the percentage younger than thirty-five is 41%. Among the one-to-three-day customers, the percentage is 55%. The four-to-five-day customers fall in between with 53% in that age group. This youthful age characteristic reflects the greater proportion of students in the one-to-three-day and four-to-five-day categories that we saw earlier in Figure 18.

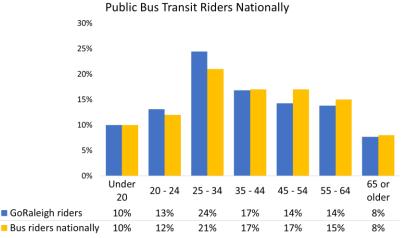
# Age Profile of Transit Customers Nationally

Figure 26 demonstrates that nationally, the age distribution among GoRaleigh customers is similar to that of bus system customers in general, although the GoRaleigh customers may tend to be slightly younger than bus riders nationally. Figure 26 Age Profile of Transit Customers Nationally (APTA, op cit)

- Nationally, 22% of bus customers are under the age of twenty-five, a percentage statistically the same as the 23% under twenty-five among to GoRaleigh customers.
- Nationally, another 21% are between twenty-five and thirtyfour, compared to GoRaleigh's 24%.
- Another 17% are between thirty-five and forty-four, the same as GoRaleigh's 17%

Similarly, nationally, 17% are

Comparison of Rider Age Profile of GoRaleigh Riders and

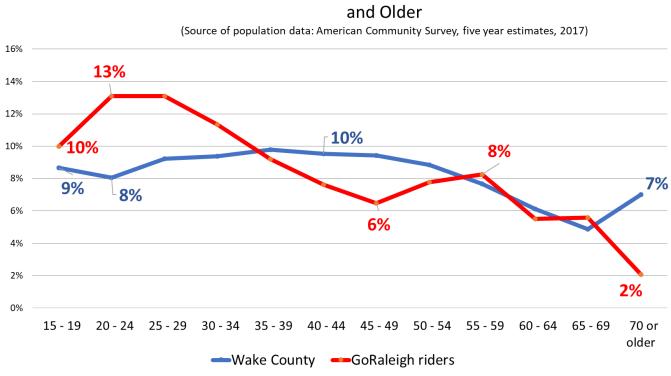


- between forty-five and fifty-four compared to the 14% among GoRaleigh customers.
- The balance, 23% nationally and 22% for GoRaleigh, are fifty-five or older.



•

### Figure 27 Age of GoRaleigh Customers and the Durham County Population



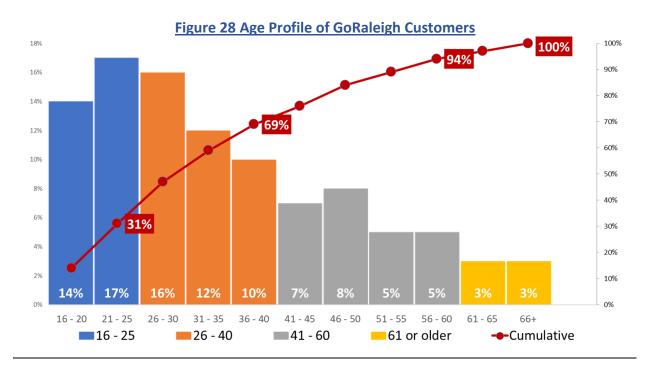
# Age Distribution of GoRaleigh Riders and Wake County Population 15

### Age of GoRaleigh Customers and the Durham County Population

Relative to the percentages in each age group among the county population fifteen and older, GoRaleigh ridership diverges most in the age ranges from twenty to twenty-nine and above sixty-nine. The county population in the twenty to twenty-four year old age set accounts for 8%, while in the ridership it accounts for 13%. And at the age of seventy and older, the percentage of the population is 7% while among riders it is 2%. There is also a significant gap in the age range from 40 to 50, with the largest gap occurring among those 45-49.

After the age of thirty-five, the county population follows a gradual downward trajectory until the age of sixty-five when the percentage of ticks up somewhat. After the age of fifty-five, the GoRaleigh ridership also trends down, and then falls to only 2% at the age of seventy or older.





# An Age Profile of GoRaleigh Customers

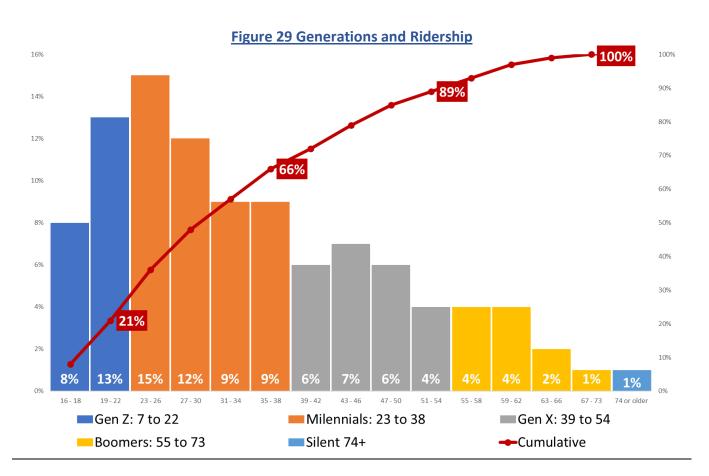
A quick glance at the chart above tells an important age story about ridership: It is somewhat disproportionately young. Close to one third (31%) of GoRaleigh riders are twenty-five or younger. More than two-thirds (69%) are forty or younger.

In several studies of transit customers in other cities, CJI has found that the age profile of any given system's bus ridership tends to follow an age progression similar to that shown above in Figure 28. Generally, about one-fourth to one-third of ridership falls into a youthful cohort, young, often in school or college, preparing for work-life, and ranging in age from sixteen to approximately twenty-five. After the age of twenty-five the percentage of transit customers in each age group drops off and enters a declining slope, which, for most transit systems we have studied, represents a life cycle period when many transit customers are entering a career phase of life, earning more and often buying a vehicle.

The age-curve then tends to flatten out somewhat between the ages of forty-one and sixty, in the GoRaleigh case averaging 6.5% of the ridership during that period.

After the age of 60, the percent of ridership falls off to 3% as people begin to retire.





## **Generations and Ridership**

For purposes of visualizing the age characteristics of the GoRaleigh customer base, another way to think about the age distribution of the ridership is to apply the age-ranges popularly used to describe generational groups. We have used definitions proposed by Pew Research Center<sup>4</sup>. The age sets used by PEW and those in the survey do not entirely correspond because while Pew defines Gen Z as between the ages of seven and twenty-two, the GoRaleigh survey interviewed no one below the age of sixteen. Also, while Baby Boomers are said to be no older than seventy-three, there are too few riders in the survey above that age to create a separate group for the older generation ("The Silent Generation") and they are grouped with the Boomers for purposes of the chart. However, the PEW definitions provide an adequate guide.

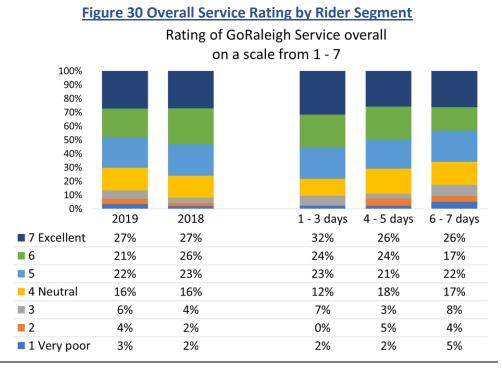
In Figure 29, we see a pattern very similar to that presented in Figure 28. Both charts make the point that a disproportionately large proportion of the ridership is young. In the case of generations, the youthful Gen Z and Millennial generations account for two-thirds of the total ridership (66%).

The bulge in the percentage of riders at middle age noted on the previous page represents a combination of the leading edge of Gen X and the trailing end of the Baby Boom.

<sup>&</sup>lt;sup>4</sup> See http://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

**Customer Satisfaction** 





# Overall System Rating Score by Rider Segment

Customers were asked to rate nineteen aspects of GoRaleigh service using a scale from 1 to 7, on which a score of 7 means "Excellent," and 1 means "Very poor." They were then asked to rate the service overall (See questionnaire, Appendix A). We begin this section of the report with the overall rating of service.

The occasional, one-tothree-day, riders offer the

highest score on overall service quality, with a total of 56% scoring service overall as 6 or 7 on the sevenpoint scale, while fewer, 50%, of the four-to-five-day riders and 43% of the six-to-seven-day riders assign those scores. This apparent relative reluctance to assign a perfect score for transit service is not uncommon for this six to seven day segment, perhaps because they rely of public transit more often and for more purposes than others with more opportunities to observe unavoidable problems.

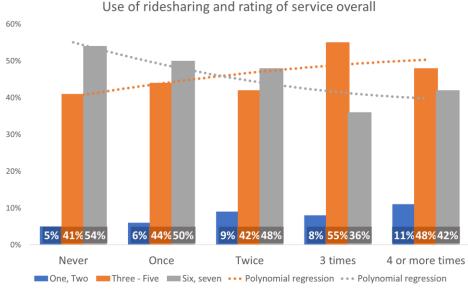
### CHANGE IN THE OVERALL SCORE

In 2019, twenty-seven percent (27%) rate service overall as seven, or excellent. Another 21% score it as six, giving a total of 48% with very high satisfaction scores. However, there was a modest decline, greater than the margin of error, in the score of six, causing the total in the two highest categories to decrease from 53% to 48% from 2018 to 2019. There was also a corresponding increase in poor scores of one through three, from 8% to 13%.

It is always difficult to interpret changes like these. One should not immediately assume that the change was driven by service deficiencies. Samples do fluctuate year to year in spite of all efforts at inter-year uniformity. For this reason, it requires more than a one year comparison to seriously suspect a trend. Demographics of the ridership itself changes. However, testing shows that none of the demographics can explain the change. It is true that the higher the income, the lower the score. But income of the total sample did not change appreciably from 2018 to 2019, so that cannot explain a decline in the overall service rating. Other demographics are unrelated to the overall service score, i.e. ethnicity, age, or vehicle availability.

What, then, is associated with the lower score? Ridesharing.





### Figure 31 Relationship between overall service rating and ridesharing

Use of ridesharing and rating of service overall

# **Overall Rating Score** and Ridesharing

In general, the more ridesharing trips a GoRaleigh customer makes, the lower the overall GoRaleigh service score will be.

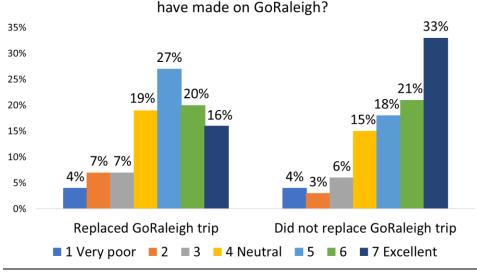
This is, of course, a classic matter of correlation v causality. Or chicken v egg. Are customers using ridesharing more because of less satisfaction with GoRaleigh service? Or are ridesharing trips presenting an attractive alternative that puts bus service in a poor light?

We cannot provide the answer to that. But from Figure 31 and Figure 32 we know there is a clear relationship. The relationship is especially strong between the overall score and having used ridesharing in place of a trip otherwise made on GoRaleigh.

From Figure 15, page 26, we know that the use of ridesharing increased dramatically between 2018

**GoRaleigh trip with ridesharing** Did you use Uber/Lyft for a trip you otherwise would

Figure 32 Relationship between overall service rating and replacing a



and 2019, from 37% of GoRaleigh riders to 52% making at least one ridesharing trip. That increase accounts statistically for the change in the service rating score.

### Figure 33 Services Included in the Survey, Grouped by Type and Showing Percentage Unable to Provide a Rating

# Percent of riders providing a rating vs those saying that this aspect of service was "Not applicable" to them

þγ	Buses on time		99%	6		19	
Operating Services Used All	Service to all destinations		99%	6		19	
	Total average trip time		98%			22	
	Weekday service frequency		98%	/ 0		<mark>2</mark> %	
	Weekday service hours		98%	/ 0		<mark>2%</mark>	
Se	Ease of transfer within system		95%			5%	
þγ							
Operating Services Used by Many	Saturday service hours		91%			9%	
	Saturday service frequency	90%			10%		
	Sunday service frequency	89%			11%		
	Sunday service hours		89%			11%	
Se	Ease of transfer between systems		85%			15%	
ent	Sense of safety on bus		99%			19	
ju e	Bus interior cleanliness	99%			19		
ror	Bus operator courtesy/helpfulness	98%			2%		
Travel Environment	Bus shelter/transit center cleanliness	97%			<mark>3%</mark>		
	Fare medium options	96%			<mark>4%</mark>		
ave	Usefulness of printed information	92%			8%		
Ц	Quality of WiFi	89%			11%		
	Usefulness of telephone operators		83%			17%	
	09	6 20%	40%	60%	80%	100	

Applicable - Provided rating Not applicable - Unable to provide rating

Services Included in the Survey, Grouped by Type and Showing Percentage Stating that the Service was not Applicable to Them



Two interacting parameters help shape the distributions of the rating scores.

- (1) One parameter is simply the proportion of all customers who can provide a rating, thus presumably indicating that they use the service at least occasionally. We refer to this as utilization. Figure 33 displays in blue bars the percent able to provide any rating whether positive, neutral or negative. It displays in the orange portion of the bars the percent who answered that the service was not applicable to them.
- (2) The second parameter is the type of service being rated. These types are explained below, but the essence is that some are operational, and some are simply static aspects of the travel experience.

### UTILIZATION

Taking utilization first, some services such as weekend service, were given ratings by fewer customers than others. We consider the extent to which customers can provide ratings a proxy for *utilization* of the service. To illustrate this changing proportion of respondents offering ratings, Figure 33 displays the percent of all respondents who offered any rating, whether positive or negative, and the percent who said that the service did not apply to them. Ratings for services with fewer users than others have a different denominator when percentages are computed for the ratings and they are thus reflective of only those who use them. The computation of the percentages in the charts which follow and show service ratings are based on only those who answered the rating question, not on the total sample.

### **TYPE OF SERVICE**

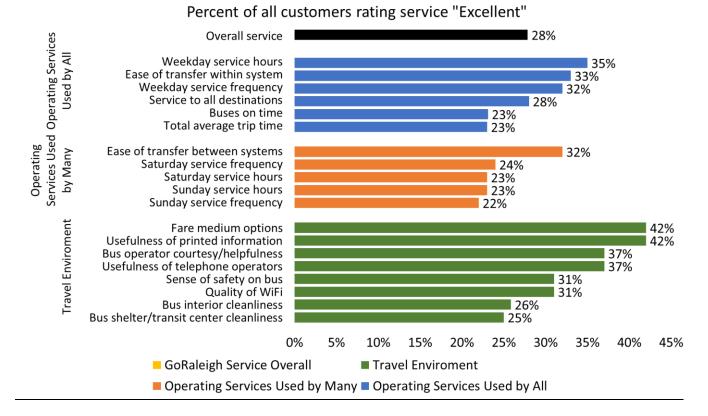
The second parameter involves the type of service. The typology is intended to put comparisons of ratings among the various services, on an apples-to-apples basis. One major factor differentiating the nineteen services included in the survey is whether the service element is *operational*. It is operational in the sense that it involves some combination of system design and the ongoing process of keeping the vehicles moving and serving passengers on a daily basis or is the type of service that sets the general environment in which the customer experiences GoRaleigh services. For example, "Quality of Wi-Fi" and "Fare medium options" are service elements that help set a general environment, while "service to all destinations" and "Buses running on time" are operational matters.

In Figure 33 and Figure 34, we apply this reasoning to differentiate three types of service elements based on two criteria: (1) the type of service (operational or travel environment) and (2) the extent to which operational services service are utilized, using the "not applicable" response as a proxy for not utilizing the service.

One can obviously debate the categorizations. For example, is interior cleanliness of the buses an operational factor or a factor that affects the customer's perception of the travel environment? It certainly involves operational activity by GoRaleigh, but on the other hand, it does not impact such things as the time customers wait for a bus or their ability to get to various locations. Thus, it is categorized with other factors affecting the environment in which people travel, rather than with operations.

No specific conclusion is to be drawn from Figure 33. It is provided only to give the reader a perspective on the differences among the elements in terms of service type and the proportion of customers using the service, as scores are compared in the several figures that follow.

### Figure 34 Scores of "Excellent" in 2018 on Individual Components of GoRaleigh Service



# Rating Scores: Scores of "Excellent" in 2019 on Individual Components of GoRaleigh Service

Figure 34 above presents a first look at customer rating scores for individual elements of service. This chart includes only the top score of seven, or "Excellent," on the seven-point scale<sup>5</sup>.

Like Figure 33, Figure 34 is organized by the type of service being rated. At the top of the chart are three operational services fundamental to all or almost all customers. Each of these has more than 30% scoring it as excellent. Weekday service hours, Weekday service frequency, and ease of transferring within the system have the highest percent of excellent ratings in the high utilization operational group, with 35%, 33%, and 32%, respectively. Coverage ("Service to all destinations you want to get to") finds fewer, but more than one-fourth of customers rating it as excellent (28%). On time performance and total time required for a trip reach almost one-fourth (both, 23%).

The second set in the chart includes operational services used by many but not all riders. Ease of transfer between systems, which scores 32% excellent is the only item in this set that does not involve weekend service. It is in this set because 15% said the question did not apply to them, implying that they do not make such inter-system transfers in a "typical week." Saturday service hours receive excellent ratings by almost one-fourth (24%). Saturday service frequency falls slightly below that level at 23%. The two other service elements in this set both involve Sunday service, service span ("Sunday service hours") at 23% and frequency and Sunday service frequency at 23%.

<sup>&</sup>lt;sup>5</sup> Note that the percentages are based on only those who were able to provide a rating, not the total sample, so that the percent "excellent" is <u>not</u> falsely reduced by inclusion of those who answered "not applicable" in the denominator.



The third set of services involves the environment in which GoRaleigh customers travel. Of the eight services included in this set, six receive excellent scores by more than 30% of the respondents. The fare media options and the usefulness of printed information, both with 42% excellent, are at the top of this list, but both personnel elements, each with 37% at the excellent score level are also at a very positive level. They are the courtesy and helpfulness of the bus operators and the usefulness of the telephone information operators. It is typical for personnel to have very good ratings. Occasional complaints notwithstanding, customers generally like the interaction with the transit personnel with whom they come in contact and give them high scores.

The quality of Wi-Fi on the buses and the sense of safety on the bus, both score 31% excellent. The remaining two elements in this set both involve cleanliness; of the interior of buses (26%) and of the bus shelters and transit center (25%).



### Figure 35 Distribution of Grouped Service Rating Scores

Jsed	Overall service	e 7% 45%		49%
ces L	Weekday service frequency	8%	39%	53%
Overall service Weekday service frequency Weekday service hours A Ease of transfer within system Buses on time Service to all destinations Total trip time		9%	38%	52%
		10%	39%	51%
		13%	45%	42%
era	Service to all destinations	16%	42%	42%
Op	Total trip time	14%	48%	39%
s: >				
Operating Services Used by Many	Ease of transfer between systems	11%	42%	47%
	Saturday service hours	19%	42%	39%
0 0 2	Saturday service frequency	19%	45%	37%
	Sunday service hours	21%	44%	35%
	Sunday service frequency		42%	35%
ent				
ime	Usefulness of printed information	6%	34%	60%
Travel Environment	Fare medium options	7%	34%	59%
ivi	Bus operator courtesy/helpfulness	9%	34%	56%
	Usefulness of telephone operators	11%	33%	56%
.avi	Sense of safety on bus	8%	38%	54%
F	Bus interior cleanliness	12%	43%	46%
	Quality of WiFi	13%	41%	46%
	Bus shelter/transit center cleanliness		46%	43%
		<sup>10%</sup> Very poor to Poo		90% 100%

# **Service Rating Distributions**

The previous chart, Figure 34, showed the top percentages on the seven-point scale. However, so that we can see what the balance is between positive and negative ratings, it is important to also consider the distribution of scores within the full 1 - 7 range.

To simplify the chart showing the distributions, the scores of 1 to 7 have been combined into three sets as shown in Figure 35 above. The top two positive scores (6 and 7) are combined, as are the bottom two scores (1 and 2). The combined middle scores of 3, 4, and 5 can be



considered neither extremely positive nor extremely negative. The scores of six or seven represent either excellent or nearly excellent scores. This is simply a way to summarize the results that also allows us to visualize the distribution of the scores.

### **RESULTS TEND TO BE POSITIVE**

The basic story of this chart is that, as with most similar surveys for other transit systems, the ratings differ primarily in the degrees of positive ratings, not in stark differences between positive and negative ratings. The percentages in the lowest rating categories of 1 and 2 tend to be below 15%. The percentages giving positive scores of six and seven on the scale in contrast, tend to be much greater. For example, of the six operational high utilization characteristics, three have high six/seven ratings greater than 50%. The other three range from 39% to 42% in the top category.

There are exceptions which have percentages greater than 15% in the low scores. The largest percentages in the lowest score category are for Sunday service frequency and hours, with 21% and 23%, respectively, in the lowest score categories. Saturday service also has high negative ratings of 19% for both service hours and frequency.

These service elements are worth mentioning only because when low ratings significantly exceed 10% to 15% of the customer base in any industry, it is a clear signal that a significant proportion of the customer base is pushing at the limits of what the system as structured can currently provide.

# **Determining Customer Priorities for Service Improvement**

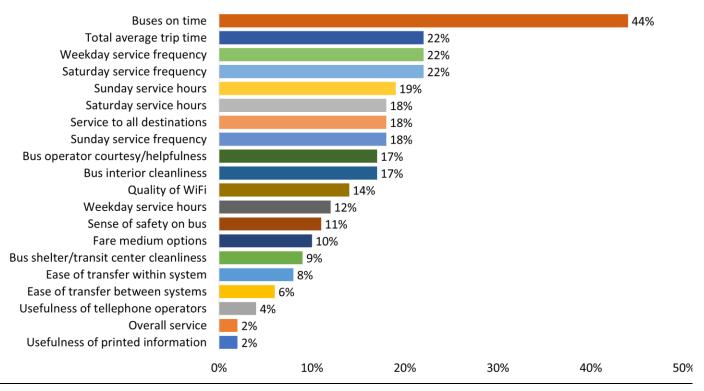
In the charts from Figure 30 through Figure 35 we have seen the opinions of GoRaleigh customers about service overall and of nineteen separate elements that make up GoRaleigh service. While these charts give us considerable information about how customers perceive GoRaleigh service (quite positively), it is static information – it does not tell us how to prioritize service improvements. Two methods of prioritizing are presented in Figure 36 and Figure 38:

- The first method (Figure 36) is very straightforward. It is based on customer response to the simple request: "Of the services in questions 1 19 above, please list the three most important to improve."
- The second method (Figure 38) involves a combination of two statistical analyses. First it compares each service rating to the average rating of all services: Is the rating above or below the average score for all nineteen elements of GoRaleigh services? Second, it correlates the rating of each element of service with the rating of GoRaleigh service overall so that we can infer its influence on that overall score.



### Figure 36 Most Important Element to Improve

One of three most important to improve



# One way to prioritize: Ask Customers "What Are the Three Most Important Services to Improve?"

Forty-four percent (44%) of GoRaleigh customers indicate that having the buses run on-time is one of their top three improvement priorities. This is always rated as the most important of the top three as it is here. At GoRaleigh, 42% give on-time performance a very good rating, and only 13% give it a poor rating. Yet it appears at the top of the improvement priority list. The reason for this is that there is no limit on the demand for "on-time" performance, by which people appear to mean, a bus at their stop when they want it.

It is important to keep in mind that the customer belief that on-time performance must be improved is a customer *perception,* not a measurement-based observation. Customers themselves will often arrive at their stop early, marginally on time, or a bit late for their bus and perceive that it is the bus that is off schedule. They may also not know the relationship of their stop to a time point. Thus, their perception and the reality can be quite different.

While the score on the seven point scale for on-time performance did not improve between 2018 and 2019, the percent placing that item in the top three to improve dropped dramatically from 55% to 44%. We had previously hypothesized that to the extent that more people begin to use real-time transit apps for bus arrival information, as 59% now do (see Figure 39), that that information should decrease the anxiety of waiting and will help reduce the perception of a lack of on time performance. However, in the 2019 survey data, riders who have the transit app on their mobile phones are no more or less likely than those who do not to identify on-time performance as among the top three. Therefore, use of a transit app cannot explain the change in the ranking.



The services next most frequently named as priorities for improvement were all named by 22% of respondents. The total time the trip takes, weekday service frequency, and Saturday service frequency are all named in the top three by 22%. It is interesting that frequency (weekday and Saturday) appear among the top four customer improvement priorities. Frequency is, of course, closely related to the perception of on time performance. The inclusion of Saturday frequency along with weekday frequency is also interesting because fewer riders use GoRaleigh on Saturday.

Other items in the top tier of priorities are also operational aspects of service. Saturday and Sunday service hours, coverage, and Sunday service frequency all are in the lower end of the top eight improvement priorities. The only operational aspect of service not falling into this top tier is weekday service hours. Apparently, there is a level of satisfaction with existing service in that respect.

Why would the mention of on-time performance as one of the top three service aspects to improve have dropped by twenty points? We tested whether it had to do with the adoption of the transit app (see Figure 39, page 58) because the use of the app increased dramatically from 37% to 59% and it might provide confidence in the arrival of the next bus. However, there was (disappointingly) no relationship.

A likely explanation was provided by David Walker of GoRaleigh. Ontime performance (OTP) has been consistent for years, varying within a narrow range of 81% to 84%, so not change in that would explain the decrease in concern with OTP. However, as part of the ongoing development of the high frequency network, frequencies have been increased on several routes. His comments follow:

In January 2019 we added our 4th high frequency network (HFN) route (operating every 15 min) in SE Raleigh. The new 19 MLK route ridership has grown by 60 to 70% on this new HFN service. We also added 30 minute frequencies 6 am to 7 pm on the 4 Rex, 27 Blue Ridge and 36 Creedmoor. The former 4 Rex route was cut in half. 2nd half is now the 36. The 27 Blue Ridge is new service.

Maybe the higher frequencies make the OTP not quite as important?

We believe that this is the likely explanation. High frequencies should have precisely that effect of diminishing the customer's concern with ontime performance because the takes are lower if one misses a bus.

# A second way to prioritize: Determine Which Service Elements Would Move the Needle of the Overall GoRaleigh Service Rating if They Were to Be Improved

Using survey data to prioritize elements of service that customers feel need improvements is a challenge. The chart of the top three services customers feel should be improved presented one way to do it. Figure 38 illustrates a second way to accomplish it. This approach takes the pool of nineteen services and answers the question:

Which of these are more important and which are less important in determining the customers' rating of GoRaleigh service overall?

This question is answered in a matrix. The matrix itself is actually less complex than it may seem, but it does require some explanation.



- The concept of the matrix in Figure 38 as follows: Respondents rated nineteen separate aspects of GoRaleigh service as shown in previous charts. They also rated *"The quality of GoRaleigh services overall."* We can assume that customers' ratings of the quality of services overall sum up their ratings of quality of the nineteen specific elements of service. Assuming this, we can answer the key question, which is, *"Which of the nineteen aspects of GoRaleigh services would, if improved, move the needle of the rating of GoRaleigh service overall?"*
- Two basic statistics are involved in this analysis, first the average or "mean" rating of service quality on the scale from 1 7, and second, a correlation statistic that measures the strength of the relationship (i.e., the *correlation*) between each element of service and the overall service rating for GoRaleigh. These statistics, when used together, answer two questions: How do customers rate each of the nineteen elements of service? And how closely related is each of those ratings to the overall rating?
- To visually display the results of this kind of analysis means using a simple graph with the 1-7 rating on one axis (the horizontal axis) and the correlation on the other (vertical) axis. However, there are challenges to doing this. The major challenge for the analysis is that both the correlations and the ratings all tend to be positive. For example, the service ratings tend to vary more between scores of 4 through 7 than between 1 and 3 (see Figure 35 page 47. There are very few poor ratings, which makes sense, since if many riders rated service negatively, it would be odd if they continued to use the service. Because so few scores are negative, we have to have a way to separate the merely good from the very good scores, not the worst from the best.
- The same kind of problem occurs with the correlations. All aspects of service go into a customer's evaluation of the overall service. Therefore, we need a good way to differentiate between the stronger and weaker correlations. A useful way to do this is to *standardize* the scores. This simply means to convert the correlation to a relative score i.e. a score that shows how important each service element is relative to all other elements of service<sup>6</sup>. This procedure enables us to construct a matrix that shows the services which, if improved, would have the most powerful effect on the rating of GoRaleigh service overall.

Placing the score in a matrix like the one below will help answer the question: What service improvements would help more to move the needle on the rating of GoRaleigh service overall? To do this, we look at the ratings and at the correlation of each of those ratings with the rating of GoRaleigh service overall. The results can be charted in a matrix like the one below in which the higher a service element is vertically in the matrix, the more important it is to the customer, and the farther to the right it is, the better the customer's current rating of that service is.

In Figure 38 we will add the actual survey statistics to fill out the matrix. That will show service improvement action priorities as shown below. The elements most in need of improvement are in the upper left quadrant. Those that may be "easier wins," but with less impact on satisfaction overall, are in the lower left. The elements that must be maintained as strong are in the upper right. The elements in the lower right are those that are in good standing with customers without additional effort by GoRaleigh. However, in some cases (e.g., safety) the element can be volatile if problems arise, so complacency is not an option.

<sup>&</sup>lt;sup>6</sup> A correlation coefficient varies from -1 to +1. Realistically in passenger survey data the correlations are always degrees of positive, never negative. The strength of the correlation varies with a narrow range, making differentiation difficult. To resolve that problem, standardization converts the correlation score to a standard deviation. In the matrix in **Error! Reference source not found.**, therefore, the vertical axis varies from -2.5 to +2.5 standard deviations, not from -1 t o +1.



	Below average rating High importance	Above average rating High importance
Importance of score to the overall rating		
ll ra		
vera		
ie ol		
to th		
ore		
f sc		
9		
tan		
Iodu		
<u>n</u>	Below average rating Low importance	Above average rating Low importance
	Quality of ser	vice score

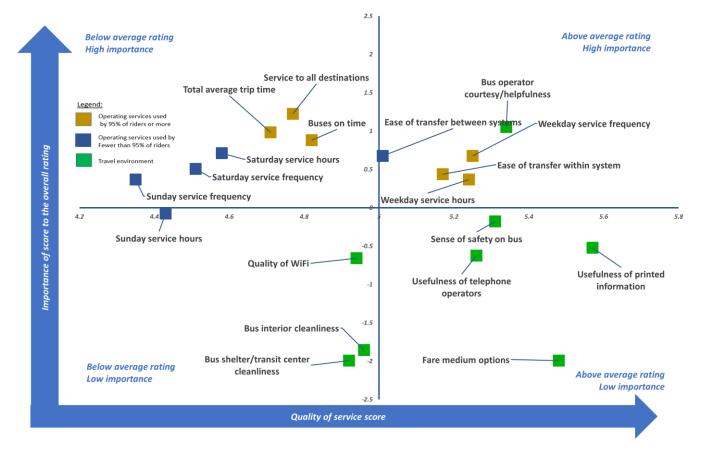
#### Figure 37 A Service Improvement Importance Matrix

The diagram above displays how the nineteen elements of service are positioned within this priority matrix.

- Vertically, it differentiates those aspects of service ranking above and below average in terms of importance in determining the overall GoRaleigh service score. Items above the center line are above average in importance.
- Horizontally, it differentiates aspects of service rated below average to the left of the line and above average to the right.



#### Figure 38 Relationship between Overall Performance Rating and Ratings of Individual Service Elements



#### **Relationship between Overall Performance and Individual Service Elements**

In the chart, the location of a service vertically, up or down along the *vertical axis indicates the strength of its correlation* with, and presumably influence on, the overall rating for GoRaleigh service. The higher on that axis, the more important we can assume that element is in influencing the score for service overall. The lower on the line, the weaker it is. The *horizontal axis indicates the rating score* for the individual element of service relative to the rating of all rating scores. The farther to the left, the poorer the rating compared to the average of all ratings, and the farther to the right, the better the rating compared to the average of all ratings. The two lines cross at the mid-points of the scores.

In considering the matrix above, keep in mind that the position of a service element in the matrix is based on its rating <u>relative to</u> the average for all scores. For example, a service element appearing at the right means that it is rated better than the average of all service elements. If, for example, the average score for all nineteen service elements were, say, 3.0, and the score for a specific element were 4, it would have a *relatively* positive score in spite of the fact that in absolute terms on a scale from 1 - 7, a 4 would be a neutral score, not a highly positive score. It would be, in short, better than average<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> The statistic is called the Z-score in statistics jargon and is based on the number of standard deviations from the mean for the correlation score. The scores from -2.5 to +2.5 shown on the axes are counts of the number of standard deviations from the mean. Note that this is a slight change of method from that used in the 2018 report when both the score itself and the correlation were plotted as standard deviations. It is believed that the current method provides a more stable and intuitively meaningful method.



#### TOP, BOTTOM, LEFT, RIGHT

- Services appearing above the horizontal line are more important to the overall rating of GoRaleigh service than those that appear below the line, those that appear below the line are less important.
- Services appearing at the right of the vertical line are rated better in quality than the services as the left of the line. The closer to the far right, the better the rating; the closer to the far left, the worse the rating.

Elements in the upper right of the chart are currently helping to boost the overall GoRaleigh service rating by being better rated than the average of all nineteen elements of GoRaleigh service, while others (top left quadrant) are currently detracting from it. It is elements in the latter group that require particular attention given that the objective is to improve overall customer ratings, a proxy for customer satisfaction. Elements in the lower left of the chart receive relatively poor performance scores but have relatively little influence on the overall score. Similarly, elements in the lower right quadrant have relatively high rating scores, but they too have little statistical relationship to the overall score and can be assumed to have little influence on it.

#### COLOR CODING SHOWS THE LOCATION OF THE SERVICE TYPES IN THE MATRIX

Notice the color coding of the service elements:

- All of the aspects of service we have labeled "Operating services used by 95% of riders or more" are *above* the horizontal line that indicates average importance to the overall service rating.
- Of the five elements we have labeled "Operating services used by fewer than 95% of riders," three are above the line of average importance to the overall score, and one, Sunday service hours is just below the line.

#### THE UPPER LEFT QUADRANT: IMPROVING THESE WOULD MOVE THE OVERALL RATING NEEDLE THE MOST

Improving service and thus ratings of the three elements in the upper left quadrant would have the greatest positive impact on the rating of GoRaleigh service overall. Service coverage ("Service to all destinations"), Buses running on time, and Total trip time (time the trip takes) all are fundamental aspects of service, and all appear in this quadrant. Buses running on time is a perennial desire of transit customers and is often found in this position in the matrix. In addition, it was clearly the top priority when respondents were asked to name the top three aspects to improve.

Of course, none of these three services in the upper left quadrant is easily changed. However, the Durham Transit Plan is aimed at just these kinds of structural factors, and over time we should see these scores move to the right in the chart.

#### THE UPPER RIGHT QUADRANT: MAINTAIN THIS RELATIVELY STRONG POSITION

At the upper right are eight elements of service that represent relative strengths among all GoRaleigh services because they score relatively well, and they are important to the overall GoRaleigh rating. Compared to all other aspects of GoRaleigh service, these services are relatively strong and support the current overall positive rating. Two of these, Saturday service hours, and Ease of transfer between systems are operational services used by somewhat fewer riders than other services. Two of the elements in this quadrant are operational services used by almost all customers: Ease of transferring within the GoRaleigh system, and Weekday service hours. Four relate to the travel environment: Bus operators' courtesy/helpfulness, the Sense of safety on the bus, the Usefulness of the printed information provided by GoRaleigh, and the Usefulness of the GoRaleigh telephone operators. This is an interesting mix of relative strengths, combining the perennial strength of



interactions with the bus operators (almost always in this quadrant in such surveys), information services, and a sense of personal safety with operational elements, including transferring within or between systems, Saturday hours of service, and weekday service hours.

The high importance and positive score of "Bus operator courtesy/helpfulness" illustrates the power of interpersonal interactions in the overall rating of a service.

#### THE LOWER RIGHT QUADRANT: THIS SERVICE IS GOOD, BUT IMPROVEMENT WOULD BE WELCOME

Finally, at the lower right are two service elements with high favorable ratings relative to other services, but that under current service configurations are relatively unimportant in influencing overall satisfaction. GoRaleigh does well on these and needs to maintain that level of satisfaction, but efforts to improve all or any one of these would have minimal impact on the rating of GoRaleigh service *overall*.

Weekday service frequency lies in this quadrant to the right side of the matrix indicating a positive rating, but it also lies below the line of average importance to the overall satisfaction score. We saw earlier that it earns 53% ratings of 6 or 7 (see Figure 35). This is important in that this is obviously a key element for a transit system in which two-thirds (67%) of the riders are going to or coming from work, and another 13% are going to or coming from school. Presumably most of these customers are working or attending school during the week, making weekday service a key to customer satisfaction. That 56% rate it as 6 or 7 is a positive sign in that sense.

In other words, riders are apparently satisfied with this service, with the result that it has little impact on variation in the overall rating. Moreover, it is rated in the top three elements to improve by only 13%, placing #9 in the listing of 19 service elements named as important to improve. This a key aspect of service and yet customers are not telling us that they want improvement. They are satisfied with the status quo. The converse of this, however, is that if weekday service frequencies were reduced, it would be likely to lead to rapid disappointment and could indeed have a significant, and negative, impact on the overall rating. Steady as she goes is the message here. The same is true of fare medium options. Customers are satisfied. The task in both cases is to maintain the ratings.

## LOWER LEFT QUADRANT: IT WOULD BE NICE TO IMPROVE THESE ELEMENTS, BUT DOING SO WOULD NOT AFFECT THE RATING OF GORALEIGH SERVICE OVERALL BY MUCH

Six elements of service appear in this quadrant. None is an operating service used by all, or almost all, riders. Instead, these are either services used by most but not all (94% at most) riders. They include Sunday service hours and frequency, and Saturday service frequency. The other elements are aspects of the overall travel environment, the cleanliness of the bus interiors and shelters, and the quality of Wi-Fi service.

Given that the cleanliness of the bus interiors is second on the priority list of elements to improve, its presence at the left of the vertical line of average rating scores is not surprising, but that is below the line of average importance to the overall rating is somewhat surprising. However, what this indicates is that *relative* to other aspects of service which are more basic in the operational sense of getting people to where they want to go, these tend to be both lower rated, and less important than average in their impact on the overall rating.

The quality of Wi-Fi service also appears in this quadrant, just below average (i.e., just to the left of the vertical axis) and very low on that axis indicating that it has very little influence on the overall GoRaleigh rating.

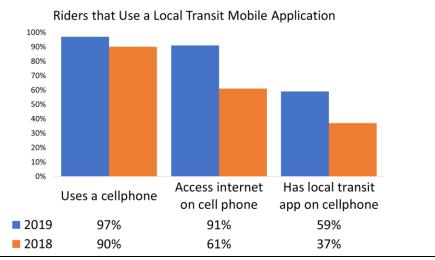


**THE POTENTIAL FOR DEMOGRAPHIC CHANGE WITHIN THE RIDERSHIP TO ALTER RATINGS AS SERVICE IS CONTINUALLY IMPROVED** Finally, the Durham Transit Plan, coupled with related transit plan in the Triangle Region, represents a profound change in transit service levels. The survey reported here deals only with the current 2019 riders. As services are continually improved, the demographic base of the ridership is likely to change. Average income, and probably average age of customers, are likely to increase. The ethnic mix might also change as new geographic areas are served. More people are likely to begin relying on the service to get to professional and other white-collar jobs. If, and when such changes occur, in spite of objective improvements in service, how they are reflected in service ratings is uncertain because new customer attracted by better service may be more demanding.



**Mobile Communication** 

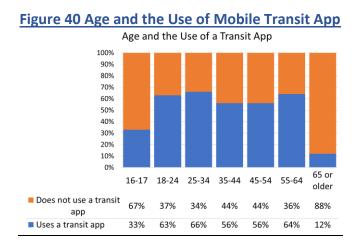




#### Figure 39 Use of Cell and Smart Phones and the Transit App

#### Use of Cell and Smart Phones, and Use of the Transit App

Among GoRaleigh customers, cell phone ownership is high, but not quite universal, with 97% of customers indicating they use a cell phone. Almost all of the cellphone users (91%) say they access the internet on it. This has increased rapidly from 2018 when only 61% said they accessed the internet on their cellphone. Fifty-nine percent (59%) of customers use a transit app on their phones, up from 37% in 2018



The number of customers using a transit app indicates that more than half of GoRaleigh customers are now using their smartphones as transit information sources, that practice is not yet universal. Other communication modes continue to be necessary.

That mobile apps cannot (yet) be relied on to provide the only communications channel to the GoRaleigh ridership is illustrated by the results shown in Figure 40. In most age groups one-third or more of GoRaleigh riders still do not use a transit app. This is extreme among those 65 or older among whom only 12% use such an app. But there are between 36% and 44% of

all other age groups from 18 to 64 who do not use a transit app. We do not know why they do not use a transit app. Perhaps they are so accustomed to using GoRaleigh that they feel no need for it. Or perhaps some of them are not tech savvy. The youngest riders, among whom two-thirds say they do not use a transit app may well be going to or from school and have little need for it.



**Appendix A: Questionnaire** 



Please tell us about how yo	u use (	GoR	alei	igh			El cuestionario en español se encuentra en la parte posterio
In the past 30 days, how would you rate GoRaleigh on the following services (Circle a rating for each question or check the box indicating that it does not apply to you)	Excellent OO		Rale	eig	h Very Poor	Don't Know or don't use	26. How did you get to the stop where you got on this GoRaleigh bus? (Check only one)         1 Walked       2 Biked       3 Drove         4 Uber or Lyft       5 Was dropped off by family/friend       6 Other GoRaleigh bus         7 Bus other than GoRaleigh       8 Other
mai ii aoes noi appiy io youy		Neutral			Very	or do	27. Please check all Triangle Region bus systems you use in a <u>typical</u> week.
1. Buses running on-time	76	5 4	3	2	1		s Chapel Hill Transit 6 Duke Transit 7 D Wolfline
2. Frequency of service on weekdays (Mon-Fri)	76	5 4	3	2	1		28. Do you use a cell-phone? 1 🗆 Yes 2 🗆 No
3. Frequency of service on Saturday	76	54		2	1		
I. Frequency of service on Sunday	76	54	3	2	1		a. If you use a cell phone, do you access the internet on it? 1 🗆 Yes 2 🗆 No
5. Hours the buses operate weekdays (Mon-Fri)	76	5 4	3	2	1		b. Do you have a mobile app for local transit on your cellphone? 1 🗆 Yes 2 🗆 No
b. Hours the buses operate Saturday	76	54	3	2	1		29. In the past 30 days, how often have you used Uber or Lyft in the Triangle region?
<ol> <li>Hours the buses operate Sunday</li> </ol>	76	5 4	3	2	1		$1 \square 0$ not at all $2 \square 1$ time $3 \square 2$ times $4 \square 3$ times $5 \square 4$ or more times
. Total time required to make your usual trip	76	5 4	3	2	1		
Availability of service to all destinations you want to get to	76	5 4	3	2	1		30. If you used Uber or Lyft in the past thirty days
0. Ease of transferring within GoRaleigh system	, ,	54	3	2	1		a did you use both GoRaleigh and Uber/Lyft during the same one-way trip?
1. Ease of transferring between GoRaleigh and other area							b did you use Uber/Lyft for a trip you otherwise would have made on GoRaleigh? 1 [ Yes 2 ]
bus transit systems	76		3	2	1		
2. Cleanliness of the bus interiors	76	5 4	•	2	1		If yes, you did that because?
3. Cleanliness of the bus shelters & transit center	76	54	3	2	1		31. Please mark all of the following that apply to you. Are you (Check all that apply)
4. Your sense of personal safety from other passengers							1  □ Employed full time 2  □ Employed part time 3 □ Unemployed and seeking work
on the buses 5. Courtesy and helpfulness of bus operators		5 4	•	2	1		4 Homemaker 5 Student 6 Retired 7 Volunteer position
5. Courtesy and helpfulness of bus operators	76	5 4	3	2	1		
6. Usefulness of information from 485-RIDE telephone operators	76	5 4	3	2	1		32. Do you have a valid driver's license? 1 🗆 Yes 🛛 2 🗆 No
7. Usefulness of printed information such as schedules							33. How many cars or other vehicles are available for your use?
or brochures	76	54	3	2	1		0 None 1 2 3 4 5 or more
8. Available ways for you to pay your bus fare	76	54	3	2	1		UNONO I Z 3 4 D OF MORE
9. Quality of wireless internet (WIFI) service	76	5 4	3	2	1		34. How old are you?Years old
0. The quality of GoRaleigh services overall	76	54	3	2	1		
1. Of the services in questions 1 - 19 above, please list th	a three most	imnarte	unt To i	mara	vo?		<b>35. Do you identify as</b> 1 Male 2 Female 3 Prefer not to answer
1 Most important $2 \square$ 2nd most				mpro	AC:		36. Do you consider yourself to be (Please Check all that apply to you)
	_						1 🗆 African American/Black 2 🗆 Asian 3 🗆 Caucasian/White
2. In a <u>typical week</u> on how many days do you use GoRale	igh? (Circle on	ly one)					4 🗆 Hispanic 5 🗆 Native American Indian 6 🗆 Other:
0 (None — Not a regular GoRaleigh rider) 1 2 3	4 5	6	7				
3. What is the ONE main purpose for which you most often	y use the Go	Raleigh	buses?	ls it	to go	to	37. What language do you most often speak at home? (Check only one)         1 □ English       2 □ Spanish       3 □ Other:
or from (Check only one)	. – d .						38. What is your total annual household income? (Check only one)
1 □ Work 2 □ School/college	3 C Shopping						1 □ Less than \$10,000 2 □ \$10,000 to \$14,999 3 □ \$15,000 to \$19,999
4 🗆 Medical/dental 5 🗆 Recreation/event	6 🗆 Other						4 □ \$20,000 to \$24,999 5 □ \$25,000 to \$34,999 6 □ \$35,000 to \$49,999
4. Compared to one year ago, do you currently ride GoRale	e <b>igh</b> 4 □ Did not ride	a vear ado					7 🗆 \$50,000 to \$74,999 8 🗆 \$75,000 to \$100,000 9 🗆 More than \$100,000
		, ,		, .			Comments:
Image: Solution of the sector of the sect	bus		<b>u</b> (Che	eck onl	y one)		



#### Por favor díganos cómo usa GoRaleigh

	os 30 días, ¿ en los siguier			G	O		R	ale	eigl	h	
(Circule una califica	ación por cada preg ue no aplica a uste	unta o marque la		Excelente			Neutral		-	Muy Malo	No lo sé o no lo uso
1. Autobuses fun	cionan a tiempo			7	6	5	4	3	2	1	
2. Frecuencia de s		nana (lun-vier)		7	6	5	4	3	2	1	
3. Frecuencia de s	servicio el sábado	•		7	6	5	4	3	2	1	
4. Frecuencia de s	servicio el doming	10		7	6	5	4	3	2	1	
5. Horario de aut	obuses entre sen	nana (lun-vier)		7	6	5	4	3	2	1	
6. Horario de aut	obuses los sábad	os		7	6	5	4	3	2	1	
7. Horario de aut	obuses los domin	igos		7	6	5	4	3	2	1	
8. Tiempo total re	equerido para su	viaje diario		7	6	5	4	3	2	1	
9. Disponibilidad	de servicio a los	destinos que d	esea ir	7	6	5	4	3	2	1	
10. Facilidad de t	ransfir dentro de	GoRaleigh		7	6	5	4	3	2	1	
11. Facilidad de t	ransferir entre G	oRaleigh y otro	<b>0</b> 5								
sistemas de 1	tránsito del área	• /		7	6	5	4	3	2	1	
12. Limpieza de l	os interiores del	autobús		7	6	5	4	3	2	1	
13. Limpieza de l				7	6	5	4	3	2	1	
14. Su sentido de			sajeros								
en los autob			•	7	6	5	4	3	2	1	
15. Cortesía y ay	uda de operador	es de autobús		7	6	5	4	3	2	1	
16. Utilidad de la									_		
telefónicos 4				7	6	5	4	3	2	1	
17. Utilidad de la		sa, como horari	os o follei		6	5	4	3	2	1	
18. Formas para				7	6	5	4	3	2	1	
19. Calidad del se				7	6	5	4	3	2	1	
20. Calidad de se				7	6	5	4	3	2	1	
21. De los servicio	os en las pregunta	as 1 a 19 arrib	a, enumer			s imp	ortan	ites ¿	Para	mejo	rar?
1 🗆 Más importante	2 🗆 2	do más		3 🗆 3e	r mas _		_				
22. En vna <u>seman</u>	<u>a <i>típica,</i> ¿cuántos</u>	i días usas GoR	aleigh? (	(Ciicule sol	o uno)						
0 (Ninguno — No es u	un pasajero regular de G	oRaleigh) 1	2	3		4	5		6	7	
23. ¿Cuál es el pro GoRaleigh? ¿E	opósito principal s para ir o venir (			e usa co	n <u>ma</u>	<u>yor fr</u>	ecver	icia el	auto	bús	
1 🗆 Trabajo	2 🗆 E	scuela/colegio		3 🗆 Cor	mpras						
4 🗆 Médico/dental	5 🗆 R	ecreación/evento		6 🗆 Oti	0						
24. En comparació	n con hace un añ	o, ; actualment	e viajas e	n GoRa	leigh.						
1 🗆 Mas seguido	2 🗆 Lo mismo	3 □ Menos	-	4 🗆 No	-		n año				
25. Para su tarifa	en el <i>primer auto</i>	bús GoRaleiah	que abor					<b>.</b> (/	Aarque	solo i	ino)
1 🗆 pago solo en efe 3 🗆 uso un pase de u	•	ticipación		o un pase i pase de 7	de un dí	a en el					

#### 26. ¿Cómo llegaste a la parada donde subiste a este autobús de GoRaleigh? (Marque solo uno) 1 🗆 Caminando 2 🗆 Bicicleta 3 🗆 Maneio 4 🗆 Uber o Lyft 5 □ Fue dejado por familia/amigo 6 □ Otro autobús GoRaleigh 7 🗆 Autobús que no sea GoRaleigh 🛛 🖇 🗆 Otro 🔄 27. Marque los sistemas de autobús de Triangle Region que use en una semana *típica*. 3 🗆 GoTrianale 1 🗆 GoRaleiah 2 🗖 GoDurham 4 🗆 GoCary 5 Chapel Hill Transit 6 Duke Transit 7 🗆 Wolfline 28. ¿Usas un teléfono celular? 1 🗆 Sí 🛛 2 🗆 No a. Si usa un teléfono celular, ¿tiene acceso a Internet en él? 1 🗆 Sí 2 🗆 No b. ¿Tiene una aplicación móvil para transito local en su celular? 1 🗆 Sí 🛛 2 🗆 No 29. En los últimos 30 días, ¿cuanto ha usado Uber o Lyft en la región de Triangle? 1 0 en absoluto 2 1 vez 3 2 veces 4 3 veces 5 4 o mas veces 30. Si usó Uber o Lyft en los últimos treinta días... a... ¿Usó GoRaleigh y Uber/Lyft durante el mismo viaje de un sentido? 1 🗆 Sí 2 🗆 No b...; Uso Uber/Lyft para un viaje que de otra forma hubieras hecho en GoRaleigh? 1 🗆 Sí 🛛 2 🗆 No ; Si sí, lo hiciste porque? 31. Marque todo lo siguiente que aplique a usted. ¿Eres tú... (Marque todo lo que corresponda) 1 🗆 Empleado de tiempo completo 🛛 2 🗖 Empleado de medio tiempo 3 🗆 Desempleados y buscando trabajo 7 🗆 Puesto voluntario 4 🗆 Ama∕o de casa 5 🗆 Estudiante 6 🗆 Jubilada/o 32. ; Tiene una licencia de conducir válida? 1 🗆 Sí 👘 2 🗆 No 33. ¿Cuántos automóviles u otros vehículos están disponibles para su uso? 0 Ninguno 1 2 3 4 5 o más 34. ¿Cuantos años tienes? \_\_\_\_\_Años 35. ; Te identificas como... 1 Hombre 2 Mujer 3 🗆 Prefiero no responder 36. ¿Te consideras... (Por favor marque todo lo que corresponda a usted) 1 Afroamericano/Nearo 2 🗆 Asiatico 3 🗆 Caucásico/Blanco 5 🗆 Indio Nativo Americano 4 🗆 Hispano é 🗆 Otro: 37. ¿Qué idioma hablas con más frecuencia en casa? (Marque solo uno) 1 🗆 Inglés 2 🗆 Español 3 🗆 Otro: 38. ¿Cuál es su ingreso familiar total anual? (Marque solo uno) 1 🗆 Menos de \$10,000 2 🗆 \$10,000 a \$14,999 3 🗆 \$15,000 a \$19,999 4 🗆 \$20,000 a \$24,999 5 🗆 \$25,000 a \$34,999 6 🗆 \$35,000 a \$49,999 7 🗆 \$50.000 a \$74.999 8 S75.000 a \$100.000 9 🗆 Mas de \$100.000 Comentarios:



7 □ use free senior fare & ID

8 🗆 1 er viaje de GoRaleigh fue ruta de tarifa gratis

**Appendix B: Rider Comments** 



	GoRaleigh
Route	Comments
1	Some better driver who can be more helpful.
1A	Be blessed.
1A	Need a covered seat at JJ Henderson towers inbound #10. Many elderly and handicapped.
	Thanks.
1A	None.
1A	Sundays need more frequent bus times!
1A	Yo quisiera que lo normal los dias domingo en la calle leon st
2A	Bus systems should be more frequent and clearer.
2A	Give mike more money.
2A	I stay on Lynn road and the bus doesn't run on Sundays. It stops running at 6:00 PM so I have
	to walk down highway 70 with kids if we need to go anywhere on Sunday or after 6:00 PM.
2A	None.
2A	The #11 bus is always late. All lines need 24 hour service.
2A	The GoPass was a good idea. Some bus drivers are rude!!
2B	Buses should run normal hours on Sunday and holidays.
2B	Great service GoRaleigh.
2B	Route #6 is often late in the morning coming into the station.
2B	They are useless if you can't get to where you need to go on time and please enforce the no
	smoking policy at the bus station.
2B	When drivers feel that they can ride by when you are running for the bus.
2B	You're the best!
3	Buses should allow you to catch your connecting bus without missing it. Buses shouldn't leave
	until All buses have arrived and allowed everyone a chance to transfer.
3	Excellent.
3	Get drivers that want to work and not have attitudes.
3	God bless!
3	Have GoPasses be able to use during weekends.
3	I love GoRaleigh transit.
3	N/A
3	#4 is always late.
3	None.
3	Not all drivers are bad: just a few are rude.
3	Please have service run all day on Sunday. It can be 30 mins or 1 hr. Please have #15 run every
	30 minutes Monday-Friday.
3	Should be able to catch connection buses. Should wait at terminal for all buses to arrive.
	Schedule should match bus arrivals. Hate the split schedules of buses or how one bus changes
	to another.
3	So far since I've ridden with GoRaleigh everything's good.



3	Some drivers make me mad when I have my music low and to my ear but tell me to turn it off
	but there is someone in the back some times and someone's listening to rap in the back and
	it's heard up front but the driver says nothing.
3	The buses are too crowded and usually late.
3	The #3 is always late or doesn't show up. Bus is nasty, always full. Stand up a lot on #3.
3B	Bus drivers need to meet the requirements of the rider. We are not on their time, but ours.
3B	I like the bus system.
4	Bus #11 and #2 are always late. I catch the first bus.
4	Bus #2 and bus #11 always late.
4	Bus is never at the station on time to get to other buses. Always gone, 3 need a bus for Angier
	avenue.
4	Bus system runs late for #2. Bus drivers don't show any sympathy. Rode the bus for over 5
	years nothing was changed with buses running on time.
4	Everything is good.
4	I think GoRaleigh is a very good way of transportation.
4	I think the buses should run on the regular schedule on Sundays.
4	Make #4 run every half hour extended Sunday to midnight. Give grace period for late buses,
	waiting one hour while my bus was one minute late is ridiculous.
4	Overall positive experience with GoRaleigh. My transit would be greatly benefitted by direct
	service from Duke Regional to the main Duke University Hospital.
4	Please get rid of the new buses. They are too small.
4	The #6 bus returning to Durham Station weekdays after 4 pm is almost always consistently
	late, causing us to miss connections.
4	The bus system is fairly good. Some bus drivers can use people skills to avoid unnecessary
	confrontations. Thank you.
5	Buses are old And we have experienced some safety issues. But, overall, good way of
	transportation.
5	Courtesy goes a long way. I would like my bus driver to be courteous to me if I'm being
	courteous to them.
5	Durham transit really needs to improve on coming on time!!
5	Make improvement on buses to run every 30 minutes on Sundays to the shopping centers.
5	More benches at bus stops.
5	No comment.
5	Thanks!
5	Usually the operator (office) doesn't give the right information about the bus schedule. Also, in
	Hillsborough the ODX bus does not stop at the Police station.
5K	Don't like the new buses. Don't like the new buses.
5K	Drivers are usually rude, will pull off and leave you if you aren't within a few feet of the sign
	even though it's obvious you are waiting on the bus.
5K	I feel the transit (Durham) system should be as the transit system in Chapel Hill. I feel that it
	should be a 24/7 service to the public.
5K	Need to be every five minutes, every route because we are a growing city with a growing need
	of transportation.



5K	None.
5K	Route #15 needs more stops.
5K	The survey was a tool for customer service. I see improvement.
5K	There are way too many rude bus drivers.
6	Great idea for service.
6	I would like you to provide more frequency of the 6 bus per half hour instead of an hour is better.
6	None.
6B	#6 could use more frequent buses. Turns into #5 and is always late to station around 3-4pm. Men's bathroom at the station *never* stocked with paper towels and rarely clean. Used 2-3 days/week for 7 months.
6B	GoRaleigh.
6B	Great bus.
6B	I would love the opportunity to have four buses running each hour for each bus route.
6B	More bus stops to transfer.
6B	More buses!
6B	Some buses arrive a bit too early which results in missing the bus.
6B	The bus frequency is bad.
6B	The driver personal attendance is terrible. Don't speak at times.
7	Discount fare for 62 years old instead of 65. Drivers ask people to lower volume of music instead of pretending not to hear it.
7	Drivers aren't friendly.
7	GoRaleigh needs to upgrade their services. Service with them has been poor. I try not to deal
7	with GoRaleigh often. Good job.
7	
7	Good job. I don't know.
	I don't know.
7	I think it's very rude and unsafe to have drivers writing in journals, scratching off lottery
/	tickets, turning around talking/looking at passengers, pouring drinks all while driving (always the same driver).
7	ldk
7	It is ok, occasionally had to tazara tarin when bus was late!
7	It would be nice if the #6 bus could be on time in the afternoon. It's always late. And some of the drivers are rude.
7	Keep it up!
7	Keep up the good work.
7	Makes a long day longer. I had to go grocery shopping. I live where the bus only goes by one- way. Its very inconvenient. Either I have to walk 25 min from a different stop or ride till the wheels fall off.
7	More seating in transit for mobile impaired.
7	N/A

7	Need more bus stop stands. Lowes one is on the wrong side and not lit well. Needs chair for mobility. Deer in woods.
7	Personal.
7	Some questions are not about the bus.
7	The buses are always late. I used the bus for all things. Take my daughter to and from school. Hate people standing up in the front of the bus. Making it hard to get on the bus.
7	This route is long and traffic makes them late sometimes.
7	Very helpful bus drivers. Learned bus routes around downtown and to Charlotte.
7	Your service is very good.
8	Bus drivers need to be more courteous and helpful.
8	Helpful to have someone hand survey.
8	I used the GoLive app and the times are never accurate when I call. Seems like they are going by GoLive also and tell me the same thing that the app is saying. When you ask to speak to a supervisor, they answer not available.
8	Overall, it's dependable.
8	Some drivers are rude and disrespectful and treat passengers any kind of way.
9A	A lot of the drivers are not customer friendly.
9A	Most bus drivers are disrespectful.
9A	Most bus drivers are disrespectful.
9A	Some drivers need customer service training. Not friendly. Buses late all the time.
9A	The Wi-Fi can be better. The buses can be on time more and run later on Sundays.
9B	Better quality of buses. Some buses are over 30 years old. Stop patching up these buses and get new buses. Get a better series. Clean these buses every day.
9B	Bus stop Mount, Level, Church road needs a stop. A lot of people in the area need development.
9B	Clean the seats.
9B	I barely complain but a lot of passengers do complain how sometimes buses are barely on time and I do not like for the seats to be nasty and dirty.
9B	I use like riding the bus but now in my 40's I don't like it the same as earlier years. Got too crowded for not enough drivers and the homeless use it as a bunk to sleep and lounge.
9B	I would really like it if GoRaleigh would extend the route of 9b out to Brier Rose Lane. It is a hassle to walk 15 minutes down the road to catch a bus especially with it beginning to get cold.
9B	No comment.
9B	Our suggestions and serious requests are the cleaning of buses. Thank you.
9B	Thank you! It's not even 7 AM; someone should buy you coffee! More service for far north Durham.
9B	The buses need to be clean and sprayed for bedbugs and lice.
9B	The drivers could be friendlier. Also, at the terminal if your bus is pulling in, the other buses
	leave before you can transfer to another bus.
9B	There is a stop need at the Dollar General on Lumely and Miami Blvd.
10A	Always on time and good service.
10A	Bus drivers pull in when they get to a bus stop earlier before they supposed to be there. Please be trying to get off work in the afternoon.



10A	Bus drivers popping gum. More responsive to unruly/rude other passengers.
10A	Durham should get the kiosk for passes. The mobile app need work (update). Some of the
	drivers have bad attitudes.
10A	Gracias el autobus un buen servicio
10A	Valid ID, just not for driving.
10B	Disable the stops. Need some seats and shelters.
10B	I'm homeless.
10B	It would be more convenient for a scanning phone system that I could use because I don't like
	carrying cash.
10B	Just wondering When will the GoRaleigh bus fare become free like our neighbors, Chapel Hill
	transit?
10B	Keep clean, be on time sometime, once for a mix.
10B	Keep route #10B. Not many use it but I do.
10B	Love the service. Wish it ran more frequently.
10B	None.
10B	Overall GoRaleigh services are great. There is minimal coverage mid-day and the bus routes
	are not direct for me, thus it takes me a long time to get anywhere or I end up driving/using
	Lyft more than I like.
10B	Stop talking to drivers (customers).
10N	Cleanliness and safety are biggest concerns. Bums at stops are why I started using Uber.
11	#8 never on time. Always too early or too late and has caused stress at my job. My only means
	of transport!!!
11	#11 bus is late often!
11	Great job to me GoRaleigh.
11	Great service love them.
11	Solo mi marido trabaja yo cuido mi hijo
11	Text does not work at the stops.
11	The loitering at terminals are completely distracting and deterrent.
11	The # 41 needs to do better.
11	The service is good, just the people on the bus!
11	Would use more frequent service on weekdays and Sundays.
11	More hours for weekdays.
12	#12 at day the bus is always late. Some drivers are not friendly and they speed.
12	Need earlier bus to Chapel Hill UNC especially on Sundays.
12	Need stop by Encore Apt.
12	None
12	Now that's a bit personal.
12	Overall good service.
12	The number #8 bus needs to run every 30 minutes on Saturday for work purposes.
12N	GoRaleigh full of lil funnies.
12N	Please keep bus #15 route going. That bus is my only way to work. I work for Amazon.
12N	Route #12 is usually behind schedule. Leaves last at the station and routinely the last to arrive
	with Route #11 a close second.



14	The buses need to run the same times 7 days a week.
15	Five years riding the bus to Durham. You guys do a pretty good job. Traffic is bad I know.
	Please leave route #15 alone or add an express to Durham.
15	Brier Creek needs a sitting area and cover.
15	Buses need more time for Sunday hours past 9 PM and run every 30 minutes on the weekday
	schedule. Keep drunks off the bus and people cussing and loud music. Drivers need to let
	passengers know.
15	Can a stop by Shannon Read post office be put up?
15	Durham city buses do a great job.
15	Having GoRaleigh passes available for purchase other than at the station (i.e. Walmart) as well
	as buses that are down every quarter hour. Otherwise, excellent service.
15	I just feel the #15 bus which I take to work should run every 30 minutes at least during the
	peak hours. Daily, except Sundays because a lot of us end up late for work if for any reason we
	miss those two morning runs.
15	If highway is backed up there should be another route the bus can take to remain on time so
	people can make their other buses.
15	Please continue to run bus #15. It is very useful for those of us who work around that area
	especially Brier Creek and Amazon. Thank you.
15	The safety is first priority on the bus.
15	Time management for route #15 could be greatly improved if it ran every half hour.
18BCC	Bus drivers need more help. Stop letting people put bags in seats.
18BCC	Could use better on time service.
18BCC	Great service!
18BCC	I have had a few experiences with GoRaleigh buses when I am at the bus stop, on time and the
	bus has gone past me (4 other passengers) and not stopped.
18BCC	If there is money in the budget, some benches for BCC stops would be nice
18BCC	I'm from the San Francisco Bay area, which has great public transit. I wasn't expecting much
	when I came here but it's very impressive and I appreciate it a lot.
18BCC	N/A
18BCC	Student
18BCC	The rider app functionality should be improved (transloc). Buses often don't show up. Also, the
	BCC time predictors are the research drive, roundabout ave unreliable (pauses before turning
	around for unpredictable length of time)









# Wake County Transit Systems Customer Survey **SUMMARY REPORT**

Prepared by:













June 2016



# Wake County Transit Systems Customer Survey **Summary Report**

**June 2016** 

**Prepared for:** City of Raleigh/GoRaleigh in coordination with GoTriangle **C-Tran** Wolfline Capital Area Metropolitan Planning Organization

Prepared by:





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## **Executive Summary**

Between October 2015 and November 2015, transit providers in Wake County, including GoRaleigh, GoTriangle, C-Tran, and Wolfline, conducted a regional on-board fixed route transit survey. The survey findings are summarized in this Executive Summary and presented in detail in the report sections that follow.

#### **Survey Purpose**

The individual results for each transit system will be used by agencies to identify needs and determine potential improvements. The comprehensive results will be used to help inform the continued development of an updated regional Transportation Demand Model (TDM) that will help shape the future of transportation planning in Wake County. Overall, the results of the survey will help transit providers in Wake County to work collectively to provide enhanced transit services to the region, while assessing their systems independently. It will also enable transit providers to build on prior efforts, including the 2010 Capital Area Bus Transit Rider Survey.

When evaluating the survey findings, it is important to recognize that the service characteristics of each transit provider influence the results. From the regional commuter service of GoTriangle to the higher volume urban bus service of GoRaleigh and smaller community service of C-Tran, as well as the campus-oriented Wolfline, riders served by these systems will have differing needs, expectations, and perceptions of service.

The survey was conducted by interviewers using hand-held tablets on-board transit buses for all transit agencies serving Wake County. The survey included questions about trip characteristics, rider demographics, and customer satisfaction and perception of transit agencies. It included questions required to meet data requirements of the regional travel demand model, Metropolitan Transportation Plan (MTP) update, and has incorporated or updated questions from previous on-board surveys as appropriate. The survey methodology and survey questions were developed with input from each agency and reviewed and approved by each agency.

#### **Major Findings**

Detailed findings from the survey are presented in the report. Collectively, key findings are that bus transit is a vital form of transportation in Wake County, bus transit serves a diverse population in Wake County, and riders are satisfied with transit agencies in Wake County.

#### Bus transit is a vital form of transportation in Wake County

Wake County riders use transit to get to major destinations like their homes, job, and learning institutions. The vast majority of riders are walking to their bus (91 percent), and to their final destinations (96 percent), which indicates riders have the ability to eliminate the use of personal vehicles as a form of transportation to these major destinations.

Access to transit is also vital, as 41 percent of riders indicate they have no working vehicle available to their household indicate they household, and a majority of riders (59 percent) who have a working vehicle available to their household indicate they cannot use the vehicle for their trips. Combining this information with the data showing that 46 percent of riders are employed either part-time or full-time, and 39 percent are students, further highlights transit as a necessity for many riders to get to work, school, home, and other daily destinations. In addition, high percentages of riders using the buses in Wake County report low household incomes, further indicating that agencies in Wake County are serving transit-dependent populations. For example, over one-third (39 percent) of riders earned less than \$15,000 (in 2014) and 78 percent of ridership earned less than 150 percent of the federal poverty level.

#### Bus transit serves a diverse population in Wake County

Wake County transit agencies serve a broad and diverse ridership. Some aspects of the demographic data presented for all systems is affected by the student population majority that uses Wolfline; however, demographic data collected during the survey indicates that the largest proportion of riders (44 percent) are between the ages of 18-24, followed by 25-34 year olds (23 percent), 35-44 year olds (12 percent), 45-54 year olds (11 percent), and 55-64 year olds (6 percent). Low percentages of riders are under age 18 or over age 65.

Across all systems, ridership race and ethnicity data reflect that about 45 percent of riders are African-American, 38 percent are White, 7 percent are Asian-American, 1 percent are Native American, less than 1 percent are Native Hawaiian or Pacific Islander, and 8 percent of riders are ethnically Hispanic/Latino. When compared to Wake County demographics, fixed route transit ridership has a higher proportion of minority ridership than that of the general population. 2014 Census population estimates show that 61 percent of the population are White/Non-Hispanic, 21 percent are African American, 6 percent are Asian-American, less than 1 percent are Native American, less than 1 percent are Native American, less than 1 percent are Native Hawaiian and Pacific Islander and 10 percent are ethnically Hispanic or Latino.

Survey results also reflect a diverse ridership history among transit users in Wake County. Those who have been using transit for over 4 years make up about 28 percent of riders, while those who have been riding for 3-4 years make up about 17 percent, 1-2 years comprise about 28 percent, and less than 1 year comprise about 26 percent of riders. First-time riders make up the remaining approximately 2 percent. These data show a balance of long-standing riders and newly-established riders, who will help to build a continued strong ridership base for the future.

#### Riders are satisfied with transit agencies in Wake County

The survey included questions to help agencies understand customers' perceptions of their performance. Performance of buses running on time, and the frequency of service receive high levels of satisfaction, with about 75 percent of riders indicating they are either satisfied or very satisfied with the on-time performance of buses, and about 67 percent indicating they are either satisfied or very satisfied with the frequency of service. Other areas of service receive even higher marks of satisfaction. These include riders being either satisfied or very satisfied with: safety of bus stops (84 percent), courtesy of drivers (83 percent), safety of drivers (89 percent), on-board safety/security (88 percent), cleanliness and comfort of buses (80 percent) and (81 percent), easy-to-understand route information (84 percent), and fare/cost to ride (81 percent).

Aspects of service with higher percentages of riders being either dissatisfied, or very dissatisfied include weekend service and bus stop amenities. When asked about weekend service, 34 percent of riders indicate they are either dissatisfied or very dissatisfied, while 33 percent indicate they are satisfied or very satisfied. When asked about bus stop amenities, 24 percent of riders indicate they are either dissatisfied or very dissatisfied or ve

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## **Overview**

Transit providers in Wake County, North Carolina, collaborated to develop and administer a customer survey in 2015. The survey was conducted using tablet-based technology on transit trips with riders of the GoRaleigh, GoTriangle, Cary Transit (C-Tran), and the North Carolina State University Wolfline (Wolfline) systems. The purposes of the survey were to provide insights into transit riders' travel, demographic, and attitudinal characteristics.

The results from the survey will be used in various ways. The comprehensive results will be used to help inform the continued development of an updated regional Transportation Demand Model (TDM) that will help shape the future of transportation planning in Wake County. The individual results for each transit system will be used by agencies to identify needs and determine potential improvements. Overall, the results of the survey will help transit providers in Wake County to work collectively to provide enhanced transit services to the region, while assessing their systems independently.

The following methodology summarizes the approach to developing, administering, and reporting the survey. A detailed survey methodology memorandum is provided as Appendix A.

#### **Surveyed Systems**

The survey was conducted by interviewers using hand-held tablets on board transit buses for all transit agencies serving Wake County – GoRaleigh (formerly Capital Area Transit), GoTriangle (formerly Triangle Transit), C-Tran, and Wolfline. These agencies serve the City of Raleigh, the Research Triangle region, the Town of Cary, and North Carolina State University, respectively. The survey included all GoRaleigh, C-Tran, and Wolfline routes, while the GoTriangle routes were limited to those with all or a portion operating in Wake County. The survey methodology and survey questions were developed with input from each agency and reviewed and approved by each agency.

#### **Survey Instrument**

The survey included questions about trip characteristics, rider demographics, and customer satisfaction and perception of transit agencies. It included questions required to meet data requirements of the regional travel demand model and Metropolitan Transportation Plan (MTP) update and incorporated or updated questions from previous on-board surveys as appropriate. While the core survey questions were consistent for all agencies, some answers were agency-specific. In addition, the GoRaleigh survey included additional questions designed to measure brand awareness. The survey instrument was developed in both a tablet (electronic) and print (paper) format. The data collected includes:

- Route surveyed, time and direction
- Transfer information
- Origin and destination
- Boarding and alighting location
- Access and egress modes

- Trip purpose
- Method of payment
- Demographic information
- Customer satisfaction
- Brand awareness (GoRaleigh only)

### **Training and Testing**

All surveyors were trained in the classroom and in the field prior to the on-board survey administration. Each surveyor was required to demonstrate they could proficiently conduct the survey. Surveyors who were unable to demonstrate proficiency in all tasks related to the administration of the survey were replaced. Surveyors were also reviewed throughout the data collection effort and were retrained if issues were encountered.

A pilot test of the survey instrument was conducted by survey supervisors. The pilot test addressed survey design, length, and response rate and was carried out simultaneously with training sessions. Results of the pilot test were used to make changes to the survey instrument and methodology prior to survey administration.

### **Survey Sampling and Dates**

A sampling plan for weekday travel was developed using historic average weekday ridership by route for the following defined time periods:

• AM Peak (6:00 AM – 9:59 AM)

• PM Peak (3:30 PM – 7:29 PM)

• Midday (10:00 AM – 3:29 PM)

Surveying occurred on Mondays, Tuesdays, Wednesdays, and Thursdays between October 5, 2015 and November 19, 2015. Some routes required survey administration over multiple days to collect the target number of responses. The full survey schedule and sampling goals for all systems, routes, directions, and time periods are included in Appendix B.

### **Survey Administration**

The survey team used an interview technique aided by tablets that integrates geographic information system (GIS) software to allow for accurate geocoding of most survey data as the survey is taken. Spanish-speaking surveyors and copies of surveys in Spanish were made available.

Riders were selected at random to participate in the survey based on the sampling goals established for each route. After the surveys were administered on board, survey records were reviewed to ensure all necessary information was provided. If any information was missing, survey respondents were called to complete the survey by phone.

### **Data Processing**

To analyze the results of the surveys, the sample data was expanded to the full ridership by route. For the purposes of this report, the survey sample data was expanded based on total daily ridership.

The number of completed surveys for each route was compared to the average daily ridership during the survey period. This ratio was used to develop expansion factors for each route that were used to weight each individual completed survey.

The expanded data was used for all of the results and analysis presented in subsequent sections of this report. Details on completed surveys and the sample expansion are included as Appendix C.

## **Survey Results**

All survey results are provided for the expanded survey data. The survey results describe trip profiles, rider demographics, and customer satisfaction. Brand awareness questions asked on GoRaleigh routes are summarized with customer satisfaction and perception.

Charts are used to visually represent the expanded survey data. Pie charts are mainly used for nominal data types and bar charts are mainly used for interval and ratio data types. For questions where potential responses differ across agencies, such as type of pass or card used, data are not compiled across all systems. Additional tables are provided to summarize origin and destination data following the questions "Where was the very last place you were before getting on the bus?" and "Where are you going once you get off your last bus on this one-way trip?". Questions and response data are grouped in three categories: trip characteristics; rider and household characteristics; and customer satisfaction, perception and brand awareness.

• Evening (7:30 PM – 12:00 AM)

### **Trip Characteristics**

This section contains questions about fixed route transit trip characteristics include the origin and destination of the trips, mode of transportation used to get to the buses and final destinations, number of transfers, and types of fares and payment methods. Trip information will help each transit agency understand how their systems are being used by their customers, and can help to determine enhancements to services. Trip characteristics data are summarized in this section to address the following subjects:

- Where was the very last place you were before getting on the bus?
- Where are you going once you get off your last bus on this one-way trip?
- Trip Purpose Summary
- How will you get to where you are going when you get off your last bus?
- Total transfers made during one-way trips
- Will you (or did you) make this trip using the same transit routes in exactly the opposite direction today?
- What type of fare did you pay for this one-way trip?
- Did you use a transit pass or card?
- What type of transit pass or card did you use for this one-way trip?

The specific address information for origin and destination collected during the survey can be used for detailed analysis to support the TDM.

#### Where was the very last place you were before getting on the bus?

#### **Key Findings**

The following are key highlights of the responses from riders when asked where they were before getting on the bus. This information helps transit agencies understand what types of origins are common among their riders. Data for 'Work' and 'Work related'; 'Hotel', 'Shopping', 'Dining' and 'Recreation'; and 'Social', 'Church' and 'Personal Errand' are grouped in the pie charts and all systems table for legibility.

System	Key Observations
All	• Home is the most common origin for riders across all systems (51.3%)
	• School is the second-most common origin for riders across all systems (18.2%), but work/work-related is the second-most common origin for three out of four systems (13.6%)
GoRaleigh	• Home is the most common origin for GoRaleigh riders (52.0%)
	• Work/work related is the second-most common origin for GoRaleigh riders (19.8%)
GoTriangle	• Home is the most common origin for GoTriangle riders (56.1%)
	• Work/work related is the second-most common origin for GoTriangle riders (31.6%)
C-Tran	• Home is the most common origin for C-Tran riders (59.2%)
	• Work/work related is the second-most common origin for C-Tran riders (23.5%)
Wolfline	• Home is the most common origin for Wolfline riders (49.2%)
	• School is the second-most common origin for Wolfline riders (38.1%)

#### **Results for All Systems**

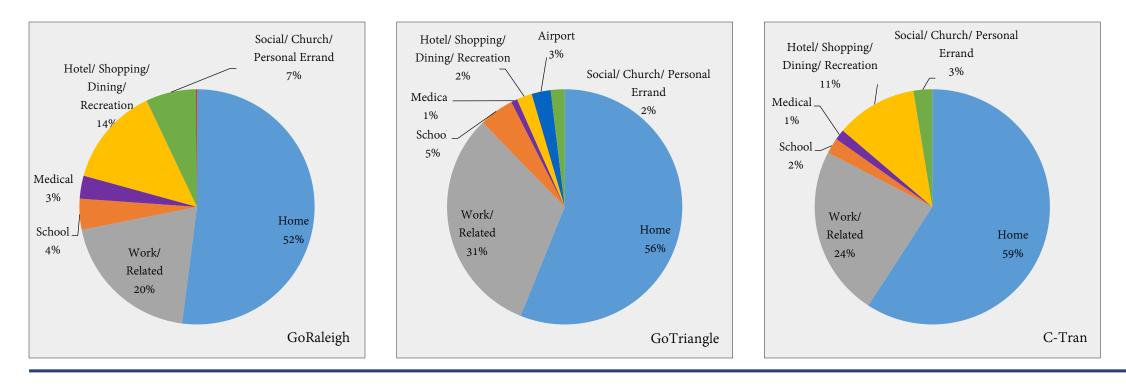
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

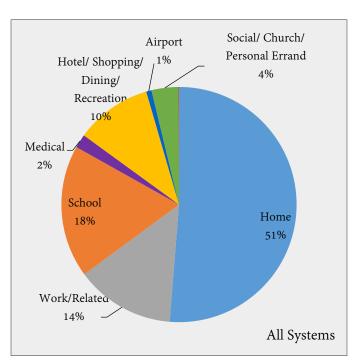
Combined responses for all systems			
Response	Percent		
Home	51.3%		
School	18.2%		
Work/Work related	13.6%		
Hotel/Shopping/Dining/Recreation*	10.5%		
Social/Church/Personal Errand**	3.7%		
Medical	1.9%		
Airport	0.7%		
Other	0.1%		

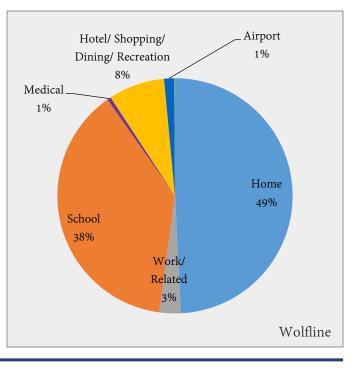
\*Combines Hotel/Convention Center, Shopping, Restaurant/Dining and Recreation/Sightseeing/Sporting Event

\*\*Combines Social Visit, Other ("Church"), and Other ("Personal Errand")

#### **Results for Individual Systems**







#### Where are you going once you get off your last bus on this one-way trip?

#### Key Findings

The following are key highlights of the responses from riders when asked where they are going once they get off their last bus on their one-way trip. This information will help transit agencies understand what types of destinations are common among their riders. Data for 'Work' and 'Work related'; 'Hotel', 'Shopping', 'Dining' and 'Recreation'; and 'Social', 'Church' and 'Personal Errand' are grouped in the pie charts for legibility.

System	Key Observations				
All	<ul> <li>Home is the most common destination for riders (31.5%)</li> <li>School (27.0%), work/work-related (19.7%), and hotel/shopping/dining/recreation (13.1%) are also</li> </ul>				
	common destinations for riders				
GoRaleigh	• The most common destination for riders is home (33.8%)				
	• The second-most common destination for riders is work/work related (29.2%)				
GoTriangle	• The most common destination for riders is work/work related (41.6%)				
	• The second-most common destination for riders is home (38.4%)				
C-Tran	• The most common destination for riders is work/work related (35.6%)				
	• The second most-common destination for riders is home (33.1%)				
Wolfline	• The most common destination for riders is school (56.1%)				
	• The second most common destination for riders is home (27.6%)				

#### **Results for All Systems**

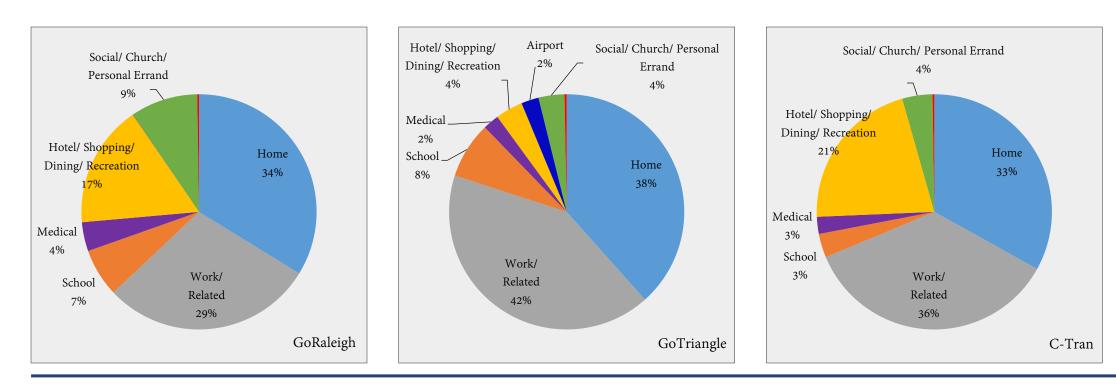
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

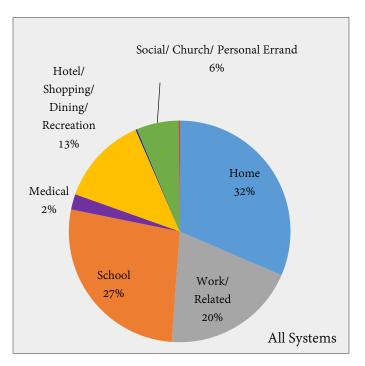
Combined responses for all systems			
Response	Percent		
Home	31.5%		
School	27.0%		
Work/Work related	19.7%		
Hotel/Shopping/Dining/Recreation*	13.1%		
Social/Church/Personal Errand**	6.2%		
Medical	2.3%		
Airport	0.2%		
Other	0.1%		

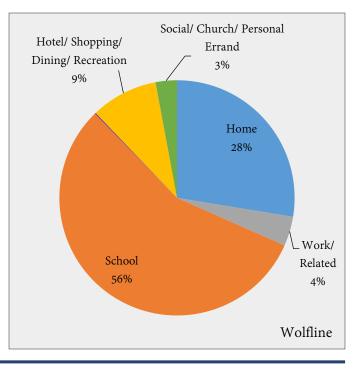
#### \*Combines Hotel, Shopping, Dining and Recreation

\*\*Combines Social, Other ("Church"), and Other ("Personal Errand")

#### **Results for Individual Systems**







### Trip Purpose Summary

Response data for the origin and destination questions, "Where was the very last place you were before getting on the bus?" and "Where are you going once you get off your last bus on this most commonly occurring trip purposes and their frequencies are shown by system. In addition to these tables, an account of all the occurring origin and destination pairs by system can be f

Trip Purpose Summary								
	GoRaleigh		GoTriangle		C-Tran		Wolfline	
Trip Purpose	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Place of Employment	9,411	38.6%	1,861	66.5%	615	52.8%	871	4.4%
Other Work Related	1,578	6.5%	97	3.5%	31	2.6%	236	1.2%
College/University	1,758	7.2%	296	10.6%	48	4.2%	15,363	77.0%
School (K-12)	469	1.9%	43	1.5%	5	0.5%	24	0.1%
Restaurant	1,169	4.8%	27	1.0%	31	2.6%	997	5.0%
Recreation	685	2.8%	22	0.8%	46	3.9%	508	2.5%
Medical	1,518	6.2%	86	3.1%	41	3.6%	121	0.6%
Social Visit	2,764	11.3%	138	4.9%	57	4.9%	651	3.3%
Shopping	2,814	11.5%	85	3.0%	279	24.0%	1,086	5.4%
Other	2,199	9.0%	143	5.1%	11	1.0%	85	0.4%
Total	24,365	100.0%	2,798	100.0%	1,164	100.0%	19,942	100.0%

s one-way trip?," are summarized in the table below. The	
found in Appendix D.	

#### How did you get to your first bus?

#### Key Findings

The following are key highlights of the responses from riders when asked how they got to the bus for the start of their one-way trip.

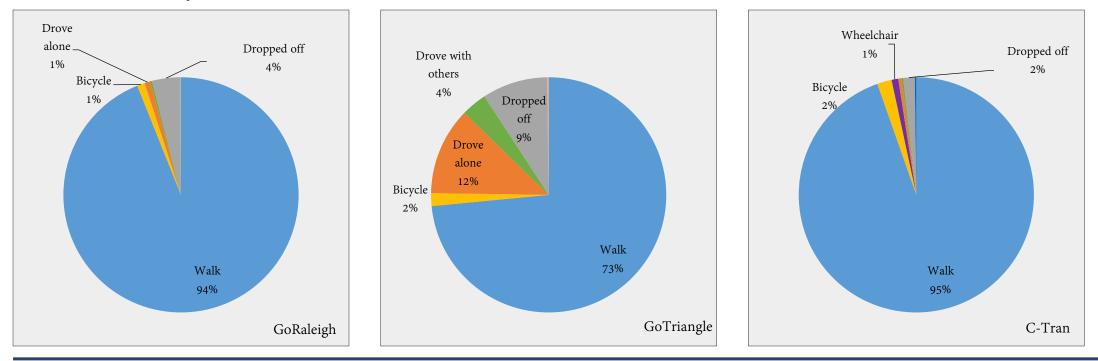
System	Key Observations
All	• The vast majority of riders walk to the bus (91.2%)
	• A small minority of riders also drive alone (4.4%), get dropped off (2.8%), bicycle (0.8%), or drive with others (0.7%)
GoRaleigh	• The vast majority of riders walk to the bus (93.9%)
	• A small minority of riders get dropped off (3.9%), bicycle (1.0%), drive alone (0.8%), or drive with others (0.3%)
GoTriangle	• A substantial majority of riders (73.9%) walk to the bus, but some also drive alone (12.0%) or get dropped off (9.0%)
	• A small minority of riders drive with others (3.5%), bicycle (1.8%) or use other means (0.2%)
C-Tran	• More riders walk to the bus compared to other systems (94.6%)
	• A small minority of riders also bicycle (2.0%), get dropped off (1.6%), use a wheelchair (0.9%), drive alone (0.4%) drive with others, (0.2%) or use other means (0.2%)
Wolfline	• The vast majority of riders walk to the bus (90.2%), but some drive alone (8.1%)
	• A small minority of riders drive with others (0.8%), get dropped off (0.6%), or bicycle (0.3%)

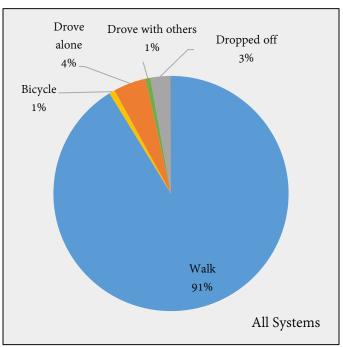
#### **Results for All Systems**

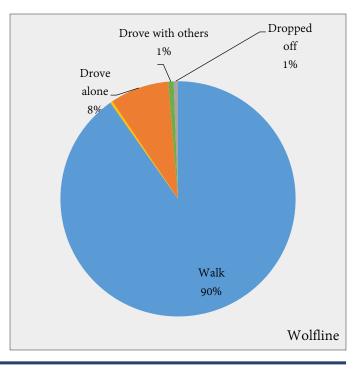
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems			
Response	Percent		
Walk	91.2%		
Drove alone	4.4%		
Dropped off	2.8%		
Bicycle	0.8%		
Drove with others	0.7%		
Wheelchair/motorized scooter	0.0%		
Other	0.0%		

#### **Results for Individual Systems**







#### How will you get to where you are going when you get off your last bus?

#### Key Findings

The following are key highlights of the responses from riders when asked how they would get to their destination from the very last bus they would use for their one-way trip.

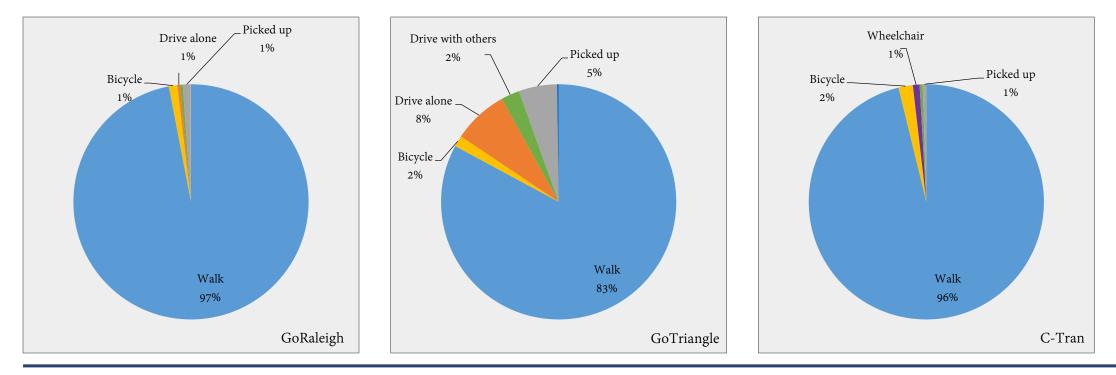
System	Key Observations
All	<ul> <li>The vast majority of transit riders across all systems walk to their destinations (95.9%)</li> <li>A small minority of riders also drive alone (2.0%), get picked up (0.9%), bicycle (0.7%), and drive with others (0.4%)</li> </ul>
GoRaleigh	<ul> <li>Compared to all other systems, more GoRaleigh riders walk to their destinations (97.0%)</li> <li>A small minority of riders bicycle (1.1%), get picked up (1.1%), drive with others (0.4%), or drive alone (0.4%)</li> </ul>
GoTriangle	<ul> <li>A substantial majority of riders (82.9%) walk to their destinations</li> <li>A higher percentage of GoTriangle riders drive alone (7.6%) or get picked up (5.3%) compared to other systems</li> </ul>
C-Tran	<ul> <li>The vast majority of riders walk to their destinations (96.2%)</li> <li>A small minority of riders also use bicycles (2.0%), wheelchairs/motorized scooters (0.9%), get picked up (0.5%) or drive with others (0.4%) to get to their destinations</li> </ul>
Wolfline	<ul> <li>The vast majority of riders walk to their destinations (96.5%)</li> <li>A small minority of riders also drive alone (3.2%) to reach their destinations</li> </ul>

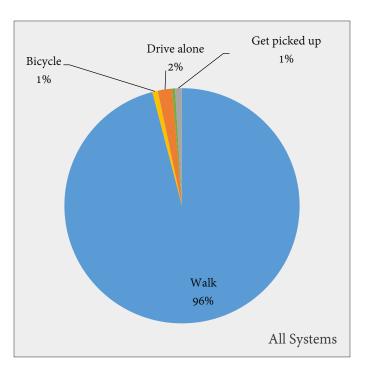
#### **Results for All Systems**

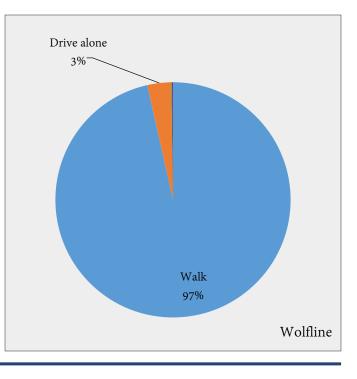
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems		
Response	Percent	
Walk	95.9%	
Drive alone	2.0%	
Get picked up	0.9%	
Bicycle	0.7%	
Drive with others	0.4%	
Wheelchair/Motorized scooter	0.0%	
Other	0.0%	

#### **Results for Individual Systems**







#### Total transfers made during one-way trips

The following are the combined responses from riders when asked "how many bus transfers did you make before you boarded" and "how many buses will you ride after you get off this bus." These questions were used in conjunction to determine the total number of transfers riders made during their one-way trip.

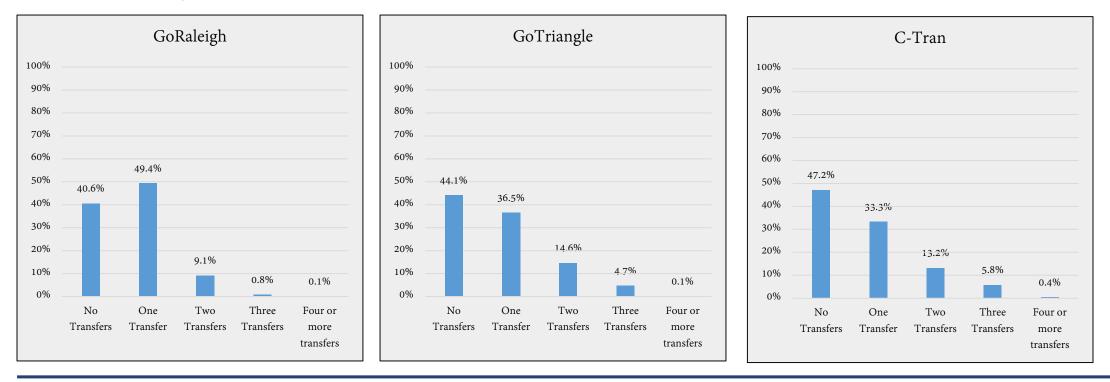
System	Key Observations
All	<ul> <li>A majority of riders (63.0%) will make no transfers</li> <li>Some riders (29.9%) will make one transfer</li> </ul>
GoRaleigh	<ul> <li>Slightly less than half (49.4%) will make one transfer and some riders (40.6%) will make no transfers.</li> <li>small minority of riders (6.9%) will make two, three (0.9%) and four or more (0.1%) transfers</li> </ul>
GoTriangle	<ul> <li>Slightly less than half of riders (44.1%) will make no transfers</li> <li>Some riders (36.5%) will make one transfer</li> </ul>
C-Tran	<ul> <li>Slightly less than half of riders (47.2%) will make no transfers</li> <li>Some riders (33.3%) will make one transfer</li> </ul>
Wolfline	• The vast majority of riders (94.1%) will make no transfers.

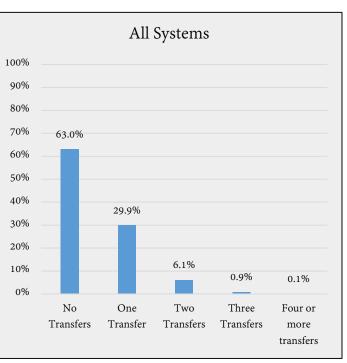
#### **Results for All Systems**

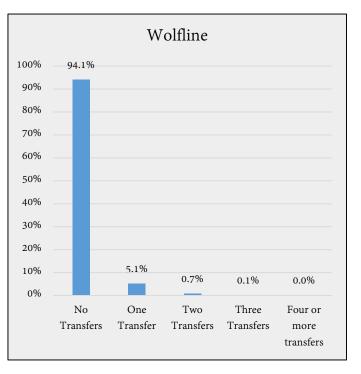
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems			
Response	Percent		
None (0)	63.0%		
One (1)	29.9%		
Two (2)	6.1%		
Three (3)	0.9%		
Four or more (4+)	0.1%		

#### **Results for Individual Systems**







#### Will you (or did you) make this trip using the same transit routes in exactly the opposite direction today?

#### Key Findings

The following are key highlights of the responses from riders when asked if they would make the same trip in the opposite direction. This information helps to highlight commuting patterns along routes, and whether or not respondents use the same route on their return trip.

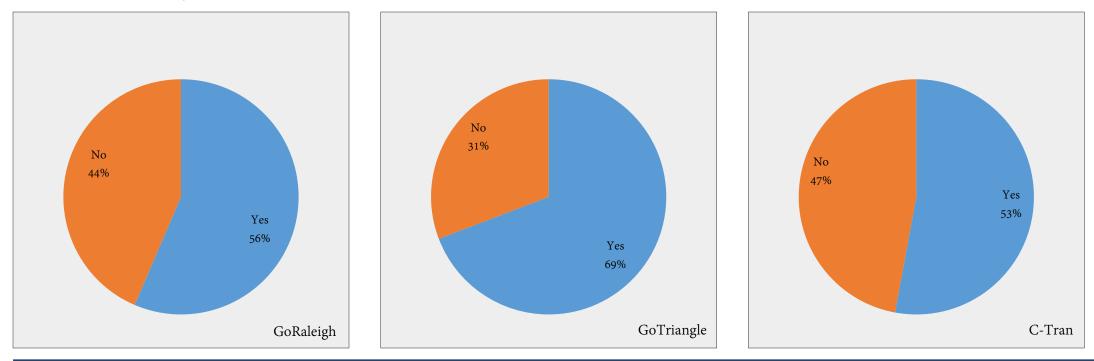
System	Key Observations
All	• Slightly more than half of all riders (53.5%) make the same trip in the opposite direction
GoRaleigh	• Slightly more than half of all riders (56.4)% make the same trip in the opposite direction
GoTriangle	• A substantial majority of all riders (69.2%) make the same trip in the opposite direction
C-Tran	• Slightly more than half of all riders (52.9%) make the same trip in the opposite direction
Wolfline	• Slightly less than half of all riders (47.5%) make the same trip in the opposite direction

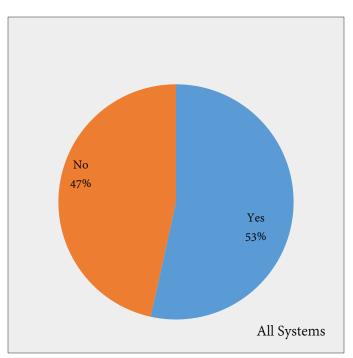
#### **Results for All Systems**

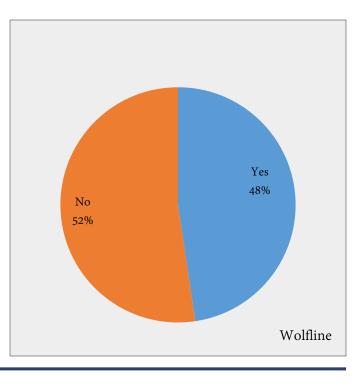
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems	
Response	Percent
Yes	53.5%
No	46.5%

#### **Results for Individual Systems**







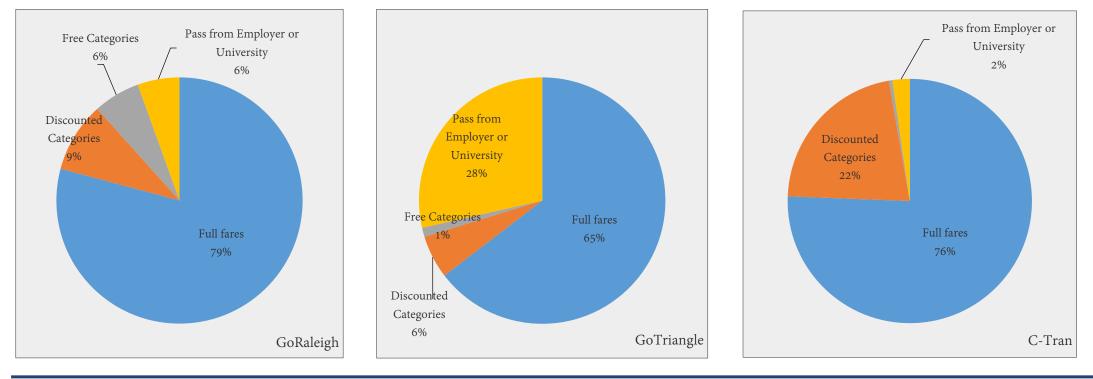
# Fare Type: For this one-way trip did you...?

#### **Key Findings**

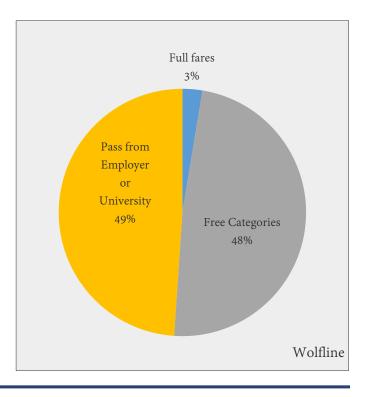
The following are key highlights of the responses from riders when asked about the type of fare they paid for their one-way trip. Results for all systems combined are not reported for this question as the possible fare types vary across systems. Response data indicates that there was likely confusion associated with this question. The percentages shown in red in the table correspond with positive responses given for a fare type that is not applicable to a corresponding system. For example, 0.3% of GoTriangle riders indicate their fare type is "Ride GoRaleigh or C-Tran for free as Youth 12 and under", which is a fare type only applicable to the GoRaleigh and C-Tran systems. Also, 48.4% of Wolfline riders responded that they "Ride free route (R-Line or Wake Forest Loop)". Since Wolfline is free to ride, it is likely that these riders intended to indicate that they "Ride a free route" rather than ride these specific free routes. These invalid responses may be due to unclear response choices, surveyor error, use of an applicable fare type on another bus and system during the one-way trip, or confusion among riders about fare types.

#### **Results for All Systems**

Response
Full Fa
Pay full fare (cash or regular pass purchase)
Discounted
Pay a person with a disability fare
Pay a youth fare
Pay a Senior Fare
Free
Ride GoRaleigh or C-Tran for free as Youth 12 and under
Ride GoRaleigh for free with Senior (65+)
Ride free route (R-Line or Wake Forest Loop)
Employer
Use a transit pass provided by employer or university



Percent for each System					
GoRaleigh	GoTriangle	C-Tran	Wolfline		
are					
79.2%	64.6%	75.6%	2.6%		
d Fare					
5.8%	3.6%	7.2%	0.0%		
0.6%	0.6%	N/A	N/A		
2.8%	1.5%	14.4%	N/A		
2					
0.2%	0.3%	0.2%	N/A		
2.2%	0.9%	N/A	N/A		
3.7%	0.0%	0.2%	48.4%		
r Paid					
5.5%	28.6%	2.3%	48.9%		
	2.2% 0.2% 0.2% 2.2% 3.7% 2aid	GoRaleigh         GoTriangle           79.2%         64.6%           79.2%         64.6%           5.8%         3.6%           0.6%         0.6%           2.8%         1.5%           0.2%         0.3%           2.2%         0.9%           3.7%         0.0%	GoRaleigh         GoTriangle         C-Tran           79.2%         64.6%         75.6%           79.2%         64.6%         75.6%           Fare         5.8%         3.6%         7.2%           0.6%         0.6%         N/A         2.8%           0.2%         0.3%         0.2%           2.2%         0.9%         N/A           3.7%         0.0%         0.2%		



# Did you use a transit pass or card?

## Key Findings

The following are key highlights of the responses from riders when asked if they used a transit pass or card.

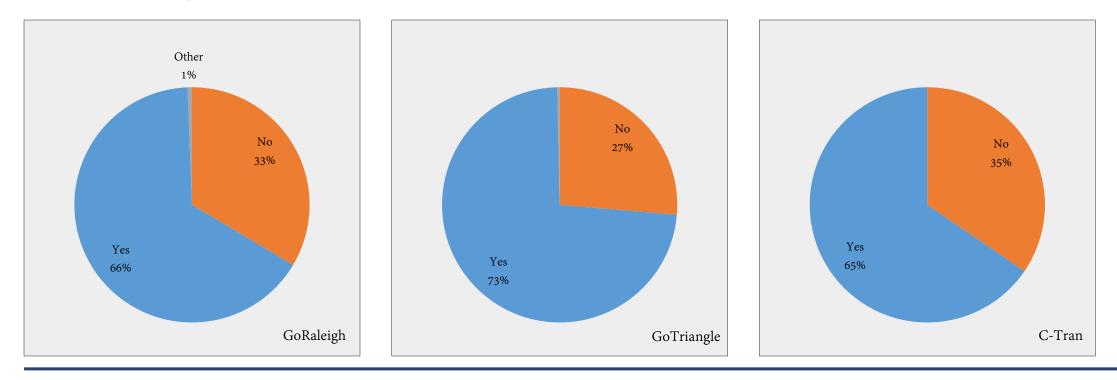
System	Key Observations
All	• A majority of riders (58.2%) use a transit pass or card
GoRaleigh	• A majority of riders (65.8%) use a transit pass or card
GoTriangle	• A substantial majority of riders (73.3%) use a transit pass or card
C-Tran	• A majority of riders (65.5%) use a transit pass or card
Wolfline	• A vast majority of riders (94.3%) do not use a transit pass or card as riders can ride Wolfline for free without a transit pass or card

## **Results for All Systems**

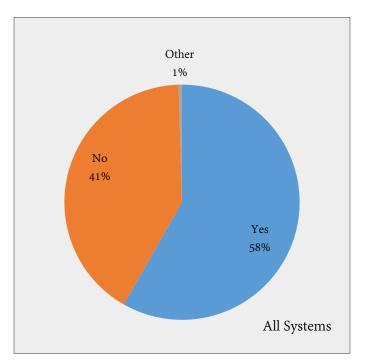
for each system are provided at the bottom of the page.

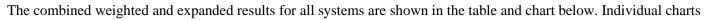
Combined responses for all systems		
Response	Percent	
Yes	58.2%	
No	41.3%	
Other	0.5%	

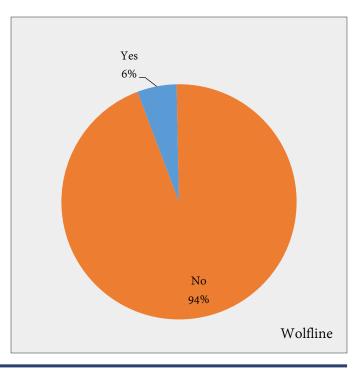
# **Results for Individual Systems**



Wake County Transit Systems Customer Survey – Summary Report - June 2016







# What type of transit pass or card did you use for this one-way trip?

# Local, Regional, Express

#### **Key Findings**

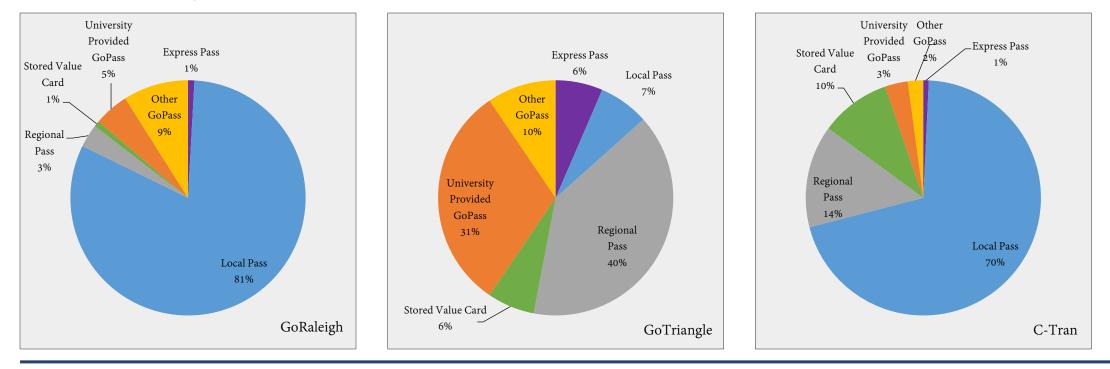
Riders who indicated they use a transit pass or card were asked what type of transit pass or card they used for their one-way trip. The types of accepted passes or cards vary by system. On this page pass types are summarized below by whether they are of the local, regional, or express variety. For example, the "Local Day Pass," "Local 7-Day Pass," and "Local 31-Day Pass" are reported as "Local Day Pass". While local passes are only used on GoRaleigh and C-Tran routes and no pass, card, or fare is required to ride Wolfline; some riders report using these types of passes. It is assumed that the riders either made a transfer and used these passes on another system during their trip or were unclear about the types of passes or the question asked.

Pass Type	Applicable Systems			
	GoRaleigh	GoTriangle	C-Tran	Wolfline
Local Pass (Day, 7-Day, 31-Day)	✓	N/A	✓	N/A
Regional Pass (Day, 7-Day, 31-Day)	✓	✓	✓	N/A
Express Pass (Day, 7-Day, 31-Day)	✓	✓	✓	N/A
GoPass (University, Other)	✓	✓	✓	✓
Stored Value Card	✓	✓	✓	N/A

#### **Results for All Systems**

System	Key Observations
GoRaleigh	<ul> <li>A substantial majority of riders (81.4%) use a 1</li> <li>Some riders use a GoPass (13.8%)</li> <li>A small minority of riders also use regional pa (0.8%)</li> </ul>
GoTriangle	<ul> <li>Most riders use a GoPass (40.5%) or a regiona</li> <li>Some riders also use local passes (6.9%), expression percentages</li> </ul>
C-Tran	<ul> <li>A substantial majority of riders (70.2%) use a 1</li> <li>Some riders use a regional pass (14.1%) or a st</li> <li>A small minority of riders use a GoPass (5.2%)</li> </ul>
Wolfline	<ul> <li>A vast majority of riders use a GoPass provide</li> <li>Some riders use an express pass (9%)</li> </ul>

#### **Results for Individual Systems**



Wake County Transit Systems Customer Survey - Summary Report - June 2016

#### local pass

asses (3.2%), express passes (0.9%) and stored value cards

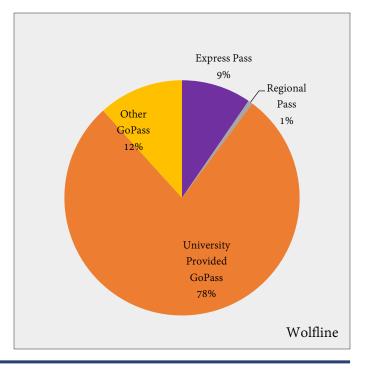
al pass (39.6%) ress passes (6.5%), and stored value cards (6.5%) at about the

local pass

stored value card (9.7%)

%) and an express pass (0.7%) at lower percentages

ed by the University (78%) or elsewhere (12%)



# What type of transit pass or card did you use for this one-way trip? (Continued)

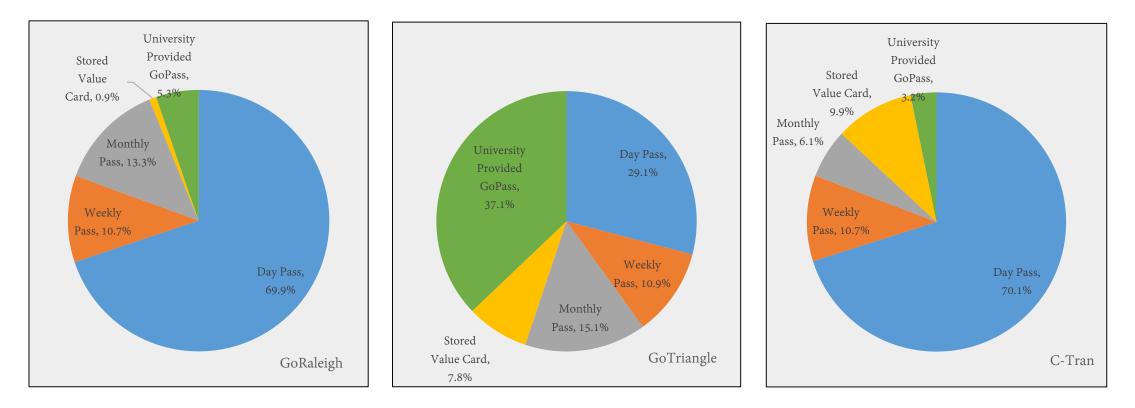
# Daily, Weekly, Monthly

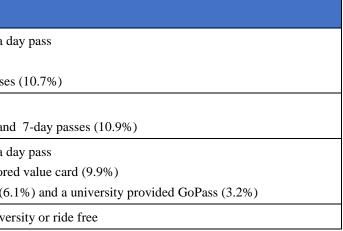
# Key Findings

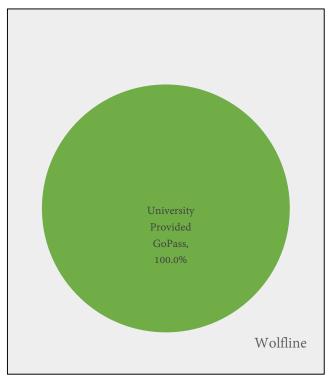
In the chart below pass types are summarized by length of coverage. For example, the "Express 7-Day Pass," "Local 7-Day Pass," and "Regional 7-Day Pass" are reported as "Weekly Pass". GoPasses and Stored Value Cards are presented again in this section because they cover all periods.

#### **Results for All Systems**

System	Key Observations
GoRaleigh	• A substantial majority of riders (69.9%) use a
	• Some riders use a 31-day pass (13.3%)
	• A small minority of riders also use 7-day passe
GoTriangle	• Some riders use a day pass (29.1%)
	• Some riders also use 31-day passes (15.1%) and
C-Tran	• A substantial majority of riders (70.1%) use a
	• Some riders use a 7-day pass (10.7%) or a stor
	• A small minority of riders use a 31-day pass (6
Wolfline	• All riders use a GoPass provided by their unive







# **Rider and Household Characteristics**

Data that describe the demographic characteristics of fixed route transit riders include age, gender, race and ethnicity, and household income, as well as the number of available cars in the household, number of people in the household, and employment status are included in this section. These questions also address frequency of riding transit and longevity of riding transit. The responses to these questions will help agencies in understanding the populations they serve and delivering services that meets their needs. Rider and household characteristics data are summarized in this section to address the following subjects:

- How long have you been riding transit?
- What is your gender?
- What is your age?
- Do you have a valid driver's license?
- How do you identify your race and ethnicity?
- Employment status
- Including you, how many people live in your household?
- Including you, how many people (16 or older) in your household are employed full or part-time?
- How many working vehicles (cars, trucks, or motorcycles) are available to your household?
- Could you have used one of these vehicles for this trip?
- Which of the following best describes your total annual household income in 2014 before taxes?

# How long have you been riding transit?

#### Key Findings

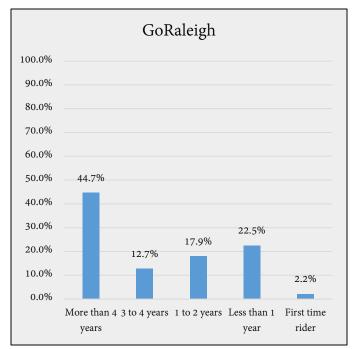
The following are key highlights of the responses from riders when asked how long they have been riding transit. Survey data about riders' tenure riding the transit system together with levels of ridership can provide some insight on things like customer loyalty, whether each system is attracting new riders, and rider familiarity with the agency and their routes. The National Transit Database (NTD) can provide further insight into transit system growth and retention. Data for Wolfline reflects a student rider population with fewer likely years of riding the transit system.

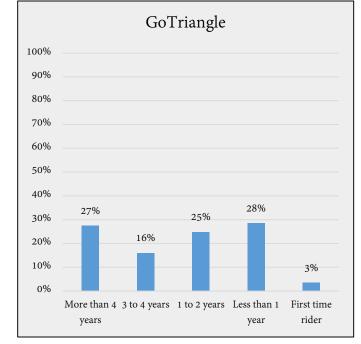
System	Key Observations
All	<ul> <li>A fairly even distribution of riders have been riding the transit systems for more than 4 years (27.5%), 1 to 2 years (27.9%) and less than 1 year (25.9%); however, there is wide variation between some systems</li> <li>Some riders have been riding the transit systems for 3 to 4 years (17.2%)</li> </ul>
GoRaleigh	• Some riders (44.7%) have been riding GoRaleigh more than 4 years
	• A similar percentage of riders have been riding GoRaleigh for 1 to 2 years (17.9%) or less than 1 year (22.5%)
GoTriangle	• A fairly even distribution of riders have been riding GoTriangle for more than 4 years (27.4%), 1 to 2 years (24.8%) and less than 1 year (28.5%)
	• Fewer riders (16.0%) have been riding GoTriangle for 3 to 4 years and very few (3.4%) are first-time riders
C-Tran	• A fairly even distribution of riders have been riding C-Tran for more than 4 years (29.8%), 1 to 2 years (24.5%) and less than 1 year (28.5%)
	• Fewer riders (15.6%) have been riding C-Tran for 3 to 4 years and very few (1.6%) are first-time riders
Wolfline	• Some riders (40.7%) have been riding Wolfline for 1 to 2 years
	• Similar percentages of riders have been riding Wolfline for 3 to 4 years (22.9%) or less than 1 year (29.7%)

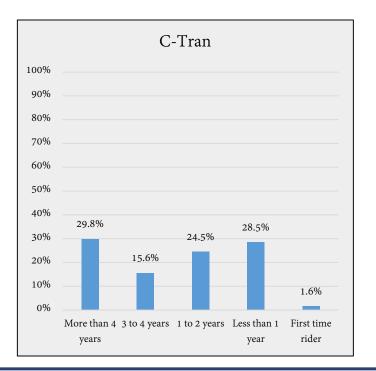
#### **Results for All Systems**

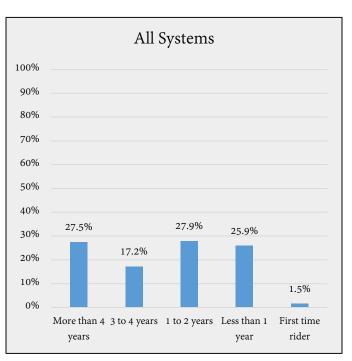
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

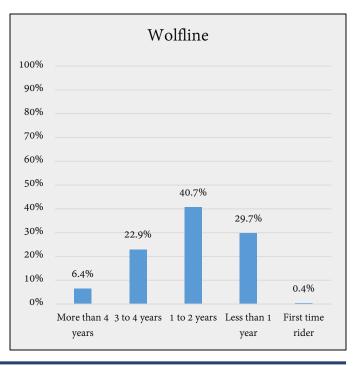
Combined responses for all systems		
Response	Percent	
More than four years	27.5%	
Three to four years	17.2%	
One to two years	27.9%	
Less than one year	25.9%	
First time rider	1.5%	











# What is your gender?

# Key Findings

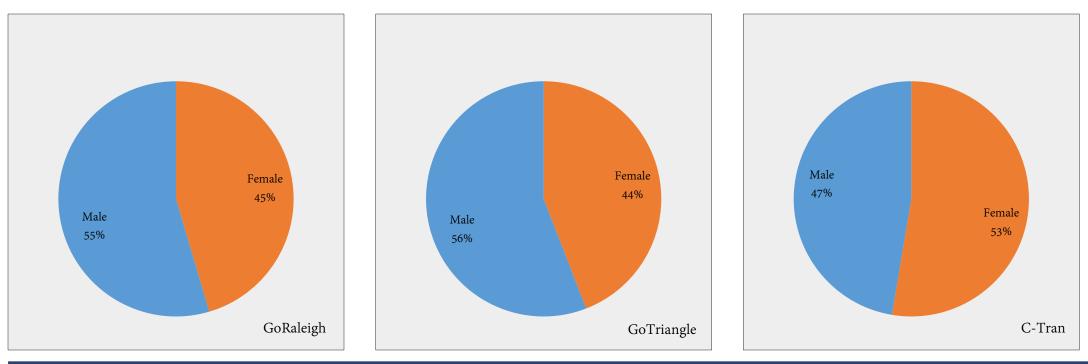
The following are key highlights of the responses from riders when asked to identify their gender. According to the most recently available U.S. Census Bureau data (2010), 51.3% of Wake County's overall population, 51.7% of the city of Raleigh's population, and 51.3% of the town of Cary's population is female. This slightly contrasts with the gender profile of transit ridership in the Triangle Region. Survey responses indicate that males are riding transit at a higher rate than their female counterparts.

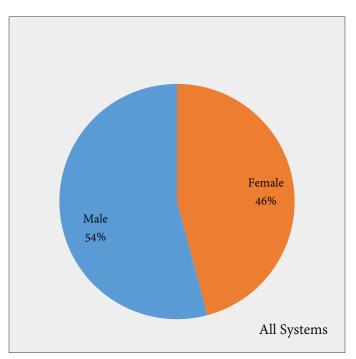
System	Key Observations
All	• More riders are male (54.2%) than female (45.8%)
GoRaleigh	• More riders are male (54.6%) than female (45.4%)
GoTriangle	• More riders are male (55.9%) than female (44.1%)
C-Tran	• More riders are female (52.6%) than male (47.4%)
Wolfline	• More riders are male (53.8%) than female (45.8%)

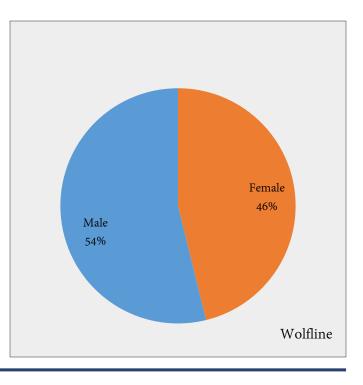
# **Results for All Systems**

The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems		
Response	Percent	
Male	54.2%	
Female	45.8%	







# What is your age?

## Key Findings

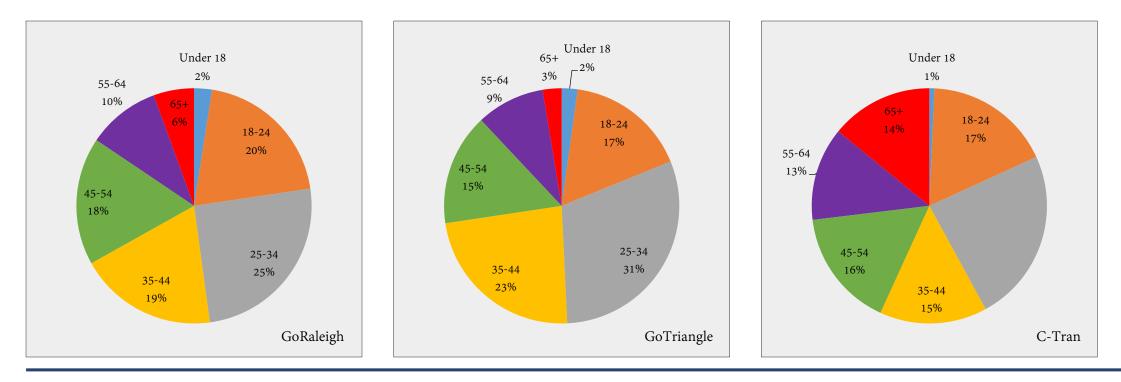
The following are key highlights of the responses from riders when asked to identify their age.

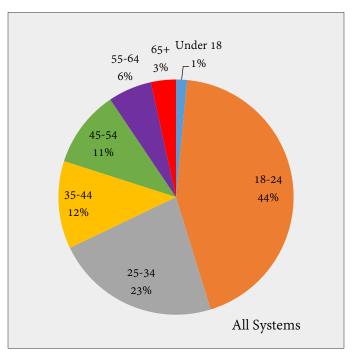
System	Key Observations
All	• The largest group of riders (43.7%) is between 18-24 years; however, this is driven by the ridership on Wolfline, and the largest age group for other systems is between 25-34 years
	• The combined systems have a small minority of riders under 18 years (1.5%) and 65 years and older (3.4%)
GoRaleigh	• The largest group of riders (25.2%) is between 25-34 years
	• Riders are evenly distributed among 18-24 years (20.2%), 35-44 years (19.0%), and 45-54 years (17.5%)
	• The lowest percentages of riders are 65 years or older (5.6%) and under 18 years (2.5%)
GoTriangle	• The largest group of riders is between 25-34 years (30.4%), followed by 35-44 years (23.4%)
	• Similar percentages of riders are 18-24 years (16.7%) as 45-54 years (15.4%)
	• The lowest percentages of riders are 65 years and older (2.6%) and under 18 years (2.2%)
C-Tran	• The largest group of riders is between 25-34 years (23.9%)
	• Ridership from all age groups 18 and over is fairly evenly distributed
	• Compared to other systems, C-Tran has the highest percentage of riders 65 years and older (14.1%)
Wolfline	<ul> <li>Compared to other systems, Wolfline has the highest percentage of riders 18-24 years (77.8%)</li> <li>Compared to other systems, Wolfline has the lowest percentages of riders 55-64 years (0.2%) and 65 years</li> </ul>
	and older (0.3%)

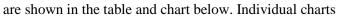
# **Results for All Systems**

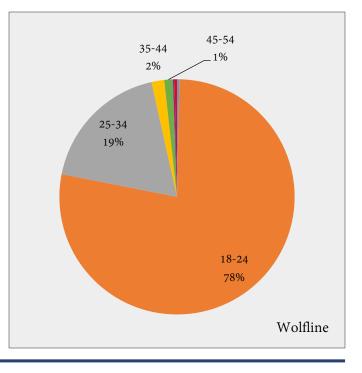
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems	
Response	Percent
Under 18 years	1.5%
18-24 years	43.7%
25-34 years	22.7%
35-44 years	12.0%
45-54 years	10.6%
55-64 years	6.0%
65+ years	3.4%









# Do you have a valid driver's license?

#### Key Findings

The following are key highlights of the responses from riders when asked if they have a valid driver's license. GoTriangle's ridership results deviate notably from GoRaleigh and C-Tran for this question. This could reflect that GoTriangle's ridership has more disposable income, which could be used for vehicle ownership and driver's license procurement. Wolfline predominantly serves a student population and its results reflect this population.

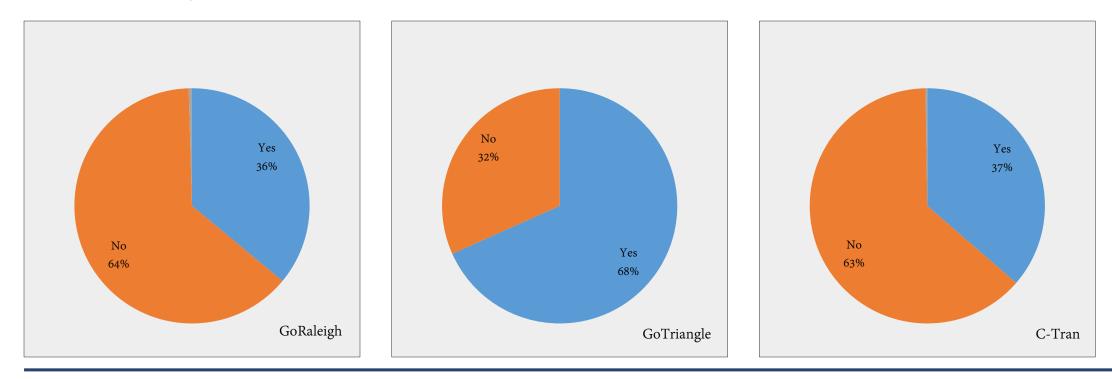
System	Key Observations
All	• Over half (56.1%) of riders have a valid driver's license; however, there is notable variation between systems
GoRaleigh	• A majority (63.5%) of riders <u>do not</u> have a valid driver's license
GoTriangle	• A substantial majority (68.3%) of riders have a valid driver's license
C-Tran	• A majority (63.4%) of riders <u>do not</u> have a valid driver's license
Wolfline	• A substantial majority of riders (80.0%) have a valid driver's license

#### **Results for All Systems**

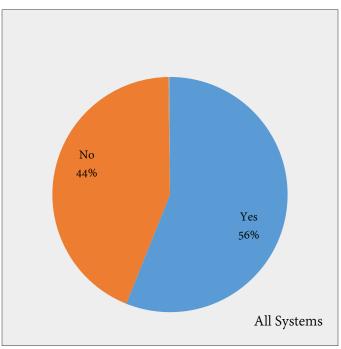
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

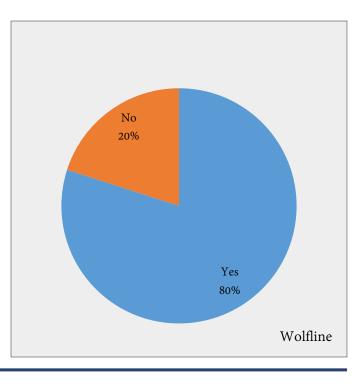
Combined responses for all systems	
Response	Percent
Yes	56.1%
No	43.7%
Not Driving Age	0.2%

#### **Results for Individual Systems**



Wake County Transit Systems Customer Survey – Summary Report - June 2016





# How do you identify your race and ethnicity (check all that apply)?

#### **Key Findings**

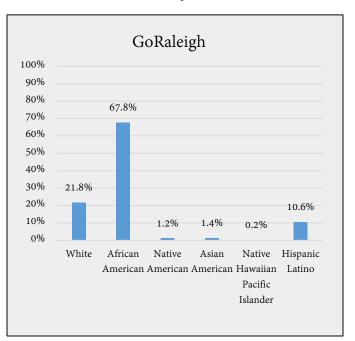
The following are key highlights of the responses from riders when asked how they identify their race and ethnicity. Riders could identify more than one race in addition to ethnicity, therefore percentage distributions may sum to greater than 100 percent.

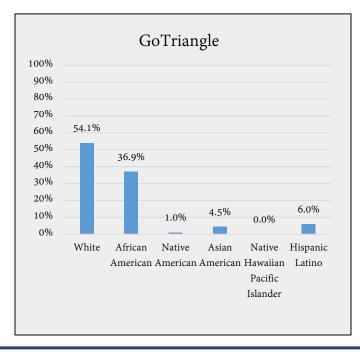
System	Key Observations
All	• More riders (44.9%) identify as African American than all other races
	• Many riders (38.2%) identify as White
GoRaleigh	• More riders (67.8%) identify as African American than all other races
	• Many riders identify as White (21.8%)
	• Some riders (10.6%) identify as ethnically Hispanic/Latino
GoTriangle	• More riders (54.1%) identify as White than all other races
	• Many riders (36.9%) identify as African American
C-Tran	• Riders identify as African American (43.9%) and White (39.0%) in similar percentages
	• Some riders (13.6%) identify as ethnically Hispanic/Latino
Wolfline	• More riders (56.0%) identify as White than all other races
	• Some riders identify as African American (18.1%) and Asian American (13.9%)

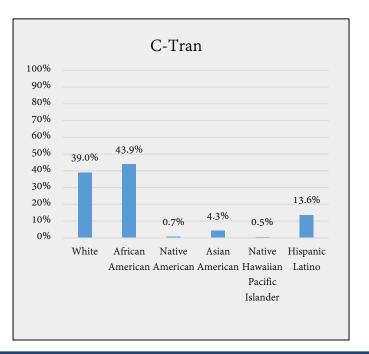
#### **Results for All Systems**

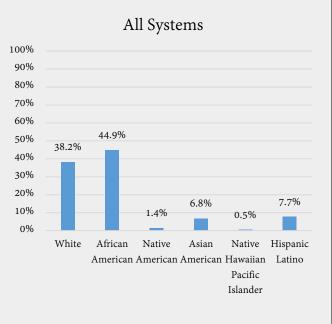
The combined weighted and expanded results for all systems are shown in the table and chart below along with a breakdown of Wake County race and ethnicity data from the 2010-2014 American Community Survey (ACS). Individual charts for each system are provided at the bottom of the page. ACS data coupled with survey responses show that non-white and non-Hispanic populations comprise a higher proportion of transit ridership than their relative proportion of the Wake County population.

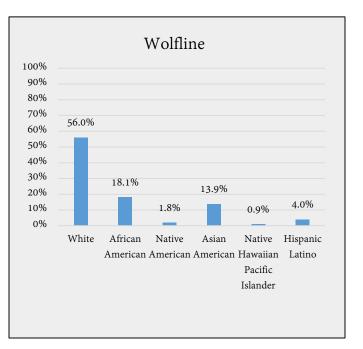
Combined responses for all systems		Wake
Response	Ridership Percent	County Percent
White (non-Hispanic)	38.2%	69.9%
African American (non-Hispanic)	44.9%	21.8%
Native American (non-Hispanic)	1.4%	0.9%
Asian American (non-Hispanic)	6.8%	6.6%
Native Hawaiian or Pacific Islander (non-Hispanic)	0.5%	0.1%
Hispanic or Latino	7.7%	9.9%











# **Employment status**

#### Key Findings

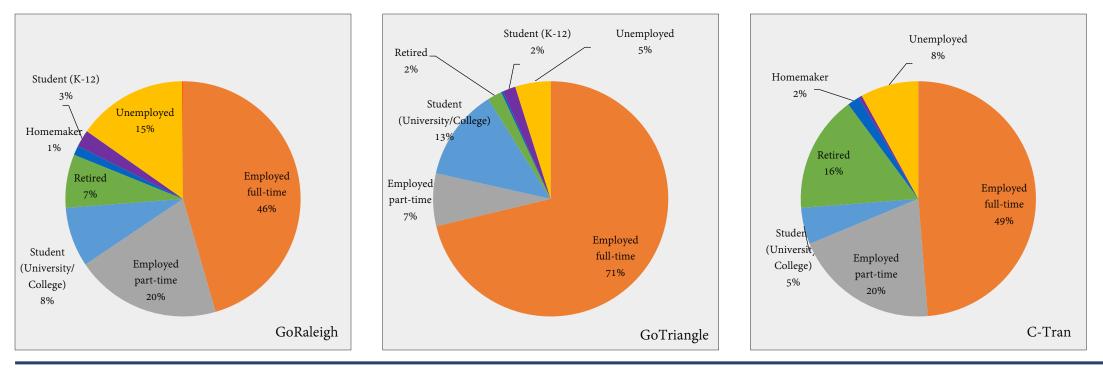
The following are key highlights of the responses from riders when asked their employment status.

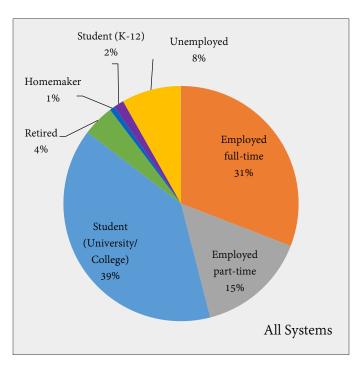
System	Key Observations
All	• Most riders are either employed full- or part-time (46.0%) or students at University or College (39.4%); however, the proportion of students is primarily due to Wolfline ridership
	• Some riders are unemployed (8.2%) or retired (4.3%)
	• Asmall minority of riders are students in grades K-12 (1.4%), homemakers (0.7%), or not of working age (0.0%)
GoRaleigh	• A majority of riders (65.5%) are employed full- or part-time
	• Some riders are unemployed (15.2%), University or College students (8.2%), or retired (7.3%)
GoTriangle	• A substantial majority of riders (78.5%) are employed full- or part-time
	• Some riders (12.6%) are University or College students
C-Tran	• A substantial majority of riders (68.7%) are employed full- or part-time
	• Some riders (16.1%) are retired
	• Some riders are unemployed (8.0%) or students at University or College (5.0%)
Wolfline	A substantial majority of riders (83.2%) are University or College students
	• Some riders (16.2%) are employed full- or part-time

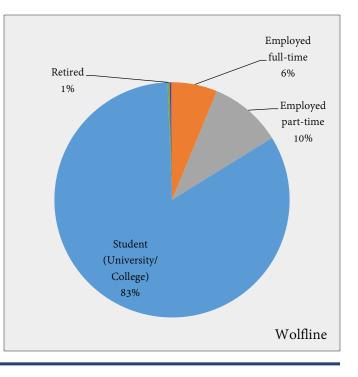
# **Results for All Systems**

The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all systems		
Response	Percent	
Student (University/College)	39.4%	
Employed full-time	30.9%	
Employed part-time	15.1%	
Unemployed	8.2%	
Retired	4.3%	
Student (K-12)	1.4%	
Homemaker	0.7%	
Not working age	0.0%	







# Including you, how many people live in your household?

# Key Findings

The following are key highlights of the responses from riders when asked how many people live in their household.

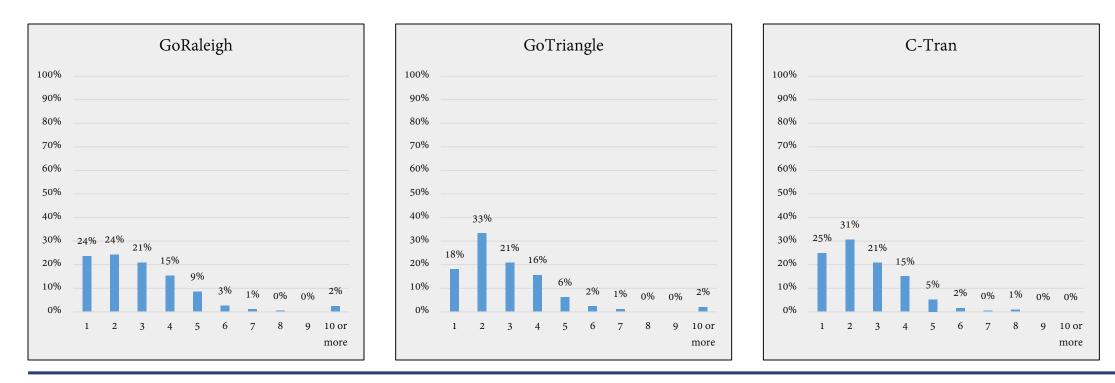
System	Key Observations
All	<ul> <li>The vast majority of riders (89.1%) live in households with four or fewer people</li> <li>Riders with two-person households are most commonly occurring subset for every system (28.1%)</li> </ul>
GoRaleigh	• A substantial majority of riders (84.5%) live in households with four or fewer people
GoTriangle	• A vast majority of riders (87.9%) live in households with four or fewer people
C-Tran	• A vast majority of riders (91.7%) live in households with four or fewer people
Wolfline	• A vast majority of riders (94.5%) live in households with four or fewer people

# **Results for All Systems**

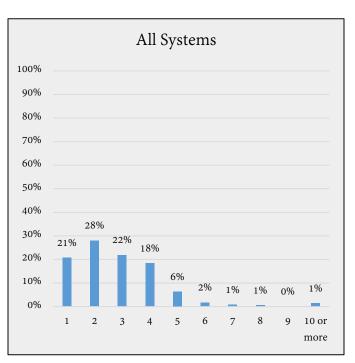
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

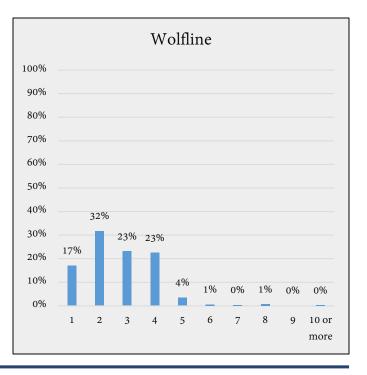
Combined responses for all systems	
Response	Percent
1	20.7%
2	28.1%
3	21.9%
4	18.4%
5	6.3%
6	1.8%
7	0.8%
8	0.6%
9	0.2%
10 or more	1.5%

# **Results for Individual Systems**



Wake County Transit Systems Customer Survey – Summary Report - June 2016





# Including you, how many people (16 or older) in your household are employed full or part-time?

## Key Findings

The following are key highlights of the responses from riders when asked how many people in their household, including themselves, are employed full or part time.

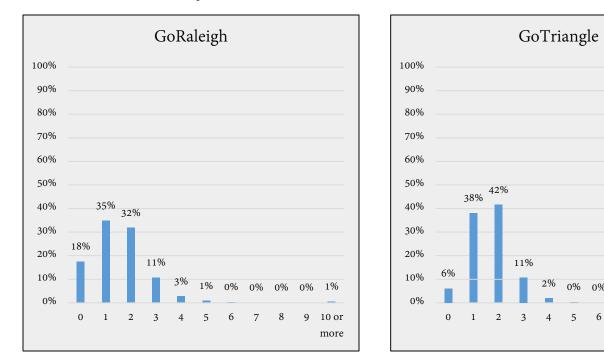
System	Key Observations
All	<ul> <li>The vast majority of riders (86.2%) live with 3 or fewer employed household members</li> <li>A majority of riders (58.0%) live with 1 or fewer employed household members</li> <li>Some riders (24.8%) live with no employed household members</li> </ul>
GoRaleigh	<ul> <li>A substantial majority of riders (84.3%) live with 3 or fewer employed household members</li> <li>A majority of riders (52.5%) live with 1 or fewer employed household members</li> <li>Some riders (17.5%) live with no employed household members</li> </ul>
GoTriangle	<ul> <li>The vast majority of riders (85.8%) live with 3 or fewer employed household members</li> <li>Some riders (44.2%) live with 1 or fewer employed household members</li> <li>A small minority of riders (6.1%) live with no employed household members</li> </ul>
C-Tran	<ul> <li>A substantial majority of riders (84.1%) live with 3 or fewer employed household members</li> <li>A majority of riders (54.0%) live with 1 or fewer employed household members</li> <li>Some riders (18.8%) live with no employed household members</li> </ul>
Wolfline	<ul> <li>The vast majority of riders (88.5%) live with 3 or fewer employed household members</li> <li>A substantial majority of riders (66.9%) live with 1 or fewer employed household members</li> <li>Wolfline has the highest percentage of riders (36.6%) living with no employed household members. This is likely due to the use of Wolfline by unemployed students.</li> </ul>

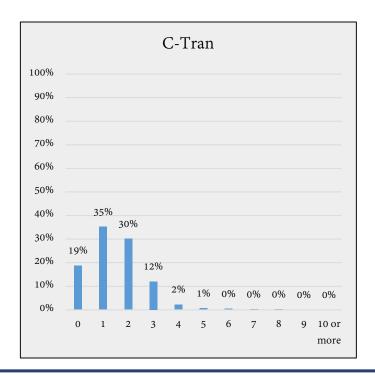
## **Results for All Systems**

The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

Combined responses for all system	S
Response	Percent
0	24.8%
1	33.2%
2	28.2%
3	9.9%
4	2.4%
5	0.6%
6	0.3%
7	0.2%
8	0.1%
9	0.0%
10 or more	0.4%

#### **Results for Individual Systems**





1%

10 or

more

0%

9

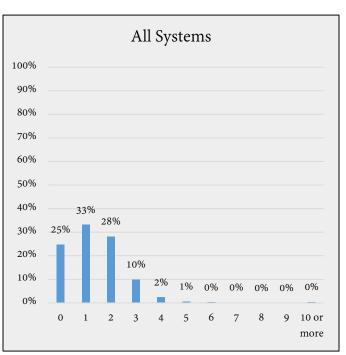
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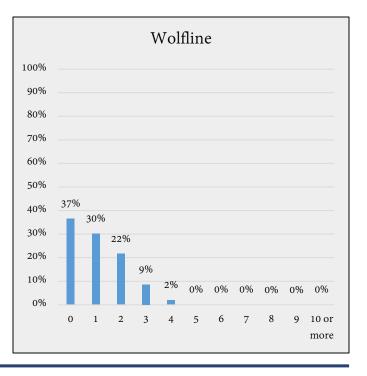
8

0%

0% 0%

Wake County Transit Systems Customer Survey – Summary Report - June 2016





# How many working vehicles (cars, trucks, or motorcycles) are available to your household?

#### Key Findings

The following are key highlights of the responses from riders when asked how many working vehicles are available to their household. GoTriangle's ridership findings deviate notably from GoRaleigh and C-Tran for this question. This could reflect that GoTriangle's ridership has more disposable income, which could be used for vehicle ownership. Wolfline predominantly serves a student population and its results reflect this population.

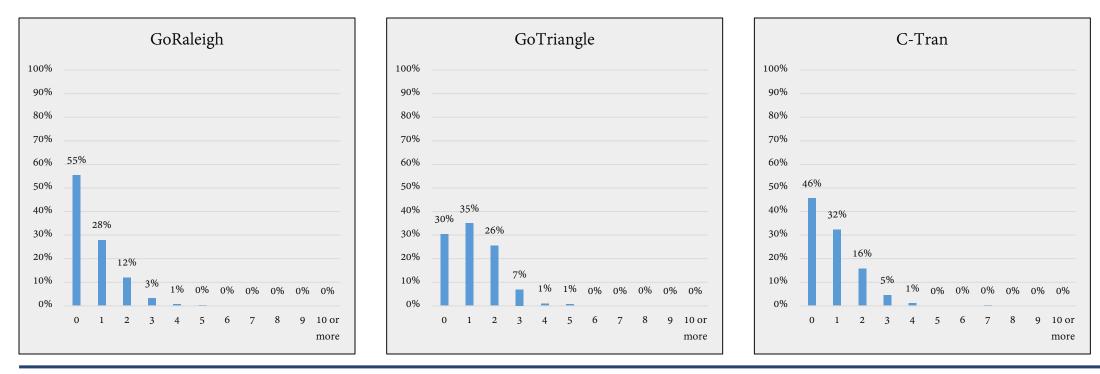
System	Key Observations
All	• Approximately two-fifths of riders (41.2%) have no vehicles available to their household
	• Some riders have 1 (28.8%), 2 (17.9%), 3 (7.5%) or 4 (3.4%) vehicles available to their household
GoRaleigh	• A majority of riders (55.5%) have no vehicles available to their household
	• Some riders have 1 (28.0%) or 2 (12.0%) vehicles available to their household
GoTriangle	• A similar percentage of riders have 0 (30.5%) or 1 (35.0%) vehicle available to their household
	• Some riders have 2 (25.6%) or 3 (7.0%) vehicles available to their household
C-Tran	• Slightly less than half of riders (45.6%) have no vehicle available to their household
	• Some riders have 1 (32.4%) or 2 (15.8%) vehicles available to their household
Wolfline	• A similar percentage of riders have 0 (25.1%), 1 (28.7%) or 2 (24.2%) vehicles available to their household
	• Some riders have 3 (13.0%) or 4 (7.2%) vehicles available to their household

#### **Results for All Systems**

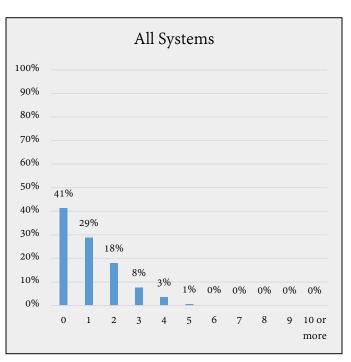
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

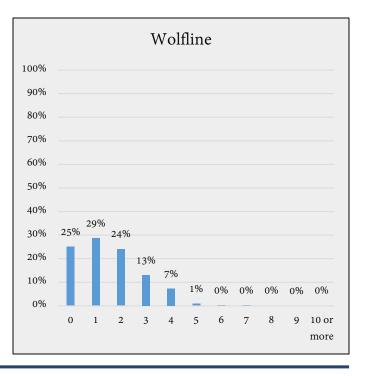
Combined responses for all system	ms
Response	Percent
0	41.2%
1	28.8%
2	17.9%
3	7.5%
4	3.4%
5	0.6%
6	0.2%
7	0.1%
8	0.1%
9	0.0%
10 or more	0.1%

## **Results for Individual Systems**



Wake County Transit Systems Customer Survey - Summary Report - June 2016





# Could you have used one of these vehicles for this trip?

#### Key Findings

Riders who have at least one vehicle available to their household were asked if the vehicle could have been used for their trip. The following are key highlights of the responses from riders. Similar to findings on the previous page, GoTriangle survey responses deviated notably from GoRaleigh and C-Tran. Meanwhile, Wolfline survey responses seemed to reflect its student-based population.

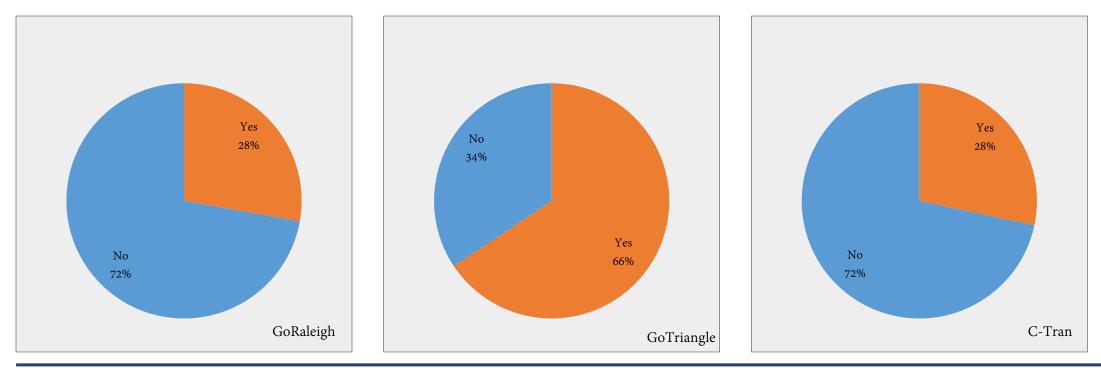
System	Key Observations
All	• A majority of riders (58.6%) could not have used one of their household's vehicles for their trip
GoRaleigh	• A substantial majority of riders (72.2%) could not have used one of their household's vehicles for their trip
GoTriangle	• A majority of riders (65.6%) could have used one of their household's vehicles for their trip
C-Tran	• A substantial majority of riders (71.7%) could not have used one of their household's vehicles for their trip
Wolfline	• A similar percentage of riders could have used one of their household's vehicles for their trip (48.7%) as could not have (51.3%)

## **Results for All Systems**

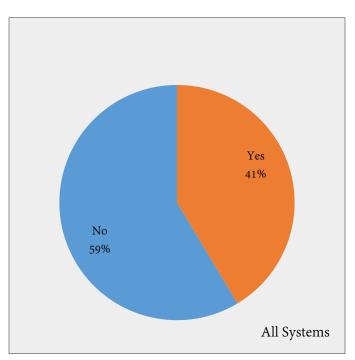
The combined weighted and expanded results for all systems are shown in the table and chart below. Individual charts for each system are provided at the bottom of the page.

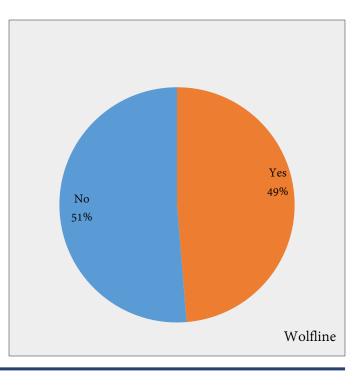
Combined responses for all systems		
Response	Percent	
No	58.6%	
Yes	41.4%	

## **Results for Individual Systems**



Wake County Transit Systems Customer Survey – Summary Report - June 2016

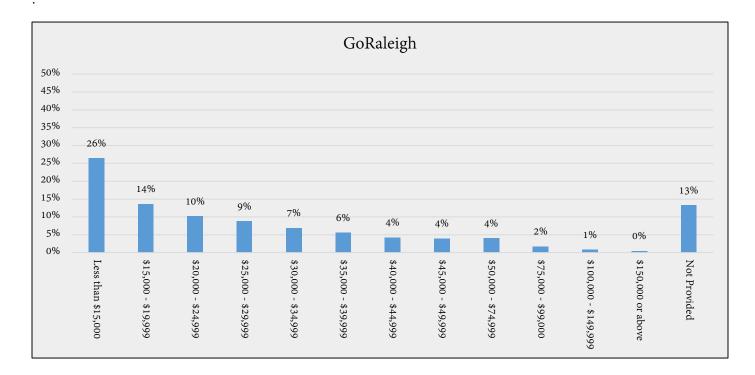


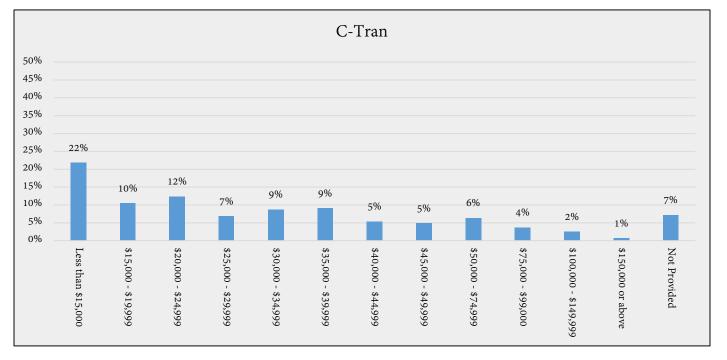


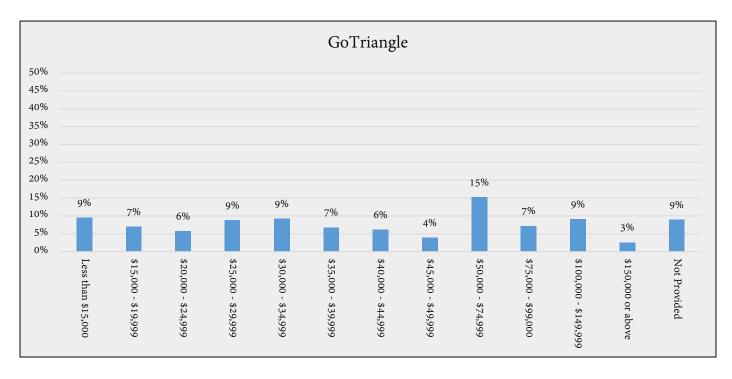
# Which of the following best describes your total annual household income in 2014 before taxes?

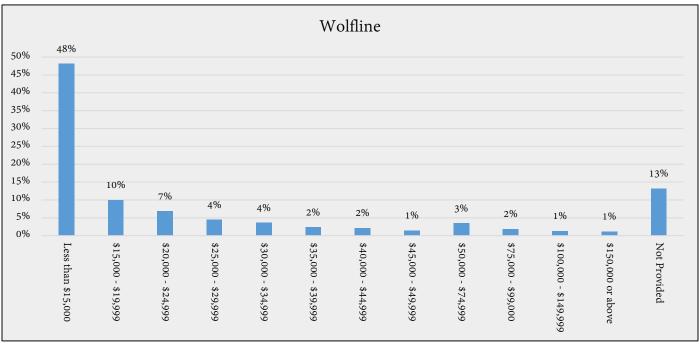
Riders were asked about their annual household income. Data for each system is summarized in the bar charts below. For three out of four systems, the income range with the highest percentage of riders is 'Less than \$15,000', with this proportion nearly 50 percent for Wolfline, which is likely a reflection of student ridership. For GoTriangle, the income range with the highest percentage of riders is '\$50,000-\$74,999'. A portion of riders did not provide a response

to this survey question (7-13% of riders by system), likely because it may be perceived to be highly personal in nature. Median household incomes for Wake County (\$66,579), the city of Raleigh (\$54,581), and the town of Cary (\$91,481), are higher than the household income of the majority of transit riders for all systems. This seems to indicate that low-cost transportation is important to transit riders.









# **Customer Satisfaction, Perception and Brand Awareness**

Customer satisfaction questions, provide critical information related to performance, schedules, appearance, and convenience that allow the agencies to determine potential areas for improvement in their delivery of fixed route transit service to their customers. Responses to perception questions provide insight as to how customers view each transit agency. Brand awareness questions were asked on GoRaleigh routes only to gauge customers' awareness about the transition from Capital Area Transportation (CAT) to GoRaleigh.

Customer satisfaction questions were asked under one main question, 'rate your satisfaction with the following items', with multiple sub-topics that allowed respondents to provide a rating of, 'very satisfied', 'satisfied', 'neutral', 'dissatisfied', and 'very dissatisfied'. Customer perception questions were phrased as statements and the rider was asked to indicate their level of agreement as 'strongly disagree', 'disagree', 'neutral', 'agree', and 'strongly agree'. Brand awareness questions were asked only of riders on GoRaleigh. This series of three questions gauged riders' awareness of the change from CAT to GoRaleigh. The questions asked on each system are summarized below.

Riders on all systems were asked:

- Rate your satisfaction with GoRaleigh in each of the following areas...
- Indicate your level of agreement with each of the following statements:
  - o (Transit agency name) values its customers
  - o (Transit agency name) provides excellent customer service
  - o I would recommend (transit agency name) to others

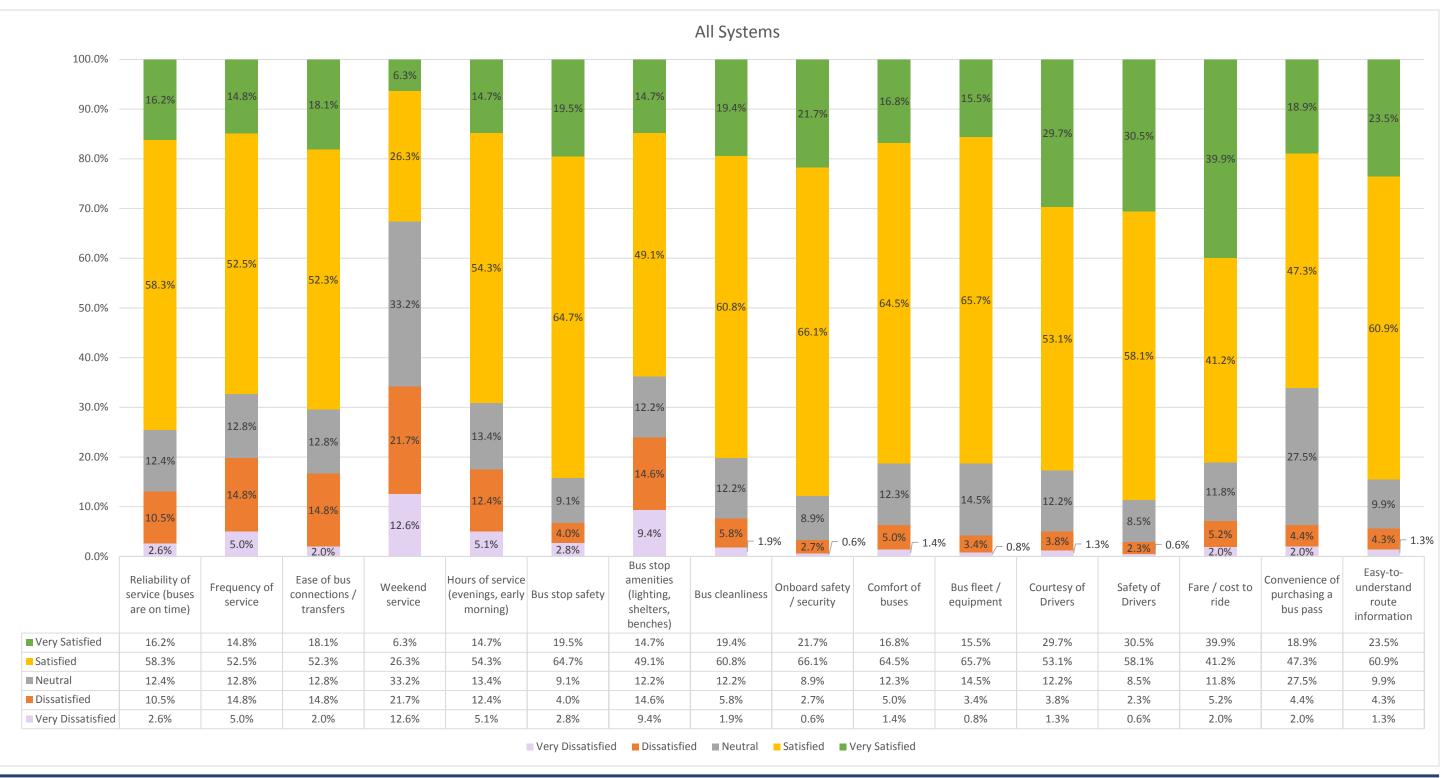
Riders on GoRaleigh were additionally asked the following brand awareness questions:

- When did you learn CAT/Capital Area Transit changed to GoRaleigh?
- How did you find out about the change?
- Have you noticed any differences in service since the switch from CAT/Capital Area Transit to GoRaleigh?

# Rate your satisfaction in each of the following areas...

#### Key Findings

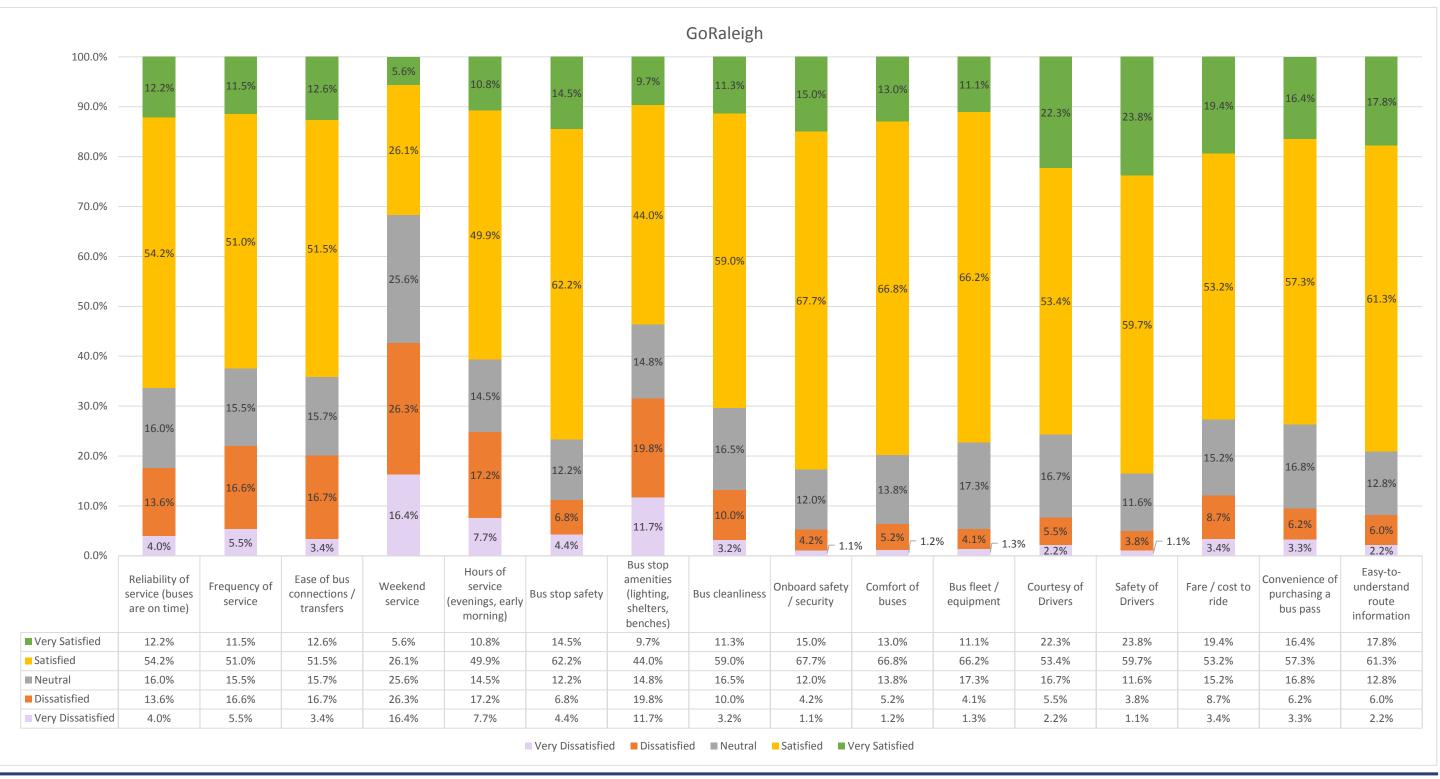
Level of satisfaction responses from riders across all systems are highlighted in the chart below. For all systems combined safety of drivers (30.5%), courtesy of drivers (29.7%), and fare/cost to ride (39.9%) have the highest percentages of very satisfied riders, and weekend service has the highest percentages of dissatisfied and 12.6% very dissatisfied).



# Rate your satisfaction with GoRaleigh in each of the following areas...

#### Key Findings

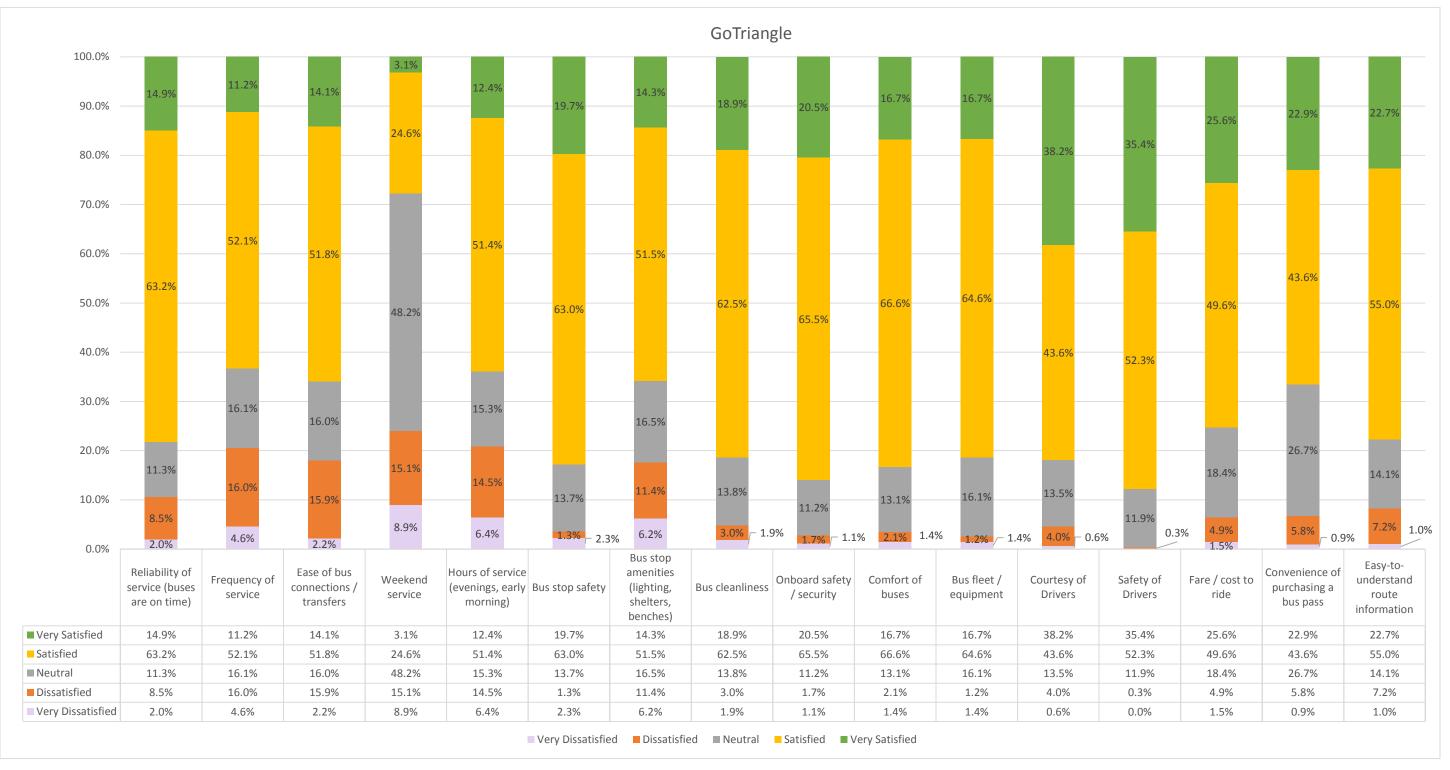
Level of satisfaction responses from riders on GoRaleigh are highlighted in the chart. Safety of drivers (23.8%), courtesy of drivers (22.3%), and fare/cost to ride (19.4%) have the highest percentages of very satisfied riders. Across all aspects of service, the highest percentages of rider dissatisfaction exist with weekend service (26.3% dissatisfied and 16.4% very dissatisfied) and bus stop amenities (19.8% dissatisfied and 11.7% very dissatisfied).

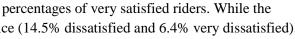


# Rate your satisfaction with GoTriangle in each of the following areas...

#### Key Findings

Level of satisfaction responses from riders on GoTriangle are highlighted in the chart. Courtesy of drivers (38.2%), safety of drivers (35.4%), and fare/cost to ride (25.6%) have the highest percentages of very satisfied riders. While the percentages of dissatisfied riders are fairly low, the highest percentages of rider dissatisfaction exist with weekend service (15.1% dissatisfied and 8.9% very dissatisfied) and hours of service (14.5% dissatisfied and 6.4% very dissatisfied).

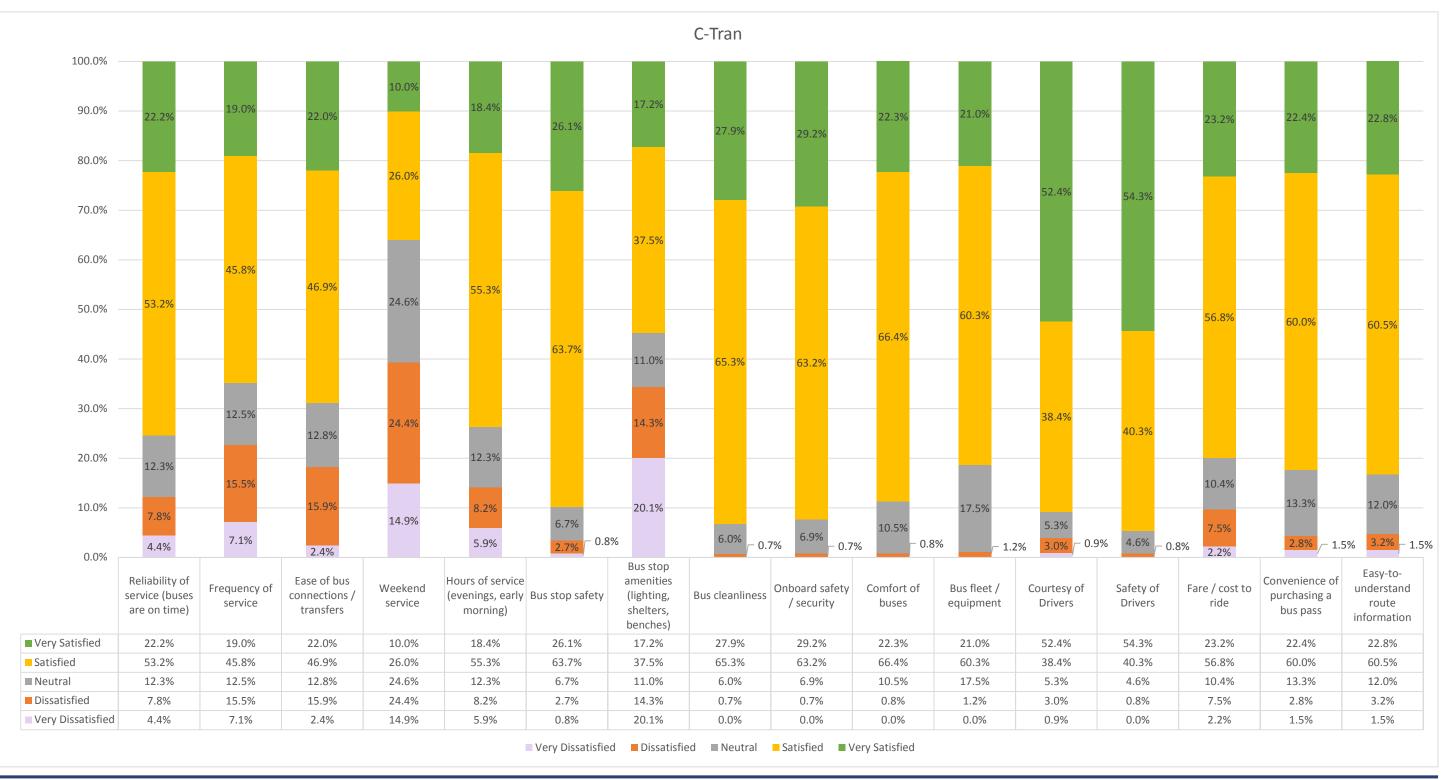




# Rate your satisfaction with C-Tran in each of the following areas...

#### Key Findings

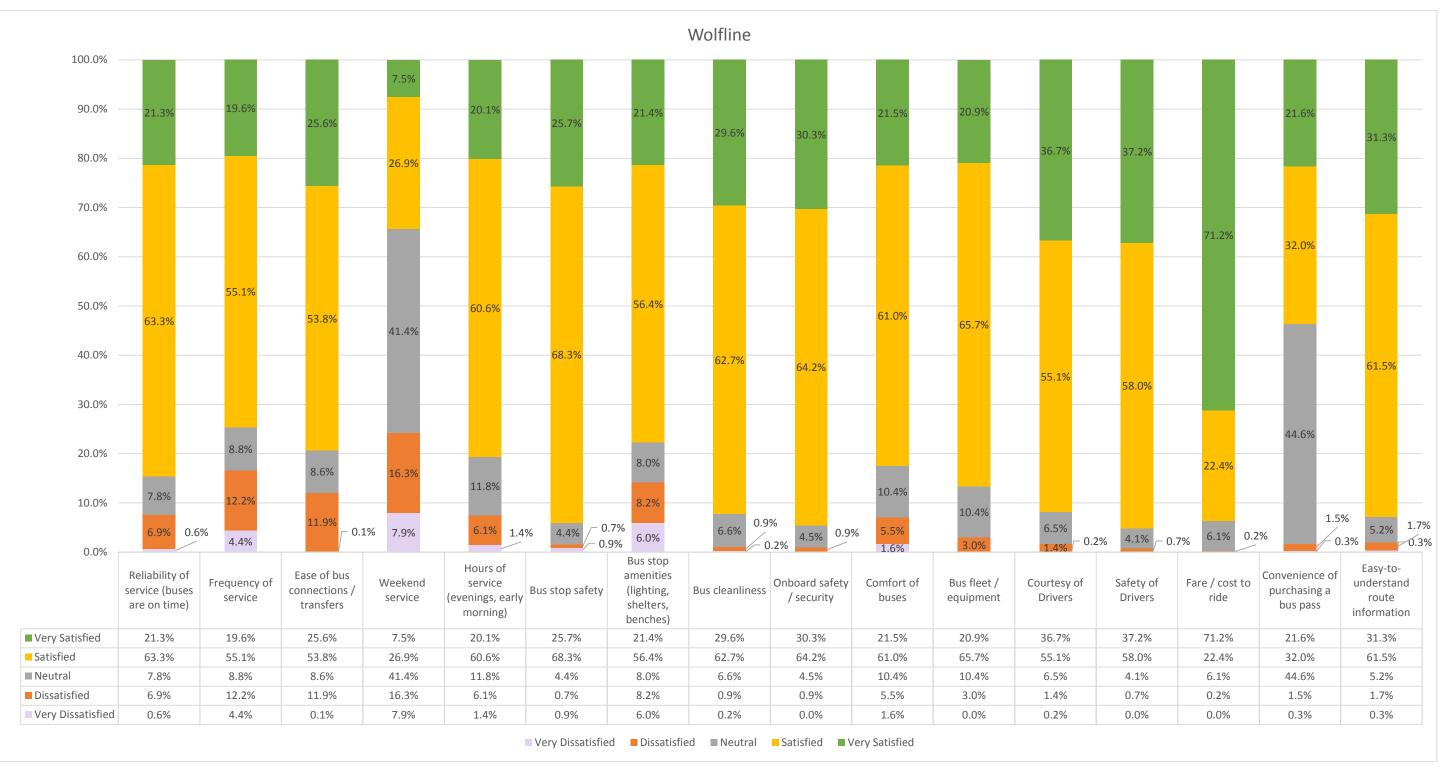
Level of satisfaction responses from riders on C-Tran are highlighted in the chart. Safety of drivers (54.3%) and courtesy of drivers (52.4%) have the highest percentages of very satisfied riders. Across all aspects of service, the highest percentages of dissatisfied riders exist with bus stop amenities (14.3% dissatisfied and 20.1% very dissatisfied) and weekend service (24.4% dissatisfied and 14.9% very dissatisfied).



# Rate your satisfaction with Wolfline in each of the following areas...

#### Key Findings

Level of satisfaction responses from riders on Wolfline are highlighted in the chart. Fare/cost to ride (21.6%), safety of drivers (37.2%) and courtesy of drivers (36.7%) have the highest percentages of very satisfied riders. While the percentage of dissatisfied riders is fairly low across all aspects of service, the highest percentages of rider dissatisfaction exist with weekend service (7.9% very dissatisfied and 16.3% satisfied).



# Indicate your level of agreement with the following statements...

Riders on each system were asked to indicate their level of agreement with three statements that gauge customers' perception of the transit agency. Riders could indicate they strongly disagree, are neutral, agree, or strongly agree with each statement.

#### GoRaleigh

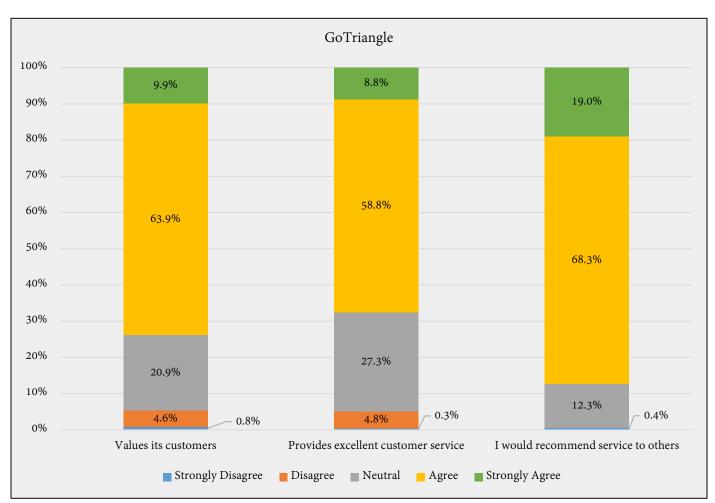
Most GoRaleigh riders (65%-78%) agree or strongly agree that GoRaleigh values its customers, provides excellent customer service, and that they would recommend GoRaleigh to others.

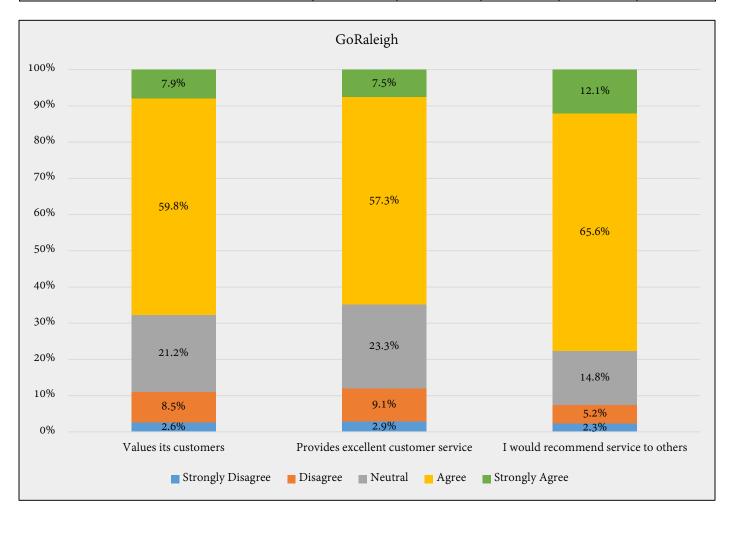
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Agency values its customers	2.6%	8.5%	21.2%	59.8%	7.9%
Agency provides excellent customer service	2.9%	9.1%	23.3%	57.3%	7.5%
I would recommend agency to others	2.3%	5.2%	14.8%	65.6%	12.1%

## GoTriangle

Most GoTriangle riders (68%-87%) agree or strongly agree that GoTriangle values its customers, provides excellent customer service, and that they would recommend GoTriangle to others.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Agency values its customers	0.8%	4.6%	20.9%	63.9%	9.9%
Agency provides excellent customer service	0.3%	4.8%	27.3%	58.8%	8.8%
I would recommend agency to others	0.4%	0.0%	12.3%	68.3%	19.0%

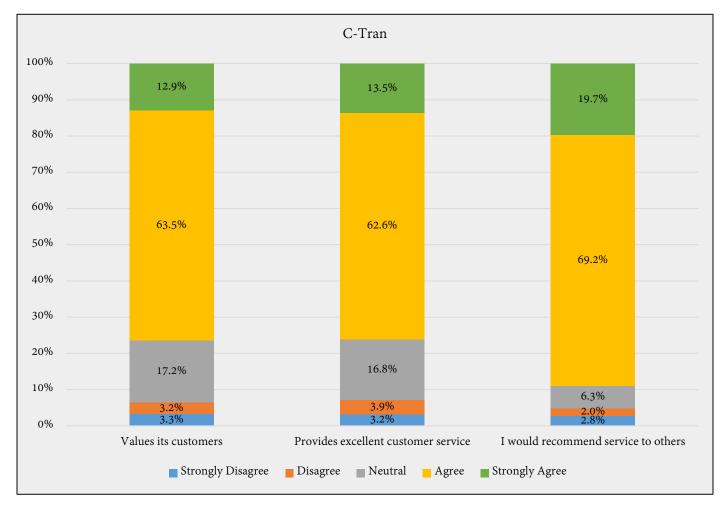




#### C-Tran

Most C-Tran riders (76% - 89%) agree or strongly agree that C-Tran values its customers, provides excellent customer service, and that they would recommend C-Tran to others.

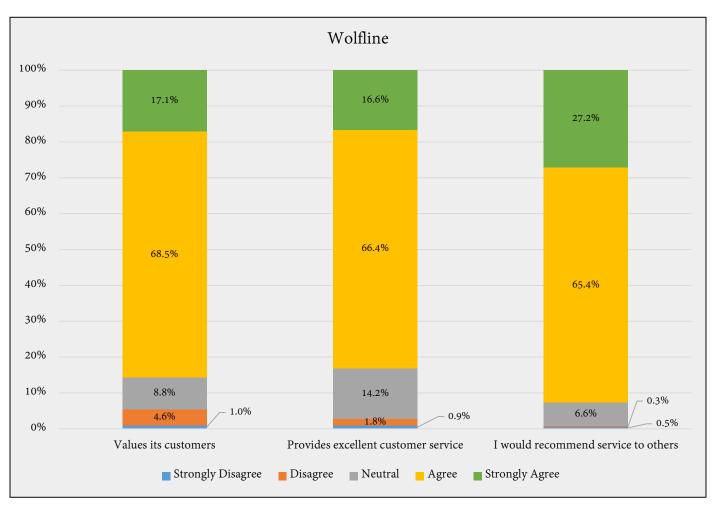
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Agency values its customers	3.3%	3.2%	17.2%	63.5%	12.9%
Agency provides excellent customer service	3.2%	3.9%	16.8%	62.6%	13.5%
I would recommend agency to others	2.8%	2.0%	6.3%	69.2%	19.7%



#### Wolfline

Most Wolfline riders (85%-93%) agree or strongly agree that Wolfline values its customers, provides excellent customer service, and that they would recommend Wolfline to others.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Agency values its customers	1.0%	4.6%	8.8%	68.5%	17.1%
Agency provides excellent customer service	0.9%	1.8%	14.2%	66.4%	16.6%
I would recommend agency to others	0.5%	0.3%	6.6%	65.4%	27.2%



# Indicate your response to the following three GoRaleigh brand awareness questions

Riders on each system were asked to three questions that gauge customers' awareness of the new GoRaleigh brand. The three questions and rider responses are shown below.

# When did you learn CAT/Capital Area Transit changed to GoRaleigh?

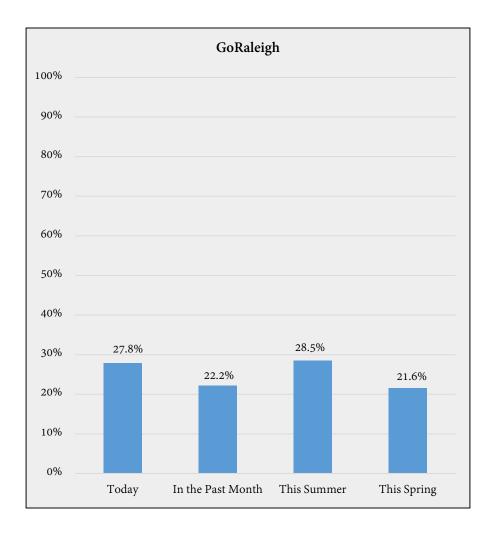
Riders on GoRaleigh were asked when they learned about the transition from CAT to GoRaleigh. The majority of GoRaleigh riders are aware that CAT/Capital Area Transit has changed to GoRaleigh (72%). Key findings of when riders learned about the transition are summarized in the table and chart.

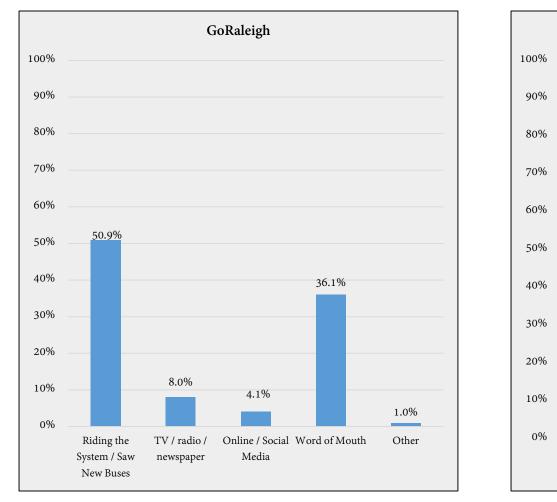
# How did you learn about the change [from CAT to GoRaleigh]?

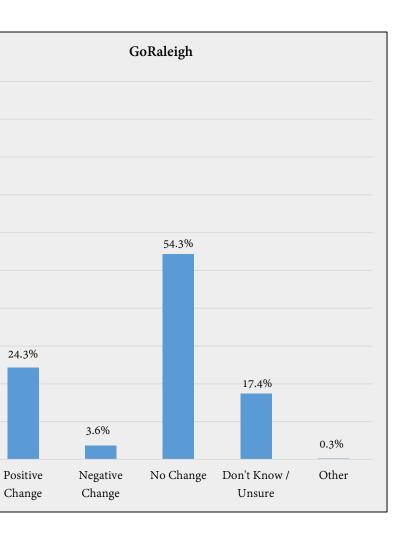
Riders on GoRaleigh were asked how they learned about the change from CAT to GoRaleigh. The majority of riders learned about the transition from CAT to GoRaleigh by riding the system and/or seeing new buses (50.9%). Key findings about how riders learned about the change are summarized in the table and chart.

# Have you noticed any differences in service since the switch from CAT/Capital Area Transit to GoRaleigh?

GoRaleigh riders were asked if they have noticed any differences in service since the transition from CAT to GoRaleigh. The majority of riders have not noticed any changes in service or were unsure if there were any changes in service (a combined 71.7%). However, approximately one-quarter (24.3%) of GoRaleigh riders noticed positive changes and only a small portion noticed negative changes (3.6%).







# **Analysis of Trends**

When reviewing the response data, common trends and themes emerge that can provide a general assessment of how transit is used, who is using it and why, and how transit is performing overall in Wake County.

# **Trip Characteristics**

The majority of riders begin their trips at home and use the bus to get to work, or to get to their home once their trip concludes. Riders are also walking at a high rate to get to their buses, as well as their final destinations. These trends are also very similar to those reported in the 2010 Capital Area Bus Transit Development Plan (TDP) and show consistency in these characteristics over the last five years. While none of these trends may be surprising, they do reflect that transit service in Wake County is essential as a mode of transportation for riders to get to their jobs, as well as to other destinations, including their homes once their trip is done. The data reflects a large number of riders not having access to a vehicle reach their bus access point and final destination by walking. This data shows that transit is not only an important transportation alternative for those who have access to a vehicle, but it is a critical and accessible form of transportation for those who use it as their primary mode of transportation throughout Wake County.

# **Rider and Household Characteristics**

The riders using transit in Wake County are made up largely of 18-54 year olds, with overall use by those 55 and older, and under 18, making up a small percentage of total riders. Riders most commonly live in two-person or three-person households, have no vehicle available to their household, and are primarily employed either full-time or part-time, or are students. Similar patterns for these demographic categories were reported in the 2010 TDP, and reflect a steady trend of the age of riders, their household size, and their employment status over the last five years.

The ridership history also reflects a strong presence of riders who have been riding for 4 or more years, as well as riders using transit for the past 1-2 years and less than 1 year. Similar ridership history was reported in the 2010 TDP.

In looking at the overall trend of gender, the expanded data show that, overall, the majority of riders are male. This was also the case for each individual agency, with the exception of C-Tran who had more female riders. Gender information reported in the 2010 TDP were similar to this survey, although the split of riders for C-Tran was 50-50 in 2010, while in the 2015 survey, the data showed a clear majority of female riders.

Reviewing race and ethnicity data, the expanded survey data shows, overall, a majority of riders are African-American. When looking at the agencies individually, riders' race and ethnicity percentages differ, with GoRaleigh having a majority of African-American riders, while C-Tran and GoTriangle reflect greater diversity among riders, and Wolfline has a large majority of White riders and higher percentages of Asian American riders compared to other systems. Similar trends emerged in the 2010 TDP, with GoTriangle and C-Tran both showing increases in the percentage of White riders on their systems, and a slight decrease in their African-American riders.

Another key characteristic of the demographic data is the household income of riders. For three out of four systems, the income range with the highest percentage of riders is 'Less than \$15,000', with this proportion nearly 50 percent for Wolfline, which is likely a reflection of student ridership. For GoTriangle, the income range with the highest percentage of riders is '\$50,000-\$74,999'. Based on the data collected for the 2010 TDP, C-Tran remained the most consistent in the income breakdown of their riders, while GoRaleigh and Wolfline saw a decrease in riders earning less than \$15,000 per year. Since the federal poverty levels and cost of living have increased since 2010, a decrease in

riders in the less than \$15,000 per year household income does not equate to an actual decrease in riders considered low-income.

# **Customer Satisfaction and Perception of Agencies**

Riders are satisfied with the reliability and frequency of service, the safety and courtesy of their drivers, and the comfort and safety of the buses. However, there are higher levels of dissatisfaction among riders with weekend service and the amenities at bus stops. The 2010 TDP reflected similar trends with riders satisfied with the safety and courtesy of the drivers, and the comfort of the buses. The 2010 TDP also showed that riders were dissatisfied with weekend service, which continues to be an area of dissatisfaction in 2015. One area that appears to show improvement from the 2010 TDP is satisfaction with reliability and frequency of service, with the current survey reflecting a slight increase in the percentage of riders satisfied with this aspect of service.

Customer satisfaction findings from the survey provide insight into service areas that could be enhanced or modified to better align with transit rider expectations. In addition, there are considerations beyond the quality of transit service provision that influence customer satisfaction. For example, rider perception and satisfaction are heavily influenced by external and internal factors. Research demonstrates that captive and non-captive ridership, is an external variable that substantially influences satisfaction. Research findings show that satisfaction among transit riders decreased when these riders would have preferred to drive and increased when riders had a choice whether to drive or take transit (<u>St. Louis et al, 2014</u>). In other words, when individuals have the economic means to choose between a personal vehicle or transit service they are generally more satisfied when they take transit. GoRaleigh and C-Tran have substantially higher proportions of riders with no driver's licenses and no available vehicles compared with GoTriangle and Wolfline. While they were surveyed collectively, each individual agency will need to consider these findings in relation to the unique system they operate. From the regional commuter service of GoTriangle to the higher volume urban bus service of GoRaleigh and smaller community service of C-Tran, as well as the campus-oriented Wolfline, riders served by these systems will have differing needs, expectations, and perceptions of service.

# **Trends and Directions**

The data collected in this survey did not reveal any new significant trends in regard to transit use, and who is using transit when compared to the 2010 survey conducted for the TDP. Overall, riders are still getting to their buses and final destinations by walking, and their trips are still to three major destinations of home, work, and school.

Demographically, the racial makeup, income characteristics, and age of riders remain similar to the 2010 survey, while the areas of customer satisfaction also remained similar. These consistent results and patterns between the data from the 2010 and 2015 surveys show that transit remains a vital component to the everyday needs of residents in Wake County, and continues to provide quality service and reliability to its customers.

# Conclusion

The Wake County Transit Systems Customer Survey was conducted in the fall of 2015 in an effort for GoRaleigh, GoTriangle, C-Tran, and Wolfline to gain insight into the trip profiles of their riders, demographic characteristics of their riders, and how their systems are performing. By understanding the characteristics of their riders, and their trips, these providers can make informed decisions that will continue to enhance their delivery of transit service to the citizens of Wake County.

The survey results will also play a critical role in coordination among the agencies, as well as the Capital Area Metropolitan Planning Organization (CAMPO), in developing an update to the regional transit model. This update will help provide the framework for future transportation planning initiatives for Wake County, and the data collected from this survey will be an important factor in understanding how transit is operating currently, and what the needs will be moving forward.

The coordinated and collective effort of each agency made the implementation of this survey possible, and the riders who participated made it a success. Continuing this type of collaborative effort among the agencies and their riders will be key in developing a strong future for transit in Wake County.

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# Appendix A-1 – Survey Methodology Memorandum

A survey methodology memo was distributed to all agencies outlining the approach for administering the survey prior to administration of the survey. This memo is presented on the following pages. While the survey was implemented according to the memo, there are a few items to note that differ from the memo. These were minor items and did not impact the implementation of the survey, the collection of data, or the overall results in the report.

#### Updates to surveying approach

- Surveying of specific routes occurred on the blackout dates. These routes were identified as not being significantly impacted by the event occurring on the targeted blackout date. Surveying targeted routes on blackout dates was necessary to ensure the survey schedule was met.
- The planned survey collection dates for each agency/route were changed during the survey administration. The actual survey dates are listed in Appendix B (p. 13).

#### Survey Responses and Confidence Levels

The total (APC-based) ridership, number of survey respondents, and margins of error at confidence levels of 95% and 99% are presented for each agency and all systems below. The GoTriangle express routes operated by GoRaleigh are included in the figures for GoRaleigh.

#### All agencies combined

- Population size (APC-based ridership) = 48,269
- $\circ$  Number of respondents = 5,390
- $\circ$  Margin of error at 95% confidence level = 1.26%
- Margin of error at 99% confidence level = 1.65%

#### GoRaleigh

- $\circ$  Population size = 24,365
- $\circ$  Number of respondents = 3,453
- Margin of error at 95% confidence level = 1.55%
- Margin of error at 99% confidence level = 2.03%

#### GoTriangle

- $\circ$  Population size = 2,798
- $\circ$  Number of respondents = 461
- Margin of error at 95% confidence level = 4.17%
- Margin of error at 99% confidence level = 5.48%

#### **C-Tran**

- Population size = 1,164
- $\circ$  Number of respondents = 420
- Margin of error at 95% confidence level = 3.82%
- Margin of error at 99% confidence level = 5.03%

#### Wolfline

- $\circ$  Population size = 19,942
- $\circ$  Number of respondents = 1,056
- Margin of error at 95% confidence level = 2.93%
- Margin of error at 99% confidence level = 3.86%

55% 03%

17% 48%

82% 03%

93% 86%



#### MEMORANDUM

To:	David Eatman, GoRaleigh
Cc:	Patrick McDonough and Geoff Green, GoTriangle; Adam Howell, C-Tran; Michael
	Ousdahl, Wolfline; Joe Huegy, ITRE; David Walker, GoRaleigh; Chris Lukasina and
	Kenneth Withrow, CAMPO
Date:	October 23, 2015
Subject:	Survey Methodology Memorandum

#### Introduction

The following methodology describes the survey efforts for transit agencies serving Wake County -GoRaleigh (formerly Capital Area Transit), GoTriangle (formerly Triangle Transit), C-Tran and Wolfline; these agencies serve the City of Raleigh, the Research Triangle Region, the Town of Cary, and North Carolina State University, respectively. The survey includes all of the GoRaleigh, C-Tran, and Wolfline routes, while the GoTriangle routes will be limited to those with a portion of the route that operates in Wake County.

The survey includes questions from previous on-board surveys along with additional questions required to meet data requirements of the regional travel demand model and long range transportation plan (LRTP) update. While the core survey questions are consistent for all agencies, some answers are agency-specific. The GoRaleigh survey includes additional questions designed to measure customer satisfaction, brand awareness, and provide baseline information for future surveys with questions about the rebranding from CAT to GoRaleigh.

The overall survey effort is similar to the Durham–Orange Light Rail Origin-Destination Study completed by GoTriangle in 2014, and follows the previous, successful survey effort design. The survey is tabletbased, and conducted on-board by trained interviewers.

This survey will provide the agencies with a comprehensive overview of their transit riders, including:

1

- Socio-demographics
- Fare payment
- Travel purpose
- · Means of access and egress to/from the system
- Time of travel
- Satisfaction with service
- Brand awareness (GoRaleigh only)

#### Technical Work

#### QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Quality assurance/quality control (QA/QC) occurs throughout the data collection process to ensure high quality and usable data. The QA/QC effort will include the following:

- Real-time data review
- Real-time geocoding
- Interview tracker
- QA/QC ride and communication procedure monitoring
- Verification of data collection
- Visual inspection of survey records
- Methods for reducing non-response bias

A complete QA/QC plan is included as Attachment A.

#### SAMPLING PLAN

The study team, transit agencies, ITRE and CAMPO developed a sampling plan for weekday travel using historic average weekday ridership by route for the following defined time periods:

- AM Peak (6:00 AM 9:59 AM)
- Midday (10:00 AM 3:29 PM)
- PM Peak (3:30PM 7:29 PM)
- Evening (7:30PM 12:00 AM)

The surveying will occur on Mondays, Tuesdays, Wednesdays, and Thursdays, when local K-12 schools and colleges/universities are in session, and will avoid potential blackout dates, as listed in Table 1. Survey results will be weighted by Automatic Passenger Counter (APC) count data.

#### Table 1 – Potential Survey Blackout Dates

Potential Survey Blackout Date	Date	Potential Agencies Affected
Election Day	11.3.15	GoRaleigh, GoTriangle, C-Tran
Veteran's Day	11.11.15	GoRaleigh, GoTriangle, C-Tran, Wolfline
After Daylight Savings Time End	11.2.15	GoRaleigh, GoTriangle, C-Tran, Wolfline
NCSU Break	10.8.15 - 10.9.15	GoRaleigh, GoTriangle, C-Tran, Wolfline
Peace Break	10.8.15 - 10.9.15	GoRaleigh, GoTriangle
Shaw Break	10.26.15-10.27.15	GoRaleigh, GoTriangle
Saint Augustine's Break	10.9.15 and 10.12.15	GoRaleigh, GoTriangle
Meredith Break	10.8.15 - 10.9.15	GoRaleigh, GoTriangle
UNC Break	10.15.15-10.16.15	GoRaleigh, GoTriangle
Duke Break	10.12.15-10.13.15	GoTriangle
NCCU Break	10.12.15-10.13.15	GoTriangle

The sampling plan for the on-board survey is designed to obtain completed surveys from 8 to 10 percent of the trips on weekday fixed transit routes for GoRaleigh, 10 percent of the trips on weekday fixed transit routes for GoTriangle, 20 percent of the trips on weekday fixed transit routes for C-Tran, and varying percentages based on ridership (from 2 percent to 20 percent) for Wolfline. The partner agencies discussed this approach with the FTA during development of the sampling plan. The agencies also discussed available funding for the project when considering the sample size. Another factor for this survey effort was to consider the successful survey outcome completed for GoTriangle.

The FTA process for improved data collection and accuracy of travel forecasts includes ridership information that can be compared to service types, travel characteristics, and socioeconomic classifications. The FTA goal is to use the on-board and origin-destination survey data to validate performance of local travel demand models.

A total of 74 routes will be sampled (36 Routes for GoRaleigh, 20 Routes for GoTriangle, 6 Routes for C-Tran and 10 routes for Wolfline). The complete survey sample goals are included as Attachment B.

#### SURVEY DESIGN

The survey team will use an interview technique aided by tablets that integrate GIS software to allow for accurate geocoding of most survey data as the survey is taken.

If a passenger does not appear to be at least 16 years old, the interviewer will ask the rider if he/she is at least 16. If the rider is not at least 16 years old and the rider is accompanied by an adult, the interviewer will ask the adult for permission to interview the younger rider OR the interviewer will ask the adult to answer the questions for the younger rider using a paper survey. The interviewer will record the demographic characteristics of the younger rider if the adult respondent answers for the younger rider. Children in strollers and being carried will be counted as passengers, and they will have an equal probability of being selected for the interview. For purposes of consistency, all children in strollers and being carried will be counted first before the accompanying adult (e.g., if an adult carrying a baby is waiting on the platform, the baby is counted before the adult.)

The survey instrument questions are provided in Attachment C. The data to be collected for the onboard Survey includes:

- Route surveyed on and time of trip
- Direction of travel
- Any other transit routes used and number of transfers
- Origin/destination
- Boarding/alighting location and Latitude and Longitude for each location
- Access and egress modes
- Trip purpose
- Method of payment
- Gender/race and other demographic information of respondent
- Customer Satisfaction
- Brand Awareness (GoRaleigh only)

3

 Designated Field Project Manager QA/QC Coordinator Field Supervisors • Data Collectors (including collectors fluent in Spanish, when necessary) Data Editors 4

ETC will conduct training prior to the on-board survey administration. Training will include classroom training and in-field training. ETC will be responsible for preparing all training materials including the Surveyor's Manual, securing a facility for conducting the training, and providing moderators to conduct the training; Planning Communities will review all training materials. Each interviewer will be required to demonstrate they can proficiently conduct the survey before they will be allowed to administer the survey. Interviewers who cannot demonstrate proficiency in all tasks the data collection effort and will be retrained if issues are encountered. If the surveyor continues to perform below standards, the surveyor will be dismissed. with training sessions. ETC will document the results of the pilot test in an informal memo, along with any needed changes to the survey instrument or survey methodology as a result of the test. Survey Administration The survey will be administered by ETC Supervisory staff. Two groups of surveyors will be present during the field efforts. surveyor and ensuring that the sampling goals for each route are met. Field Teams. The ETC Supervisory staff will focus their efforts on the administration of surveys on several bus routes per week. The staff will supervise a group of approximately 15-20 interviewers per day. On high volume routes, up to six interviewers may be deployed per route. On low volume routes, just one interviewer may be deployed on a route.

SURVEY MANAGEMENT PLAN A detailed Survey Management Plan is included as Attachment D and addresses both a staffing plan and training. The staffing plan includes an organizational structure as follows: related to the administration of the survey will be replaced. Surveyors will also be reviewed throughout ETC will conduct a pilot test for the survey efforts. The pilot test will be administered by survey supervisors. The pilot test will address survey design, length, and response rate and will be simultaneous The Planning Communities/ETC team will also update the tablet programming as needed to ensure that any problems identified during the pre-test are corrected. Leadership Team. The leadership team will consist of the project advisor, project manager, and 2-3 support personnel. The leadership group will be responsible for reviewing the performance of each

Training for the survey will be held on October 5, 2015 through October 8, 2015.

**Timing of the Survey.** The surveys will be administered during weekdays (Monday-Thursday) when schools are in session, and will avoid blackout dates, as best possible. The surveys will be administered from 6:00am-9:00pm or during the hours for which the route is operating.

**Process of Conducting Survey.** Interviewers will select riders at random to participate in the survey based on the sampling goals established for each route. Once an interviewer has selected a rider for the survey, the interviewer will do the following:

- The interviewer will approach the person selected and ask them to participate in the survey.
- If the person refuses, the interviewer will end the survey, but the refusal will be recorded on the tablet to help assess the overall response rate to the survey.
- If the rider agrees to participate, the interviewer will ask if he/she has at least five to seven minutes to complete the survey.
- If the rider does NOT have at least five to seven minutes, the surveyor will ask the rider to provide his/her boarding location, alighting location, name, and phone number. ETC Institute's call center will contact the respondent within 24 hours and ask him/her to complete the survey by phone. If a respondent does not have a phone number, then a printed copy of the survey with a postagepaid return will be provided. This will ensure "short-trips" are well represented. This method has been used successfully by ETC in previous studies.
- If a rider has at least five to seven minutes, the surveyor will administer the full survey to the
  respondent as a face-to-face interview using a tablet computer.
- ETC will provide weekly progress reports during the data collection effort detailing the survey
  effort.

**Post Survey Administration.** After the surveys are administered, the field team leaders will review the survey data collected by their team and present the data to the Leadership Team. They will then review the survey records to ensure all necessary information has been provided. If any information is missing, they will forward the survey record and the name and phone number of the survey respondent to ETC Institute's call center. Interviewers working in the call center will then call respondents to retrieve missing information by phone.

#### DATA PROCESSING AND ANALYSIS

The quality assurance/quality control and data cleaning/processing procedures will be fully detailed in the QA/QC Plan. The draft database will have locations geocoded to the latitude/longitude at the address level and assigned to the appropriate TAZ, trips verified, and a flag for what is considered a "complete/ usable" or "incomplete/un-useable" record.

The project team will expand the dataset based on APC data for each agency, route, time of day, and day of survey. The final data files will be provided to each transit agency electronically, as well as a full data dictionary.

#### Implementation Schedule

Week 1: 10/12-10/1		e on-board custom Tuesday	Wednesday
Go Raleigh	Route 1	Route 5	Route 15
	Route 2	Route 6	Route 16
	Route 3	Route 7	Route 18
	Route 4	Route 8	Route 19
	Route 10	Route 12	Route 21
	Route 11	Route 13	Route 22
Week 2: 10/19-10/2	2 Monday	Tuesday	Wednesday
Go Raleigh	Route 55	Route 230	Go Raleigh Clean
	Route 70	Route 240	0
	Route 102	Route 250	
	Route 110	Route 400	
	Route 150	Route 540	
		Route 700	
Week 3: 10/26-10/2		Tuesday	Wednesday
Go Triangle	Route 42	Route 300	Route 800
	Route 46	Route 301	Route 805
	Route 47	Route 303	Route 900
	Route 49	Route 305	Route 901
	Route 100	Route 311	Go Triangle Clean
	Route 102	Route 400	
	Route 105	Route 405	
	Route 201	Route 700	
Week 4: 11/2-11/5	Monday	Tuesday	Wednesday
Week 4: 11/2-11/5 C-Tran	Monday Route 1	Tuesday	Wednesday
		Tuesday	Wednesday
	Route 1	Tuesday	Wednesday
	Route 1 Route 2	Tuesday	Wednesday
	Route 1 Route 2 Route 3	Tuesday	Wednesday
	Route 1 Route 2 Route 3 Route 4	Tuesday	Wednesday
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5		
	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1	Route 9
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 2	Route 9 Route 10
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 2 Route 3	Route 9
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 2 Route 3 Route 5	Route 9 Route 10
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 2 Route 3 Route 5 Route 5 Route 6	Route 9 Route 10
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 1 Route 2 Route 3 Route 5 Route 5 Route 6 Route 7	Route 9 Route 10
	Route 1 Route 2 Route 3 Route 4 Route 5	Route 1 Route 2 Route 3 Route 5 Route 5 Route 6	Route 9 Route 10
C-Tran	Route 1 Route 2 Route 3 Route 4 Route 5 Route 6	Route 1 Route 1 Route 2 Route 3 Route 5 Route 5 Route 6 Route 6 Route 7 Route 8 Tuesday	Route 9 Route 10

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#### Figure 1: Survey Schedule

5

own in Figure 1
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	Thursday
	KRX
	ZWX
	WRX
	JCX
	CLX
	FRX
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ıр	Go Raleigh Cleanup
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	Thursday
	Go Triangle Cleanup
qu	
	Thursday
	C-Tran Cleanup
	WolfLine Cleanup
	Thursday
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#### ATTACHMENT A:

#### QUALITY ASSURANCE/QUALITY CONTROL PLAN

#### Timing of the Survey

The survey will be administered weekdays (Monday-Thursday) when schools are in session.

#### Prior to the Administration of the Survey

Some key tasks that will be performed by ETC Institute prior to the administration of the survey include: • Ensuring the stops previously identified matched the route actually being driven.

- Identifying large employers and schools along the route, which may impact ridership patterns at certain times of the day.
- ETC Institute will work with the transit agencies to raise awareness of the survey. This will include posting signs on buses to encourage participation in the survey.

#### During the Administration of the Survey

Interviewers will select riders at random to participate in the survey based on the sampling goals established for each route. Once an interviewer has randomly selected a rider for the survey, the interviewer will do the following:

- Approach the person who was selected and ask him or her to participate in the survey.
- If the person refused, the interviewer will end the survey, but the refusal will be recorded on the tablet PC to help assess the overall response rate to the survey.
- If the rider agrees to participate, the interviewer will ask the respondent if he or she has at least five to seven minutes to complete the survey.
- If the rider does NOT have at least five to seven minutes, the surveyor will ask the rider to provide his or her boarding location, alighting location, name, and phone number. Shortly after this information is collected, a phone interviewer from ETC Institute's call center will contact the respondent and ask him or her to provide the information by phone. This methodology will ensure people who complete "short-trips" on public transit are well represented.
- If a rider has at least five to seven minutes, the surveyor will administer the full survey to the respondent as a face-to-face interview using a tablet PC.

#### After the Administration of the Survey

After the surveys are administered, the field supervisors will review the survey data collected by the interviewers. Subsequently, the Data Managers will review each survey record to ensure all required information has been provided and the trip makes sense.

If any of the required information is missing or incomplete, the Data Managers will forward the survey record, and corresponding name and phone number of the survey respondent, to ETC Institute's call center. Interviewers working in ETC Institute's call center will call respondents who provided their name and phone number to retrieve the missing information by phone in the same manner as those who were only on the vehicle for a short period of time.

Once survey records have been classified as "complete," meaning all required information has been collected, the records will be forwarded to ETC Institute's geocoding manager for final processing and geocoding.

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#### Protocol for Surveying Minors (Children under age 16)

If a passenger does not appear to be at least 16 years old, the interviewer will ask the rider if he/she is at least 16. If the rider is not at least 16 years old and not accompanied by an adult, the interviewer will ask the rider to complete a printed copy of the survey and record its serial number. If the rider is accompanied by an adult, the interviewer will ask the adult for permission to interview the younger rider OR the interviewer will ask the adult to answer the questions for the younger rider. The interviewer will record the demographic characteristics of the younger rider if the adult respondent answers for the younger rider. Children in strollers and being carried will be counted as passengers, and they will have an equal probability of being selected for the interview. For purposes of consistency, all children in strollers and being carried will be counted first before the accompanying adult (e.g., if an adult carrying a baby is on the bus, the baby is counted before the adult.)

ETC Institute will recruit staffing using A Plus Student staffing agency. The basic steps that will be used to recruit qualified interviewers are described below:

- Step 1 Positions Are Advertised: Local staffing agencies will advertise for the position. ETC Institute will pay slightly higher than average wages to ensure we can attract high quality employees. ETC Institute will also try to find interviewers who have at least some college education or military backgrounds.
- Step 2 Phone Interview and Tutorial: Once the ads for the positions are posted, the staffing agencies will conduct an initial review of the applicants by phone. Applicants will also be sent a link to an on-line tutorial about the survey so they can understand what they will be doing before the staffing agencies actually meet the applicants face-to-face. An example of one of the on-line training sites developed by ETC Institute can be viewed by going to http://www.etctransit.com/survey.php. [Enter password "fall2013" and then select Option 2 (main survey only). Then select item #3 (click here to watch the Main Survey Tutorial).]
- Step 3 Reference Checks: The applicant's references are checked. A negative reference eliminates the applicant from consideration.
- <u>Step 4 Face-to-Face Interview</u>: Assuming the applicant is still interested in the job after reviewing the tutorial AND the references were positive, the staffing agencies will conduct a faceto-face interview with the applicant. As part of the interview, the applicant is required to demonstrate his/her proficiency with the use of tablet PCs and Google Maps. Applicants who cannot demonstrate these proficiencies are eliminated from consideration.
- Step 5 Background Checks: Background checks are conducted on the applicant. The checks include a screening against the National Sex Offenders Registry and a criminal background checks at the local, state, and national level. All applicants with convictions for violent crimes or childrelated offenses are eliminated from consideration. Applicants with any felony conviction during the past 3 years are also eliminated. Applicants with drug or alcohol related convictions during the past 2 years (including misdemeanors) are eliminated.
- <u>Step 6 Classroom Training</u>: Applicants who pass the first five steps are invited to attend classroom training. During the training, applicants receive instructions for the procedures that must be followed. If an applicant fails to demonstrate proficiency by the end of classroom instruction, the applicant is eliminated.
- Step 7: Field Training: Those who pass the classroom training are invited to the final phase of the recruitment process, which is field training.
  - o On the first day of field training, applicants get a chance to conduct interviews under the supervision of an experienced supervisor from ETC Institute. Supervisors oversee 2-4 interviewers and provide feedback on performance throughout the day. Interviewers who

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are conducting the survey properly are allowed to go to the next phase of field training. Interviewers who need more help, but show promise are asked to spend a second day in the field under direct supervision.

- Once an interview has demonstrated proficiency under direct supervision, he/she is given a field test during which the prospective interviewer conducts surveys on his/her own. During this period, the interviewer's productivity and data quality are remotely assessed by ETC Institute's senior staff.
- Riders who complete the survey are contacted by phone to ask them about their perceptions of the interviewer. ETC Institute also places a "secret shopper" on the train where we observe the interviewer's performance. Interviewers who demonstrate proficiency with the administration of the survey are retained and offered a job as an interviewer for the project. Those who fail this test are eliminated from consideration.

A total of 15 interviewers will be hired. An additional 5 will be trained as "reserves" in the event interviewers get sick, do not show up for work or quit.

#### **Bilingual Staffing Assignments**

To ensure that non-English speaking riders are adequately represented in the survey, ETC Institute will deploy bilingual interviewers as follows:

· At least one bilingual Spanish-speaking interviewer will be present on all routes listed as high percentage routes.

Bilingual interviewers will wear stickers showing language spoken. (e.g., Yo hablo espanol.)

#### Other Quality Control Procedures

Short-Trips. Since some riders who make short trips may not have time to complete the survey during their trip, the first question on the tablet PC version will ask the rider if he/she has at least 5-7 minutes to complete the survey. Riders who do not have time will be asked to provide their name and phone number so an interviewer from ETC Institute's call center can contact the rider and administer the survey by phone within 24 hours. Riders who do not have a phone or do not want to provide a phone number will be given a printed copy of the survey and the serial number will be recorded. If a rider begins a survey on a route but does not have time to complete the survey before the rider's stop is approached, the interviewer will alight the bus with the rider and complete the survey on at the stop, if the rider agrees. Once the interview is completed, the interviewer will board the next bus at that stop and return to normal sampling procedures. This method will only be used on routes for which buses come by stops frequently.

- Real-Time Geocoding. The tablet PC program will be designed to allow real-time geocoding of all address locations (home, origin, destination, boarding and alighting locations).
- Real-Time Monitoring of Surveyor Performance. The tablet PC program will be designed in a manner that allows ETC Institute's field supervisors to monitor the performance of individual interviewers in real time. At the end of each day, field supervisors will evaluate the performance of each interviewer. This will include a review of the characteristics of the passengers who are interviewed with regard to age, gender, race, and the average length of each interview. These daily reviews will allow the research team to provide immediate feedback to interviewers to improve their overall performance. It will also allow the research team to quickly identify and remove interviewers who were not conducting the survey properly.

• Staffing level management. Interviewers will check-in with the field supervisor at the beginning of their shift at the transit station that has been designated to be the command and control center for the day. After checking-in with the field supervisor, the interviewer will board the route they've been assigned for the day. Upon arrival on the bus where he/she is working for the day, the interviewer will use the tablet PC to send a message to the field supervisor indicating that he/she is ready to begin conducting interviews. The field supervisor will be able to remotely monitor the location of all tablet computers and the interviewers who are using them, which will allow to the field supervisor to make adjustments in staffing levels on each route as needed during the day. Field supervisors will check-in with each interviewer at least once per hour. Interviewers will notify the field supervisor immediately if they have problems or encounter any unusual saturations.

#### ATTACHMENT B:

#### SAMPLE GOALS

#### Table B1 – GoRaleigh Sample Goals

	Routes		Sampling Goals								
Route Number	Name	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL			
1	Capital	INBOUND	8%	20	43	34	11	108			
1	Capital	OUTBOUND	8%	29	45	32	11	117			
2	Falls of Neuse	INBOUND	10%	18	27	16	7	68			
2	Falls of Neuse	OUTBOUND	10%	20	26	17	7	70			
3	Glascock	INBOUND	10%	6	6	7	2	21			
3	Glascock	OUTBOUND	10%	4	5	5	2	16			
4	Rex Hospital	INBOUND	10%	15	17	13	7	52			
4	Rex Hospital	OUTBOUND	10%	18	21	12	8	59			
5	Biltmore Hills	INBOUND	10%	15	15	10	7	47			
5	Biltmore Hills	OUTBOUND	10%	8	17	17	10	52			
6	Crabtree	INBOUND	10%	13	12	18	4	47			
6	Crabtree	OUTBOUND	10%	10	19	15	2	46			
7	South Saunders	INBOUND	10%	25	32	22	6	85			
7	South Saunders	OUTBOUND	10%	18	34	24	8	84			
8	Six Forks	INBOUND	10%	10	11	7	3	31			
8	Six Forks	OUTBOUND	10%	10	14	11	4	40			
10	Longview	INBOUND	10%	8	7	5	3	23			
10	Longview	OUTBOUND	10%	7	8	7	4	26			
11	Avent Ferry	INBOUND	10%	21	17	10	3	51			
11	Avent Ferry	OUTBOUND	10%	10	17	21	9	54			
12	Method	INBOUND	10%	10	14	19	7	61			
12	Method	OUTBOUND	10%	10	16	13	4	42			

13	Chavis Heights	INBOUND	10%	6	14	8		28
13	Chavis Heights	OUTBOUND	10%	2	9	7	2	18
15	WakeMed	INBOUND	8%	20	42	23	11	96
15	WakeMed	OUTBOUND	8%	25	48	27	11	111
16	Oberlin	INBOUND	10%	6	10	8	5	29
16	Oberlin	OUTBOUND	10%	8	10	10	3	31
18	Worthdale	INBOUND	10%	14	11	10	4	39
18	Worthdale	OUTBOUND	10%	10	10	16	7	43
19	Apollo Heights	INBOUND	10%	13	16	8	3	40
19	Apollo Heights	OUTBOUND	10%	9	14	11	6	40
21	Caraleigh	INBOUND	10%	9	6	6	3	24
21	Caraleigh	OUTBOUND	10%	7	8	11	5	31
22	State Street	INBOUND	10%	9	10	4	2	25
22	State Street	OUTBOUND	10%	8	12	7	4	31
50	R-Line	CIRCULAR	10%	19	41	28	13	101
55	Poole Road Express	INBOUND	10%	1	-	-	1	2
55	Poole Road Express	OUTBOUND	10%			1	1	2
60	Wake Forest Express	INBOUND	10%	4		2	2	8
60	Wake Forest Express	OUTBOUND	10%	5	-	9	-	14
62	Wake Forest Loop	CIRCULAR	10%	5	9	6	1	21
63	Knightdale Express	INBOUND	10%	3	-	1		4
63	Knightdale Express	OUTBOUND	10%	1	-	3		4
64	Zebulon/ Wendell Express	INBOUND	10%	6		1		7
64	Zebulon/ Wendell Express	OUTBOUND	10%	1	÷	5	-	6
70	Carolina Pines	EASTBOUND	10%	9	11	9	4	33
70	Carolina Pines	WESTBOUND	10%	10	11	11	5	37
76	Johnston County Express	INBOUND	10%	4	~	1		5

76	Johnston County Express	OUTBOUND	10%	1		3		
77	Clayton Express	INBOUND	10%	2	-	1	-	
77	Clayton Express	OUTBOUND	10%	1	-	3		
78	Fuquay Varina Express	INBOUND	10%	3		1		
78	Fuquay Varina Express	OUTBOUND	10%	1	1	3	-	
102	Garner	INBOUND	10%	4				
102	Garner	OUTBOUND	10%	2	-		-	
110	Buck Jones	INBOUND	10%	5	6	4	3	1
110	Buck Jones	OUTBOUND	10%	4	7	6	6	2
150	Trawick Link	INBOUND	10%	6	6	5	3	2
150	Trawick Link	OUTBOUND	10%	8	8	9	4	2
230	Millbrook Crosstown	INBOUND	10%	9	6	5		2
230	Millbrook Crosstown	OUTBOUND	10%	8	7	9		2
240	North Crosstown	EASTBOUND	10%	5	7	6	-	1
240	North Crosstown	WESTBOUND	10%	7	9	6		2
250	Triangle Town Center	ccw	10%	12	17	10	2	4
400	Wake Tech Express	INBOUND	10%	3	10	2	E.	1
400	Wake Tech Express	OUTBOUND	10%	13	7			2
700	Brier Creek Express	INBOUND	10%	5		3	1	
700	Brier Creek Express	OUTBOUND	10%	4	-	4	-	
Grand Total				630	807	647	239	2,32

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Table B2 – GoTriangle Sample Goals

Rou	tes	Sampling Goals										
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL					
42	CIRCULAR	10%	3	-	2	-						
46	CIRCULAR	10%	3	-	3	-						
47	CIRCULAR	10%	5		5							
49	CIRCULAR	10%	3		4							
100	INBOUND	10%	12	15	10	6						
100	OUTBOUND	10%	8	16	11	6						
105	INBOUND	10%	10	2	6	2						
105	OUTBOUND	10%	9	-	12	-						
201	INBOUND	10%	-	-	5	-						
201	OUTBOUND	10%	6		-							
300	EASTBOUND	10%	7	6	5	-						
300	WESTBOUND	10%	6	6	7	-						
301	INBOUND	10%	12	-	14	3						
301	OUTBOUND	10%	11		15							
305	INBOUND	10%	5	-	5	-						
305	OUTBOUND	10%	5	-	4	-						
311	INBOUND	10%	4	-	5	-						
311	OUTBOUND	10%	4	-	4	1						
900 [CRX]	INBOUND	10%	15		11	-						
900 [CRX]	OUTBOUND	10%	11	÷	15							
901 [DRX]	INBOUND	10%	15		12	-						
901 [DRX]	OUTBOUND	10%	8	-	16	2						
Grand Total			162	45	171	20	3					

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### Table B3 – C-Tran Sample Goals

Rout	es			Sampling	g Goals		
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	РМ РЕАК	EVENING	TOTAL
1	cw	20%	8	11	9	3	31
2	ccw	20%	7	10	8	3	28
3	INBOUND	20%	5	11	5	2	23
3	OUTBOUND	20%	3	7	5	2	17
4	INBOUND	20%	7	9	8	2	26
4	OUTBOUND	20%	8	13	11	2	34
5	INBOUND	20%	5	11	11	2	29
5	OUTBOUND	20%	12	9	6	2	29
6	INBOUND	20%	5	15	15	2	37
6	OUTBOUND	20%	12	13	12	2	39
Grand	Total		72	109	90	22	293

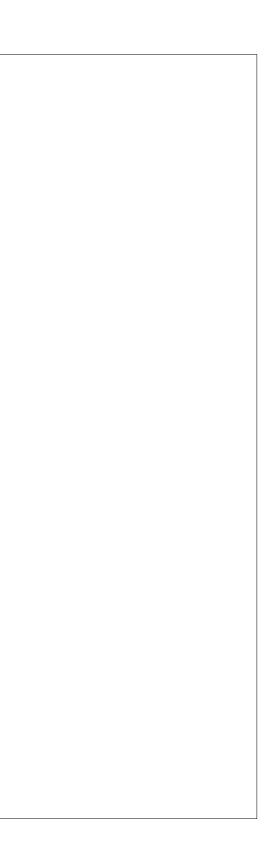
### Table B4 – Wolfline Sample Goals

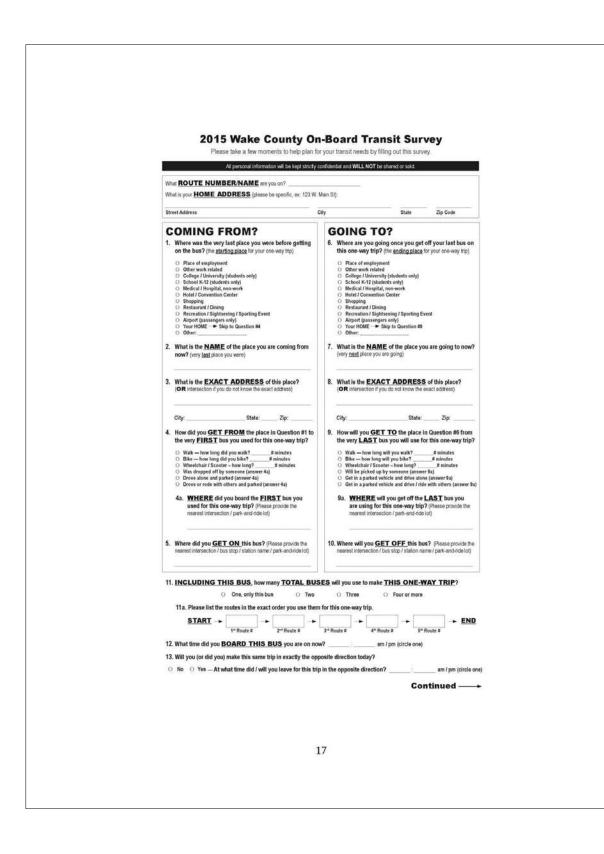
Route	s			Sampling	g Goals		
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
1	LOOP	2%	16	33	19	4	72
2	LOOP	9%	20	33	16	3	72
3	LOOP	3%	20	45	18	4	87
5	LOOP	5%	24	29	14	2	69
6	LOOP	11%	21	32	16	3	72
7	LOOP	4%	18	46	18	3	85
8	LOOP	3%	19	45	21	7	92
9	LOOP	3%	20	42	17	3	82
10	LOOP	10%	16	31	22	-	69
11	LOOP	20%	21	32	17	-	70
Grand To	otal		195	368	178	29	770

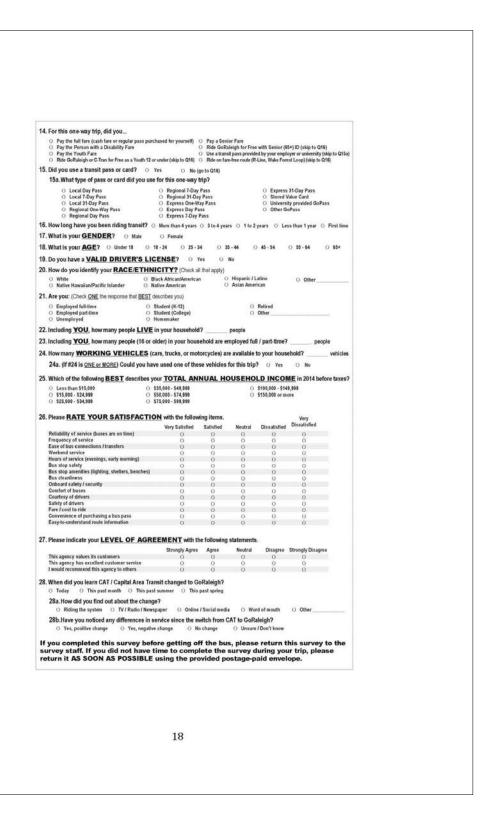
15

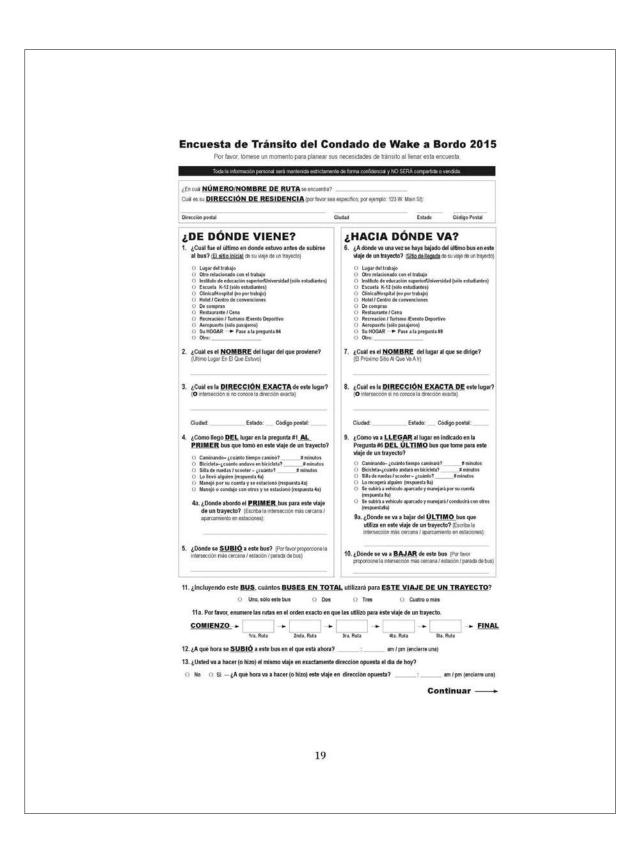
## ATTACHMENT C:

## SURVEY QUESTIONS









14. Para este viaje de un trayecto, usted O Pagó la tarifa completa (pago en efectivo o O Pagó la la persona con una Tarta por Disco O Pagó la Tarifa Juvenil S Subió al GoRaleigh o C-Tran gratuitamení menores (pase a pregunta 16)	o pase regular com capacidad		sted) O	de la tercera e Usò un pase d Universidad-	leigh gratuit dad (65+) (pi e trànsito pr pase a pregu	amente con ID para p ase a pregunta 16) ovisto por su emplear	dor o
15. ¿Usó pase de transito o tarjeta?	O SI O No	(pase a pre	gunta 16)		2.122		
15a.¿Qué tipo de pase o tarjeta utilizó Pase Local por Día Pase Local de 7 Días Pase Local de 31 Días Pase Regional por Uni Tayreto Pase Regional por Día	O Pase R O Pase R O Pase E O Pase E	de un tra egional por egional por xpreso por xpreso por xpreso por	7 Dias 31 Dias un Trayecto Dia		O Tarjeta O GoPass	opreso por 31 Dias de Valor Almacenado i Universitario o de GoPass	
16. ¿Hace cuanto está usando el servicio	de transporte?						
O Más de 4 años O 3 a 4 años O 1 a 2 17. ¿Sexo? O Masculino O Femenino		de 1 año	O Primera	a vez			
18. ¿Cual es su EDAD? O Menor de 18		25 - 34	0 35.4	4 0 45-5	4 0 55	-64 O 65+	
19. ¿Tiene una licencia vàlida de conducc		O No			· · · ·		
20. ¿Como clasificaria su raza/etnia? (Sele			n)				
O Blanco	O NegrolAfroam	ericano	0	Hispano/Latin		O Otre	
21. Es usted: (seleccione la respuesta que mej O Empleado de tiempo completo O Empleado medio tiempo	O Estudiante () O Estudiante ()	(-12)		Asiatico ame	tetirado		
O Desempleado	O Ama de casa						
22. ¿Incluyèndose a <u>USTED</u> , cuantas pe 23. ¿Incluyèndose a <u>USTED</u> , cuantas pe	ersonas (de 16	-		perso a estàn empl		nedio tiempo o de	
tiempo completo? personas			and a start of			1.4	
24. ¿Cuantos VEHICULOS funcionale						vehiculo	e
24a. (Si la pregunta #24 es UNO O MA	2.2				8	- C	
0	ribe <u>MEJOR</u> Menos de \$15,000 \$35,000 - \$49,999 \$100,000 - \$149,99		O \$15. O \$50	ANUALE ,000 - \$24,999 ,000 - \$74,999 0,000 o más	1	<ul> <li>LES DEL HOG</li> <li>\$25,000 - \$34,999</li> <li>\$75,000 - \$99,999</li> </ul>	AR
26. Por favor CALIFIQUE SU SATIS	SFACCIÓN	on los sig	juientes p	ountos.			
	Muy Sa	tistecho S	atistecho	Neutral		Muy Insatistecho	
Fiabilidad del servicio (los buses llegan a tier Frecuencia del servicio		2	0	0	0	0	
Fiabilidad del servicio (los buses llegan a tier Frecuencia del servicio Facilidad de conexión / transferencias entre l Servicio de fin de semana		5				0	
Frecuencia del servicio Facilidad de conexión / transferencias entre l Servicio de fin de semana Horas de servicio (mañanas, madrugada)	buses		0 0 0	0 0 0	0000	0 0 0	
Frecuencia del servicio Facilidad de conexión / transferencias entre l Servicio de fin de semana Horas de servicio (mañanas, madrugada) Seguridad en la parada de bus Servicios en la parada (illuminación, protecci	buses ón, banquillos)		0000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0	
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### ATTACHMENT D:

### SURVEY MANAGEMENT PLAN

The survey will be administered by multiple interviewer teams who will be directly supervised by the project manager and Field Supervisor. The key individuals who will oversee data collection in the field are listed below.

### **Data Collection Team**

- Project Manager Aaron Hekele
- Assistant Project Managers Fred G'sell
- QA/QC Data Managers Nick Jones
- Field Supervisors Brandon Musarra

The organizational structure of the team is described below.

### Leadership Team

The leadership team will consist of the project manager, assistant project managers, and data managers. The leadership team will be responsible for reviewing the performance of the interviewer team and ensuring that the sampling goals for each route are met. The leadership team will operate from centralized locations so that the performance of all teams can be evaluated. The selection of bus routes to be surveyed each week will be carefully planned to ensure the leadership team can directly interface with all routes as they are being surveyed.

### **Field Supervisors**

Field teams will focus their efforts on the administration of surveys on an average of 3 - 6 bus routes per day. The field supervisors will oversee a group of approximately 15-20 interviewers covering the entire service day. Interviewers will be deployed on buses running in opposite directions. On high volume routes, interviewers may be deployed on up to six buses per route. On low volume routes, interviewers may be deployed on just one bus serving the route.

The field supervisors will be responsible for ensuring interviewers are properly trained and equipped to conduct interviews, scheduling interviewers, inspecting work, and reviewing the data collected before submitting the data to the leadership team at the end of the day.

### Data Collection Personnel

ETC Institute will use its vast experience to cultivate quality interviewers over the life of the project. In order to accomplish this, ETC has partnered with a DBE staffing firm, A Plus Student Staffing. A Plus will be responsible for recruiting both English and Spanish speaking interviewers. In addition, Language Solutions will provide skilled bilingual interpreters with experience in the transportation field to staff those routes with high-likelihood of Limited English Proficiency (LEP) riders as identified through Census data and driver observations.

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# Appendix A-2 - Onboard Survey

An onboard survey was administered for this study using tablets that integrated GIS software to allow for accurate geocoding of data as the survey was taken. Screen shots of the survey are shown below and on the pages that follow.

2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Surve
GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	START_AGENCY
There are 71 questions in this survey  START_01_INITIALS  []Enter YOUR (interviewer's) Initials * Please write your answer here:	[]Select Transit Agency: *         Please choose only one of the following:         GoRaleigh         GoTriangle         C-Tran         Wolfline
http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en 1/90	http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/rang/en

ey - (GoTriangle and CTran) - Fall 2015 2/90

		_		
2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
			[]Select the [ROUTE] you	are working: *
START_02_ROUTE			Please choose only one of the follow	ing:
			Route 1: Capital- INBOUND t	oward Downtown
			Route 1: Capital- NUTBOUND     Route 1: Capital- OUTBOUND	
			Route 2: Falls of Neuse- INBC	-
			Route 2: Falls of Neuse- OUT	
			Route 3: Glascock- INBOUND	
			Route 3: Glascock- OUTBOU	ND toward Crabtree at Timber
			Route 4: Rex Hospital- INBO	UND toward Downtown
			O Route 4: Rex Hospital- OUTB	OUND toward Towne North Shopping Center
			O Route 5: Biltmore Hills- INBO	UND toward Downtown
			Route 5: Biltmore Hills- OUTE	3OUND toward Sanderford at Idlewood Village
			Route 6: Crabtree- INBOUND	toward Downtown
			Route 6: Crabtree- OUTBOUN	ND toward Townridge Shopping Center
			O Route 7: South Saunders- INE	30UND toward Downtown
				ITBOUND toward Shoppes at Gamer
			Route 8: Six Forks - INBOUN	ID toward Downtown
				JND toward North Hills at Northclift
			Route 10: Longview- INBOUN	
			Route 10: Longview- OUTBOIL	
			Route 11: Avent Ferry- INBOU	
			Route 11: Avent Ferry- OUTB	
			Route 12: Method- INBOUND	
			Route 12: Method- OUTBOUN	
			Route 13: Chavis Heights- IN     Route 13: Chavis Heights- IN	USUND toward Holmes at Bragg
			Route 13: Chavis Heights- OC     Route 15: WakeMed- INBOUT	
			Route 15: WakeMed- OUTBO	
			Route 16: Wateried OD ISO     Route 16: Oberlin- INBOUND	
			O Route 16: Oberlin- OUTBOUN	
			Route 18: Worthdale- INBOUT	
			Route 18: Worthdale- OUTBO	
			Route 19: Apollo Heights- INE	
				TBOUND toward Swinburne at Kidd
			O Route 21: Caraleigh- INBOUN	ID toward Downtown
			Route 21: Caraleigh- OUTBOIL	UND toward Maywood at Lake Wheeler
			Route 22: State Street- INBO	UND toward Downtown
			O Route 22: State Street- OUTE	OUND toward Hadley at Dandridge
			C Route 50: R-Line- CIRCULAR	8
			Route 55: Poole Road Expres	
				s- OUTBOUND toward Poole Road P&R
				ss [WRX]: INBOUND toward Downtown
				ss [WRX]: OUTBOUND toward Wake Forest
			Route 62: Wake Forest Loop	
				[KRX]: INBOUND toward Downtown
				[KRX]: OUTBOUND toward Knightdale
				xpress [ZWX]: INBOUND toward Downtown xpress [ZWX]: OUTBOUND toward Zebulon P&R
				EASTBOUND toward Southgate Plaza
				: WESTBOUND toward Trailwood Hills
				xpress (JCX): INBOUND toward Downtown
				xpress (JCX): OUTBOUND toward Downlown xpress (JCX): OUTBOUND toward Cleveland Crossing Shopping Center
				LLX]: INBOUND toward Downtown
				CLX]: OUTBOUND toward Clayton Towne Plaza
				ress [FRX]: INBOUND toward Downtown
				ress [FRX]: OUTBOUND toward South Park Fuquay
			O Route 102: Gamer [102]: INB	
http://goraleigh.etcsurvey.com/index	x.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en 3/90		http://goraleigh.etcsurvey.com/ind	ex.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en
				-

/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
О	Route 102: Gamer [102]: OUTBOUND toward White Oak Shopping Center
O F	Route 110: Buck Jones [11L]; INBOUND toward NCSU
О г	Route 110: Buck Jones [11L]: OUTBOUND toward Schaub at Sandlin
OF	Route 150: Trawick Link [15L]: INBOUND toward Wake Med Center
0 6	Route 159: Trawick Link [15L]: OUTBOUND toward Buffaloe at Durwood
0 6	Route 230: Millibrook Crosstown [23L]: INBOUND toward Crabtree Valley Mail
0 1	Route 230: Millibrook Crosstown [23L]: OUTBOUND toward New Hope at Capital
	Route 240: North Crosstown [24L]: EASTBOUND toward Spring Forest at Capital
-	Route 240: North Crosstown [24L]: WESTBOUND toward North Hills Mail
-	Route 250: Triangle Town Center [25L] - CIRCULAR
-	Route 400: Wake Tech Express [40X]: INBOUND toward Downtown
OF	Route 400: Wake Tech Express [40X]: OUTBOUND toward Wake Tech
-	Route 700: Brier Creek Express [70X]: INBOUND toward Crabtree Valley Mail
	Route 700: Brier Creek Express [70X]: OUTBOUND toward Brier Creek Shopping Center
_	So Tri: Route 42- CIRCULAR
_	Go Tri: Route 46- CIRCULAR
_	Go Tri: Route 47- CIRCULAR
-	Go Tri: Route 49- CIRCULAR
-	Go Tri: Route 100-INBOUND toward Downtown
-	So Tri: Route 100- OUTBOUND toward RTC
-	So Tri: Route 105- INBOUND toward Downtown
	So Tri: Route 105- OUTBOUND toward RTC
_	So Tri: Route 201- INBOUND toward North Rateign
_	Ge Tri: Route 201- OUTBOUND Ioward RTC
-	So Tri: Route 300- EASTBOUND toward Downtown
_	Go Tri: Route 300-WESTBOUND toward Cary
	Ge Tri: Route 301- INBOUND toward Downtown
	Go Tri: Route 301- OUTBOUND toward Cary Go Tri: Route 305- INBOUND toward Downtown
_	
-	So Tri: Route 305- OUTBOUND toward Lake Pine
-	So Tri: Route 311-INBOUND toward RTC
-	Go Tri: Route 311- OUTBOUND toward APEX
-	Se Tri: Route 400- INBOUND toward Durham Station Se Tri: Route 400- OUTBOUND toward Chapel Hill
_	So Tri: Route 405 INBOUND toward Durham Station
-	So Tri: Route 405- NUCCOND Ioward Chapel Hill
_	Go Tri: Route 700-INBOUND toward RTC
_	Go Tri: Route 700-OUTBOUND toward Durham Station
-	Go Tri: Route 800-INBOUND toward Pullian Station
_	So Tri: Route 800- OUTBOUND toward Chapel Hill
_	Go Tri: Route 805-INBOUND toward RTC
_	Go Tri: Route 805- OUTBOUND toward Chapel Hill
-	So Tri: Route 805 CO IS COND toward Chapel Hill So Tri: Route 900 [CRX]- INBOUND toward Chapel Hill
-	So Tri: Route 900 [CRX]- OUTBOUND toward Downtown
-	So Tri: Route 901 [DRX]- INBOUND toward Durham Station
_	So Tri: Route 901 [DRX]- OUTBOUND toward Downtown
	C-Tran: Route 1: CLOCKWSE
	C-Tran: Route 2: COUNTERCLOCKWISE
_	C-Tran: Route 3: INBOUND toward Train Station
-	C-Tran: Route 3: OUTBOUND toward Harrison Square
	C-Tran: Route 4: INBOUND toward Train Station
	C-Tran: Route 4: OUTBOUND toward NC Hwy 55
_	C-Tran: Route 5: INBOUND toward Train Station
	C-Tran: Route 5: OUTBOUND toward Crescent Commons Drive
-	C-Tran: Route 6: INBOUND toward Train Station
	C-Tran: Route 6: OUTBOUND toward Plaza West
-	NolfLine: Route 1: LOOP
01	
	NolfLine: Route 2/21: LOOP

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### GoRaleigh 2015 OB Survey - GoRaleigh Onboa

WolfLine: Route 3: LOOP
WolfLine: Route 5: LOOP
WolfLine: Route 6: LOOP
WolfLine: Route 7: LOOP
WolfLine: Route 8: LOOP
WolfLine: Route 9: LOOP
WolfLine: Route 10: LOOP
WolfLine: Route 11: LOOP

O Other:

{AGENCY.shown}

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2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard
START_03_RANDOM		START_04_HAVE5MIN
[] Please choose a number between 1 and 6:		נז Hello. My name is {INTER
• 1 • 2 • 3 • 4 • 5 • 5		We're doing a quick survey on bus services in Wa you are maki
• <u>\$</u> • <u>\$</u> • <u>\$</u>		*
Please write your answer here:		Prease choose only one of the following:  Yes I can participate in the survey (have 5 min+)  Yes (but no time for full survey)
{INSERTANS:254972X1655X6132} {INSERTANS:254972X836X4294}{INSERTANS:254972X836X4294other}		Volunteer (non-random sample) No (refused) No (already did this survey)
		Do not speak the interviewer's language (Spanish)     Do not speak the interviewer's language (Other)     Disabled (cannot see well enough to complete the survey or cannot hear to understand instruction)
		{INSERTANS:254972X1655X6132} {INSERTANS:254972X836X4294}
ttp://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en 7/	0	http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/i

Survey - (GoTriangle and CTran) - Fall 2015

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ake County. Do you mind if I ask you some ing?

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### TOD\_SELECT

[] {TOD=if((date('His')+030000)>240000,"OTH1",if((date('His')+030000)>193000,"OTH2",if((date('His')+030000)>153000,"PM1",if((dat

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

## CALL\_BACK\_CASE2\_INFO

### []What's your name and telephone number?

Only answer this question if the following conditions are met: Answer was "Yes (but no time for full survey)" or "Do not speak the interviewer's language (Other)" or "Disabled (cannot see well enough to complete the survey or cannot hear to understand instructions)" at question is draw the time you are making? sendUserLoad to (1). Questions about the time you are making? sendUserLoadon(1). Please

|--|

Name	
Phone	

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2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
START_14_OBSERV_GENDER_RACE		START_15_RESTART_URL
Conly answer this question if the following conditions are met: Answer was No (already did this survey) or No (refused) at question '5 [HAVE_5_MIN_FOR_SURVET (Hello, My name is (INTERV_INIT.shown) We're doing a quick survey or Wake County. Do you mind if I ask you some questions about the trip you are making? sendUserLocation(1),) Please choose all that apply:      [Mate]	on bus services in	[] Click link below to re-start the survey with your initials { <i>INTERV_INIT.shown</i> }, agency { <i>AGENCY.shown</i> } and route { <i>ROUTE_SURVEYED.shown</i> } already filled-in. CLICK HERE TO RESTART SURVEY
[Female]         American Indian / Alaska Native         Asian         Black / African American         Hispanic / Latino         Native Hawaiian / Pacific Islander         White         16 and under		Do NOT click Next Only answer this question if the following conditions are met: Answer was the following is unvey! or the (relused) at question '5 [HAVE_5_MIN_FOR_SURVET ( Hello. My name is (INTERV_INIT shown) We're doing a quick survey on bus services in Weke County. Do you mind if ask you some questions about the trip you are making? sendUserLocation(1).)
<ul> <li>□ 16-19</li> <li>□ 20-34</li> <li>□ 35-50</li> <li>□ 51-64</li> <li>□ over 65</li> </ul>		
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### START\_AGE\_TEST

[]Are you 16 years or older? [If no, ask: Do you have a parent or guardian here who can answer on your behalf?] \*

- Please choose only one of the following:
- O Yes: 16 or older
- O No: 13-15 with a guardian
- O No: 12 or under

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### SURVEY\_WITH\_GUARDIAN

### []Would you like to answer the survey with the supervision of your adult guardian?

Only answer this question if the following conditions are met: Answer was No: 13-15 with a guardian' at question '10 [AGE] (Are you 16 years or older? [ifno, ask: Do you have a parent or guardian here who can answer on your behalf?])

Please choose only one of the following:

O Yes: I can answer the survey with my guardian O No: I cannot participate

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INSERTABS.254972X1564X8135)         INSERTABS.254972X1564X8135)         Insertable insertion	6 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh C
(InSERTANS:254972X:1540X6135)       Over some of provide structure of the structure o	TART_CONTINUE	HOME_01_ADDRES	S
	0	[]What is your HOME a	ddress? If you are visiting the area, please li
	INSERTANS:254972X1564X6135}		
Sector of or strature;       Image: Image			
	RTAN3.234972A1034A0130}		
		City	
	one of the following:		
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Raleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### please list the address where you are staying (ex: 123 W. Main St): $^{st}$

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2/	4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
	FROM_01_ORIGIN_PLA	СЕ_ТҮРЕ
	[]Where was the very last pla	ace you were before getting on the bus? (choose one) *
	Only answer this question if the following Answer was 'Continue Survey' at question	conditions are met: "12 [CONTINUE_SURVEY]" { {INSERTANS:254972X1584X6135} {INSERTANS:254972X1654X6136} )

nditions are met: CONTINUE\_SURVEY]'({INSERTANS:254972X1564X6135}{(INSERTANS:254972X1654X6136})) Please choose only one of the following:

- ◯ Your Home
- O Your usual WORKPLACE
- Other work related
- College / University (students only)
- School K12 (students only)
- O Medical Service / Hospital (non-work)
- O Hotel / Convention Center
- O Shopping O Restaurant / Dining
- O Recreation / Sightseeing / Sporting Event
- O Social visit

O Airport

O Other

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### FROM\_02\_ORIGIN\_NAME

## [] What is the <u>NAME</u> of the place you are coming from now?

Only answer this question if the following conditions are met: Answer was Restaurant / Dining' or 'Shopping' or 'Hotel / Convention Center' or 'Medical Service / Hospital (non-work)' or 'School K12 (students only)' or 'College / University (students only)' or 'Gherwork related 'or 'Your usual WORKPLACE' or 'Other 'or 'Airport' or 'Social visit' at question '14 [ORIGIN\_PLACE\_TYPE] (Where was the very last place you were before getting on the bus? (choose one)

Please write your answer here:

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/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Ont
ROM_07_ORIGIN_	ADDRESS		FROM_08_ORIGIN_TRANSPORT
[] What is the EXACT STR *	EET ADDRESS of this place? (or nearest intersection or landmark)		[] How did you get to your first bus? *
		ery	Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE_SURVEY] {{NSERTANS 254972X1564X Please choose only one of the following:
ease write your answer(s) here:			
otel or Place Name			O Bicycle
et Address			O Wheelchair / Motorized Scooter
			Drove alone and parked     Drove with others and parked
			Drove with others and parked     Dropped off
			O other
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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### FROM\_09\_ORIGIN\_WALK\_TIME

### []How long did you walk? (in minutes) \*

Only answer this question if the following conditions are met: Answer was 'Welk' at question '17 [ORIGIN\_TRANSPORT]' (How did you get to your first bus? )

Please write your answer here:

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### FROM\_09a\_ORIGIN\_BIKE\_TIME

### []How long did you bike? (in minutes) \*

## Only answer this question if the following conditions are met: Answer was 'Bicycle' at question '17 [ORIGIN\_TRANSPORT] ( How did you get to your first bus? )

Please write your answer here:

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### FROM\_09b\_ORIGIN\_WHEELCHAIR\_TIME

### []How long? (in minutes) \*

Only answer this question if the following conditions are met: Answer was "Wheelchair / Motonzed Scooter' at question '17 [ORIGIN\_TRANSPORT]" (How did you get to your first bus? )

Please write your answer here:

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### FROM\_10\_ORIGIN\_PARK\_YN\_PNR

### []Did you park your vehicle/BIKE (or was dropped off) at a park-n-ride location? \*

Only answer this question if the following conditions are met: Answer was 'Dropped off' or 'Drove with others and parked' or 'Drove alone and parked' at question '17 [ORIGIN\_TRANSPORT] (How did you get to your first bus?)

Please choose only one of the following:

⊖ Yes () No

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### FROM\_11\_ORIGIN\_PARK\_PNR

### []At which park-n-ride did you park your vehicle/BIKE (or were dropped off)? \*

Only answer this question if the following conditions are met: Answer was "Yes' at question '21 [ORIGIN\_PARK\_YN\_PNR]" (Did you park your vehicle/BiKE (or was dropped off) at a park-n-ride location?)

Please choose only one of the following: ◯ American Tobacco North Parking Deck

O Big Lots (Kilmayne Dr) Carolina Pines Park ◯ Carrboro Plaza

O Carter-Finley Park-and-Ride

O Cary Amtrak Station

O Chatham County O Clayton Town Plaza

Cleveland Crossing Park-and-ride

Crabtree Valley Mall

O District Dr Park-and-Ride

O Durham Tech Orange County Campus

O Eubanks Rd Park-and-Ride

O Food Lion

O Forest Hills Shopping Center

O Friday Center

Galaxy Foods

O GoRaleigh Operations Facility (Capital Area Transit) O Grace Lutheran Church

O Hedrick Building

O Highland United Methodist Church

O Jones Ferry

◯ Kmart

○ Knightdale Park-and-Ride at Wal-Mart

O Lake Pine Plaza Park and Ride

O Lowe's Hardware

O Martin Luther King (MLK) Jr. Blvd

O Mebane Cone Health

O Millbrook Exchange Park

O Mini City Shopping Center O NC-54 Park-and-Ride Lot

O North Hillsborough Park & Ride O Patterson Place

O Pleasant Valley

O Pleasant Valley Shopping Center

Regional Transit Center (RTC)

O Sears Outlet O Shelly Lake / Sertoma Park

O South Park

O Southern Village

O Southpoint Mall

O Triangle Town Center Mall

○ Wake Forest Park-and-Ride (White St at Elm Ave) O Waverly Place

O Wellington Park Plaza

O Wendell Park-and-Ride

O White Oaks Shopping Center Zebulon Park-and-Ride (Compare Foods)

O Other

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### FROM\_12\_ORIGIN\_DROPOFF

## []What is the Nearest intersection or Place where you parked your vehicle (or bike) or were dropped off before boarding the first bus on this trip? \*

## Only answer this question if the following conditions are met: Answer was 'No' at question '21 (ORIGN\_PARK\_YN\_PNR)' (Did you park your vehicle/BIKE (or was dropped off) at a park-n-ride location?)

Please write your answer(s) here:

Street Address	
City	
State	
Zip Code	
Latitude	
Longitude	

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TO_01_DESTIN_PLACE_TYPE		TO_02_DESTIN_NAME
[] Where are you going once you get off your last bus on this one-way trip?		[] What is the <u>NAME</u> of the place you are going to now? *
* Only answer this question if the following conditions are met: Answer was "Continue Survey at question "12 [CONTINUE_SURVEY]" ({INSERTANS:254972X1564X6135} {INSE Please choose only one of the following: O Your Home	ERTANS:254972X1654X6136} )	Only answer this question if the following conditions are met: Answer was 'Other' or 'Nigort' or 'Social visit' or 'Restaurant / Dining' or 'Shopping' or 'Hotel / Convention Cen University (students only) for 'Other work related 'or 'Your usual WORKPLACE' at question '24 [DESTN_PLA sendUserLocation(4); \$(document) ready(tunction()) var origin = "(ORIGN_PLACE_TYPE NAOK)"; it(origin = Please write your answer here:
Your usual WORKPLACE     Other work related     College / University (students only)     School K12 (students only)		
Medical Service / Hospital (non-work)     Hotel / Convention Center     Shopping     Restaurant / Dining		
Recreation / Sightseeing / Sporting Event     Social visit     Airport     Other		
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ard Survey - (GoTriangle and CTran) - Fall 2015

 $\label{eq:center} Center or Medical Service / Hospital (non-work) or 'School K12 (students only) or 'College / PLACE_TYPE] ( Where are you going once you get off your last bus on this one-way trip? gin == 1 {{ (${ w} evaluation of the set o$ 

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### TO\_07\_DESTIN\_ADDRESS

[] What is the EXACT STREET ADDRESS of this place? (or nearest intersection or landmark)

Only answer this question if the following conditions are met: Answer was Recreation / Sightseeing / Sporting Event or "Other" or "Airport" or "Social visit" or Restaurant / Dining" or "Shopping" or "Hotel / Convention Center" or "Medical Service / Hospital (non-work") or "School K12 (students only" or "College / University (students only") or "Other work related" or "Your usual WORKPLACE" at question "24 [DESTN\_PLACE\_TYPE] { Where are you going once you got off your last bus on this one-way thp?sendUserLocabon(4), \${document]readytunction[] (var origin = "RRIGN\_PLACE\_TYPE NAOK",", it origin == 1) { \${"at your 24/2472/XS56X42771; Thide(1); }}.)

### Please write your answer(s) here:

Hotel or Place Name	
Street Address	
City	
State	
Zip Code	
Latitude	
Longitude	

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### TO\_08\_DESTIN\_TRANSPORT

[]How will you get to where you are going when you get off your last bus?

### \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] { {NSERTANS:254972X1564X6135} {NSERTANS:254972X1654X6136} }

Please choose only one of the following:

O Walk

O Bicycle

O Wheelchair / Motorized Scooter O Drove alone and parked

O Drove with others and parked

O Dropped off

O Other

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### TO\_09\_DESTIN\_WALK\_TIME

### []How long will you walk? (in minutes) \*

Cnly answer this question if the following conditions are met: Answer was Welk at question '27 [DESTN\_TRANSPORT] (How will you get to where you are going when you get off your last bus? )

Please write your answer here:

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TO\_09a\_DESTIN\_BIKE\_TIME

### []How long will you bike? (minutes) \*

Only answer this question if the following conditions are met: Answer was 'Bicycle' at question '27 [DESTIN\_TRANSPORT] (How will you get to where you are going when you get off your last bus? ) Please write your answer here:

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O_09b_DESTIN_WHEELCHAIR_TIME	TO_10_DESTIN_PARK_YN_PNR
[]How long? (minutes) * Only answer this question if the following conditions are met:	[]Will you get picked up (or get your vehicle/B: Only answer this question if the following conditions are met:
his question if the following conditions are met: heelchair / Motorized Scooter' at question '27 [DESTIN_TRANSPORT]" (How will you get to where you are going when you get off your last bus? ) ur answer here:	Only answer this question if the following conditions are met: Answer was Dropped off or Drove with others and parked or Drove ( bus? )
	Please choose only one of the following: Ves
	○ Ne

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Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### (E) at a park-n-ride location? \*

e and parked' at question '27 [DESTIN\_TRANSPORT]' (How will you get to where you are going when you get off your last

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### TO\_11\_DESTIN\_PARK\_PNR

### []At which park-n-ride is your vehicle/BIKE parked / will you get picked up? \* Only answer this question if the following conditions are met: Answer was "Yes' at question '31 [DESTN\_PARK\_YN\_PNR] (Will you get picked up (or get your vehicle/BiKE) at a park-n-ride location?)

Please choose only one of the following: O American Tobacco North Parking Deck O Big Lots (Kilmayne Dr) O Carolina Pines Park 🔘 Carrboro Plaza O Carter-Finley Park-and-Ride Cary Amtrak Station O Chatham County Clayton Town Plaza O Cleveland Crossing Park-and-ride Crabtree Valley Mall O District Dr Park-and-Ride O Durham Tech Orange County Campus

- Eubanks Rd Park-and-Ride
- O Food Lion O Forest Hills Shopping Center
- O Friday Center
- Galaxy Foods
- O GoRaleigh Operations Facility (Capital Area Transit)
- O Grace Lutheran Church
- O Hedrick Building O Highland United Methodist Church
- O Jones Ferry
- ◯ Kmart
- Knightdale Park-and-Ride at Wal-Mart 🔿 Lake Pine Plaza Park and Ride
- O Lowe's Hardware
- O Martin Luther King (MLK) Jr. Blvd
- O Mebane Cone Health
- O Millbrook Exchange Park
- O Mini City Shopping Center O NC-54 Park-and-Ride Lot
- O North Hillsborough Park & Ride
- O Patterson Place
- O Pleasant Valley
- O Pleasant Valley Shopping Center Regional Transit Center (RTC)
- O Sears Outlet
- O Shelly Lake / Sertoma Park
- O South Park
- O Southern Village
- O Southpoint Mall
- O Triangle Town Center Mall
- ◯ Wake Forest Park-and-Ride (White St at Elm Ave) O Waverly Place
- Wellington Park Plaza
- O Wendell Park-and-Ride White Oaks Shopping Center
- O Zebulon Park-and-Ride (Compare Foods)
- O Other

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

35/90

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

TO\_12\_DESTIN\_DROPOFF

## []What is the Nearest intersection or Place where you will pick up your vehicle (or bike) or where you will be picked up after getting off the LAST bus on this trip? \*

Only answer this question if the following conditions are met: Answer was No' at question '31 [DESTN\_PARK\_YN\_PNR] (WII you get picked up (or get your vehicle/BKE) at a park-n-ride location?)

Please write your	answer(s) here:
Street Address	
City	
State	
Zip Code	
Latitude	
Longitude	

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### FROM\_13\_STOP\_ON

Where did you GET ON THIS bus ({ROUTE\_SURVEYED.shown}) for this one-way trip?

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( [INSERTANS 254972X1564X8135] {INSERTANS 254972X1654X8136} )

Please write your answer(s) here:

Street Address	
Stop ID	
Latitude	
User Stop	
Longitude	

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboa

### TO\_13\_STOP\_OFF

### []Where will you GET OFF <u>THIS</u> bus in this one-way trip? \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( [INSERTANS 254972X1564X6135] (INSERTANS 254972X1654X6136] )

Please write your a	answer(s) here:
Street Address	
Latitude	
Stop ID	
🔲 User Stop	
Longitude	

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ard Survey - (GoTriangle and CTran) - Fall 2015	rd Survey -	(GoTriangle	and CTran) -	Fall	2015	
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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### THIS\_TRIP\_PREV\_TRANSFERS

### []How many bus transfers did you make BEFORE you boarded this bus since leaving the place you are COMING FROM? \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} )

Please choose only one of the following:

- (0) None
- (1) One (2) Two

(3) Three

(4+) Four or more

THIS\_TRIP\_02\_TRIP\_1ST\_RTE

2/4/2016

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39/90

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GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

Cliffich by	any based FIDET on this and your trial *
	you board <u>FIRST</u> on this one-way trip? *
Only answer this question if the f Answer was '(4+) Four or more' or place you are COMING FROM?)	ollowing conditions are met: (3) Three'or (2) Two'or (1) One' at question '36 [PREV_TRANSFERS] (How many bus transfers did you make BEFORE you boarded this bus since leaving the
Please choose only one of the foll	owing:
O Route 1 Capital	
Route 2 Falls of Neuse	
O Route 3 Glascock	
O Route 4 Rex Hospital	
O Route 5 Biltmore Hills	
O Route 6 Crabtree	
Route 7 South Saunders	
Route 8 Six Forks	
O Route 10 Longview	
O Route 11 Avent Ferry	
O Route 12 Method	
O Route 13 Chavis Heights	
O Route 15 WakeMed	
O Route 16 Oberlin	
O Route 18 Worthdale	
O Route 19 Apollo Heights	
O Route 21 Caraleigh	
O Route 22 State Street	
O Route 50 R-Line	
O Route 54L Spring Forest R	oad Crosstown
O Route 55 Poole Road Expr	2SS
○ Route 60 Wake Forest Exp	ress [WRX]
Route 62 Wake Forest Loo	ç [60]
Route 63 Knightdale Expre	
Route 64 Zebulon/ Wendell	
Route 70 Carolina Pines [7	
Route 76 Johnston County	
Route 77 Clayton Express	
Route 78 Fuquay Varina Ex	press [FRX]
Route 102 Garner [102]     During 144	,
Route 110 Buck Jones [11]     Beute 150 Travilak Link [14]	
Route 150 Trawick Link [15     Route 230 Millbrook Crossi	
Route 240 North Crosstow	
Route 250 Triangle Town C	
O Route 400 Wake Tech Exp	
O Route 700 Brier Creek Exp	
O Go Tri Route 42	
Go Tri Route 46	
O Go Tri Route 47	
🔘 Go Tri Route 49	
O Go Tri Route 100	
O Go Tri Route 105	
O Go Tri Route 201	
O Go Tri Route 300	
O Go Tri Route 301	
O Go Tri Route 303	
O Go Tri Route 305	
O Go Tri Route 311	
Go Tri Route 400	
O Go Tri Route 405	
O Go Tri Route 700	
O Go Tri Route 800	

2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onbo 🔘 Go Tri Route 805 O Go Tri Route 900 [CRX] O Go Tri Route 901 [DRX] O C-Tran Route 1 O C-Tran Route 2 O C-Tran Route 3 O C-Tran Route 4 O C-Tran Route 5 O C-Tran Route 6 O WolfLine Route 1 O WolfLine Route 2/21 O WolfLine Route 3 O WolfLine Route 5 O WolfLine Route 6 O WolfLine Route 7 O WolfLine Route 8 O WolfLine Route 9 O WolfLine Route 10 O WolfLine Route 11 O Other

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oard Survey - (GoTriangle and CTran) - Fall 2015	
72/lang/en 42	2/90

2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard
		[]Which bus route did y	you board <u>SECOND</u> on this one-way trip? *
THIS_TRIP_03_1	RIP_2ND_RTE	Only answer this guestion if the for Answer was '(4+) Four or more' or'( are COMING FROM?)	ollowing conditions are met: '(3) Three' or '(2) Two' at question '36 [PREV_TRANSFERS]' (How many bu
		Please choose <b>only one</b> of the follo	wing:
		O Route 1 Capital	
		Route 2 Falls of Neuse	
		O Route 3 Glascock	
		O Route 4 Rex Hospital	
		O Route 5 Biltmore Hills	
		O Route 6 Crabtree	
		O Route 7 South Saunders	
		O Route 8 Six Forks	
		Route 10 Longview	
		O Route 11 Avent Ferry	
		Route 12 Method     Devise 13 Charle Method	
		Route 13 Chavis Heights     Device 15 Wolk Market	
		Route 15 WakeMed     Depte 16 Obsetting	
		C Route 16 Oberlin	
		Curte 18 vyornaaie	
		Courte 19 Apoilo Heights	
		Route 21 Caraleign     Route 22 State Street	
		Route 50 R-Line	
		O Route 54L Spring Forest Ro	bad Crosstown
		O Route 55 Poole Road Expre	
		O Route 60 Wake Forest Expr	
		O Route 62 Wake Forest Loop	
		O Route 63 Knightdale Express	s [KRX]
		O Route 64 Zebulon/ Wendell I	Express [ZWX]
		O Route 70 Carolina Pines [7L	-]
		O Route 76 Johnston County E	
		O Route 77 Clayton Express [	
		O Route 78 Fuquay Varina Exp	press [FRX]
		O Route 102 Garner [102]	
		O Route 110 Buck Jones [11L]	
		Route 150 Trawick Link [15]	
		O Route 230 Millbrook Crossto	
		Route 240 North Crosslown     Device 250 Triangle Town 2	
		Route 250 Triangle Town Ce     Devite 400 Miles Tech Every	
		Route 400 Wake Tech Expr     Route 700 Brier Creek Expr	
		Go Tri Route 42	200 [ 1 UA ]
		Go Tri Roule 42	
		O Go Tri Route 47	
		G Go Tri Route 49	
		O Go Tri Route 100	
		O Go Tri Route 105	
		O Go Tri Route 201	
		O Go Tri Route 300	
		O Go Tri Route 301	
		O Go Tri Route 303	
		O Go Tri Route 305	
		O Go Tri Route 311	
		O Go Tri Route 400	
		O Go Tri Route 405	
		O Go Tri Route 700	
		O Go Tri Route 800	
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board Survey - (GoTriangle and CTran) - Fall 2015	
many bus transfers did you make BEFORE you boarded this bus since leaving the p	lace you
972/lang/en	44/90

	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	
O Go Tri Route 805		
Go Tri Route 900 [CRX]		
Go Tri Route 901 [DRX]		
○ C-Tran Route 1		
O C-Tran Route 2		
C-Tran Route 3		
C-Tran Route 4		
O C-Tran Route 5		
O C-Tran Route 6		
WolfLine Route 1     WolfLine Route 2/21		
WolfLine Route 3		
O WolfLine Route 5		
O WolfLine Route 6		
O WolfLine Route 7		
O WolfLine Route 8		
O WolfLine Route 9		
WolfLine Route 10		
O WolfLine Route 11		
O Other		

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

THIS\_TRIP\_04\_TRIP\_3RD\_RTE

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	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
[]Which bus route d	id you board <u>THIRD</u> on this one-way trip? *
Only answer this question if Answer was '(4+) Four or mo FROM?)	the following conditions are met: e' or (3) Three' at question '36 [PREV_TRANSFERS] (How many bus transfers did you make BEFORE you boarded this bus since leaving the place you are COMING
Please choose only one of th	a following:
O Route 1 Capital	
O Route 2 Falls of Neus	9
Route 3 Glascock	
O Route 4 Rex Hospital	
O Route 5 Biltmore Hills	
Route 6 Crabtree	
O Route 7 South Saunde	15
Route 8 Six Forks	
Route 10 Longview	
Route 11 Avent Ferry	
Route 12 Method	
Route 13 Chavis Heig	its
Route 15 WakeMed	
Route 16 Oberlin     Route 18 Monthele	
<ul> <li>Route 18 Worthdale</li> <li>Route 19 Apollo Heigh</li> </ul>	
<ul> <li>Route 19 Apollo Heigh</li> <li>Route 21 Caraleigh</li> </ul>	3
Route 22 State Street	
Route 50 R-Line	
<ul> <li>Route 54L Spring Fore</li> </ul>	st Road Crosstown
O Route 55 Poole Road	
O Route 60 Wake Forest	
Route 62 Wake Forest	
O Route 63 Knightdale E	
O Route 64 Zebulon/ We	
O Route 70 Carolina Pin	ıs [7L]
O Route 76 Johnston Co	unty Express [JCX]
O Route 77 Clayton Exp	ess [CLX]
O Route 78 Fuquay Variant	a Express [FRX]
O Route 102 Garner [102	1
Route 110 Buck Jones	[11L]
O Route 150 Trawick Lin	
O Route 230 Millbrook C	
Route 240 North Cros	
Route 250 Triangle To	
<ul> <li>Route 400 Wake Tech</li> <li>Route 700 Brier Creek</li> </ul>	
Go Tri Route 42	Express [ruk]
Go Tri Route 46	
O Go Tri Route 47	
O Go Tri Route 49	
O Go Tri Route 100	
O Go Tri Route 105	
Go Tri Route 201	
Go Tri Route 300	
O Go Tri Route 301	
O Go Tri Route 303	
🔘 Go Tri Route 305	
O Go Tri Route 311	
O Go Tri Route 400	
O Go Tri Route 405	
🔘 Go Tri Route 700	
🔘 Go Tri Route 800	

2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboa O Go Tri Route 805 O Go Tri Route 900 [CRX] O Go Tri Route 901 [DRX] O C-Tran Route 1 O C-Tran Route 2 O C-Tran Route 3 C-Tran Route 4 O C-Tran Route 6 O WolfLine Route 1 O WolfLine Route 2/21 O WolfLine Route 3 O WolfLine Route 5 WolfLine Route 6 O WolfLine Route 7 O WolfLine Route 8 O WolfLine Route 9 O WolfLine Route 10 O WolfLine Route 11 O Other

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ard Survey -	(GoTriangle	and CTran) -	Fall 2015	

/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboa
			lid you board <u>FOURTH</u> on this one-way trip? *
KIP_05_1	RIP_4TH_RTE	Only answer this question in Answer was '(4+) Four or mo	the following conditions are met: re' at question '36 [PREV_TRANSFERS] (How many bus transfers did you
		Please choose only one of the	
		O Route 1 Capital	
		Route 1 Capital     Route 2 Fails of Neus	8
		O Route 3 Glascock	-
		O Route 4 Rex Hospital	
		Route 5 Biltmore Hills	
		O Route 6 Crabtree	
		O Route 7 South Saunde	rs
		O Route 8 Six Forks	
		O Route 10 Longview	
		O Route 11 Avent Ferry	
		O Route 12 Method	
		O Route 13 Chavis Heig	hts
		O Route 15 WakeMed	
		Route 16 Oberlin	
		O Route 18 Worthdale	
		O Route 19 Apollo Heigh	ts
		O Route 21 Caraleigh	
		O Route 22 State Street	
		O Route 50 R-Line	
		O Route 54L Spring Fore	st Road Crosstown
		O Route 55 Poole Road	
		O Route 60 Wake Fores	Express [WRX]
		O Route 62 Wake Fores	
		Route 63 Knightdale E	
		O Route 64 Zebulon/ We	ndell Express [ZWX]
		O Route 70 Carolina Pin	es [7L]
		O Route 76 Johnston Co	unty Express [JCX]
		Route 77 Clayton Exp	ress [CLX]
		Route 78 Fuquay Vari	na Express [FRX]
		O Route 102 Garner [10]	1
		O Route 110 Buck Jone	; [11L]
		O Route 150 Trawick Lin	
		O Route 230 Millbrook C	
		O Route 240 North Cros	
		O Route 250 Triangle To	
		Route 400 Wake Tech	
		O Route 700 Brier Creek	Express [70X]
		O Go Tri Route 42	
		O Go Tri Route 46	
		O Go Tri Route 47	
		O Go Tri Route 49	
		O Go Tri Route 100	
		Go Tri Route 105	
		O Go Tri Route 201	
		O Go Tri Route 300	
		Go Tri Route 301	
		Go Tri Route 303	
		Go Tri Route 305	
		O Go Tri Route 311	
		O Go Tri Route 400	
		Go Tri Route 405	
		Go Tri Route 700	
		O Go Tri Route 800	
		O Go Tri Route 805	
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board Survey - (GoTriangle and CTran) - Fall 2015	
u make BEFORE you boarded this bus since leaving the place you are COMING FROM	?)
972/lang/en	50/90

2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Surve
Go Tri Route 900 [CRX]				
Go Tri Route 901 [DRX]			THIS_TRIP_07_NXT	TDNSEDS
C-Tran Route 1				
O C-Tran Route 2			[]How many buses will y	ou ride <u>AFTER</u> you get off this bus on your way to the
O C-Tran Route 3				
C-Tran Route 4			Answer was 'Continue Survey' at qu	lowing conditions are met: astion '12 [CONTINUE_SURVEY]' ( {INSERTANS:254972X1564X6135} {INSER`
C-Tran Route 5			Please choose only one of the follow	/ing:
C-Tran Route 6			O (0) None	
O WolfLine Route 1			(1) One	
O WolfLine Route 2/21			() (1) One (2) Two	
WolfLine Route 3			(1) 100 (3) Three	
WolfLine Route 5			(4+) Four or more	
WolfLine Route 6			0 (1) 101	
WolfLine Route 7				
O WolfLine Route 8				
O WolfLine Route 9				
WolfLine Route 10				
O WolfLine Route 11				
O Other				
http://goraleigh.etcsurvey.com/index.	php/admin/printablesurvey/sa/index/surveyid/254972/ang/en	51/90	http://goraleigh.etcsurvey.com/ind	lex.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en
				· · · · · ·

ard Survey - (GoTriangle and CTran) - Fall 2015

### y to the place you are GOING TO? \*

135} {INSERTANS:254972×1654×6136} )

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### THIS\_TRIP\_08\_TRIP\_NXT\_RTE

Only answer this question if the following conditions are met: Answer was (4+) Fouror more' or (3) Three' or (2) Two' or (1) One' at question '41 [NEXT_TRANSFERS] (How many are GOINGTO?)
Please choose only one of the following:
O Route 1 Capital
Route 2 Falls of Neuse
O Route 3 Glascock
O Route 4 Rex Hospital
O Route 5 Biltmore Hills
O Route 6 Crabtree
Route 7 South Saunders
O Route 8 Six Forks
O Route 10 Longview
O Route 11 Avent Ferry
O Route 12 Method
O Route 13 Chavis Heights
◯ Route 15 WakeMed
O Route 16 Oberlin
O Route 18 Worthdale
Route 19 Apollo Heights
O Route 21 Caraleigh
○ Route 22 State Street
O Route 50 R-Line
O Route 54L Spring Forest Road Crosstown
O Route 55 Poole Road Express
○ Route 60 Wake Forest Express [WRX]
○ Route 62 Wake Forest Loop [60]
O Route 63 Knightdale Express [KRX]
Route 64 Zebulon/ Wendell Express [ZWX]
O Route 70 Carolina Pines [7L]
Route 76 Johnston County Express [JCX]
O Route 77 Clayton Express [CLX]
O Route 78 Fuquay Varina Express [FRX]
O Route 102 Garner [102]
Route 110 Buck Jones [11L]
Route 150 Trawick Link [15L]
Route 230 Millbrook Crosstown [23L]
Route 240 North Crosstown [24L]
Route 250 Triangle Town Center [25L]
Route 400 Wake Tech Express [40X]     Batter 700 Pater Crack Express [70X]
Route 700 Brier Creek Express [70X]
Go Tri Route 42     Go Tri Route 45
O Go Tri Route 47 O Go Tri Route 49
O Go Tri Route 100
O Go Tri Route 105
O Go Tri Route 201
O Go Tri Route 300
Go Tri Route 301     Go Tri Route 303
O Go Tri Route 305
O Go Tri Route 305
O Go Tri Route 400
O Go Tri Route 405
O Go Tri Route 700

[]Which bus route will you board <u>NEXT</u> on this one-way trip? \*

2/4/2016

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/ang/en

53/90

TRANSFERS]" (How many buses will you ride AFTER you get off this bus on your way to the place you

2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Surve
2/4/2016 Go Tri Route 805 Go Tri Route 900 [CRX] Go Tri Route 901 [DRX] C-Tran Route 1 C-Tran Route 2 C-Tran Route 2 C-Tran Route 4 C-Tran Route 5 WolfLine Route 1 WolfLine Route 1 WolfLine Route 3 WolfLine Route 5 WolfLine Route 5 WolfLine Route 5 WolfLine Route 5 WolfLine Route 8 WolfLine Route 9 WolfLine Route 9 WolfLine Route 10 WolfLine Route 11 Other	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015		2/4/2016 THIS_TRIP_09_TRIP_4	
http://goraleigh.etcsurvey.com/index.p	php/admin/printablesurvey/sa/index/surveyid/254972/lang/en	55/90	http://goraleigh.etcsurvey.com/index.j	php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

)16	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	
]Which bus rout	e line will you board <u>AFTER THAT</u> on this one-way trip? *	
<b>Inly answer this questio</b> Inswerwas '(4+) Four or O?)	on if the following conditions are met: more' or '(3) Three' or '(2) Two' at question '41 [NEXT_TRANSFERS]' (How many buses will you ride AFTER you get off this bus on your way to the place you are GOING	
Please choose only one	of the following:	
Route 1 Capital		
<ul> <li>Route 2 Falls of No</li> <li>Route 3 Glascock</li> </ul>	ense	
Route 3 Glascock     Route 4 Rex Hospi		
Route 5 Biltmore H		
Route 6 Crabtree	IIIS	
Route 7 South Sau	inders	
Route 8 Six Forks	ine 3	
<ul> <li>Route 10 Longview</li> </ul>	,	
O Route 11 Avent Fe		
O Route 12 Method		
O Route 13 Chavis H	teights	
O Route 15 WakeMe	d	
O Route 16 Oberlin		
O Route 18 Worthdale	e	
O Route 19 Apollo He	eights	
O Route 21 Caraleight	1	
O Route 22 State Str	eet	
O Route 50 R-Line		
O Route 54L Spring F	Forest Road Crosstown	
O Route 55 Poole Ro		
O Route 60 Wake Fo		
O Route 62 Wake Fo		
Route 63 Knightdal		
	Wendell Express [ZWX]	
Route 70 Carolina		
_	I County Express [JCX]	
<ul> <li>Route 77 Clayton E</li> <li>Route 78 Fuquay V</li> </ul>		
Route 102 Garner [		
O Route 110 Buck Jo		
O Route 150 Trawick		
O Route 230 Millbrook		
O Route 240 North C	rosstown [24]	
O Route 250 Triangle		
O Route 400 Wake T	ech Express [40X]	
O Route 700 Brier Cr	eek Express [70X]	
O Go Tri Route 42		
O Go Tri Route 46		
Go Tri Route 47		
Go Tri Route 49		
O Go Tri Route 100		
Go Tri Route 105		
<ul> <li>Go Tri Route 201</li> <li>Go Tri Route 300</li> </ul>		
Go Tri Route 300		
Go Tri Route 301		
<ul> <li>Go Tri Route 303</li> <li>Go Tri Route 305</li> </ul>		
O Go Tri Route 311		
Go Tri Route 400		
Go Tri Route 405		
O Go Tri Route 700		
O Go Tri Route 800		
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2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboa 🔘 Go Tri Route 805 O Go Tri Route 900 [CRX] O Go Tri Route 901 [DRX] O C-Tran Route 1 O C-Tran Route 2 O C-Tran Route 3 O C-Tran Route 4 O C-Tran Route 5 O C-Tran Route 6 O WolfLine Route 1 O WolfLine Route 2/21 O WolfLine Route 3 O WolfLine Route 5 O WolfLine Route 6 O WolfLine Route 7 O WolfLine Route 8 O WolfLine Route 9 O WolfLine Route 10 O WolfLine Route 11 O Other

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

ard Survey - (	GoTriangle	and CTran) -	Fall 2015

/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015
THIS_TRIP_10_TRIP_3RD_ROUTE	[]Which bus route will you board <u>THIRD</u> on this one-way trip? * Only answer this question if the following conditions are met:
	Chry answer use gleanon mer converge conclusioning and interventing of the second seco
	Please choose only one of the following:
	Route 1 Capital
	Route 2 Fails of Neuse
	O Route 3 Glascock
	Route 4 Rex Hospital
	Route 5 Biltmore Hills
	O Route 6 Crabine
	Route 7 South Saunders
	Route 8 Six Forks
	Route 10 Longview
	Route 11 Avent Ferry
	Route 12 Method
	Route 13 Chavis Heights
	Route 15 WakeMed
	Route 16 Oberlin
	Route 18 Worthdale
	Route 19 Apollo Heights
	Route 21 Caraleigh     Review 22 Clarate Clarate
	Route 22 State Street
	Route 50 R-Line     O Route 541 October Sound October
	Route 54L Spring Forest Road Crossfown     Route 55 Poole Road Express
	Route 55 Poole Road Express     Route 60 Wake Forest Express
	Coute 60 Wake Forest Loop [60]
	Route 63 Knightdale Express [KRX]
	Route 64 Zebulon/ Wendell Express [RVK]
	Route 70 Carolina Pines [7L]
	Route 76 Johnston County Express [JCX]
	Route 77 Clayton Express [CLX]
	○ Route 78 Fuquay Varina Express [FRX]
	O Route 102 Garner [102]
	Route 110 Buck Jones [11L]
	Route 150 Trawick Link [15L]
	Route 230 Millbrook Crosstown [23L]
	O Route 240 North Crosstown [24L]
	Route 250 Triangle Town Center [25L]
	Route 400 Wake Tech Express [40X]
	Route 700 Brier Creek Express [70X]
	O Go Tri Route 42
	G Go Tri Route 45
	G Go Tri Route 47
	O Go Tri Route 49
	O Go Tri Route 100
	O Go Tri Roule 105
	Go Tri Route 201
	Go Tri Route 300
	Go Tri Roule 301
	Go Tri Route 303
	O Go Tri Route 305
	Go Tri Route 311
	G Go Tri Route 400
	G Go Tri Route 405
	G Go Tri Route 700
	G Go Tri Route 800
	O Go Tri Route 805
in/printablesurvey/sa/index/surveyid/254972/lang/en	59/90 http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

is will you ride AFTER you get offthis bus on your way to the place you are GOING TO?)	
4972/lang/en	60/90
······································	

2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	
O Go Tri Route 900 [CRX]		
O Go Tri Route 901 [DRX]		
C-Tran Route 1		
C-Tran Route 2		
C-Tran Route 3 C-Tran Route 4		
C-Tran Route 5		
C-Tran Route 6		
O WolfLine Route 1		
O WolfLine Route 2/21		
O WolfLine Route 3		
O WolfLine Route 5		
WolfLine Route 6 WolfLine Route 7		
WolfLine Route 8		
O WolfLine Route 9		
O WolfLine Route 10		
O WolfLine Route 11		
O Other		
http://goraleigh.etcsurvey.com/index.p	hp/admin/printablesurvey/sa/index/surveyid/254972/ang/en	61/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

THIS\_TRIP\_12\_TRIP\_4TH\_RTE

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	
[]Which bus rout	e will you board <u>LAST</u> on this one-way trip? *	
Only answer this question Answer was '(4+) Four or	n if the following conditions are met: more'at question '41 [NEXT_TRANSFERS] (How many buses will you ride AFTER you get off this bus on your way to the place you are GOING TO?)	
Please choose only one		
-	·	
<ul> <li>Route 1 Capital</li> <li>Route 2 Falls of No</li> </ul>		
<ul> <li>Route 3 Glascock</li> </ul>	026	
O Route 4 Rex Hosp	tal	
Route 5 Biltmore H		
O Route 6 Crabtree		
O Route 7 South Sau	nders	
O Route 8 Six Forks		
O Route 10 Longview		
O Route 11 Avent Fe	ту	
O Route 12 Method		
○ Route 13 Chavis H	eights	
◯ Route 15 WakeMe	1	
O Route 16 Oberlin		
O Route 18 Worthdal	,	
O Route 19 Apollo H	ights	
O Route 21 Caraleight		
O Route 22 State Str	set	
Route 50 R-Line		
O Route 54L Spring F	orest Road Crosstown	
O Route 55 Poole Ro		
Route 60 Wake Fo		
O Route 62 Wake Fo		
Route 63 Knightdal		
-	Wendell Express [ZWX]	
Route 70 Carolina		
Route 76 Johnston		
Route 77 Clayton I     Daute 70 Current		
<ul> <li>Route 78 Fuquay V</li> <li>Route 102 Garner  </li> </ul>		
Route 102 Gamer   Route 110 Buck Jo		
<ul> <li>Route 150 Trawick</li> </ul>		
<ul> <li>Route 230 Millbroo</li> </ul>		
O Route 240 North C		
Route 250 Triangle		
O Route 400 Wake T		
O Route 700 Brier Cr		
Go Tri Route 42		
Go Tri Route 46		
Go Tri Route 47		
Go Tri Route 49		
O Go Tri Route 100		
Go Tri Route 105		
Go Tri Route 201		
Go Tri Route 300		
Go Tri Route 301		
Go Tri Route 303		
Go Tri Route 305		
Go Tri Route 311		
Go Tri Route 400		
Go Tri Route 405		
Go Tri Route 700		
Go Tri Route 800		
Go Tri Route 805		

2/4/2016 GoRaleigh 2015 OB Survey - GoRaleigh Onboa O Go Tri Route 900 [CRX] O Go Tri Route 901 [DRX] O C-Tran Route 1 O C-Tran Route 2 O C-Tran Route 3 O C-Tran Route 4 O C-Tran Route 5 O C-Tran Route 6 O WolfLine Route 1 O WolfLine Route 2/21 O WolfLine Route 3 O WolfLine Route 5 O WolfLine Route 6 O WolfLine Route 7 O WolfLine Route 8 O WolfLine Route 9 O WolfLine Route 10 O WolfLine Route 11 O Other

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/ang/en

ard Survey -	(GoTriangle	and CTran) -	Fall 2015

#### REVIEW\_SCREEN\_01

#### []

You LIVE OR are currently staying at <u>{HOME OR HOTEL ADDR ADDR.shown}</u>, <u>{HOME OR HOTEL ADDR CITY.shown}</u>, <u>{HOME OR HOTEL ADDR STATE.shown}</u>

You began this trip at [ {ORIGIN PLACE TYPE.shown} {ORIGIN PLACE TYPE other.shown} ] called [{ORIGIN NAME.shown}], located at: {ORIGIN ADDRESS PLACE.shown}, {ORIGIN ADDRESS ADDR.shown}, {ORIGIN ADDRESS CITY.shown}, {ORIGIN ADDRESS STATE.shown}]

You <u>{ORIGIN\_TRANSPORT.shown} {ORIGIN\_TRANSPORT\_other.shown}</u> from there to <u>THE VERY FIRST</u> bus YOU USED FOR <u>THIS</u> ONE-WAY TRIP

Before getting ON THIS bus you used these routes:

[ {TRIP FIRST ROUTE.shown} {TRIP FIRST ROUTE other.shown}] and then

[ {TRIP SECOND ROUTE.shown} {TRIP SECOND ROUTE other.shown} ] and then

[ {TRIP THIRD ROUTE.shown} {TRIP THIRD ROUTE other.shown} ]

and then

[ {TRIP FOURTH ROUTE.shown} {TRIP FOURTH ROUTE other.shown}]

You boarded this bus WHICH IS THE [ <u>{ROUTE SURVEYED.shown} {ROUTE SURVEYED other.shown}</u>] at [ {STOP\_ON\_ADDR.shown} ] and will get off at [ {STOP\_OFF\_ADDR.shown} ]

After THIS bus {ROUTE SURVEYED.shown} {ROUTE SURVEYED other.shown} you will transfer to

[{TRIP\_NEXT\_ROUTE.shown} {TRIP\_NEXT\_ROUTE\_other.shown}] and then to

[ {TRIP AFTER ROUTE.shown} {TRIP AFTER ROUTE other.shown} ]

and then to

[{TRIP 3RD ROUTE.shown}{TRIP 3RD ROUTE other.shown}]

and then to

[{TRIP LAST4TH RTE.shown} {TRIP LAST4TH RTE other.shown}]

After that, you will [<u>{DESTIN\_TRANSPORT.shown}{DESTIN\_TRANSPORT\_other.shown}</u>] from THE VERY LAST bus YOU ARE USING FOR THIS TRIP to get to your destination which is [<u>{DESTIN\_PLACE\_TYPE.shown}{DESTIN\_PLACE\_TYPE\_other.shown}</u>] called [<u>{DESTIN\_NAME.shown}</u>], located at: [<u>{DESTIN\_ADDRESS\_PLACE.shown}</u>, <u>{DESTIN\_ADDRESS\_CITY.shown}</u>].

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} )

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/ang/en

65/90

2/4/2016

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### OTHER\_01\_TIME\_ON

#### []What time did you BOARD <u>this</u> bus? \* Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY]' ({INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136}) Please choose only one of the following: Before 6:00 am 🔘 6:00 - 7:00 am O 7:00 - 8:00 am 🔘 8:00 - 9:30 am ) 9:30 - 10:30 am O 10:30 - 11:30 am 11:30 am - 12:30 pm O 12:30 - 1:30 pm O 1:30 - 2:30 pm O 2:30 - 3:30 pm 🔿 3:30 - 4:30 pm 🔘 4:30 - 5:30 pm O 5:30 - 6:30 pm O 6:30 - 7:30 pm 7:30 - 9:00 pm O After 9:00 pm

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2/4/2016

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#### OTHER\_02\_TRIP\_IN\_OPP\_DIR

#### []Will you (or did you) make this same trip using the same transit routes in exactly the opposite direction today? \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( [INSERTANS 254972X1564X6135] {INSERTANS 254972X1654X6136} )

Please choose only one of the following:

O Yes O No

Current trip from {ORIGN\_PLACE\_TYPE shown}{ORIGN\_PLACE\_TYPE\_other.shown} {origin} to {DESTN\_PLACE\_TYPE shown}{DESTN\_PLACE\_TYPE\_other.shown} (destination)

/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard S
OTHER_03_OPP_I	DIR_TIME
[]At what time did/v	vill you leave for this trip in the opposite direction? $st$
	he following conditions are met: #8 [Trip_in_Opposite_Dir]" (Will you (or did you) make this same trip using the si
Please choose <b>only one</b> of the	following:
O Before 6:00 am	
6:00 - 7:00 am	
7:00 - 8:00 am	
O 8:00 - 9:30 am	
O 9:30 - 10:30 am	
O 10:30 - 11:30 am	
O 11:30 am - 12:30 pm	
O 12:30 - 1:30 pm	
1:30 - 2:30 pm	
O 2:30 - 3:30 pm	
🔘 3:30 - 4:30 pm	
4:30 - 5:30 pm	
5:30 - 6:30 pm	
O 6:30 - 7:30 pm	
7:30 - 9:00 pm	
After 9:00 pm	
Current trip from (ORIGIN PLA	CE_TYPE.shown}{ORIGIN_PLACE_TYPE_other.shown} {origin) to {DESTIN_F

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

67/90

Survey - (GoTriangle and CTran) - Fall 2015

same transit routes in exactly the opposite direction today? )

N\_PLACE\_TYPE.shown}{DESTIN\_PLACE\_TYPE\_other.shown} (destination)

2/4/2016		

OTHER\_06\_FARE\_DISCOUNTS

#### []For this one-way trip did you: \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} )

Please choose only one of the following:

- O Pay full fare (cash fare or regular pass purchased for yourself)
- O Pay a Person with a Disability Fare
- O Pay a Youth Fare (GoTriangle, GoRaleigh) O Ride GoRaleigh or C-Tran for free as Youth 12 or under
- O Pay a Senior Fare (GoTriangle, C-Tran)
- O Ride GoRaleigh for free with Senior (65+)
- O Use a transit pass provided by employer or university (e.g. GoPass)
- O Ride Free Route (R-Line or Wake Forest Loop)

#### []What type of pass or card did you use for this one-way trip? \*

#### Local Day Pass (C-Tran / GoRaleigh)

2/4/2016

[]

OTHER\_05\_PASS\_TYPE

- O Local 7-Day / Weekly Pass (C-Tran / GoRaleigh)
- C Local 31-Day Pass (C-Tran / GoRaleigh)
- Regional Day Pass (C-Tran, GoRaleigh, GoTriangle)
- Regional 7-Day Pass (C-Tran, GoRaleigh, GoTriangle)
- C Regional 31-Day Pass (C-Tran, GoRaleigh, GoTriangle)
- Express Day Pass (GoTriangle)
- Express 7-Day Pass (GoTriangle)
- C Express 31-Day Pass (GoTriangle)
- O University Provided GoPass
- Other GoPass
- Stored Value Card (\$25 / \$20 C-Tran / \$13.50)

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69/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/2549

//2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	
OTHER_05_PASS_TY	PE	
[] Did you use a transit pas	s or card?	
* Only answer this question if the fol Answer was 'Continue Survey' at qui Please choose all that apply:	lowing conditions are met: oston '12 [CCNTINUE_SURVEY] ( [NSERTANS 254972X 1564X6135] {INSERTANS 254972X 1654X6136} )	
Yes		
No No		
Other:		
[]What type of pass or ca	ard did you use for this one-way trip? *	
Only answer this question if the fol Answer was "Yes" at question '51 [US {INSERTANS:254972X1564X6135} Please choose only one of the follow	ED_PASS([Did you use a transit pass or card?) and Answer was 'Continue Survey' at question '12 [CONTINUE_SUR VEY] ( [INSERTANS:254972X1654X6136])	
O Local Day Pass (C-Tran / Go		
O Local 7-Day / Weekly Pass (	C-Tran / GoRaleigh)	
<ul> <li>Local 31-Day Pass (C-Tran /</li> <li>Regional Day Pass (C-Tran,</li> </ul>		
<ul> <li>Regional 7-Day Pass (C-Tran</li> </ul>		
Regional 31-Day Pass (C-Transport	ın, GoRaleigh, GoTriangle)	
Express Day Pass (GoTriang Operations)		
<ul> <li>Express 7-Day Pass (GoTria</li> <li>Express 31-Day Pass (GoTria)</li> </ul>		
O University Provided GoPass	angue)	
O Other GoPass		
Stored Value Card (\$25 / \$20	– C-Tran / \$13.50)	
p://goraleigh.etcsurvey.com/inc	tex.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en	70/90

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

OTHER\_15\_HOW\_LONG\_RIDING

### How long have you been riding {AGENCY.shown} ?

\*

[]

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136} ) Please choose **only one** of the following:

- O More than 4 years ◯ 3 to 4 years
- ◯ 1 to 2 years

C Less than 1 year

◯ First time rider

## OTHER\_109\_GENDER

### []What is your gender? \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} ) Please choose only one of the following:

O Male O Female

2/4/2016

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71/90

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2/4/2016	

#### OTHER\_105\_AGE

# [] What is your AGE? \*

### Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136} )

Please choose only one of the following:

O Under 18

#### 0 18-24 0 25-34

0 35-44

0 45-54

- 0 55-64
- 0 65+

### OTHER\_101\_HAS\_DRIVE\_LICENSE

#### []Do you have a valid driver's license? \*

Only answer this guestion if the following conditions are met: Answer was 'Continue Survey at question '12 [CONTINUE\_SURVEY] ({INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} ) Please choose only one of the following:

O Yes O No Not driving age

2/4/2016

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

73/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

2/4/2016	

OTHER\_106\_ETHNIC\_BACKGROUND

# [] How do you identify your race/ethnicity? (check all that apply) \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 (CONTINUE\_SURVEY) ( (INSERTANS 254972X1564X6135) (INSERTANS 254972X1654X6136) ) Please choose all that apply:

- 🗌 White
- Black/African American

Native American

Asian American

Native Hawaiian / Pacific Islander

Hispanic/Latino

Other:

GoRaleigh 2015 OB Survey - GoRaleigh Onboa

#### OTHER\_17\_STATUS\_EMPLOYMENT

#### []Are you: \*

2/4/2016

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SUR VEY] ( {INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136} )

Please choose only one of the following: C Employed full-time

O Employed part-time

O Student (K-12)

O Student (University/College)

Unemployed

O Retired

◯ Homemaker Not working age

(select the one response that BEST describes you)

75/90

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ard Survey -	(Gol riangle	and CTran) -	Fall 2015

/201	

#### OTHER\_13\_COUNT\_MEMBER\_HH

#### []Including YOU, how many people <u>live</u> in your household? \*

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} ) Please choose only one of the following:

#### One (1)

O Two (2)

O Three (3)

O Four (4) O Five (5)

() Six (6)

O Seven (7)

Eight (8)

() Nine (9) O Ten or More (10+)

2/4/2016

#### OTHER\_14\_COUNT\_EMPLOYED\_HH

#### []Including YOU, how many people (over age 15) in your household are employed full/part-time? \* Only answer this question if the following conditions are met: Answer was 'Continue Survey at question '12 [CONTINUE\_SURVEY] ( {INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136} ) Please choose only one of the following: O None (0) O One (1) O Two (2) O Three (3) O Four (4) O Five (5) O Six (6) O Seven (7) O Eight (8) O Nine (9)

O Ten or More (10+)

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

77/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

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	/201	
24	201	0

### OTHER\_11\_ COUNT\_VH\_HH

#### []How many working vehicles are available to your household? \*

Only answer this question if the following conditions are met: Answer was Continue Survey at question '12 [CONTINUE\_SUR VEY] ({INSERTANS 254972X1564X6135} (INSERTANS 254972X1654X6136) )

#### Please choose only one of the following: O None (0)

One (1)

O Two (2)

O Three (3)

O Four (4) O Five (5)

O Six (6)

O Seven (7)

O Eight (8)

O Nine (9)

O Ten or more (10+)

### OTHER\_12\_CAN\_USE\_VEH\_TRIP

#### []Could you have used one of these vehicles to for this trip? \*

Only answer this question if the following conditions are met: Answer was Two (2)" or "One (1)" or "Ten or more (10+7 or Nine (9)" or "Eight (8)" or "Seven (7)" or "Six (6)" or "Five (5)" or "Four (4)" or "Three (3)" at question "61 [COUNT\_VH\_HH]" (How many working vehicles are available to your household? ) and Answer was "Continue Survey" at question "12 [CONTINUE\_SURVEY] ( [INSERTANS 254972X1654X8135] [INSERTANS 254972X1654X8136] )

Please choose only one of the following:

⊖ Yes () No

2/4/2016

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

79/90

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

HER_107_INCOME	FEEDBA	CK_01_SATISF_AGENCY
Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2014 before taxes? *	[]Please	rate your satisfaction with {AGENCY.shown} in each of the
this question if the following conditions are met: Continue Survey at question '12 [CONTINUE_SURVEY]' ({INSERTANS.254972X1564X6135}{INSERTANS.254972X1654X6136})	Only answe	this question if the following conditions are met:
		'Continue Survey' at question "12 [CONTINUE_SUR VEY]' { {INSERTANS:254972X1564X6 se the appropriate response for each item:
e only one of the following: in \$15,000		
lan \$19,900	Reliability	of service (buses are on time)
00 - \$24,999	Frequency	of service
\$29,999	Ease of bu Weekend s	s connections/transfers ervice
00 - \$34,999		rvice (evenings, early morning)
\$35,000 - \$39,999	Bus stop s	
0,000 - \$44,999	Bus stop a Bus cleani	menities (lighting, shelters, benches) ness
\$45,000 - \$49,999	Onboard s	fety/security
\$50,000 - \$74,999	Comfort of Bus fleet/e	
\$75,000 - \$99,000	Courtesy of	Drivers
00.000 - \$149,999 50.000 or above	Safety of [ Fare/cost i	
76	Convenien	e of purchasing a bus pass
	Easy-to-ur	derstand route information

ard Survey - (GoTriangle and CTran) - Fall 2015  Ilowing areas: 135} (INSERTANS 254972X1654X6136) )  Very Salisfied Neutral Dissatisfied Dissatisfied OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	DWING AREAS: 5}{INSERTANS 254972X1654X6136}) Very tisfied Satisfied Neutral Dissatisfied Dissatisfied	lowing areas: 35} (INSERTANS 254972X1654X6136} ) Very Very alisfied Satisfied Neutral Dissatisfied Dissatisfied	llowing areas: 135} {INSERTANS:254972X1854X8138} ) Very Salisfied Satisfied Neutral Dissatisfied Dissatisfied					
135} (INSERTANS 254972X1654X6136}) Very Salisfied Satisfied Neutral Dissatisfied Dissatisfied	- 5} {INSERTANS 254972X1654X6136} ) Very tisfied Satisfied Neutral Dissatisfied Dissatisfied	25}{NSERTANS254972X1654X6136}) Very Very atisfied Satisfied Neutral Dissatisfied Dissatisfied	135}{INSERTANS.254972X1854X8138} ) Very Salisfied Satisfied Neutral Dissatisfied Dissatisfied	xard Sur∨ey	- (GoTriangle a	nd CTran) - Fa	all 2015	
135}{INSERTANS 254972X1654X6136}) Very Salisfied Salisfied Neutral Dissalisfied Dissalisfied	- 5} {INSERTANS 254972X1654X6136} ) Very tisfied Satisfied Neutral Dissatisfied Dissatisfied	25}{NSERTANS254972X1654X6136}) Very Very atisfied Satisfied Neutral Dissatisfied Dissatisfied	135}{INSERTANS.254972X1854X8138} ) Very Salisfied Satisfied Neutral Dissatisfied Dissatisfied	llowing ar	eas:			
Very Salisfied Salisfied Neutral Dissalisfied Dissalisfied OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	Very Ising         Satisfied         Neutral         Dissatisfied         Dissatisfied           O         O         O         O         O         O           O         O         O         O         O         O         O           O<	Very ats/fied         Satisfied         Neutral         Dissatisfied         Dissatisfied           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0	Very salsified     Neutral     Dissatisfied     Dissatisfied       O     O     O     O       O     O     O			K6136} )		
				Very Satisfied	Satisfied	Neutral		Very Dissatisfied
				0000	0000	000	0000	0000
				'2/lang/en				

#### 2/4/2016

#### GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

### FEEDBACK\_02\_AGREE

[]Please indicate your level	of agreement with the	e following statemen	ts:		
Only answer this question if the follow Answer was 'Continue Survey' at question		NSERTANS:254972X1564X6	8135} {INSERTANS:254972X16	54×6136} )	
Please choose the appropriate respons	e for each item:				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
{AGENCY.shown} values its customers	0	0	0	0	0
{AGENCY.shown} provides excellent customer service	0	0	0	0	0
I would recommend {AGENCY.shown} to others	0	0	0	0	0

2/4/2016

### Q23\_CHANGES\_GOR

#### []When did you learn CAT/Capital Area Transit changed to GoRaleigh?

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS 254972X1564X6135} {INSERTANS 254972X1654X6136} )

Please choose **only one** of the following:

O Today

◯ In the past month

O This summer

O This spring

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

83/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/lang/en

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

#### HOW\_FOUND\_OUT

#### []How did you find out about the change?

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 [CONTINUE\_SURVEY] ( {INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136} ) Please choose only one of the following:

○ Riding the system/Saw new buses

#### O TV/radio/newspaper

Online/social media

O Word of mouth

O Other

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

#### DIFFERENCES

### []Have you noticed any differences in service since the switch from CAT/Capital Area Transit to GoRaleigh? Only answer this question if the following conditions are met: Answer was 'Continue Survey at question '12 [CONTINUE\_SUR VEY]' ({INSERTANS:254972X1564X6135} {INSERTANS:254972X1654X6136}) Please choose only one of the following: O Positive change Negative change O No change O Don't know/unsure O Other

85/90

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

#### REGISTER\_TO\_WIN

[]

People who submit an accurately completed survey will have the option of being entered in a random drawing for \_\_\_\_\_

You must provide your home address at the beginning of the survey to be eligible.

### Would you like me to enter you into the drawing?

Only answer this question if the following conditions are met: Answer was 'Continue Survey' at question '12 (CONTINUE\_SURVEY)' { [INSERTANS 254972X1564X8135] {INSERTANS 254972X1654X8136} }

Please choose only one of the following:

⊖ Yes

○ No

O Not interested in contest but will provide contact info

One I-Pad Mini as main prize. \$25 gift cards to Wal-Mart. \$25 Stored Value cards for all GoTransit services.

2/4/2016

GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015

#### REGISTER\_TO\_WIN\_RIDER\_CONTACT

#### []Please provide the following information:

Only answer this question if the following conditions are met: Answer was Not interested in contest but will provide contact info'or 'Yes' at question '69 [REGISTER\_TO\_WIN\_Y\_N] ( People who submit an accurately completed survey will have the option of being entered in a random drawing for \_\_\_\_\_\_. You must provide your home address at the beginning of the survey to be eligible. Would you like me to enter you into the drawing? ) Please write your answer(s) here:

Your name	
Phone number	
Em ail address	

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

87/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Survey - (GoTriangle and CTran) - Fall 2015	2/4/2016	GoRaleigh 2015 OB Survey - GoRaleigh Onboard Su
ITERVIEWER_N	IOTE		Thank you for your help!
		Please fax your completed su Submit your survey. Thank you for completing this	urvey to: review_mode_off
ir answer here	e.	Thank you for completing this	s survey.

89/90

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/ang/en

http://goraleigh.etcsurvey.com/index.php/admin/printablesurvey/sa/index/surveyid/254972/iang/en

Survey - (GoTriangle and CTran) - Fall 2015

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# Appendix B-1 – Survey Schedule

The survey team administered the onboard surveys Monday through Thursday between October 5, 2015 and November 19, 2015. Individual route survey schedules avoided a portion of the blackout dates identified in Appendix A- Survey Methodology Memorandum. Some routes required survey administration over multiple days to collect the target number of responses. The full survey schedule is included as Table 1.

	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
Route	10/	10/	10/	10/	10/1	10/1	10/1	10/]	10/]	10/2	10/2	10/2	10/2	10/2	10/2	10/2	11/	11/	11/	11/	11/	11/1	11/]	11/]	11/]	11/]	11/1	11/1
C-Tran: Route 1: CLOCKWISE																	Х	Х	X							X		
C-Tran: Route 2: COUNTERCLOCKWISE																	Х	Х	X									
C-Tran: Route 3: INBOUND toward Train Station																	Х	Х	X		X		Х		Х	X		
C-Tran: Route 3: OUTBOUND toward Harrison Square																	Х	Х	X		X		Х		Х	X		
C-Tran: Route 4: INBOUND toward Train Station																	Х	Х	X	X	X		Х		Х			
C-Tran: Route 4: OUTBOUND toward NC Hwy 55																	Х	Х	X	X	X		Х		Х	X		
C-Tran: Route 5: INBOUND toward Train Station																	Х	Х	Х		X		Х		Х	X		
C-Tran: Route 5: OUTBOUND toward Crescent Commons Drive																	Х	Х	X		X		Х					
C-Tran: Route 6: INBOUND toward Train Station																	Х	Х	X	X			Х		Х			
C-Tran: Route 6: OUTBOUND toward Plaza West																	Х	Х	X	X			Х					
Go Tri: Route 100- INBOUND toward Downtown												Х	Х				Х						Х			X	X	
Go Tri: Route 100- OUTBOUND toward RTC												Х	Х				Х	Х		X		X	Х			X	Х	
Go Tri: Route 102- INBOUND toward Downtown												Х																
Go Tri: Route 102- OUTBOUND toward Garner												Х																
Go Tri: Route 105- INBOUND toward Downtown												Х	Х	Х		Х							Х					
Go Tri: Route 105- OUTBOUND toward RTC												Х	Х	Х		Х							Х		Х			
Go Tri: Route 201- INBOUND toward North Raleigh																											Х	
Go Tri: Route 201- OUTBOUND toward RTC																									Х	X	Х	
Go Tri: Route 300- EASTBOUND toward Downtown												Х		Х			Х	X	X						Х			
Go Tri: Route 300- WESTBOUND toward Cary											Х	Х					Х	Х	X						Х			

### Table 1 – Survey Administration Schedule

Route	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
Go Tri: Route 301- INBOUND toward Downtown												X			X		Х		Х	Х			Х			Х	Х	
Go Tri: Route 301- OUTBOUND toward Cary												Х			Х		Х						Х		Х			
Go Tri: Route 305- INBOUND toward Downtown												Х													Х		Х	
Go Tri: Route 305- OUTBOUND toward Lake Pine												Х											Х		Х		Х	
Go Tri: Route 311- INBOUND toward RTC																	Х			X					Х	Х	X	
Go Tri: Route 311- OUTBOUND toward APEX																	Х			X					Х			
Go Tri: Route 400- INBOUND toward Durham Station													X															
Go Tri: Route 400- OUTBOUND toward Chapel Hill													X															
Go Tri: Route 405- INBOUND toward Durham Station													X															
Go Tri: Route 405- OUTBOUND toward Chapel Hill													X															
Go Tri: Route 42- CIRCULAR													X												Х		X	
Go Tri: Route 46- CIRCULAR																X												Х
Go Tri: Route 47- CIRCULAR																X									Х			Х
Go Tri: Route 49- CIRCULAR																X											Х	
Go Tri: Route 700- INBOUND toward RTC												Х	X				Х						X			Х		
Go Tri: Route 700- OUTBOUND toward Durham Station													X														X	
Go Tri: Route 800- INBOUND toward RTC													X															
Go Tri: Route 800- OUTBOUND toward Chapel Hill													X															
Go Tri: Route 805- INBOUND toward RTC													X															
Go Tri: Route 805- OUTBOUND toward Chapel Hill													X														X	
Go Tri: Route 900 [CRX]- INBOUND toward Chapel Hill												X	X				Х			X			Х					
Go Tri: Route 900 [CRX]- OUTBOUND toward Downtown																	Х			X			Х					
Go Tri: Route 901 [DRX]- INBOUND toward Durham Station												X		Х			Х						Х			Х		
Go Tri: Route 901 [DRX]- OUTBOUND toward Downtown												Х		Х			Х						Х			Х		
Route 1: Capital- INBOUND toward Downtown	X	Х	Х	Х	Х	X	X	Х	Х		Х	Х	Х						Х	Х	Х			Х	Х		Х	
Route 1: Capital- OUTBOUND toward Triangle Town Center	X	X	X	X	X	X	X	Х	X	X	X	X							X	X	X	Х	X	Х	Х	Х	X	

	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
Route	10	10	10	10	10/	10/	10/	10/	10/	10/	10/	10/	10/	10/	10/	10/	11	11	11	11	11	11/	11/	11/	11/	11/	11/	11/
Route 10: Longview- INBOUND toward Downtown					X		X		X	Х										Х	Х	Х						
Route 10: Longview- OUTBOUND toward Chatham at Bertie					X			Х	X	Х										Х	Х							
Route 102: Garner [102]: OUTBOUND toward White Oak Shopping Center										X												Х			Х			
Route 11: Avent Ferry- INBOUND toward Downtown	X	X	X	X	X	X	X	Х	X		Х				X							X		Х		Х		
Route 11: Avent Ferry- OUTBOUND toward Trailwood Hills	X	X	Х	X	X	X	X	Х		X	Х	X	X		X	X	Х			Х	Х	X		Х	X	Х		
Route 110: Buck Jones [11L]: INBOUND toward NCSU			Х								Х	X								Х		X				Х		
Route 110: Buck Jones [11L]: OUTBOUND toward Schaub at Sandlin											Х	Х								Х		Х					Х	
Route 12: Method- INBOUND toward Downtown	X	X		X	X	X		Х	X	X	Х	X	X	X						Х	X							
Route 12: Method- OUTBOUND toward Method at Beryl	X	X		X	X	X	X	Х	X	X	Х	X	X					Х		Х	X			Х				
Route 13: Chavis Heights- INBOUND toward Downtown					X	X	X	Х		X				X										Х				
Route 13: Chavis Heights- OUTBOUND toward Holmes at Bragg					X	X	X	Х	X	X				X										Х				
Route 15: WakeMed- INBOUND toward Downtown		X	X		X				X	X	Х	X	X	Х						Х	Х				X		Х	
Route 15: WakeMed- OUTBOUND toward Wake Medical		X	X		X	X	X	Х	X	X	Х	X	X							Х	Х			Х	X		Х	
Route 150: Trawick Link [15L]: INBOUND toward Wake Med Center											Х		X			X	Х						Х	Х				
Route 150: Trawick Link [15L]: OUTBOUND toward Buffaloe at Dunwood											Х	X	X			X	Х						Х		X		X	
Route 16: Oberlin- INBOUND toward Downtown				X	X	X	X	Х									Х				Х	X			X	Х		
Route 16: Oberlin- OUTBOUND toward Rex Hospital				X	X	X	X	Х	X	X	Х						Х				Х	X			X	Х		
Route 18: Worthdale- INBOUND toward Downtown	X	X		X	X	X	X	Х			Х	X		X		X						X		Х				
Route 18: Worthdale- OUTBOUND toward Bus Way				X	X	X	X	Х	X	Х		X		Х		X						X		Х				
Route 19: Apollo Heights- INBOUND toward Downtown					X	X	X			Х		X	X	Х	X							X		Х		Х	Х	
Route 19: Apollo Heights- OUTBOUND toward Swinburne at Kidd					X	X	X	Х	X	X	Х	X	X	Х								X	Х	Х	X		Х	
Route 2: Falls of Neuse- INBOUND toward Downtown	X	X	X	X	X	X	X	Х	X	Х	Х		X	Х	Х				Х		Х	X		Х				
Route 2: Falls of Neuse- OUTBOUND Bent Tree Plaza		X	X	X	X	X	X	Х	X	X	Х	X	X	X	X				Х		Х	X		Х	X	Х		
Route 21: Caraleigh- INBOUND toward Downtown						X		Х	X	X		X			X	X						X		X				
Route 21: Caraleigh- OUTBOUND toward Maywood at Lake Wheeler						X	X	Х	X	X	Х	X				X						X		Х		Х		
Route 22: State Street- INBOUND toward Downtown			X			X		Х				X	X		X							X		Х				

Route	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
Route 22: State Street- OUTBOUND toward Hadley at Dandridge			Х		X	X	X	X	X			X	X		Х							X		Х				
Route 230: Millbrook Crosstown [23L]: INBOUND toward Crabtree Valley Mall								X			X	X												Х				
Route 230: Millbrook Crosstown [23L]: OUTBOUND toward New Hope at Capital						x					X	X													X		X	
Route 240: North Crosstown [24L]: EASTBOUND toward Spring Forest at Capital											X		X		X	X												
Route 240: North Crosstown [24L]: WESTBOUND toward North Hills Mall											X		X		X	X												
Route 250: Triangle Town Center [25L] - CIRCULAR											X	X												Х				
Route 3: Glascock- INBOUND toward Downtown			X		X		X	X			X			Х							X							
Route 3: Glascock- OUTBOUND toward Crabtree at Timber			X	Х	Х	Х	Х	Х			Х			Х				Х			Х			Х	Х	Х		
Route 4: Rex Hospital- INBOUND toward Downtown	X	Х	X	X	X	X	X	X				X	X	Х	Х				Х							Х	X	Х
Route 4: Rex Hospital- OUTBOUND toward Towne North Shopping Center			X	X	Х	X	X	Х	Х		X	X	X	Х				Х	Х	Х			Х			Х	Х	
Route 400: Wake Tech Express [40X]: INBOUND toward Downtown		Х			Х	Х		Х	Х	Х	Х													Х				
Route 400: Wake Tech Express [40X]: OUTBOUND toward Wake Tech		Х			Х	Х	Х	X	Х	Х			X											Х				
Route 5: Biltmore Hills- INBOUND toward Downtown		Х	X	Х	Х	Х	Х	Х	Х					Х	Х					Х				Х				
Route 5: Biltmore Hills- OUTBOUND toward Sanderford at Idlewood Village	Х		X	Х	Х	Х	Х	Х	Х	Х		Х		Х						Х				Х	Х	Х		
Route 50: R-Line- CIRCULAR			X	Х		Х	Х			Х	Х	Х		Х	Х			X					Х	Х				
Route 55: Poole Road Express- INBOUND toward Downtown																								Х	Х			
Route 55: Poole Road Express- OUTBOUND toward Poole Road P&R																								Х				
Route 6: Crabtree- INBOUND toward Downtown	Х	Х	X	Х	Х	Х	Х	Х	Х	Х								X		Х	Х		Х	Х				
Route 6: Crabtree- OUTBOUND toward Townridge Shopping Center	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х				X			Х	Х	Х	Х	Х	Х		
Route 60: Wake Forest Express [WRX]: INBOUND toward Downtown														Х	Х							X		Х				
Route 60: Wake Forest Express [WRX]: OUTBOUND toward Wake Forest									Х					X	X							X		X	Х			
Route 62: Wake Forest Loop [60]: CIRCULAR															X					Х				Х				
Route 63: Knightdale Express [KRX]: INBOUND toward Downtown							Х																		Х	Х		
Route 63: Knightdale Express [KRX]: OUTBOUND toward Knightdale							X																		Х	Х		
Route 64: Zebulon/ Wendell Express [ZWX]: INBOUND toward Downtown	X	Х													Х													Х

Route	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
Route 64: Zebulon/ Wendell Express [ZWX]: OUTBOUND toward Zebulon P&R	X	х													X							X			x			
Route 7: South Saunders- INBOUND toward Downtown		Х	Х	X		Х		Х	Х	Х	Х	Х		Х										Х				
Route 7: South Saunders- OUTBOUND toward Shoppes at Garner	X	X	Х		X	X	X	Х	X	X	Х	X						X			X			X		Х	Х	
Route 70: Carolina Pines [7L]: EASTBOUND toward Southgate Plaza											Х	X			X				X					X	X			
Route 70: Carolina Pines [7L]: WESTBOUND toward Trailwood Hills											Х	X			X				X						Х	Х		
Route 700: Brier Creek Express [70X]: INBOUND toward Crabtree Valley Mall											Х													Х			Х	
Route 700: Brier Creek Express [70X]: OUTBOUND toward Brier Creek Shopping Center											Х													x			Х	
Route 76: Johnston County Express [JCX]: INBOUND toward Downtown																Х								Х				Х
Route 76: Johnston County Express [JCX]: OUTBOUND toward Cleveland Crossing Shopping Center																								x	X	X		
Route 77: Clayton Express [CLX]: INBOUND toward Downtown																								Х	X		Х	
Route 77: Clayton Express [CLX]: OUTBOUND toward Clayton Towne Plaza																								X	X	Х	Х	
Route 78: Fuquay Varina Express [FRX]: INBOUND toward Downtown												X																
Route 78: Fuquay Varina Express [FRX]: OUTBOUND toward South Park Fuquay												X												x				
Route 8: Six Forks - INBOUND toward Downtown	Х		Х	X	X		Х	Х	X	Х	Х	Х						X			Х							
Route 8: Six Forks - OUTBOUND toward North Hills at Northclift	Х		Х	X	X	Х	Х	Х	Х	Х	Х	Х										X		Х				
Wolfline: Route 1: LOOP													Х	Х	Х	Х		Х			Х					Х	Х	
WolfLine: Route 10: LOOP													Х	Х		Х			Х				Х	Х				
WolfLine: Route 11: LOOP																Х	Х	X	Х					X				
WolfLine: Route 2/21: LOOP														X	X	Х				X	X			Х			Х	
WolfLine: Route 3: LOOP														Х	Х	Х		X				X	Х	Х			Х	
WolfLine: Route 5: LOOP													X	X		X			X	X						Х		
WolfLine: Route 6: LOOP													X	X	Х	X			X					Х			Х	
WolfLine: Route 7: LOOP													X	X	Х	X								Х				
WolfLine: Route 8: LOOP													X	Х	X	X	Х	X	X					X				

Route	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/9/2015	11/10/2015	11/11/2015	11/12/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015
WolfLine: Route 9: LOOP													X		X	X			X	Х						X		

The survey team exceeded the sampling rate goal for all agencies, routes, directions, and time periods. Details on the sampling goals for each system are included as Tables 2a-2d.

### Table 2a – GoRaleigh Sample Goals

Routes			Sampling G	oals				
Route Number	Name	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
1	Capital	INBOUND	8%	20	43	34	11	108
1	Capital	OUTBOUND	8%	29	45	32	11	117
2	Falls of Neuse	INBOUND	10%	18	27	16	7	68
2	Falls of Neuse	OUTBOUND	10%	20	26	17	7	70
3	Glascock	INBOUND	10%	6	6	7	2	21
3	Glascock	OUTBOUND	10%	4	5	5	2	16
4	Rex Hospital	INBOUND	10%	15	17	13	7	52
4	Rex Hospital	OUTBOUND	10%	18	21	12	8	59
5	Biltmore Hills	INBOUND	10%	15	15	10	7	47
5	Biltmore Hills	OUTBOUND	10%	8	17	17	10	52
6	Crabtree	INBOUND	10%	13	12	18	4	47
6	Crabtree	OUTBOUND	10%	10	19	15	2	46
7	South Saunders	INBOUND	10%	25	32	22	6	85
7	South Saunders	OUTBOUND	10%	18	34	24	8	84
8	Six Forks	INBOUND	10%	10	11	7	3	31
8	Six Forks	OUTBOUND	10%	11	14	11	4	40
10	Longview	INBOUND	10%	8	7	5	3	23
10	Longview	OUTBOUND	10%	7	8	7	4	26
11	Avent Ferry	INBOUND	10%	21	17	10	3	51
11	Avent Ferry	OUTBOUND	10%	10	14	21	9	54
12	Method	INBOUND	10%	17	18	19	7	61
12	Method	OUTBOUND	10%	10	16	12	4	42
13	Chavis Heights	INBOUND	10%	6	14	8		28
13	Chavis Heights	OUTBOUND	10%	2	9	7		18

Routes			Sampling G	oals				
Route Number	Name	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
15	WakeMed	INBOUND	8%	20	42	23	11	96
15	WakeMed	OUTBOUND	8%	25	48	27	11	111
16	Oberlin	INBOUND	10%	6	10	8	5	29
16	Oberlin	OUTBOUND	10%	8	10	10	3	31
18	Worthdale	INBOUND	10%	14	11	10	4	39
18	Worthdale	OUTBOUND	10%	10	10	16	7	43
19	Apollo Heights	INBOUND	10%	13	16	8	3	40
19	Apollo Heights	OUTBOUND	10%	9	14	11	6	40
21	Caraleigh	INBOUND	10%	9	6	6	3	24
21	Caraleigh	OUTBOUND	10%	7	8	11	5	31
22	State Street	INBOUND	10%	9	10	4	2	25
22	State Street	OUTBOUND	10%	8	12	7	4	31
50	R-Line	CIRCULAR	10%	19	41	28	13	101
55	Poole Road Express	INBOUND	10%	1	-		1	2
55	Poole Road Express	OUTBOUND	10%		-	1	1	2
60	Wake Forest Express	INBOUND	10%	4	-	2	2	8
60	Wake Forest Express	OUTBOUND	10%	5	-	9		14
62	Wake Forest Loop	CIRCULAR	10%	5	9	6	1	21
63	Knightdale Express	INBOUND	10%	3	-	1		4
63	Knightdale Express	OUTBOUND	10%	1	-	3		4

Routes			Sampling G	pals				
Route Number	Name	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
64	Zebulon/ Wendell Express	INBOUND	10%	6	-	1		7
64	Zebulon/ Wendell Express	OUTBOUND	10%	1	-	5		6
70	Carolina Pines	EASTBOUND	10%	9	11	9	4	33
70	Carolina Pines	WESTBOUND	10%	10	11	11	5	37
76	Johnston County Express	INBOUND	10%	4	-	1		5
76	Johnston County Express	OUTBOUND	10%	1	-	3		4
77	Clayton Express	INBOUND	10%	2	-	1		3
77	Clayton Express	OUTBOUND	10%	1	-	3		4
78	Fuquay Varina Express	INBOUND	10%	3	-	1		4
78	Fuquay Varina Express	OUTBOUND	10%	1	1	3		5
102	Garner	INBOUND	10%	4	-			4
102	Garner	OUTBOUND	10%	2	-			2
110	Buck Jones	INBOUND	10%	5	6	4	3	18

Routes			Sampling G	oals				
Route Number	Name	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
110	Buck Jones	OUTBOUND	10%	4	7	6	6	23
150	Trawick Link	INBOUND	10%	6	6	5	3	20
150	Trawick Link	OUTBOUND	10%	8	8	9	4	29
230	Millbrook Crosstown	INBOUND	10%	9	6	5		20
230	Crosstown		10%	8	7	9		24
240	North Crosstown	EASTBOUND	10%	5	7	6		18
240	North Crosstown	WESTBOUND	10%	7	9	6		22
250	Triangle Town Center	CCW	10%	12	17	10	2	41
400	Wake Tech Express	INBOUND	10%	3	10	2		15
400	Wake Tech Express	OUTBOUND	10%	13	7			20
700	Brier Creek Express	INBOUND	10%	5	-	3	1	9
700	Brier Creek Express	OUTBOUND	10%	4	-	4		8
	Grand Total			630	807	647	239	2,323

### Table 2b – GoTriangle Sample Goals

Routes		Sampling Goals					
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
42	CIRCULAR	10%	3		2		5
46	CIRCULAR	10%	3		3		6
47	CIRCULAR	10%	5		5		10
49	CIRCULAR	10%	3		4		7
100	INBOUND	10%	12	15	10	6	43
100	OUTBOUND	10%	8	16	11	6	41
105	INBOUND	10%	10	2	6	2	20
105	OUTBOUND	10%	9		12		21
201	INBOUND	10%			5		5
201	OUTBOUND	10%	6				6
300	EASTBOUND	10%	7	6	5		18
300	WESTBOUND	10%	6	6	7		19
301	INBOUND	10%	12		14	3	29
301	OUTBOUND	10%	11		15		26
305	INBOUND	10%	5		5		10
305	OUTBOUND	10%	5		4		9
311	INBOUND	10%	4		5		9
311	OUTBOUND	10%	4		4	1	9
900 [CRX]	INBOUND	10%	15		11		26
900 [CRX]	OUTBOUND	10%	11		15		26
901 [DRX]	INBOUND	10%	15		12		27
901 [DRX]	OUTBOUND	10%	8		16	2	26
Grand	Total		162	45	171	20	398

### Table 2c – C-Tran Sample Goals

Routes		Sampling Goals											
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL						
1	CW	20%	8	11	9	3	31						
2	CCW	20%	7	10	8	3	28						
3	INBOUND	20%	5	11	5	2	23						
3	OUTBOUND	20%	3	7	5	2	17						
4	INBOUND	20%	7	9	8	2	26						
4	OUTBOUND	20%	8	13	11	2	34						
5	INBOUND	20%	5	11	11	2	29						
5	OUTBOUND	20%	12	9	6	2	29						
6	INBOUND	20%	5	15	15	2	37						
6	OUTBOUND	20%	12	13	12	2	39						
Grand	Total		72	109	90	22	293						

## Table 2d – Wolfline Sample Goals

Routes		Sampling Goals					
Route Number	Direction	Sampling Rate	AM PEAK	MIDDAY	PM PEAK	EVENING	TOTAL
1	LOOP	2%	16	33	19	4	72
2	LOOP	9%	20	33	16	3	72
3	LOOP	3%	20	45	18	4	87
5	LOOP	5%	24	29	14	2	69
6	LOOP	11%	21	32	16	3	72
7	LOOP	4%	18	46	18	3	85
8	LOOP	3%	19	45	21	7	92
9	LOOP	3%	20	42	17	3	82
10	LOOP	10%	16	31	22	-	69
11	LOOP	20%	21	32	17	-	70
Grand Te	otal		195	368	178	29	770

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# **Appendix C – Sample Expansion**

To analyze the results of the surveys, the sample data must be expanded to the full population size. For the purposes of this report, the survey sample data was expanded based on total daily ridership. The sample data may be used for other purposes in the future, namely updating the regional travel demand model, and expanded by different methods.

The transit agencies provided average daily ridership by route during the scheduled survey period to serve as the population totals. The number of completed surveys for each route was compared to the average daily ridership during the survey period. This ratio was used to develop expansion factors for each route that were used to weight each individual completed survey.

For example, for a route with 90 average daily ridership and 19 completed surveys, the ratio of completed surveys to average daily ridership would be 21%. The expansion factor for the completed surveys, 4.76 would be calculated by dividing 90 by 19. As a result, each of the 19 completed surveys would represent 4.76 average daily riders.

Details on the sample expansion are included as Tables 1a-1d.

### Table 1a – GoRaleigh Survey Expansion Factors

Route	Survey Average Daily Ridership	<b>Completed Surveys</b>	Survey % Daily Ridership	Expansion Factor
1	2,966	398	13.4%	7.45
2	1,379	204	14.8%	6.76
3	415	63	15.2%	6.59
4	1,166	166	14.2%	7.02
5	954	137	14.4%	6.97
6	1,015	153	15.1%	6.63
7	1,682	180	10.7%	9.35
8	653	167	25.6%	3.91
10	414	85	20.5%	4.87
11	1,068	205	19.2%	5.21
12	1,039	133	12.8%	7.81
13	561	62	11.1%	9.05
15	2,584	251	9.7%	10.29
16	605	102	16.9%	5.93
18	826	132	16.0%	6.26
19	844	111	13.1%	7.61
21	672	87	12.9%	7.72
22	599	63	10.5%	9.51
50	819	141	17.2%	5.81
55	35	3	8.5%	11.81

Route	Survey Average Daily Ridership	Completed Surveys	Survey % Daily Ridership	Expansion Factor
60	139	28	20.2%	4.96
62	207	44	21.3%	4.70
63	72	17	23.6%	4.24
64	89	14	15.7%	6.38
70	622	84	13.5%	7.40
76	27	9	33.6%	2.98
77	97	10	10.3%	9.75
78	103	12	11.6%	8.62
102	111	6	5.4%	18.47
110	430	68	15.8%	6.33
150	346	83	24.0%	4.17
230	414	51	12.3%	8.12
240	382	52	13.6%	7.35
250	380	59	15.5%	6.44
400	513	54	10.5%	9.49
700	136	19	13.9%	7.17
System Total	24,365	3,453	14.2%	7.06

### Table 1b – GoTriangle Survey Expansion Factors

Route	Survey Average Daily Ridership	Completed Surveys	Survey % Daily Ridership	Expansion Factor
42	23	9	39.7%	2.52
46	31	10	32.8%	3.05
47	58	14	24.3%	4.12
49	64	10	15.7%	6.36
100	589	98	16.7%	6.01
105	270	38	14.1%	7.12
201	83	14	16.9%	5.92
300	413	45	10.9%	9.19
301	161	56	34.8%	2.87
305	132	25	19.0%	5.27
311	90	19	21.0%	4.76
900 [CRX]	456	56	12.3%	8.14
901 [DRX]	429	67	15.6%	6.41
System Total	2,798	461	16.5%	6.07

### Table 1d– Wolfline Survey Expansion Factors

Route	Survey Average Daily Ridership	<b>Completed Surveys</b>	Survey % Daily Ridership	Expansion Factor
1	3,812	108	2.8%	35.30
2	628	91	14.5%	6.90
3	3,653	148	4.1%	24.69
5	1,433	88	6.1%	16.28
6	643	90	14.0%	7.15
7	2,261	110	4.9%	20.55
8	3,281	136	4.1%	24.13
9	2,928	112	3.8%	26.14
10	939	87	9.3%	10.79
11	364	86	23.7%	4.23
System Total	19,942	1,056	5.3%	18.88

### Table 1c – C-Tran Survey Expansion Factors

Route	Survey Average Daily Ridership	Completed Surveys	Survey % Daily Ridership	Expansion Factor
1	126	34	27.1%	3.70
2	127	45	35.4%	2.83
3	163	63	38.8%	2.58
4	243	89	36.7%	2.73
5	206	84	40.7%	2.45
6	300	105	35.0%	2.85
System Total	1,164	420	36.1%	2.77

# **Appendix D – Trip Origins and Destinations**

Response data for the origin and destination questions, "Where was the very last place you were before getting on the bus?" and "Where are you going once you get off your last bus on this one-way trip?" are summarized as pairs for all systems combined and each individual system in the following tables. Response data for origins are shown in table rows and response data for destinations are shown in table columns.

### All Systems

Origi	n and Destination Pairs fo	or All Systems							Destina	ations								
	From/To	Place of Employment	Oher Work Related	College/ University (students)	School (K-12) (students)	Medical Service/ Hospital (non-work)	Hotel/ Convention Center	Shopping	Restaurant/ Dining	Recreation/ Sightseeing/ Sporting Event	Airport	Your Home	Personal Errand	Social Visit	Church	Other	Total	%
	Place of Employment	103	177	180	11	20	-	221	54	54	12	4,680	10	164	-	6	5,690	11.8%
	Other Work Related	53	32	7	14	9	13	90	19	7	-	536	-	103	-	-	884	1.8%
	College/University (students)	95	60	2,281	5	70	35	377	400	63	-	4,875	-	252	-	-	8,514	17.6%
	School K-12 (students	37	-	-	9	-	-	46	-	22	-	164	8	-	-	-	285	0.6%
	Medical Service/ Hospital (non-work)	13	16	7	7	33	-	69	18	-	-	677	-	62	-	10	912	1.9%
SU	Hotel/ Convention Center	7	-	-	-	-	-	-	19	-	6	26	7	-	-	-	65	0.1%
Origins	Shopping	124	40	74	-	33	-	210	70	49	-	1,955	14	194	-	7	2,768	5.7%
0	Restaurant/Dining	103	20	373	7	10	-	170	34	76	-	622	5	105	-	-	1,525	3.2%
	Recreation/Sightseeing/ Sporting Event	43	12	14	-	29	-	33	33	7	-	474	10	24	-	-	680	1.4%
	Airport	18	-	-	-	-	6	-	-	-	6	82	-	-	-	-	112	0.2%
	Your Home	7,264	1,015	9,559	325	839	7	2,472	869	485	57	7	163	1,634	7	47	24,750	51.3%
	Personal Errand	5	21	-	-	-	7	21	8	-	-	207	15	7	-	-	292	0.6%
	Social Visit	212	34	178	-	46	-	134	62	24	8	868	-	185	6	-	1,757	3.6%
	Church	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	15	0.0%
	Other	-	-	-	-	-	-	10	7	-	-	-	-	10	-	-	27	0.1%
	Total	8,077	1,425	12,674	378	1,089	68	3,853	1,593	786	88	15,186	232	2,741	14	69	48,275	1
	%	16.7%	3.0%	26.3%	0.8%	2.3%	0.1%	8.0%	3.3%	1.6%	0.2%	31.5%	0.5%	5.7%	0.0%	0.1%		

### GoRaleigh

rigin and Destination Pairs f	for GoRaleigh							Destinat	tions								
From/To	Place of Employment	Oher Work Related	College/ University (students)	School (K-12) (students)	Medical Service/ Hospital (non-work)	Hotel/ Convention Center	Shopping	Restaurant/ Dining	Recreation/ Sightseeing/ Sporting Event	Airport	Your Home	Personal Errand	Social Visit	Church	Other	Total	%
Place of Employment	82	71	50	11	20		195	43	21		3,429	7	155		6	4,090	16.8%
Other Work Related	37	32		14	7		82	19	7		462		83			741	3.0%
College/University (students)	48	19	22	5	36		59	13	12		545		30			790	3.2%
School K-12 (students	37			6			21		22		151	8				245	1.0%
Medical Service/ Hospital (non-work)	11	16		7	33		69	18			545		62		10	770	3.2%
Hotel/ Convention Center	7							19			26	7				59	0.2%
Shopping Restaurant/Dining	124	40	5		33		189	67	49		1,544	14	133		7	2,204	9.0%
5 Restaurant/Dining	70		25	7	10		108	27	25		381	5	79		20	756	3.1%
Recreation/Sightseeing/ Sporting Event	19	12			29		17	6	7		193	8	24			315	1.3%
Airport											6					6	0.0%
Your Home	5,331	882	1,161	267	759	7	1,925	525	327	7	7	144	1,292	7	36	12,678	52.0%
Personal Errand	5	21				7	5	8			190	15	7			258	1.1%
Social Visit	212	25	33		46		134	38	21	8	731		158	6		1,410	5.8%
Church											15					15	0.1%
Other							10	7					10			27	0.1%
Total	5,981	1,116	1,296	318	973	14	2,814	789	491	15	8,225	208	2,033	14	78	24,365	100.0%
%	24.5%	4.6%	5.3%	1.3%	4.0%	0.1%	11.5%	3.2%	2.0%	0.1%	33.8%	0.9%	8.3%	0.1%	0.3%	100.0%	1

### GoTriangle

Origin and Destinati	on Pairs fo	or GoTriangle							Destin	ations								
From/	Го	Place of Employment	Oher Work Related	College/ University (students)	School (K-12) (students)	Medical Service/ Hospital (non-work)	Hotel/ Convention Center	Shopping	Restaurant/ Dining	Recreation/ Sightseeing/ Sporting Event	Airport	Your Home	Personal Errand	Social Visit	Church	Other	Total	%
Place of Emple	oyment	6	21					15	4	8	12	771		6			844	30.2%
Other Work R	elated						13	5				23					41	1.5%
College/Univer (students)	rsity								6			113		5			124	4.4%
School K-12 (s	students											10					10	0.4%
Medical Servic Hospital (non-												24					24	0.9%
Hotel/ Conven Center	tion										6						6	0.2%
Shopping												30					30	1.1%
• Restaurant/Di	ning			6								11					17	0.6%
Recreation/Sig Sporting Even												6					6	0.2%
Airport		18					6					49					73	2.6%
Your Home		1,066	44	172	33	62		34	6	8	49			89		8	1,570	56.1%
Personal Erra	nd																-	0.0%
Social Visit			9	6								38					53	1.9%
Church																	-	0.0%
Other																	-	0.0%
Total		1,090	74	184	33	62	19	55	16	16	67	1,075	-	100	-	8	2,798	100.0%
%		39.0%	2.6%	6.6%	1.2%	2.2%	0.7%	2.0%	0.6%	0.6%	2.4%	38.4%	0.0%	3.6%	0.0%	0.3%		

### C-Tran

rigin and Destination Pairs	for C Tran							Destinat	ions								
From/To	Place of Employment	Oher Work Related	College/ University (students)	School (K-12) (students)	Medical Service/ Hospital (non-work)	Hotel/ Convention Center	Shopping	Restaurant/ Dining	Recreation/ Sightseeing/ Sporting Event	Airport	Your Home	Personal Errand	Social Visit	Church	Other	Total	%
Place of Employment	15	3	3				11				227	2	2			264	22.7%
Other Work Related					3		3				4					9	0.8%
College/University (students)					7						13					20	1.7%
School K-12 (students				3							2					5	0.5%
Medical Service/ Hospital (non-work)	3										14					17	1.4%
Hotel/ Convention Center																0	0.0%
Shopping							22	3			86					110	9.5%
Restaurant/Dining							3				4					6	0.6%
Recreation/Sightseeing/ Sporting Event								3			8	3				13	1.1%
Airport																0	0.0%
Your Home	369	24	32		18		155	11	35			2	38		3	689	59.2%
Personal Errand											11					11	0.9%
Social Visit									3		16					19	1.6%
Church																0	0.0%
Other																0	0.0%
Total	388	27	35	3	27	0	193	17	38	0	385	8	41	0	3	1,164	1
%	33.3%	2.3%	3.0%	0.2%	2.4%	0.0%	16.6%	1.4%	3.3%	0.0%	33.1%	0.7%	3.5%	0.0%	0.2%		1

### Wolfline

Origin	and Destination Pairs fo	or Wolfline							Destinatio	ons								
	From/To	Place of Employment	Oher Work Related	College/ University (students)	School (K-12) (students)	Medical Service/ Hospital (non-work)	Hotel/ Convention Center	Shopping	Restaurant/ Dining	Recreation/ Sightseeing/ Sporting Event	Airport	Your Home	Personal Errand	Social Visit	Church	Other	Total	%
_	Place of Employment		82	127					7	24		252					492	2.5%
_	Other Work Related	16		7								48		21			92	0.5%
	College/University (students)	47	41	2,259		28	35	317	381	51		4,204		217			7,581	38.0%
	School K-12 (students							25									25	0.1%
	Medical Service/ Hospital (non-work)			7								93					100	0.5%
	Hotel/ Convention Center																-	0.0%
Origins	Shopping			69								294		61			424	2.1%
0	Restaurant/Dining	33		342				59	7	52		226		26			745	3.7%
	Recreation/Sightseeing/ Sporting Event	24		14				16	24			267					345	1.7%
	Airport											26					26	0.1%
	Your Home	498	65	8,194	24			358	328	115			16	215			9,813	49.2%
	Personal Errand							16				7					23	0.1%
	Social Visit			139					25			83		27			274	1.4%
	Church																-	0.0%
	Other																-	0.0%
	Total	618	188	11,159	24	28	35	792	771	241	-	5,501	16	568	-	-	19,942	100.0%
	%	3.1%	0.9%	56.0%	0.1%	0.1%	0.2%	4.0%	3.9%	1.2%	0.0%	27.6%	0.1%	2.8%	0.0%	0.0%		

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# **Appendix E – Regional Express Routes**

Regional express routes operated by GoRaleigh for GoTriangle (WRX, KRX, ZWX, FRX, JCX, CLX, and 102 to Garner) were surveyed with GoRaleigh routes and results have been included with the GoRaleigh system results. While the regional express buses are a part of GoTriangle's system and included with GoTriangle system maps and schedules, they are operated by GoRaleigh staff and vehicles carry the GoRaleigh branding. There is additional value to evaluating express route service provision as a unique service in a disaggregated manner so that GoTriangle, as well as GoRaleigh can consider the results for this GoTriangle contracted, GoRaleigh operated service.

This section of the report discusses the key findings for regional express fixed route service. Regional express route riders constitute approximately 2.8 percent of GoRaleigh operated ridership (639 of 23,726) and comprise 17.8 percent of GoTriangle's total contracted system ridership (639 of 2,798, including GoRaleigh operated routes). These regional express route riders exhibited a blend of GoRaleigh and GoTriangle ridership characteristics.

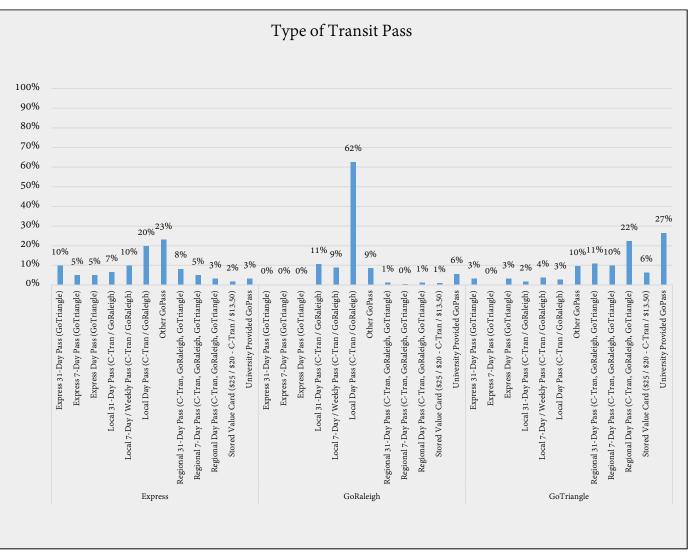
## **Origins and Destinations.**

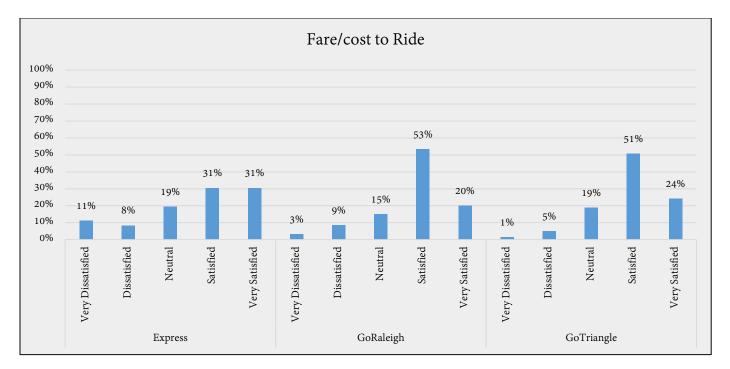
Express route riders exhibited different trip purposes than GoTriangle and GoRaleigh ridership, which can be seen in the table below. For example, express route riders had a higher frequency of college/university trips than GoTriangle and GoRaleigh and had a higher frequency of work trips than GoRaleigh ridership, but a lower frequency of work trips than GoTriangle ridership. Express route riders also made fewer medical, shopping, restaurant/dining, and airport trips than GoTriangle or GoRaleigh riders. It should also be noted that regional express route riders used an automobile to get to their first bus, or from their last bus to their ultimate destination, at a slightly higher rate than GoTriangle and at a much higher rate than GoRaleigh riders.

Trip Purpose Summary								
	E	xpress	GoRal	eigh*	GoTriangle			
Trip Purpose	Total	Percent	Total	Percent	Total	Percent		
Place of Employment	355	55.6%	9,056	38.2%	1,861	66.5%		
College/University	108	17.0%	1,733	7.3%	296	10.6%		
Social Visit	61	9.5%	2,703	11.4%	138	4.9%		
Other Work Related	53	8.3%	1,545	6.5%	97	3.5%		
School (K-12)	21	3.4%	448	1.9%	43	1.5%		
Medical	11	1.8%	1,477	6.2%	86	3.1%		
Other	11	1.7%	483	2.2%	27	1.0%		
Shopping	9	1.4%	4,349	18.3%	85	3.0%		
Recreation	8	1.3%	705	3.0%	22	0.8%		
Restaurant/Dining	0	0.0%	1,169	4.9%	27	1.0%		
Airport	0	0.0%	21.316	0.1%	116	4.2%		

## **Transit Pass**

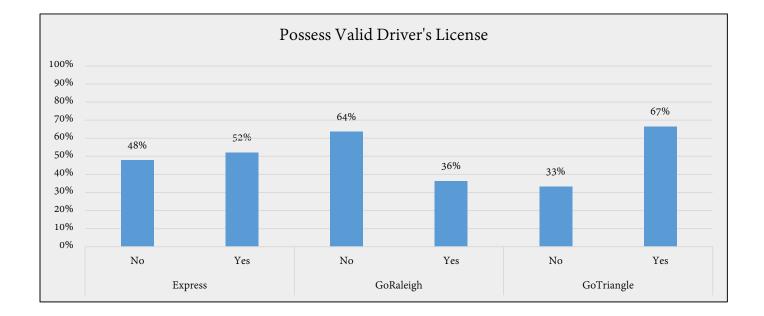
Express route riders use a different composition of transit passes than GoTriangle or GoRaleigh ridership, which is shown in the bar graph on this page. For example, 26% of regional express route riders use a type of GoPass (university provided 3% and other 23%) while 37% of GoTriangle riders (university provided 27% and 10% other) and only 15 percent of GoRaleigh riders (6% university provided and 9% other). Additionally, regional express riders use local day passes at a rate (20%) that is higher than GoTriangle ridership (3%) and less than GoRaleigh ridership (62%). Regional express route riders exhibit higher levels of dissatisfaction (8% dissatisfied and 11% very dissatisfied) with the fare/cost to ride when compared to GoTriangle riders (5% dissatisfied and 1% very dissatisfied). Fare satisfaction by ridership group is also shown on the following page.

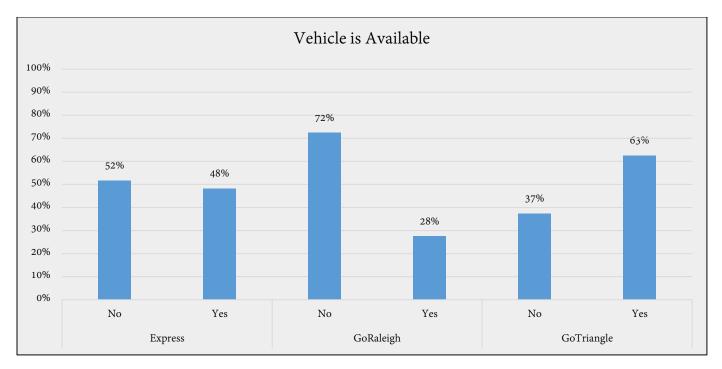




### **Driver's License and Vehicle Availability**

Regional express route riders possess valid driver's licenses at differing rates than GoRaleigh or GoTriangle ridership, which is shown in the bar graph below. Regional express route riders have a lower rate of possessing a driver's license (51%) than GoTriangle ridership (67%) and a higher rate of possessing a valid driver's license than GoRaleigh ridership (36%). It is also worthy to note that regional express route riders have vehicles available for their use at a rate (48%) that is higher than GoRaleigh ridership (28%), but lower than GoTriangle ridership (63%), which is shown in a bar graph on this page.





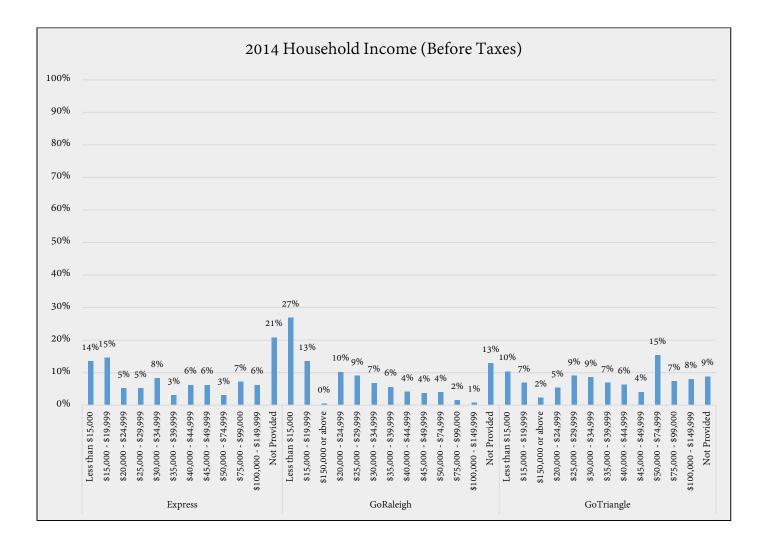
## **Race/ethnicity**

Regional express routes have a different racial and ethnic composition than GoRaleigh or GoTriangle routes, which is shown in the table below. For example, regional express routes have a lower proportion of white riders (29%) than GoTriangle (50%), but a higher proportion of white riders than GoRaleigh (22%). Additionally, express routes have a higher composition of African Americans than GoTriangle (36%) and a lower composition of African-American riders (57%) than GoRaleigh (64%).

Race/Ethnicity by Service Type									
Race/Ethnicity	Express	GoRaleigh	GoTriangle						
White	29%	22%	50%						
African-American	57%	64%	36%						
Native American	0%	1%	1%						
Hispanic-Latino	10%	10%	6%						
Asian American	0%	1%	4%						
Native Hawaiian Pacific Islander	0%	0%	0%						
Other	3%	1%	3%						

### **Household Income**

Regional express route ridership earned different levels of household income in 2014 than GoRaleigh or GoTriangle ridership, which is shown in the bar chart below. For example, regional express ridership had a slightly higher percentage of income earners in the range of less than \$15,000 annually (14%) compared to GoTriangle (10%) and a lower percentage than GoRaleigh ridership (27%). Additionally, regional express route ridership had a slightly lower percentage of income earners in the \$100,000 - \$149,999 income range (6%) than GoTriangle (8%) and a higher percentage than GoRaleigh (1%).

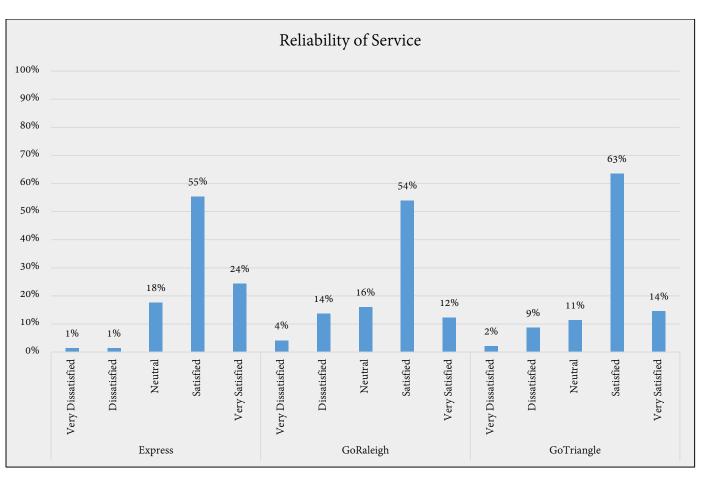


## **Customer Satisfaction**

Several key customer service aspects with results that exhibit differences for regional express routes are presented herein.

### **Reliability of Service**

Regional express route ridership exhibits different levels of satisfaction regarding bus reliability than GoTriangle or GoRaleigh ridership, which is shown in the bar graph on this page. For example, regional express route ridership has lower rates of dissatisfaction (1% very dissatisfied and 1 percent very dissatisfied) with the reliability of bus service than GoTriangle (9% dissatisfied and 2% very dissatisfied) or GoRaleigh (14% dissatisfied and 4% very dissatisfied).

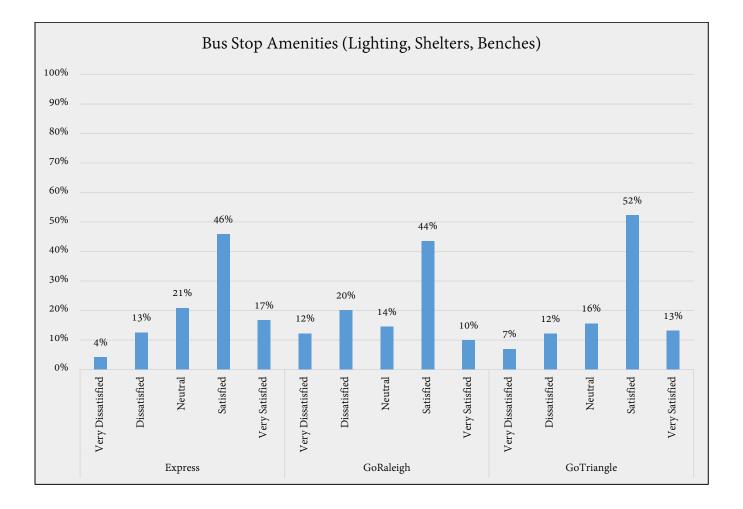


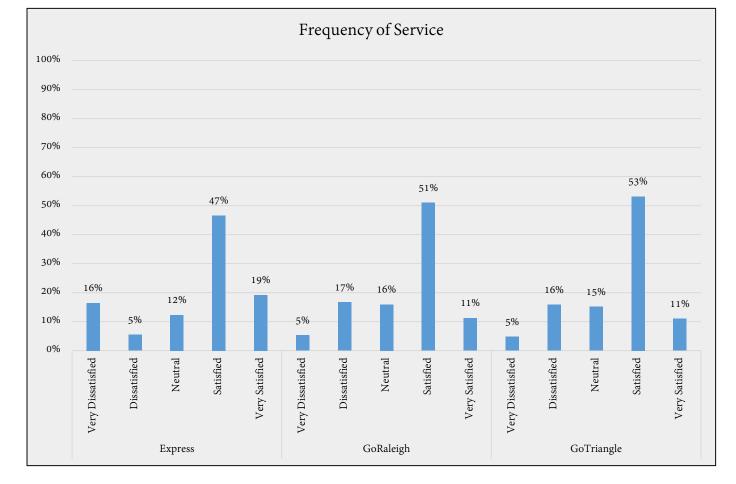
## **Frequency of Service**

Regional express route ridership exhibits differing levels of satisfaction regarding bus frequency than GoTriangle or GoRaleigh ridership, which is shown in the bar graph below. For example, regional express route ridership has higher rates of being very dissatisfied with frequency of service (16%) when compared to GoRaleigh (5%) and GoTriangle (5%). Overall dissatisfaction levels (dissatisfied and very dissatisfied) are similar for regional express, GoTriangle, and GoRaleigh ridership.

## Bus stop amenities

Regional express route ridership exhibits different levels of satisfaction regarding bus stop amenities than GoTriangle or GoRaleigh ridership, which is shown in the bar graph below. For example, regional express route ridership has similar rates of dissatisfaction (13% dissatisfied and 4% very dissatisfied) to GoTriangle (12% dissatisfied and 7% very dissatisfied) and lower rates than GoRaleigh (20% dissatisfied and 12% very dissatisfied).

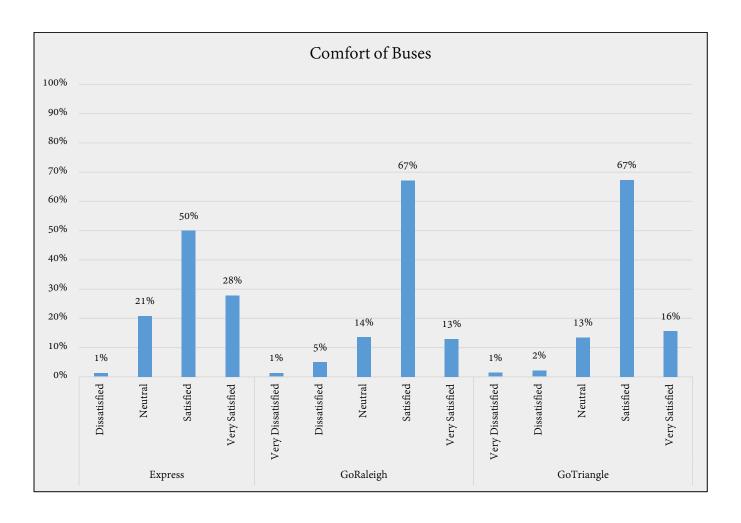


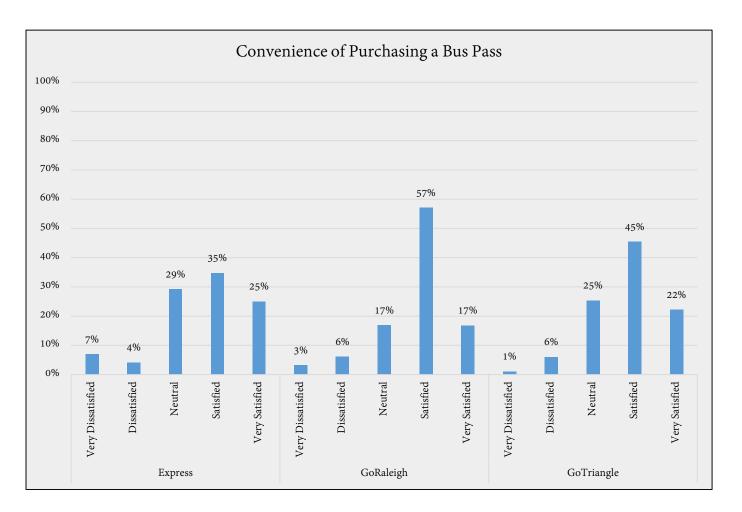


Regional express route ridership exhibits different levels of satisfaction regarding comfort of buses than GoTriangle or GoRaleigh ridership, which is shown in the bar graph on this page. For example, regional express route riders exhibit higher rates for being very satisfied with the comfort of buses (28%) than GoTriangle (16%) or GoRaleigh (13%) riders. Overall rates of satisfaction (satisfied and very satisfied) are similar among regional express, GoTriangle, and GoRaleigh ridership.

## **Convenience of Purchasing a Bus Pass**

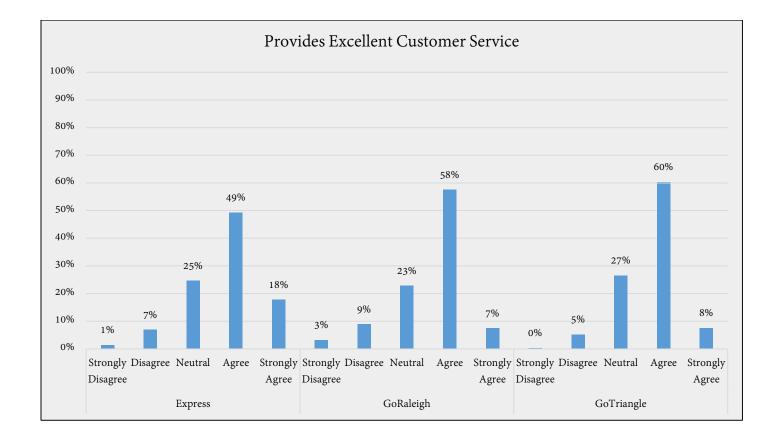
Regional express route ridership exhibits different levels of satisfaction regarding their perception of customer service than GoTriangle or GoRaleigh ridership, which is shown in the bar graph below. For example, regional express route riders exhibit higher rates of being very dissatisfied (7%) than GoRaleigh (3%) or GoTriangle (1%) ridership. Although, overall levels of dissatisfaction (dissatisfied and very dissatisfied) are only slightly higher for regional express ridership when compared to GoTriangle or GoRaleigh ridership.





## **Overall Customer Service Perception**

Express route ridership exhibit different levels of agreement regarding their perception of customer service than GoRaleigh or GoTriangle ridership, which is shown in the bar graph below. While, regional express route ridership exhibits similar overall levels of agreement (agree and strongly agree) regarding the perception of excellent customer service provision as GoTriangle and GoRaleigh ridership, regional express route ridership exhibits a higher level of strongly agreeing (18%) with the perception that customer service provision is excellent than GoTriangle (8%) or GoRaleigh (7%) ridership.



## **Section 8**

# Transit Service Monitoring Program and Reporting



## **Title VI Transit Service Monitoring Procedures**

January 2021

## Introduction

GoRaleigh monitors performance-based data on adopted system-wide service standards and policies to meet federal requirements and to ensure that service design and operations practices do not result in disparities on the basis of race, color, or national origin.

The Federal Transit Administration (FTA) requires public transportation providers that operate 50 or more fixed route vehicles in peak service and are located in an Urbanized Area of 200,000 or more in population to monitor the performance of their transit system relative to their system-wide service standards (*Title VI Requirements and Guidelines for FTA Recipients – Chapter IV, Section 6 Requirements to Monitor Transit Service*).

This document outlines procedures undertaken by GoRaleigh to comply with the FTA Circular C 4701.1B cited above in accordance with the agency's adopted system wide measures. Monitoring procedures include evaluating whether service meets established standards and policies, as well as assessing whether discrepancies exist between minority and non-minority routes.

## **Service Standards and Policies**

FTA requires all fixed route transit providers to develop quantitative standards for fixed route modes of operation for the following indicators:

- Load
- Headway
- On-time performance
- Service availability

FTA further requires that all providers of fixed route public transportation develop policies for the following service indicators:

- Transit amenities
- Vehicle assignment

GoRaleigh's adopted standards and policies are found in Appendix A - *System-wide Service Standards* and *Policies*.

## **Discrepancy Analysis for Minority Routes**

Transportation providers must monitor the performance of minority and non-minority routes for all transit provider service standards and policies, identify when a standard or policy is not met, analyze potential discrepancies between minority and non-minority routes, and determine whether any disparate impacts exist.

Service standards and policies provide the framework for monitoring and assessing service. The analyses of performance for service standards on **vehicle loads**, **service frequency**, **on-time** 

**performance, vehicle assignment, service availability,** and **distribution of amenities** compare the measures for "minority" and "non-minority" routes as defined by the FTA. The evaluations are undertaken based on the FTA definition of "minority route" as follows.

*Minority Route* – a minority transit route is one in which at least one-third of the revenue miles are located in a Census Block, Census Block Group or traffic analysis zone where the percentage minority population exceeds the percentage minority population in the service area.

FTA allows transportation providers to allow for exceptions in determining minority routes. For example, if a route is a commuter route that passes through a minority area with no stops, the Census geographies for the area it passes through with no stops may be omitted.

GoRaleigh will monitor and evaluate performance in regard to established standards and policies triennially. FTA requires transit providers to monitor transit system performance relative to system-wide service standards and policies and carry out the discrepancy analysis at least once every three years. GoRaleigh monitors system performance monthly, quarterly, and annually as well as every three years for the FTA Triennial Review. When discrepancies and potential disparate impacts exist, GoRaleigh must analyze the reason for the discrepancy and take steps to reduce the potential effects.

## **Identifying Minority Routes**

Minority routes are identified for the discrepancy analysis as follows:

- Using GIS, apply a 1/3 mile buffer on all GoRaleigh bus routes
- Determine which Census Block Groups intersect this buffer
- Using GIS, apply a 200-foot buffer to all Census Block Groups with a minority population greater than the system average (200-foot buffer ensures that route segments running along the border of a minority block group are included in the calculation)
- Sum the length of segments intersecting the buffered above average minority Census Block Groups for each route and divide by the total length of the route
- Identify routes with one-third or more of the total length intersecting buffered above average minority Census Block Groups as "minority routes" and record in a table based on Table 1 Minority Routes.

## **Figure 1 - Minority Routes**

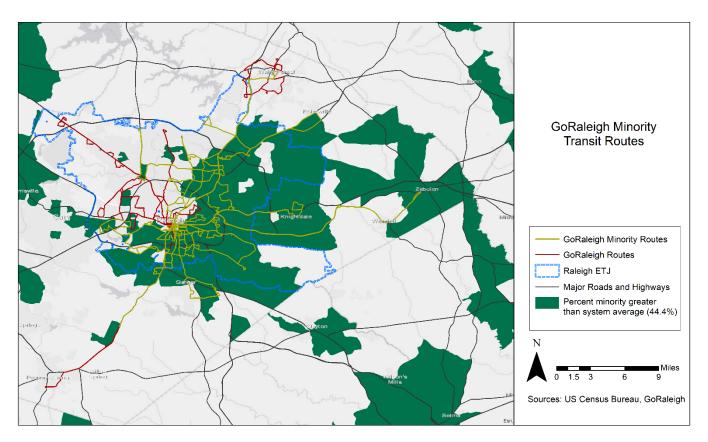


Table 1 - Minority Routes

Route #	Route	Route #	Route
#	Name	#	Name
#	Name	#	Name
#	Name	#	Name

## **Transit Service Monitoring Process**

Monitoring of the service standards that follow and the associated discrepancy analysis must occur once every three years. GoRaleigh currently monitors system performance monthly, quarterly, and annually as well.

## Service Standards

## Vehicle Load

Vehicle load is how many passengers are on a vehicle compared to the vehicle's capacity.

**Standard:** Vehicle load standards establish the average maximum number of passengers allowed per vehicle to provide a safe and comfortable ride. GoRaleigh's vehicle load standard identifies acceptable passenger loads by routes and at different times of the day to help ensure acceptable levels of passenger comfort and operating efficiency. Vehicle loads will not exceed safety and performance measures which vary by vehicle type.

**Title VI Monitoring Measure:** GoRaleigh will monitor the Level of Service (LOS) of all routes and the proportion of minority versus non-minority routes that receive LOS A-C versus LOS D-F as follows. Maximum load factors for the Local and Breeze routes and 1.0 for Premium Express routes, represents the maximum allowable passenger capacity, and are calculated by dividing the total actual capacity by the seated capacity of the vehicle. Data is derived from available samples from Automatic Passenger Counters (APC), and by customer reports. GoRaleigh routinely monitors vehicle load and capacity, and will continue to monitor and adjust schedules as necessary if vehicle loads surpass the adopted standard.

#### Data Collection and Evaluation Steps:

- Collect ridership data for all routes
- Calculate average Passenger Load Factor (passengers/seat) as follows. Divide average daily ridership for each route by the number of trips per day on that route to determine the number of passengers per trip. Divide the number of passengers by the average number of seats available based on the current fleet composition.
- Evaluate LOS for all routes based on the Passenger Load Factor and record the results in a table similar to Table 1 Vehicle Load Analysis
- Total and calculate the percent of minority and non-minority routes for LOS A-C and LOS D-F
- Record the results in a table similar to Table 2 -Vehicle Load Discrepancy Analysis
- For cases where discrepancies exist and there is potential for disparate impacts, identify recommended steps to reduce potential effects

Route #	Route	Average Passenger Load Factor (passengers/seats)	LOS
#	Name		
#	Name		

#	Name		
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#### Passenger Load LOS Key

LOS	Passenger Load factor (p/seat)	Comments			
А	0.00-0.50	No Passengers need to sit next to each other			
В	0.51-0.75	Some passengers will need to sit next to others			
С	0.76-1.00	All passengers can sit through choices will be limited			
D	1.01-1.25	Some passengers required to stand			
E	1.26-1.50	Maximum load of passengers achieved (seated & standees)			
F	>1.50	Crush load			

#### Table 3 - Vehicle Load Discrepancy Analysis

LOS	Minority Routes		Non-minority	Total	
	Number	Percent	Number	Percent	Number
Routes receiving only LOS scores A, B, and/or C					
Routes receiving LOS scores D, E, F at any point					

#### Headway

Bus Headway is defined as the interval of time between buses traveling in any given direction (inbound/outbound) on any given route.

**Standard:** Headways shall vary between peak periods and off-peak periods where demand dictates in order to minimize operating expenses and provide the most efficient service during weekday peak demand periods.

**Monitoring Measure:** GoRaleigh will review the headways for minority versus non-minority routes to see if the proportion of minority or non-minority routes differ by headway grouping (i.e., 15 minute headways, hour headways, or more limited service).

## Data Collection and Evaluation Steps:

- Collect headway data for all routes and record the results in a table similar to Table 3 Headway Analysis.
- Compare headway to standards
- Categorize weekday peak headways for minority and non-minority routes based on 15 minute, 30 minute, and more than 30 minute groups
- Record the results in a table based on Table 4 -Headway Discrepancy Analysis
- For cases where discrepancies exist and there is potential for disparate impacts, identify recommended steps to reduce potential effects

Route #	Route	Weekday		Saturday	Sunday
		Peak	Off-Peak		
#	Name				
#	Name				
#	Name				
#	Name				

## Table 4 -Headway Analysis -

## Table 5 - Peak Period Headway Discrepancy Analysis

Headway	Minority Routes		Non-minority	Total	
	Number	Percent	Number	Percent	Number
15 minute					
30 minute					
More than 30 minute					

#### **On-Time Performance**

# *On-time performance is a measure of the trips completed no later than 5 minutes after the scheduled time.*

**Standard:** GoRaleigh's on-time performance standard is for 85% of trips to be completed no later than 5 minutes after the scheduled time. On-time performance is a measure of how reliably services adhere to the published schedules. It is affected by many variables, including traffic congestion, accidents, weather, road conditions, etc. GoRaleigh continuously monitors on-time performance using , and system results are reported quarterly to the Raleigh Transit Authority.

**Monitoring Measure:** GoRaleigh will monitor the difference between the percent of minority versus non-minority routes not meeting the on-time performance standard.

#### Data Collection/Evaluation:

- Collect on-time performance data for all routes and present the data in a table similar to Table 5 On-Time Performance Analysis
- Compare on-time performance to 85% standard
- Categorize on-time performance for minority and non-minority routes into those meeting or falling below the 85% standard
- Record the results in a table based on Table 6 On-Time Performance Discrepancy Analysis
- For cases where discrepancies exist and there is potential for disparate impacts, identify recommended steps to reduce potential effects

Table 6 - On-T	Time Performance	e Analysis
----------------	------------------	------------

Route #	Route	Departures	Arrivals	On-Time	Early	Late	% On- Time
#	Name						
#	Name						
#	Name						

### Table 7 - On-Time Performance Discrepancy Analysis

On-Time Performance	Minority Routes		Non-minority	Total	
	Number	Percent	Number	Percent	Number
Routes on time ≥85% of time					
Routes on time <85% of time					

## Service Availability

Service availability is a measure of the population with access to a transportation provider's fixed route services.

**Standard:** GoRaleigh evaluates the availability of transit service based on the percent of all residents within a <sup>1</sup>/<sub>3</sub> mile radius of bus service in the potential service area, defined as the City of Raleigh municipal limits. GoRaleigh's goal is to ensure that 90 percent of all residents within the service area are within a 1/3 mile radius of bus service.

**Monitoring Measure:** GoRaleigh will use GIS to apply a ½ mile buffer to its routes and calculate the population within that buffer in comparison to the population of the service area. Population will be allocated based on the proportion of the Census Block Group contained within the buffer. Demographics will be compared for minority and non-minority populations within the buffer and those within the service area as a whole.

## Data Collection/Evaluation:

- Collect demographic data on minority, non-minority, and total population for all Census Block Groups within the Raleigh City limits
- Using GIS, apply a 1/3 mile buffer on all GoRaleigh bus routes
- Determine which Census Block Groups intersect this buffer
- Extract the demographic data for the intersecting Census Block Groups
- Determine the proportion of relevant Census Block Groups covered by the buffer and adjust the demographic data based on the proportion covered by the buffer
- Record the results in a table similar to Table 7 Service Availability and Discrepancy Analysis
- For cases where discrepancies exist and there is potential for disparate impacts, identify recommended steps to reduce potential effects

## Table 8 - Service Availability and Discrepancy Analysis

	Total Population	Minority Population			Non-minority Population		
		Number	Percent	Number	Percent		
Raleigh City Limits (intersecting Block Groups)							
GoRaleigh bus routes 1/3 mile buffer (intersecting Block Groups)							

## Service Policies

## **Transit Amenities**

Transit amenities include amenities for transit riders at bus stops including bus shelters, trash cans and schedule information.

**Policy:** The standard measure for all amenities is to determine equitable distribution within facilities and throughout the GoRaleigh service area based on need, activity and geographical location. Each amenity is monitored separately to ensure that service amenities are equitability distributed. Minimum activity thresholds for siting various stop amenities are presented in the table below.

## Table 9 - Transit Amenity Minimum Thresholds

Amenity	Minimum Threshold
Shelter placement	Average of 10 or more boardings per weekday
Stand-alone seating options	As needed for stops that have either not met the boarding requirements, where shelters are not appropriate, or where right-of-way constraints exist
Park and Ride and Transfer Stations	As needed to meet ridership demand
Real-Time Passenger Advisory Signage	As needed for high ridership locations with potential service to multiple routes and that exhibit transfer opportunities

**Monitoring Measure:** GoRaleigh will calculate the number of candidate shelter and bench locations in total and then calculate the number of locations meeting the bench and shelter standards with those

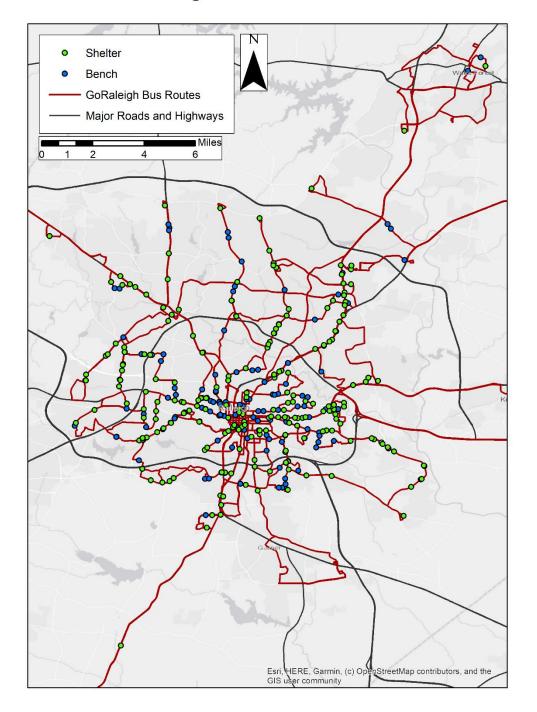
facilities. GIS will then be used to compare the number of candidate stops and stops with amenities in minority Block Groups versus non-minority Block Groups.

## Data Collection/Evaluation:

- Determine all bus stops that meet the appropriate daily boardings threshold
- Determine which of these stops have a bench and shelter
- Categorize each of these bus stops based on whether they are located within a minority Census Block Group or non-minority Census Block Group
- Record the results in a table similar to Table 9 Transit Amenity and Discrepancy Analysis
- For cases where discrepancies exist and there is potential for disparate impacts, identify recommended steps to reduce potential effects

Bus Stops	Minority Block Group		Non-minority Block Group		All Stops	
	Number	Percent	Number	Percent	Number	
>=10 daily boardings	>=10 daily boardings					
Without shelter						
With shelter						
Without bench						
With bench						

## Table 10 - Transit Amenity and Discrepancy Analysis



## GoRaleigh Shelters and Benches

#### **Vehicle Assignment**

*Vehicle assignment is the method by which a transportation provider assigns or rotates vehicles among routes.* 

**Standard:** GoRaleigh randomly assigns vehicles to routes on a daily basis to assure that there are no equity issues. The random daily assignment prevents specific vehicles being placed on specific routes and also ensures that all routes will have access to newer vehicles. While the vehicle assignment process is random, GoRaleigh reviews APC data during the process to ensure that the vehicle size meets the capacity requirements on each route. Some routes have vehicle size restrictions based on the operating environment; therefore, the vehicle assignments on those routes are based on vehicle size rather than random selection of the entire fleet.

**Monitoring Measure:** GoRaleigh will use run cut sheets to make sure that random vehicle assignment occurred on minority versus non-minority routes.

#### Data Collection/Evaluation:

- Collect run cut sheets for all vehicle assignments.
- Verify that no patterns are apparent for vehicle assignment in minority versus non-minority routes
- Verify that distribution of fleet age, ADA accessibility, and bicycle racks on vehicles is equitable.

## **Disparate Impact Review**

Levels and quality of service are analyzed regularly by GoRaleigh for potential disparities. Specific analysis of potential discrepancies on the basis of race, color, or national origin are applied to the results of transit service monitoring for each of the required standards and policies, as described in the preceding sections. In accordance with FTA Circular 4702.1B, "For cases in which the observed service for any route exceeds or fails to meet the standard or policy, depending on the metric measured, the transit provider shall analyze why the discrepancies exist, and take steps to reduce the potential effects." The final evaluation step for the assessment of each standard and policy is to recommend steps to reduce potential effects.

The overall results of the analysis of potential discrepancies and disparate impacts should be summarized at the conclusion of the Monitoring Evaluation. In addition, the Raleigh Transit Authority's service standards and policies are reviewed regularly to ensure equitable transit service to all persons in the City of Raleigh and Wake County.

# Placeholder

GoRaleigh Title VI Service Monitoring Procedures



## Title VI Service Monitoring Results January 2021

#### Background

The Federal Transit Administration (FTA) requires public transportation providers that operate 50 or more fixed route vehicles in peak service and are located in an Urbanized Area of 200,000 or more in population to monitor the performance of their transit system relative to their system-wide service standards (*Title VI Requirements and Guidelines for FTA Recipients – Chapter IV, Section 6 Requirements to Monitor Transit Service*).

Transportation providers must monitor for discrepancies between minority and non-minority routes for all transit provider service standards. When discrepancies exist, GoRaleigh must analyze the reason for the discrepancy and take steps to reduce the potential effects.

FTA requires discrepancy analysis occur at least once every three years. GoRaleigh already monitors system performance quarterly and annually as well as every three years for the FTA Triennial Review.

#### Services Standards and Policies to Evaluate

FTA requires all fixed route transit providers to develop quantitative standards for fixed route modes of operation for the following indicators:

- Load
- Headway
- On-time performance
- Service availability

FTA further requires that all providers of fixed route public transportation develop qualitative policies for the following procedures listed below.

- Transit amenities
- Vehicle assignment

#### **Determination of Minority Routes**

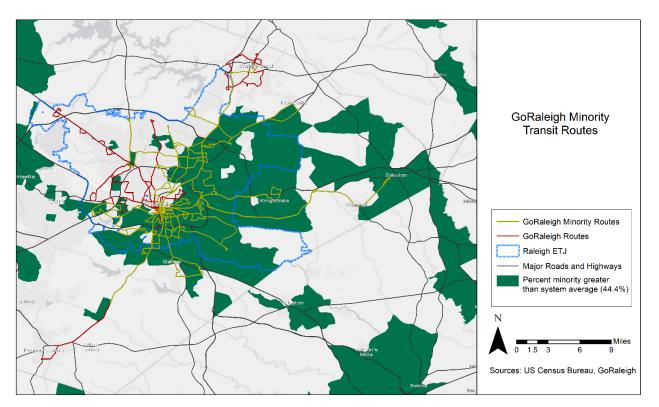
The performance monitoring must factor in impacts to minority populations by comparing impacts of minority routes to non-minority routes using the following FTA definition:

*Minority Route* – a minority transit route is one in which at least one-third of the revenue miles are located in a Census Block, Census Block Group or traffic analysis zone where the percentage minority population exceeds the percentage minority population in the service area. FTA allows transportation providers to allow for exceptions in determining minority routes. For example, if a route is a commuter route that passes through a minority area with no stops, the Census geographies for the area it passes through with no stops may be omitted. Among GoRaleigh's 37 routes, 26 are classified as "minority" routes and 11 are "non-minority" routes. Of the four (4) Express services, three (3) are classified as "minority" routes. Routes shown in Table 1 were determined to meet the definition of minority routes and are illustrated in the map shown in Figure 1.

Route #	Route	Route #	Route
1	Capital	2	Falls of Neuse
5	Biltmore Hills	7	South Saunders
7L	Carolina Pines	10	Longview
11	Avent Ferry	11L	Buck Jones
13	Chavis Heights	15	WakeMed
15L	Trawick	17	Rock Quarry
18	Poole/ Barwell	18S	Poole
19	Apollo Heights	20	Garner
21	Caraleigh	22	State Street
23L	Millbrook	24L	North Crosstown
25L	Triangle Town Center	33	Knightdale
36	Creedmoor	40X	Wake Tech Express
55X	Poole Road Express	401X	Rolesville

#### Table 1 - Minority Routes

#### **Figure 1 - Minority Routes**



#### **Monitoring Results**

Monitoring results are based on data from October 2019. This date was chosen to best represent typical performance as October is typically a high ridership time period and 2019 was prior to the COVID-19 pandemic. During the pandemic, ridership has dropped and

#### Vehicle Load – is how many passengers are on a vehicle compared to the vehicle's capacity.

The average of all loads during the peak operating period should not exceed vehicles' achievable capacities. When maximum load factors are reported as being exceeded, the ridership will be monitored to determine if the load factor is being exceeded on a regular basis. If load factors are exceeded regularly, GoRaleigh will evaluate whether frequency on that route should be adjusted within the confines of the expected funding levels, then determine to either substitute a larger vehicle or make minor modification to routes or schedules in order to bring the service within the vehicle load standards.

Table 2 - Vehicle Load Analysis (Average Passenger Load	d per Route)
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Route #	Route	Average Passenger Load Factor (passengers/seats)	LOS
1	Capital	0.61	В

2	Falls of Neuse	0.55	В
3	Glascock	0.23	А
4	Rex Hospital	0.35	А
5	Biltmore Hills	0.40	А
6	Crabtree	0.50	А
7	South Saunders	0.44	А
7L	Carolina Pines	0.29	А
8	Six Forks	0.41	А
10	Longview	0.26	А
11	Avent Ferry	0.58	В
11L	Buck Jones	0.25	А
12	Method	0.47	А
13	Chavis Heights	0.17	А
15	WakeMed	0.52	В
15L	Trawick	0.19	А
16	Oberlin	0.34	А
17	Rock Quarry	0.34	А
18	Poole / Barwell	0.31	А
18S	Poole	0.25	А
19	Apollo Heights	0.29	А
20	Garner	0.13	А
21	Caraleigh	0.35	А
22	State Street	0.27	А
23L	Millbrook	0.24	А
24L	North Crosstown	0.24	А
25L	Triangle Town Center	0.40	А

26	Edwards Mill	0.12	А
27	Blue Ridge	0.12	А
33	Knightdale	0.11	А
36	Creedmoor	0.12	А
40X	Wake Tech Express	0.14	А
55X	Poole Road Express	0.44	А
70X	Brier Creek Express	0.25	А
401X	Rolesville Express	0.07	А
R	R-Line	0.22	А
37	Wake Forest Loop	0.10	А

## Passenger Load LOS Key

LOS	Passenger Load factor (p/seat)	Comments
А	0.00-0.50	No Passengers need to sit next to each other
В	0.51-0.75	Some passengers will need to sit next to others
С	0.76-1.00	All passengers can sit through choices will be limited
D	1.01-1.25	Some passengers required to stand
E	1.26-1.50	Maximum load of passengers achieved (seated & standees)
F	>1.50	Crush load

## Table 3 - Vehicle Load Discrepancy Analysis

LOS	Minority Routes		Non-minority Routes		Total
103	Number	Percent	Number	Percent	Number
Routes receiving only LOS scores A, B, and/or C	26	72%	11	28%	36
Routes receiving LOS scores D, E, F at any point	0	0%	0	0%	0

## *Headway* - is defined as the interval of time between buses traveling in any given direction (inbound/outbound) on any given route.

Headways shall vary between peak periods and off-peak periods where demand dictates in order to minimize operating expenses and provide the most efficient service during weekday peak demand periods. Headways shall be at their maximum when minimum service is provided during off-peak periods. Further, GoRaleigh has established the following headways where economically feasible:

- Peak period headways shall not exceed 30 minutes;
- Off peak headways shall not exceed 60 minutes;
- Peak period headways on connecting services shall be no greater than 35 minutes.

Headways are reviewed when vehicle load issues arise based on review of stop-level data, when customer service or operator complaints are received, or when public requests for additional services are received through the various opportunities for public input. When funding is available, headways are increased on routes without excess capacity or in areas that, because of development patterns, have greater density to successfully support increased transit service. When adjustments are made to headways, the GoRaleigh Planner reviews the system to ensure that there are no disparate impacts created from the frequency adjustments.

The following factors are examined if and when adjusting headways needs to be considered:

- Load factor
- Passenger demand
- Route length
- Running time
- Passenger volume
- Proximity of route terminal to operating facilities of other routes
- Equipment allocation

#### Table 4 -Headway Analysis

Route #	Route	Weekday		Saturday	Sunday
		Peak	Off-Peak		
1	Capital	15	15 or 60	30 or 60	30 or 60
2	Falls of Neuse	30	30 or 60	60	60
3	Glascock	30	60	60	60
4	Rex Hospital	30	30	30	30

5	Biltmore Hills	30	60	60	60
6	Crabtree	30	60	60	60
7	South Saunders	15	15 or 60	30 or 60	30 or 60
7L	Carolina Pines	30	60	60	60
8	Six Forks	30	60	60	60
10	Longview	30	60	60	60
11	Avent Ferry	30	60	60	60
11L	Buck Jones	60	60	60	60
12	Method	30	60	60	60
13	Chavis Heights	30	30	30	30
15	WakeMed	15	15 or 60	30 or 60	30 or 60
15L	Trawick	45	45	45	45
16	Oberlin	30	60	60	60
17	Rock Quarry	60	60	60	60
18	Poole / Barwell	30	60	60	60
18S	Poole	60	-	No service	No service
19	Apollo Heights	15	15 or 30	30	30
20	Garner	30	30 or 60	No service	No service
21	Caraleigh	30	30 or 60	30 or 60	30 or 60

		-	-	-	
22	State Street	30	30 or 60	30 or 60	30 or 60
23L	Millbrook	30	60	60	60
24L	North Crosstown	30	60	60	60
25L	Triangle Town Center	60	60	60	60
26	Edwards Mill	30	60	30 or 60	30 or 60
27	Blue Ridge	30	30 or 60	30 or 60	30 or 60
33	Knightdale	60	60	No service	No service
36	Creedmoor	30	30 or 60	30 or 60	30 or 60
40X	Wake Tech Express	30	-	No service	No service
55X	Poole Road Express	Variable	Variable	Variable	Variable
70X	Brier Creek Express	60	-	Peak only	Peak only
401X	Rolesville Express	60	-	No service	No service
R	R-Line	15	15	15	15
37	Wake Forest Loop	60	60	60	60

#### Table 5 -Peak Period Headway Discrepancy Analysis

Headway	Minority Routes*		Non-minority	Total	
neauway	Number	Percent	Number	Percent	Number
15 minute	4	80%	1	20%	5
30 minute	14	64%	8	36%	22
35 minutes or more	7	78%	2	22%	9

\*The Poole Road Express, a minority route, has variable headway times even during weekday peak hours and is not included in the headway discrepancy analysis

**On-Time Performance** - a measure of the trips completed no later than 5 minutes after the scheduled time.

GoRaleigh's on-time performance standard is for 85% of trips to be completed no later than 5 minutes after the scheduled time.

#### Table 6 -On-Time Performance

Goralei	<u>yn O</u> i	гU	CLODE	51 20	19			
Route	Total	Total	Total	Total	Total	%	Grade	OTP +
	Departures	Arrivals	On-Time	Early	Late	On-Time	Grade	Early
10 LONGVIEW	2250	2248	2078	25	147	92%		93%
7L CAROLINA PINES CROSSTOWN	2537	2547	2337	7	193	92%	Α	92%
7 SOUTH SAUNDERS	5000	5031	4551	4	445			91%
19 MLK-SUNNYBROOK	6001	6051	5369	106	526	89%		91%
36 CREEDMOOR	3781	3837	3342	43	396	88%		90%
33 KNIGHTDALE	1129	1137	990	33	106	88%		91%
16 OBERLIN ROAD	3422	3481	2969	69	384	87%	в	89%
25L TRIANGLE TOWN CENTER	3267	3374	2832	75	360	87%		89%
17 ROCK QUARRY	2830	2831	2423	81	326	86%		88%
27 BLUE RIDGE	4947	4990	4198	99	650	85%		87%
26 EDWARDS MILL	4263	4303	3602	116	545	84%		87%
12 METHOD	2989	3100	2515	63	411	84%		86%
15 WAKEMED	8408	8401	6989	61	1358	83%		84%
15L TRAWICK	2584	2587	2147	9	428	83%		83%
1 CAPITAL	8292	8328	6808	84	1400	82%	с	83%
6 CRABTREE	3309	3301	2701	42	566	82%	Ľ	83%
5 BILTMORE HILLS	2794	2753	2279	76	439	82%		84%
20 GARNER	1312	1354	1070	60	182	82%		86%
22 STATE STREET	1689	1686	1363	27	299	81%		82%
18 POOLE-BARWELL	5011	5012	3997	122	892	80%		82%
4 REX HOSPITAL	7547	7605	5991	182	1374	79%		82%
2 FALLS of NEUSE	6077	6131	4802	73	1202	79%		80%
11 AVENT FERRY	3576	3588	2824	65	687	79%		81%
13 CHAVIS HEIGHTS	2473	2409	1926	46	501	78%		80%
8 SIX FORKS	4801	4778	3683	57	1061	77%		78%
401X ROLESVILLE EXPRESS	219	213	167	20	32	76%		85%
3 GLASCOCK	1772	2158	1346	10	416	76%		77%
21 CARALEIGH	1192	1211	902	94	196	76%		84%
18S POOLE RD	758	750	559	16	183	74%		76%
23L MILLBROOK CROSSTOWN	2789	2798	1940	21	828	70%		70%
24L NORTH CROSSTOWN	2992	2944	1925	11	1056	64%		65%
55X POOLE ROAD EXPRESS	255	259	159	13	83	62%		67%
70X BRIER CREEK EXPRESS	593	603	330	5	258	56%		56%
11L BUCK JONES	3144	3187	1150	127	1867	37%		41%
	114003	114986	92264	1942	19797	81%		83%
	Total	Total	Total	Total	Total	%		OTP +
	Departures	Arrivals	On-Time	Early	Late	0n-Time	Grade	Early
64X ZEBULON/WENDELL-RALEIGH EXPRESS (ZWX)	642	642	463	<b>Earry</b> 18	161	72%		75%
WAKE FOREST EXPRESS (WFX)	428	423	308	6	101	72%		73%
FUQUAY-VARINA-RALEIGH EXPRESS (FRX)	420	423	294	26	114	67%		73%
WAKE FOREST LOOP	1159	1169	698	75	386	60%		67%
40X WAKE TECH	856	861	489	75	360	57%		58%
HUN WARE TEUR	000	001	409	C	302	51%		3070

## GoRaleigh OTP October 2019

#### Table 7 - On-Time Performance Discrepancy Analysis

On-Time	Minority Routes		Non-minority	Total	
Performance	Number	Percent	Number	Percent	Number
Routes on time ≥85%	8	80%	2	20%	10
of time					
Routes on time <85%	18	67%	9	33%	27
of time					

*Service Availability* - is a measure of the population with access to a transportation provider's fixed route services.

GoRaleigh evaluates the availability of transit service based on the percent of all residents within a 1/3 mile radius of bus service in the potential service area, defined as the City of Raleigh municipal limits.

#### Table 8 - Total Population

Coographic Extent	Total	Minority P	opulation	Non-minority Population		
Geographic Extent	Population	Total	Percent	Total	Percent	
Raleigh City Limits (intersecting Block Groups)	404,076	180,304	45%	223,772	55%	
GoRaleigh bus routes 1/3 mile buffer (intersecting Block Groups)	333,873	157,547	47%	176,326	53%	

**Transit Amenities** - include amenities for transit riders at bus stops including bus shelters, trash cans and schedule information.

The standard measure for all amenities is to determine equitable distribution within facilities and throughout the GoRaleigh service area based on need, activity and geographical location. Each amenity is monitored separately to ensure that service amenities are equitability distributed.

## Table 9 - Transit Amenities and Discrepancy Analysis

Bus Stops	Minority Block Group		Non-mino Gro	All Stops		
	Number	lumber Percent Number		Percent	Number	
>=10 daily boardings						
Without shelter	74	63%	44	37%	118	
With shelter	105	71%	43	29%	148	
Without bench	79	68%	37	32%	116	
With bench	100	67%	50	33%	150	

## *Vehicle Assignment* - is the method by which a transportation provider assigns or rotates vehicles among routes.

GoRaleigh randomly assigns vehicles to routes on a daily basis to assure that there are no equity issues. The random daily assignment prevents specific vehicles being placed on specific routes and also ensures that all routes will have access to newer vehicles. While the vehicle assignment process is random, GoRaleigh reviews APC data during the process to ensure that the vehicle size meets the capacity requirements on each route. Some routes have vehicle size restrictions based on the operating environment; therefore, the vehicle assignments on those routes are based on vehicle size rather than random selection of the entire fleet.

In following the vehicle random assignment policy, no patterns were found.

#### **Disparate Impacts Review**

No disparities in either levels or quality of service during the past three (3) year period have been found with analyzing the equity of system transit service. The Raleigh Transit Authority's service standards and policies are reviewed regularly to ensure equitable transit service to all persons in the City of Raleigh and Wake County.

# [Placeholder for Information also in Folder 6]

GoRaleigh Title VI Service Monitoring Procedures

## Log of Board Minutes and Resolutions

Program Element (Study or Document)	Date of Board Approval (MM/YYYY)
GoRaleigh 2017 Smartcard Fare Equity Analysis	05/2017
GoRaleigh 2017 Service Changes Service Equity Analysis	06/2017
GoRaleigh 2018 Fare Equity Analysis of Free Youth GoPasses	05/2018
GoRaleigh 2018 Title VI Fare Structure Equity Review	02/2019
GoRaleigh FY 2020 Service Changes Title VI Service Equity Analysis	10/2019
GoRaleigh R-Line Service Changes Service Equity Analysis	02/2020
Title VI Service Equity Analysis for Garner Route 20 and Caraleigh Route 21	06/2020

# [Placeholder for all Supporting Documents of Board Approvals]

## **Section 9**

## **Service and Fare Changes**



## Title VI Procedures for Evaluating Major Service and Fare Changes

January 2021

## Purpose

The methods described in this document are used by GoRaleigh to evaluate whether proposed major service or any fare changes will have a disparate adverse impact on minority populations and/or a disproportionate burden low-income populations. The proposed methods adhere to the Federal Transit Administration (FTA) Circular 4702.1B. This Circular requires that transit providers operating 50 or more fixed route vehicles in peak service and located in an urbanized area of 200,000 people or more develop written procedures and policies to address major service changes and any fare changes.

## Major Service Change Methodology

This section outlines what constitutes a major service change for GoRaleigh and explains the policies for determining if a proposed service change will have a disparate impact on minority populations or a disproportionate burden on low-income populations. The methods for applying the policies are also explained. Refer to Figure 1 for a flow chart outlining the Equity Analysis process. The service and fare equity policies are in Attachment B - Service and Fare Equity Policies.

## Policy Definitions

#### Major Service Change

A "major service change" is defined as any of the following, and shall require a service equity analysis:

- The addition of a route;
- The elimination of a route
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles on any route;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours;
- The expansion or reduction in regular days of service on any route; or
- A system-wide change concurrently affecting five percent or more of the total system revenue hours.

The following types of activities are not classified as "major service changes" and shall not require a service equity analysis:

- Service for special events;
- Temporary routing changes to address road construction, maintenance or closures; changes or additions to service operated during emergencies; and detours caused by labor strikes, fuels shortages or safety concerns; route number designation changes; the introduction or discontinuation of short or limited-term service (e.g., promotional, demonstration, seasonal or emergency service, or service provided as mitigation or diversions for construction or other similar activities), as long as the service will be/has been operated for no more than 12 months; or

• Any service change that does not meet the conditions of a major service changes as defined above.

Service change proposals that do not meet the criteria for "major" service changes are still subject to an appropriate level of public review and comment. GoRaleigh shall consider the degree of adverse effects and analyze those effects when planning major service changes.

Transit providers that have implemented or will implement a New Start, Small Start, or other new fixed guideway capital project shall conduct a service and fare equity analysis, regardless of whether the project qualifies as a major service change under this policy. Refer to FTA Circular 4702.1B, Chapter IV, page 21, section (c) for more information.

## Disparate Impact Policy - Service Equity Analysis

The GoRaleigh disparate impact policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by minority populations. GoRaleigh considers impacts to be disparate any time adverse impacts borne by minority populations differ from impacts borne by non-minority populations by **5 percent**. GoRaleigh evaluates the threshold based on the difference in the minority population or ridership on the affected routes compared to the minority populations served by the system overall. When disparate impacts are identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disparate impacts.

## Disproportionate Burden Policy - Service Equity Analysis

The GoRaleigh disproportionate burden policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by low-income populations. GoRaleigh considers impacts to be disproportionate when adverse impacts borne by low-income populations differ from impacts borne by non-low-income populations by **2.5 percent**. GoRaleigh evaluates the threshold based on the difference in the low-income population or ridership on the affected routes compared to the low-income populations served by the system overall. When disproportionate impacts are identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disproportionate impacts.

## Analysis Methods & Data Sources

The following methods are used to apply GoRaleigh's low-income and minority thresholds to proposed route changes that qualify as major service changes. This method applies to changes in service span, service headway, and route alignment, as well as new and deleted routes.

 Pull data for analysis: Use the most current year of the US Census American Community Survey (ACS) 5-year annual estimates. Conduct the analysis at the Block Group level. Use Table B03002 "Hispanic or Latino Origin by Race" to estimate minority populations and Table C17002 "Ratio of Income to Poverty Level in the Past 12 Months" to estimate low-income populations. Pull data for affected routes and the overall system. Rider survey data may be substituted if deemed more relevant for changes in service span, headway or route elimination. Analysis for new routes or new route alignments will require use of Census Block Group data.

- **Conduct service impact analysis:** Consider impacts on populations within a 1/3-mile buffer area of Local and Express bus routes, or riders on these routes identified through survey data. Using Geographic Information Systems (GIS), apply the buffer to Census Block Groups to calculate the low-income and minority populations, or calculate these based on survey demographics. Block Groups will not correspond perfectly with the buffer area. Use discretion to determine when only a portion of a Block Group's population will be included for analysis.
- Determine if service change(s) exceed thresholds: Compare the population data from the American Community Survey, or the rider survey, for the affected route to the population served by the system overall. Determine if the difference exceeds the 5 percent (minority) or 2.5 percent (low-income) thresholds.
- Evaluate and mitigate impacts: Evaluate the proposed service changes to see if mitigation measures could lessen impacts to minority and low-income populations or if the proposed service changes need to be reevaluated. If another proposed service change occurring at the same time will improve service in the same area, note how the proposed service change will mitigate impacts.

## Fare Change Methodology

This section explains GoRaleigh's thresholds for determining whether a proposed fare change could have a disparate impact on minority populations or a disproportionate burden on low-income populations. The methods for applying the policies are also explained. Refer to Figure 1 for a flow chart outlining the Equity Analysis process.

## Fare Change Policy Definitions

GoRaleigh will use the following definitions and criteria to evaluate the impacts of a proposed fare change on minority and low-income populations.

## Fare Change Disparate Impact Policy - Fare Equity Analysis

The GoRaleigh disparate impact policy establishes a **3 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by minority populations. The thresholds apply to the difference in the impacts of each proposed fare change on minority populations compared to the impacts on non-minority populations. This is measured by analyzing ridership surveys as to whether minority riders are more likely to use each mode of service, payment type, or payment media that would be subject to the fare change.

## Disproportionate Burden Policy - Fare Equity Analysis

The GoRaleigh disproportionate burden policy establishes a **5 percent** threshold for determining when adverse impacts of fare changes are disproportionately borne by low-income populations. The thresholds apply to the difference in the impacts of each proposed fare change on low-income populations compared to the impacts on other populations. This is measured by analyzing ridership surveys as to whether low-income riders are more likely to use each mode of service, payment type, or payment media that would be subject to the fare change.

## Fare Equity Analysis Methods & Data Sources

The following methods are used to apply GoRaleigh's low-income and minority thresholds to proposed fare changes.

- Determine ridership and demographic variables by fare type. Determine the overall ridership and ridership by fare category for low-income and minority GoRaleigh riders using on-board survey data.
- **Apply thresholds.** Apply the thresholds to each payment type with a proposed fare change to determine if any minority and low-income populations exceed the threshold for any payment type.
- **Evaluate and mitigate impacts.** Examine the proposed fare changes exceeding the thresholds and recommend actions to avoid, minimize, or mitigate impacts as needed.

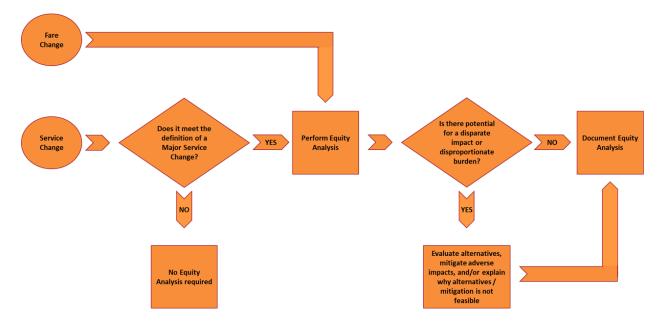


Figure 1 - Service and Fare Equity Analysis Process

## Additional Transit Equity Considerations

Transit service and fare changes have many impacts, some of which are difficult to quantify or are not required to be analyzed by FTA. While no specific analysis procedures are defined for the following impacts and populations, integrating qualitative methods, supported by quantitative data where available and/or applicable, is recommended.

## Other Title VI Related Populations

Title VI encourages equity for all populations that may face discrimination and other challenges. In addition to minority and low-income populations, the following populations may be considered during service or fare equity analysis.

• **Seniors and youth:** These populations have less access to personal automobiles and are more likely to depend on transit to fulfill their transportation needs.

- **People with disabilities:** Many people with disabilities are not able to operate a personal automobile and often are not able to use active transportation to effectively access the destinations they need to reach. Furthermore, paratransit service is determined based on proximity to standard fixed route transit service.
- **Unemployed persons:** Unemployed persons may or may not be low income earners, and may also have less access to personal automobiles. Transit service provides an effective mode to reach jobs and other key destinations. Furthermore, economic activity encouraged by transit development may lead to new job opportunities.

## **Related Impacts**

Transit facilities, service, and fare structure impact the community at large in a variety of ways, intended or unintended. While not exhaustive, the following list enumerates areas potential benefits, challenges, and impacts related to transit. Potential impacts should be qualitatively described where a related impact would have a notable effect that would not be otherwise captured in other analysis.

- Housing: Transit service is most beneficial in areas that have high low-income populations and/or affordable housing. These populations are less likely to own a personal vehicle and are more likely to be transit dependent. Transit service, however, may increase property values which can raise housing prices and reduce the supply of affordable housing in an area.
- **Economy:** Transit stations often bring increased economic activity into the surrounding area. This effect is most pronounced in densely populated areas with a variety of land uses. Many transit agencies and communities explicitly plan for Transit Oriented Development to take advantage of this effect, and often to mitigate issues with housing affordability before residents are priced out.
- **Health:** Transit service provides additional transportation options beyond automobiles and may lead to lower automobile Vehicle Miles Traveled in a community, reducing emissions and increasing air quality. Multimodal transportation options also encourage the use of active transportation modes such as walking and cycling, leading to health benefits in the populations that use these modes.
- **Resilience:** Transit resilience interacts with other impacts. By providing a reliable mode of transportation in a community, that community will have more options when facing traffic congestion. Community members also have an alternative method of travel if their personal vehicle breaks down; those who do not own a vehicle are able to more easily access jobs, healthcare, and other destinations.

## Public Participation Procedures

GoRaleigh will adhere to FTA Title VI public outreach requirements when proposing major service or fare changes. This includes engaging the public to provide input on updates to definitions of disproportionate burden and disparate impact thresholds for both service and fare changes. Public input will also be sought on updates to what constitutes a major service change. The agency's Public Participation Plan should be referred to and provides guidance on

conducting outreach and provides a Public Participation Plan template for planning outreach for major initiatives.

For all proposed fare and/or route changes, GoRaleigh will hold at least one public hearing, with a minimum of two public notices prior to the hearing in order to receive public comments on the proposed fare changes. The first meeting notice will occur at least 30 days prior to the scheduled hearing date, with the second notice being made at least 10 days prior to the scheduled hearing date. Public materials will be produced in English or in other languages upon request, in order to ensure Limited English Proficient (LEP) populations within the transit service area are informed of the proposed service changes and can participate in community discussions. GoRaleigh will conduct a fare equity analysis and publish such analysis for the public's consideration prior to any public hearings associated with the proposed fare changes.

GoRaleigh utilizes a variety of methods in order to receive public comments on the proposed fare changes. GoRaleigh uses the following methods and techniques:

- **Website:** staff updates the site at GoRaleigh.org as needed with agendas and minutes from meetings, as well as draft and final plans and programs. The website also serves as a medium by which the public can submit comments and requests.
- News Media (News and Observer, Que Pasa, English and Spanish Radio, etc.)
- Legal Advertised Notices: GoRaleigh will announce all legal notices
- **Board Meetings:** The Raleigh Transit Authority meets the second Thursday of each month at 3:30 p.m. at City Hall located at 222 West Hargett Street Raleigh NC 27602, or virtually. These meetings are open to the public and include an opportunity for the public to comment on any item relating to transit.
- **Public Meetings/Hearings:** These activities provide opportunities for public input throughout the planning process. The results and comments obtained at these meetings are incorporated into the appropriate planning documents and meeting minutes. GoRaleigh strives to provide widespread access to these forums by conducting them at accessible times and locations. In addition, presentations at partner agency meetings are scheduled to inform and engage. Supplemental materials such as questionnaires, surveys, and handouts of presentation materials may be distributed to the planning partners, interested parties, and posted on the website to accommodate those unable to participate in person.
- **Contacts Lists** (continually updated by GoRaleigh): Raleigh Transit Authority, Human Service Organizations, Chamber of Commerce, Business Associations, State Agencies, Federal Agencies, Senior Groups, and other stakeholders.
- **Partner Engagement:** Conversations with partners, non-profits, and faith based organizations that serve Title VI and non-English speaking populations. These partners may engage their constituents and help ensure their constituents are aware of when these changes occur and how to provide input.
- **Surveys:** Surveys, which may be project-specific, are used during the updates of plans for data gathering. The survey process and the survey results are incorporated into their respective planning documents.
- **Press Releases:** GoRaleigh may issue press releases on projects and programs to the media, and often, those projects are in the news. Press releases will be sent to the news

organizations in English and Spanish to announce upcoming meetings and activities and to provide information on specific issues being considered by GoRaleigh.

- **Direct Mailings:** GoRaleigh will often send information directly to individuals (electronically and written). GoRaleigh maintains a master database of contact information for business, federal, state and local agencies, public bodies and interested individuals.
- **Paid Advertisements:** To promote its services or collect public comments, GoRaleigh may place paid advertisements in local printed or online publications or websites.
- **Community Outreach Booths:** Occasionally, GoRaleigh staffs tables or booths at community events and public gathering spaces to raise awareness of services and/or promote ridership.

## Attachment A - Definitions

## Adverse effects

Adverse effects of service changes are defined as: a decrease in the level of transit service (hours, days, and/or frequency); and/or Decreased access to comparable transit service, which is defined as an increase of the access distance to beyond one-third mile of bus stops. Denial of benefits to minority or low-income populations may also be considered adverse effects.

## **Disparate Impact**

FTA Circular 4702.1B identifies disparate impacts as a "racially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin."

## **Disproportionate Burden**

FTA Circular 4702.1B defines disproportionate burden as "a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations."

## **Express Bus Service**

Express routes operate non-stop or with limited stops along the body of the route. Stops are generally only available at the beginning and end points of the route.

## Local Bus Service

Local bus service operates with frequent stops along the body of the route. Most local routes are radially extending from downtown, however, some local routes are crosstown routes not originating or terminating downtown.

## Low Income Persons and Populations

FTA Circular 4702.1B states that "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or within a locally developed income threshold that is at least as inclusive as these guidelines. For these policies, persons with household incomes below 150 percent of the federal poverty level for a regionally average household size are determined to be low-income. Low-income population is defined by FTA as any readily identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data on low-income populations is obtained from the U.S. Census Bureau and transit agency ridership surveys dependent upon the analysis required.

## Mitigation

Mitigation refers to actions that will limit adverse effects when there is not a feasible alternative which avoids adverse effects. Mitigation actions will differ depending on the particular service or fare change, but may include efforts such as alternative fare payment options, fare capping, or community meetings to identify other alternatives.

## **Minority Persons and Populations**

According to FTA Circular 4702.1B, a minority person is defined as an individual identifying as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Minority populations are defined by FTA as any readily identifiable group of minority persons who live in geographic proximity, or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data on minority populations is obtained from the U.S. Census Bureau and transit agency ridership surveys dependent upon the analysis required.

## Paratransit

Paratransit service is a broad term for demand-responsive services offered to transit riders that cannot use fixed route services. Paratransit is typically used to describe accessible van service and other transportation that must be provided for individuals who are unable to use fixed route systems.

## **Persons with Disabilities**

FTA defines persons with disabilities as persons "who by reason of illness, injury, age, congenital malfunction, or other incapacity or temporary or permanent disability (including any individual who is a wheelchair user or has semi-ambulatory capabilities), cannot use effectively, without special facilities, planning, or design, mass transportation service or a mass transportation facility."

Attachment B - Service and Fare Equity Policies

# [Placeholder]



# **Major Service Change Policy**

## Background

Transit providers that operate 50 or more fixed route vehicles in peak service and are located in urbanized areas (UZA) of 200,000 or more people, or that otherwise meet the threshold defined in Chapter IV of FTA Circular 4702.1B, must conduct a Title VI equity analysis whenever they plan a fare change and/or a major service change. Equity analyses are required regardless of whether proposed changes would cause positive or negative impacts to riders. In other words, transit providers must conduct an equity analysis for all fare changes and for major service reductions and major service expansions.

## Purpose

The purpose of this policy is to establish a threshold that defines a "major" service change. All "major" increases or decreases in transit service are subject to a Title VI Service Equity Analysis prior to the Raleigh Transit Authority's approval of the service change. A Title VI Equity Analysis completed for a "major" service change must be presented to the Raleigh Transit Authority for its consideration and included in the GoRaleigh Title VI Program with a record of action taken by the Board.

## **Major Service Change**

A "major service change" is defined as any of the following, and shall require a service equity analysis:

- The addition of a route;
- The elimination of a route
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles on any route;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours;
- The expansion or reduction in regular days of service on any route; or
- A system-wide change concurrently affecting five percent or more of the total system revenue hours.

The following types of activities are not classified as "major service changes" and shall not require a service equity analysis:

- Service for special events;
- Temporary routing changes to address road construction, maintenance or closures; changes or additions to service operated during emergencies; and detours caused by labor strikes, fuels shortages or safety concerns; route number designation changes; the introduction or discontinuation of short or limited-term service (e.g., promotional,

demonstration, seasonal or emergency service, or service provided as mitigation or diversions for construction or other similar activities), as long as the service will be/has been operated for no more than 12 months; or

• Any service change that does not meet the conditions of a major service changes as defined above.

Service change proposals that do not meet the criteria for "major" service changes are still subject to an appropriate level of public review and comment. GoRaleigh shall consider the degree of adverse effects and analyze those effects when planning major service changes.



## **Disparate Impact Policy**

This policy establishes a threshold for determining whether a given action has a disparate impact on minority populations. Per FTA Circular 4702.1B:

Disparate impact refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin...

The policy shall establish a threshold for determining when adverse effects of [fare/]service changes are borne disproportionately by minority populations. The disparate impact threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by minority populations compared to impacts borne by nonminority populations. The disparate impact threshold must be applied uniformly... and cannot be altered until the next Title VI Program submission.

In the course of performing a Title VI Equity Analysis, GoRaleigh must analyze how the proposed action would impact minority as compared to non-minority populations. In the event the proposed action has a negative impact that affects minorities more than non-minorities with a disparity that exceeds the adopted Disparate Impact Threshold, or that benefits non-minorities more than minorities with a disparity that exceeds the adopted Disparate Impact Threshold, or that benefits non-minorities more than minorities with a disparity that exceeds the adopted Disparate Impact Threshold, GoRaleigh must evaluate whether there is an alternative that has a more equitable impact. Otherwise, GoRaleigh must take measures to mitigate the impact of the proposed action on the affected minority population and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative.

## Service Equity Analysis Disparate Impact Threshold

The GoRaleigh disparate impact policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by minority populations. GoRaleigh considers impacts to be disparate any time adverse impacts borne by minority populations differ from impacts borne by non-minority populations by **5 percent**. GoRaleigh evaluates the threshold based on the difference in the minority population or ridership on the affected routes compared to the minority populations served by the system overall. When disparate impacts are identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disparate impacts.

## Fare Equity Analysis Disparate Impact Threshold

The GoRaleigh disparate impact policy establishes a **3 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by minority populations. The thresholds apply to the difference in the impacts of each proposed fare change on minority populations compared to the impacts on non-minority populations. This is measured by analyzing ridership surveys as to whether minority riders are more likely to use each mode of service, payment type, or payment media that would be subject to the fare change.



This policy establishes a threshold for determining whether a given action has a disproportionate burden on low-income populations. Per FTA Circular 4702.1B:

Disproportionate burden refers to a neutral policy or practice that disproportionately affects lowincome populations more than non-low-income populations...

Low-income populations are not a protected class under Title VI. However, recognizing the inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes...

The transit provider shall develop a policy for measuring disproportionate burdens on lowincome populations. The policy shall establish a threshold for determining when adverse effects of service changes are borne disproportionately by low-income populations. The disproportionate burden threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by low-income populations as compared to impacts borne by non-low-income populations.

According to the FTA circular, "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or that falls within a locally-developed income threshold that is at least as inclusive. For service equity analyses conducted by GoRaleigh, persons with household incomes at or below 150 percent of the federal poverty level for a regionally-average household size are determined to be lowincome, a more inclusive threshold than the poverty guidelines.

In the course of performing a Title VI Equity Analysis, GoRaleigh must analyze how the proposed action would impact low-income as compared to low-income populations. In the event the proposed action has a negative impact that affects low-income populations more than non-low-income populations with a disparity that exceeds the adopted Disproportionate Burden threshold, or that benefits non-low-income populations more than low-income populations with a disparity that exceeds the adopted Disproportionate Burden threshold, GoRaleigh must evaluate whether there is an alternative that has a more equitable impact. Otherwise, GoRaleigh must take measures to mitigate the impact of the proposed action on the affected low-income population and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative.

## Service Equity Analysis Disproportionate Burden Threshold

The GoRaleigh disproportionate burden policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by low-income populations. GoRaleigh considers impacts to be disparate any time adverse impacts borne by low-income populations differ from impacts borne by non-low-income populations by **2.5 percent**. GoRaleigh evaluates the threshold based on the difference in the low-income population or ridership on the affected routes compared to the low-income populations served by the system overall. When disproportionate burdens are identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disparate impacts.

## Fare Equity Analysis Disproportionate Burden Threshold

The GoRaleigh disparate impact policy establishes a **5 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by low-income populations. The thresholds apply to the difference in the impacts of each proposed fare change on low-income populations compared to the impacts on non-low-income populations. This is measured by analyzing ridership surveys as to whether low-income riders are more likely to use each mode of service, payment type, or payment media that would be subject to the fare change.

## Summary of Public Engagement Process for Setting the Major Service Change Policy and Disparate Impact Policy

## **Initial Adoption and Outreach**

GoRaleigh originally adopted the following service and fare change policies in 2015:

- Major Service Change Policy,
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

These policies were originally adopted in conjunction with a regional proposed fare increase. The attached "Triangle Region 2014-2015 Proposed Transit Fare Increases" summarizes public outreach related to the adoption of these policies.

## Fall 2020 Review

In fall 2020, GoRaleigh began the process of reviewing the fare and service change policies and other elements of the Title VI program. The technical review of these policies resulted in minor changes and clarifications to the Major Service Change Policy, but did not result in changes to the Disparate Impact or the Disproportionate Burden Policies and associated thresholds. It is anticipated that updates may occur following the full release of the 2020 Census data and would be incorporated in a future Title VI program update.

GoRaleigh met with a variety of stakeholders to discuss the needs and concerns of Title VI populations in the Raleigh area and efforts to update Title VI program and public engagement materials. Stakeholders included other City departments, the Capital Area Metropolitan Planning Organization, non-profit organizations, advocacy groups, and others representing minority, low-income, persons with disabilities, and other key population groups served by GoRaleigh. Meeting minutes are attached from these interagency and stakeholder sessions.

These engagement efforts provided insight into Title VI and public engagement practices, but did not result in any additional changes to service and fare change policies,

#### January 2021 Adoption

[Placeholder upon completion of engagement period, which will include but not be limited to:

- Agency website posting
- Online interactive site (Social Pinpoint)
- Social media notices
- Onboard flyers
- Press release
- Email campaign/distribution to transit stakeholders
- RTA Public Hearing(s)
- Other? (confirm and/or add to list) ]

# Triangle Region 2014–2015 Proposed Transit Fare Increases

## **Summary of Public Outreach**

Capital Area Transit and Triangle Transit are committed to early and continuing public and agency engagement during the development of proposed fare increases for regional transit, analysis of the equity of these increases under Title VI and preparation of new or updated agency Title VI policies. A public involvement program, outlined in the Public Participation Plan (PPP) developed at the start of the project, has been conducted to inform and engage the public, agencies and stakeholders. Public and agency involvement are essential to inform final proposed fare increases, updated Title VI policies and the Triangle Region Title VI Fare Equity Analysis.

The project has provided multiple opportunities for the public to review the proposed fare increases, policies and equity analysis through events such as public meetings, canvassing and briefings. Input has been solicited through comment forms in person and online. This document summarizes the public involvement program conducted during the preparation of the Triangle Region Title VI Fare Equity Analysis and the input received through March 2014. The information will be updated as additional meetings are held and further feedback is received.

## **Outreach Meetings**

The project team held or attended a variety of community meetings to educate the public and stakeholders about the proposed fare increases, Title VI policies and Title VI Fare Equity Analysis and to solicit input. These meeting opportunities included:

## Public Meetings

Public meetings were identified as a needed strategy for the agencies to provide advertised, open public forums for the public to comment on the proposed fare changes and related policies and analysis. The project team held six public meetings throughout the region and took place in locations near transit stops to provide access to the meetings and opportunity to solicit feedback at stops during the meetings. These meetings are outlined in Table 1-1 – Public Meetings.

## Community Events - Canvassing

Community events and canvassing were proposed as the primary strategy for reaching transit riders and Title VI populations. The project team canvassed at five transit centers to target a diversity of riders. Interpreters were used at canvassing events in Raleigh and Durham to reach LEP populations. These canvassing events are outlined in Table 1-2 - Community Events. Project staff also had the opportunity for limited canvassing at transit stops during the Green Road and CAT Operations Center public meetings.

## Other Community Events and Presentations

Transit agency staff and project team members have attended events and meetings held by community organizations to further educate Title VI populations and other community members

about the project and solicit public comment. These events and organizations were also included in Table 1-2 – Community Events.

## Local transit agency meetings

The project team has presented at the Raleigh Transit Authority, Triangle Transit Operations and Finance Board and Triangle Transit Board of Trustees. The purpose of these meetings has been to update the transit agencies on the status of the project and analysis and introduce Title VI policies. These meetings are outlined in Table 1-3 – Agency Meetings. Additional briefings and meetings will take place to review findings of the fare equity study, further discuss proposed fare increases and adopt updated Title VI policies.

Attachment 1 provides more details on these meeting in the meeting summaries.

## **Communications Methods**

A variety of communications methods and media were used to support the outreach meetings and to further engage stakeholders and the public on the proposed fare increases and development of the Title VI Fare Equity Analysis.

## Informational materials

Two informational handouts were developed for distribution at community events and public meetings and were also available online. The project overview handout included general project information with an overview of the background of the project, reasons for the proposed increases, a table outlining the proposed fares and a brief description of the Title VI Fare Equity Analysis. This handout was deemed a vital material and was translated into Spanish. A second handout provided a more detailed description of proposed Title VI program and service and fare equity analysis policies. Display materials utilized at the large public meetings contained highlighted information from the handouts and project materials. Interpreters were available at several of the public meetings to provide sight translation for the displays and second handout to LEP persons.

#### **Comment Forms**

A comment form was developed to collect data on ridership demographics and feedback on proposed fare increases and Title VI policies. Questions included both specific, structured questions as well as open-ended inquiries. The comment forms were available in English and Spanish and were distributed in person at community events and public workshops, with staff assisting in completion of forms at canvassing opportunities. Identified stakeholders and community organizations that serve minority and low-income populations or have are tied to transit services were provided copies electronically. The comment form was also available online starting October 24, 2013. A copy of the comment form and summary of results can be found in Attachment 2.

## Agency web and social media sites

A web page providing information regarding the proposed fare increases and the Triangle Region Title VI Fare Equity Analysis website has been maintained on GoTriangle's website at:

http://www.gotriangle.org/transit/fare-increase-proposal?/fareincrease. The web page has been updated with public meeting announcements, informational materials and the online comment form. A copy of the project website can be found in Attachment 3. Agency social media sites including Facebook and twitter were also utilized to provide project announcements and further promote awareness.

## Notifications

English and Spanish version flyers were created for notification of the November 2013 public meetings and distributed electronically to stakeholders and in person during the community events. Bus placard flyers were also created for distribution at transit centers and on CAT and Triangle Transit bus routes.

The project team developed a list of community organizations and individuals that work with or represent Title VI populations for distribution of digital updates and announcements. These included emails for redistribution to organizational list servs, announcements for posting to community websites, and social media updates. Email, twitter, and Facebook updates can be found in Attachment 3. The Stakeholder List is provided in Attachment 4.

## **Media relations**

News releases were used to provide information about the public workshops. News releases were provided to area newspapers, radio and television broadcast stations and online forums. A number of media outlets have provided coverage for the proposed fare increases and public meetings. Media coverage is presented in Table 1-4.

## **Outreach Activity Summary**

The following tables summarize the public outreach events that have been utilized for the Triangle Region Title VI Fare Equity Analysis. Date, time and location information is included for each event.

Date	Time	Location	Materials Distributed/Collected
11/6/2013	3:30-7:30 pm	Durham Station, Durham	13 Handouts 7 Comments
11/12/2013	4:00-7:00 pm	Green Road Community Center, Raleigh	5 Handouts 3 Comments
11/14/2013	3:30-7:00 pm	One Exchange Plaza, Raleigh	7 Handouts 5 Comments
11/18/2013	4:00-7:00 pm	Chapel Hill Public Library, Chapel Hill	5 Handouts 1 Comments
11/20/2013	3:30-6:30 pm	Woodcroft Club, Durham	1 Handout 0 Comments

#### **Table 1-1: Public Meetings**

Date	Time	Location	Materials Distributed/Collected
11/21/2013	3:30-7:00 pm	CAT Operations Facility, Raleigh	19 Handouts 2 Comments

## Table 1-2: Community Events/Presentations

Date	Name/Type of Event	Time	Location	Materials Distributed
10/10/2013	Staff Presentation – Northeast Citizens Advisory Council (CAC)	7:00 pm	Marsh Creek Park, Raleigh	
10/10/2013	Staff Presentation – Southeast CAC	7:00 pm	Barwell Road Community Center, Raleigh	
10/12/2013	LEP/Community Festival – Viva Raleigh	1:00-3:00 pm	Green Road Community Center, Raleigh	20 Flyers 16 Comments
10/12/2113	LEP/Community Event – La Feria de la Salud		Holton Career & Resource Center, Durham	45 Flyers 16 Comments
10/13/2013	LEP Outreach	1:00-3:00 pm	Twin Lakes Park, Durham	45 Flyers 15 Comments
10/17/2013	Staff Presentation – Raleigh Mayor's Committee on Disabilities	12:00- 1:00 pm		
10/21/2013	LEP Outreach	1:00-3:00 pm	Chewing Middle School, Durham	10 Flyers 9 Comments
10/23/2013	Transit Center Canvassing	7:00-9:00 am	Regional Transit Center, Durham	75 Flyers 14 Comments
10/23/2013	Transit Center Canvassing	3:00-6:00 pm	Crabtree Valley Mall, Raleigh	100 Flyers 40 Comments
10/24/2013	Transit Center Canvassing	7:00-9:00 am	Cary Train Station, Cary	40 Flyers 13 Comments
11/6/2013	Transit Center Canvassing	3:30-5:30 pm	Durham Station, Durham	60 Flyers 19 Comments
11/7/2013	Staff Presentation – Midtown CAC	7:00 pm	Eastgate Park and Neighborhood Center, Raleigh	
11/12/2013	Staff Presentation – Durham Mayor's Committee for Persons with Disabilities	1:30 pm	City Hall, Durham	

## Triangle Region Title VI Fare Equity Analysis – Public Participation Summary

Date	Name/Type of Event	Time	Location	Materials Distributed
11/14/2013	Transit Stop Canvassing	3:30-6:00 pm	Moore Square Transit Station, Raleigh	75 Flyers 25 Handouts 55 Comments
11/18/2013	Staff Presentation – East CAC	7:00 pm	Lions Park, Raleigh	
11/20/2013	Staff Presentation – Raleigh CAC	7:00 pm	City Council Chambers, Raleigh	
12/5/2013	Staff Presentation – North CAC	7:00 pm	Millbrook Exchange Park	
12/15/2013	Staff Presentation – Southeast Raleigh Association	12:00 pm		

## Table 1-3: Agency Meetings

Date	Organization	Time	Location
10/3/2013	Triangle Transit Operations and Finance Committee	10:00 am-12:30 pm	Triangle Transit, Durham
10/10/2013	Raleigh Transit Authority	2:30-5:00 pm	Raleigh Municipal Building, Raleigh
10/31/2013	Triangle Transit Board of Trustees	1:00-5:00 pm	Triangle Transit, Durham
12/3/2013	Triangle Transit Operations and Finance Committee	10:45-12:00	Triangle Transit, Durham
12/12/13	Raleigh Transit Authority	2:30-5:00 pm	Raleigh Municipal Building, Raleigh

A number of promotional techniques have been employed to support the stakeholder outreach events and activities described in the previous sections. The following notifications have been utilized to announce public meetings and promote the website and online comment form.

#### **Table 1-4: Notifications and Announcements**

Date	Method	Recipient	Topic/Purpose
October – November 2013	Bus Placards	Bus riders	Public Meetings Announcement
10/24/2013	News Release	Media – GoTriangle Website	Public Meetings Announcements

Date	Method	Recipient	Topic/Purpose
10/25/2013	Email	Stakeholder email list	Public Meetings Announcement
10/30/2013	Email	Stakeholder email list	Public Meetings Update
10/30/2013	Advertisement	Media – La Conexion*	Public Meetings Announcements
11/1/2013	Email	Raleigh Public Records	Project Announcement Public Meetings Announcement
11/1/2013	Email	CAT	Public Meetings Announcement
11/6/2013	Advertisement	Media – La Conexion*	Public Meetings Announcement

\*Paid advertisement

## Minority, Low-Income, and Limited-English Proficiency Populations

The following public involvement and outreach tools were used to engage minority, low-income and LEP populations in the planning process.

- Presentations to key groups and organizations serving low-income, minority, senior, youth and disabled populations.
- Canvassing at transit stations as a large portion of the minority or low-income populations are transit dependent.
- Bus placards on CAT and Triangle Transit buses, again targeting riders
- Electronic and hardcopy notifications and announcements distributed to organizations that serve minority, low-income, and LEP populations
- Public meetings held in locations convenient to minority, low-income, and LEP populations
- Vital materials including project handout, comment form, flyer, and notifications translated in Spanish
- Canvassing at events that attract LEP populations
- Interpreters at appropriate public meetings and canvassing events

## **Public Comments**

Comment forms were collected at all community events and public meetings, and through a project webpage, dedicated phone line, and email. Information on name, address, email, stakeholder type, voluntary demographic data, transit system patronized, issues noted and specific comments were entered into a comment database. Comments collected totaled 329 and covered a variety of topics, many specific to the impacts of the proposed fare increases and other general transit-related comments. The comments were categorized into the following groups:

• Fare increases will change ridership. The most common response was that people are already facing financial hardship and will therefore have to ride less frequently due to the financial burden of the proposed fare increase. Some would look into other modes, such as walking or

driving, or would get a different type of pass. Many commenters said they would need to restrict the number of destinations during their travel.

- Fare increase will not change ridership, but have negative financial impacts. Commenters stated that the cost of travel is already too expensive for some, especially for those who work part-time or minimum wage jobs. The second most frequent response was that transit service is the only option for transportation so the commenters will have to continue riding but re-examine their budgets.
- No Change. The third most common response was simply requesting no change to the fares.
- Fare Increases will have Unfair Implications. Commenters were concerned for riders who live on fixed-incomes, specifically disabled and senior riders. Additionally, commenters with families were concerned over the increase for children which would add an additional financial strain.
- Support for the proposed fare increases. Commenters were in general supportive of the proposed fare increases as a way to support funding for new buses and off-set the cost of rising fuel prices. While the fares may increase commenters found that the fares remain less expensive than transit services in other places across the country.

In addition to responses to the proposed fare increases, some commenters provided suggestions for mitigation or information service riders may be interested in to help off-set the increase. Suggestions provided in the public comments include:

- Incentivizing buying a monthly pass with a larger discount or a payment plan
- Create a 'commuter pass' for people who only ride the bus five days a week
- Create a system for the fare increases where larger businesses pay a higher rate while individuals have a lower increase
- Start with a smaller increase and gradually increase over more years
- Determine fare increases based on the length of trip in terms of time and/or distance (similar to zone base fare structure)

Meeting summaries providing more detail can be found in Attachment 1.

## Media Coverage

The project has been covered in various media outlets across the region. Table 1-5 provides an overview of the media coverage to date.

Date	Source	Article Name	Link
10/25/2013	NewsObserver	Triangle Transit and Raleigh's CAT Propose to Increase Bus Fares	http://www.newsobserver.com/2013/10/25/3312170/ triangle-transit-and-raleighs.html
10/28/2013	NewsObserver	Triangle Transit and Raleigh's CAT Propose to Increase Bus Fares	http://www.newsobserver.com/2013/10/28/3321071/ triangle-transit-and-raleighs.html

## Table 1-5: Media Coverage

Date	Source	Article Name	Link
10/30/2013	INDY Weekly	Bus Fare Hikes Proposed for Raleigh	http://www.indyweek.com/indyweek/bus-fare-hikes- proposed-for-raleigh-triangle- transit/Content?oid=3755736
10/30/2013	ABC-11	Bus Fares to Increase in the Triangle	http://abclocal.go.com/wtvd/story?section=news/local &id=9305720
10/30/2013	WUNC 91.5	Triangle Bus Services Considering Fare Increase	
10/30/2013	Univision North Carolina	Department of Transportation Talks about A Possible Increase to 'Transportation Ticket'	http://northcarolina.univision.com/videos/video/2013- 10-31/pasaje-precios-aumento
11/2/2013	WRAL-TV	Look for Raleigh Bus Fare to Increase	http://www.wral.com/look-for-raleigh-bus-fare-to- rise/13065671/
11/4/2013	Chapel Hill News	Triangle Transit Eyes Fare Increase	http://www.chapelhillnews.com/2013/11/04/3332103 /triangle-transit-eyes-fare-increases.html
11/5/2013	NCSU Technician Online	Triangle Bus Fares Could Increase Next Year	http://www.technicianonline.com/news/article_4c740 06e-45d8-11e3-b7c7-0019bb30f31a.html
11/6/2013	WRAL-TV	Triangle Transit, Capital Area Transit Considering Fare Increases	http://www.wral.com/triangle-transit-capital-area- transit-considering-fare-increases/13082913/

## **Evaluation of Outreach**

Performance measures to evaluate the effectiveness of the public outreach for the proposed fare increase, Title VI policies update and Fare Equity Analysis were established in the PPP for the project. The performance measures were organized by the following areas:

- Accessibility
- Reach
- Diversity/Equity
- Decision Integration

The results of the outreach to date against the specific performance measures are presented below.

#### **Table 1-6: Evaluation of Outreach Measures**

Outreach Measure	Target	Outcome
Accessibility		
Distribution/convenience of meeting locations	Meeting and community event locations represent the target demographics	Yes

## Triangle Region Title VI Fare Equity Analysis – Public Participation Summary

Outreach Measure	Target	Outcome
Transit accessibility	All meetings are within 1/8 of a mile from a transit stop	Yes
ADA accessibility	All meetings are ADA accessible	Yes
Language accessibility	All meetings have language accessibility	Yes
Reach	1	
Total number of comments	250	329
Total number of comments received from LEP persons	25	60
Total number of participants at public meetings and community events	100	23 Signed In 400 Spoken With
Total number of LEP persons in attendance at public meetings and community events	15	0 Signed In 120 Spoken With
Number of visits to the project webpages	100	1023, including 893 unique visitors
Number of articles or other media coverage	1 in each jurisdiction	5 regional stories, 4 Raleigh/Wake County, 2 Chapel Hill/Orange County, 1 regional Spanish media
Diversity/Equity	I	•
Demographic distribution	Voluntary demographic data collected via comment forms represents costumer base	Yes
Geographic distribution	20% of zip codes represented by participants - based on comment form addresses or zip codes	Yes (60%)
Diversity of community organizations provided notifications or targeted by community events and cross-section of Title VI populations served	10 organizations each representing seniors, low- income, minority and disabled populations	Yes, see Community Events and Stakeholder List
Decision Integration	1	1
All comments are analyzed and summarized to the project team in a timely manner for decision making	Meeting summaries prepared within 10 business days	Yes
Decision Integration	All comments requiring response are responded to within 15 business days	Yes
Decision Integration	Comments requiring response and actions taken in response	Yes

Outreach Measure	Target	Outcome
	to comments are tracked	

## Attachments

## 1. Public Meeting Summaries:

Durham Station Green Road Community Center One Exchange Plaza Chapel Hill Public Library Woodcroft Club CAT Operations Facility

## 2. Comment Form and Results

Comment Form (English) Comment Form (Spanish) Comment Form Results

## 3. Outreach Materials:

Email Announcements Website Flyer Translated Flyer Bus Placard Project Overview handout Title VI handout

#### 4. Stakeholder List

## **Attachment 1 – Public Meeting Summaries**

## **Durham Station**

November 6, 2013

#### Meeting Format:

- Staff members canvassed the Triangle Transit bus stops from 3:30 until 5:30, collecting comment forms, distributing handouts and comment forms, and encouraging people to go inside the center for the public meeting.
- The public meeting ran concurrently with Triangle Transit's standing public meeting and included a brief presentation to the People Riding In Durham Everyday (PRIDE) Ambassadors.

#### Number of Public Meeting Attendees:

- 12 public meeting attendees
- 4 signed in
- 7 PRIDE Ambassadors

## Number of Comment Forms Collected:

- 19 Canvassing
- 7 Public Meeting

#### Summary of Comments:

Commenters expressed concern over the fare increase and many stated that they would have to rethink the pass they purchased or change the number of times they took the bus. Several commenters were concerned about the financial burden of the proposed increase to regional paratransit fares since many riders are disabled on fixed incomes.

#### **Green Road Community Center**

#### November 12, 2013

#### Meeting Format:

- The public meeting was held from 3:30-7:00 at the community center.
- Staff also canvassed the 23L bus stop outside of the community center every half hour.

#### Number of Public Meeting Attendees: 5

#### Number of Comment Forms Collected: 3

#### Summary of Comments:

Commenters at this event stated that increased fares would decrease ridership or be a significant burden, as many riders already experience financial hardships. One commenter suggested starting with a smaller increase and gradually increasing over a longer period of time. Commenters also shared recommendations for general improvements for the transit system, including service enhancements and benches and shelters at all bus stops.

#### Moore Square/One Exchange Plaza

November 14, 2013

#### Meeting Format:

- The public meeting was held from 3:30 until 7:00 pm in the lobby of the building.
- Staff canvassed Moore Square Transit Center from 3:30 until 6:00 pm.

#### Number of Meeting Attendees: 5

Number of Comment Forms Collected:

- 55 Canvassing
- 5 Public Meeting

#### Summary of Comments:

Many commenters were not aware of the proposed fare increases, or had not been aware the increase applied to their fare type (typically seniors), so these participants were very interested in collecting information and providing input. Commenters at this event focused primarily on the potential financial burden of the proposed increase, as many noted strained budgets. Additionally, many commenters provided suggestions on how to distribute the fares in different manners as well as suggestions for improvements for the system, such as extended evening hours and weekend services.

#### **Chapel Hill Public Library**

November 18, 2013

Meeting Format:

• The public meeting was held from 4:00 until 7:00 pm in Meeting Room B at the public library.

Number of Meeting Attendees: 5

Number of Comment Forms Collected: 1

Summary of Comments:

The attendees at this meeting were very interested in how the transit services would change if a light rail system was implemented in the region. One event attendee expressed disappointment that the state government no longer provided the GoPass for employees and felt that some other incentive program should be enacted.

## Woodcroft Club

November 19, 2013

Meeting Format:

- The public meeting was held from 3:30 to 6:30 in the community center.
- Staff canvassed the Triangle Transit bus stop on West Woodcroft Parkway.

Number of Meeting Attendees: 3

Number of Comment Forms Collected: 0

Summary of Comments:

No comments were collected at this event.

#### **CAT Operations Facility**

November 21, 2013

Meeting Format:

- The public meeting was held from 3:30-7:00 in the conference room of the facility.
- Staff also canvassed the 18L and 55X bus stops on Poole Road and Bus Way outside of the facility every half hour.

Number of Meeting Attendees: 1

Number of Comment Forms Collected: 2

#### Summary of Comments:

Commenters were generally concerned about the older adult disabled populations that travel on the buses. They were concerned that the increased fares may be too expensive for people on fixed incomes, and also concerned about the distances some must travel to reach the bus stops. In general, many of the transit riders were not familiar with the proposed fare increases and appreciative of the information.

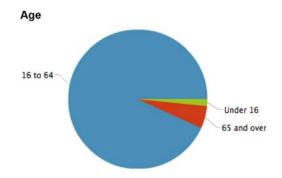
## **Attachment 2 – Comment Form Results**

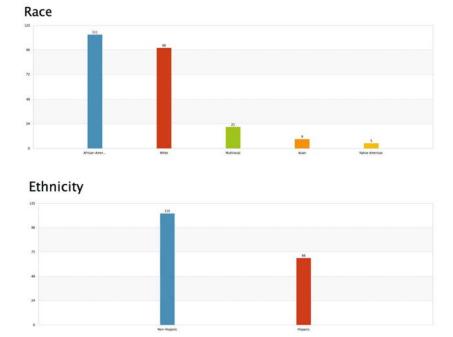
In total, 329 comment forms were collected however, not all respondents completed all sections of the comment form. The data presented below indicates how many responses were collected for each question.

## **Demographic Information**

The first set of questions was designed to collect the demographic information of the respondents. The purpose of this section was to compare the demographics of the riders participating in this outreach to the rider data collected by the transit agencies and ensure that the Title VI populations were being reached through the public engagement opportunities.

Of the 310 respondents that selected an age group, 93.2 percent were 16 to 64, 5.2 percent seniors 65 and older, and the remaining 1.6 percent were 16 or younger. The racial breakdown included 45.5 percent African American, 40.2 percent White, 8.6 percent multiracial, 3.7 percent Asian and 2.0 percent Native American. Ethnically, 62.5 percent of the respondents identified as non-Hispanic and 37.5 percent Hispanic (176 total).





Of the 265 people who selected an income range, 57.3 percent of the respondents indicated an income of \$25,000 or less annually (39.6 percent less than \$15,000, 17.7 percent \$15,000 to less than \$25,000).

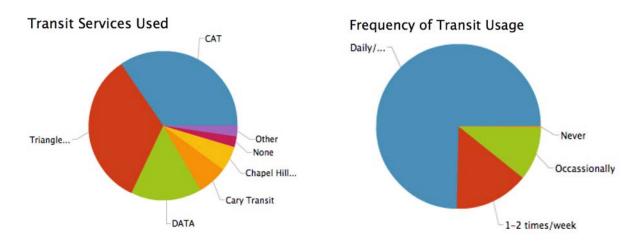


#### **Transit Use**

The purpose of this section was to collect data on the current transit usage as well as how transit riders pay for bus fare (fare type and trip type) and discount programs. Respondents were allowed to select more than one response for the questions.

For the transit agencies listed, 518 responses were provided: 179 selected Capital Area Transit, 173 Triangle Transit, 80 DATA, 34 C-Tran, 26 Chapel Hill Transit, 12 for 'other' transit services, and 12 selected no transit services.

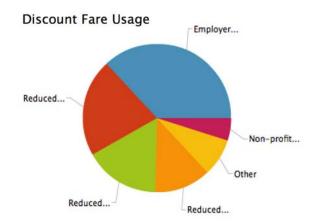
Transit riders who use services daily or almost daily returned the highest number of comment forms (250 out of 335 responses). People who ride one to two times a week provided slightly more responses than occasional riders (49 compared to 35).



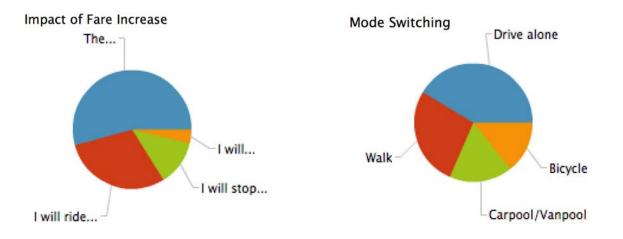
Two questions asked about bus payment. The first allowed the responded to select all the fare types the respondent uses. Seven options were given and 395 responses were given and cash fare was the most frequent response (154). Day pass was the second more frequently selected response with 78, 48 selected GoPass and 41 people selected 31 Day Pass. The 5-Day pass has the least amount of responses with 17 responses.



The second question allowed the responded to select the discount programs purchased and 122 people provided responses to this question. Of those, employer passes was the most frequently selected with 36.9 percent of the responses. Reduced disability fares were selected next, with 21.5 percent of the responses which was slightly above reduced senior fares, which received 16.4 percent of the responses.



The last closed-ended question on the comment form asked transit riders how the proposed fare increases will change the way they ride the bus. Over half of the respondents stated that the fare increases would not change their ridership behaviors (54.3 percent). Approximately 30 percent of the riders said they will ride less often and another 12.4 percent said they will stop riding. Finally, 3.7 percent said they will change the type of bus service they use. Of the different ticket options provided, 31.0 percent said they would switch to paying cash for tickets, while 16.5 percent said they would switch to the \$25 stored value card and another 13.1 percent would buy the 31-Day pass.



## **Attachment 3 – Outreach Materials**

Attachment 4 – Stakeholder List

# **Triangle Region Title VI Policies**

# PROPOSED UPDATES TO SERVICE AND FARE EQUITY POLICIES

As direct recipients of federal funds, Capital Area Transit (CAT) and Triangle Transit are required by the Federal Transit Administration (FTA) to establish Title VI Programs that outline how the agencies will comply with requirements that protect minority and low-income populations.

Updated requirements for Title VI programs and policies were implemented by FTA in 2013 (FTA Circular 4702.1B). These include requirements for larger transit agencies when implementing service and fare changes. CAT and Triangle Transit have developed updates to Title VI policies for evaluating the impact of proposed major service and fare changes on minority and low-income populations to respond to these recent requirements. Updated policies include:

- Major Service Change Policy
- · Disparate Impact Policies for service and fare changes
- · Disproportionate Burden Policies for service and fare changes

CAT and Triangle Transit are gathering input from transit riders regarding these new policies and will integrate the feedback into the final policies. The policy updates will be submitted for approval by the boards of each agency. Title VI of the Civil Rights Act of 1964 states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

# **MAJOR SERVICE CHANGE DEFINITION**

A "major" service change policy defines at what level changes in service trigger the preparation of a Service Equity Analysis to evaluate the potential for disparate or disproportionate impacts to minority and low-income populations. The proposed updated policies for CAT and Triangle Transit are shown below. Disparate and disproportionate impact policies are shown on page 2.

## **Capital Area Transit**

A "major service change" is defined as:

- The addition or elimination of a route,
- A 25 percent reduction in route-miles or revenue vehicle miles,
- A 25 percent expansion or reduction in the span of service or frequency of any route, measured in revenue vehicle hours, or
- The expansion or reduction in regular days of service on any route.

## **Triangle Transit**

A "major service change" is defined as:

- · The addition or elimination of a route,
- A change in at least 25 percent of an existing route's patten, measured in route-miles,
- A 25 percent expansion or reduction in the span of service or frequency of any route, measured in revenue vehicle hours, or
- The expansion or reduction in regular days of service on any route.

# **MAJOR SERVICE CHANGES – POLICY THRESHOLDS**

Agencies must establish thresholds for evaluating the impacts of proposed major service changes.

A **Disparate Impact Policy** will help determine if proposed service changes will disproportionately impact minority populations.

A **Disproportionate Burden Policy** will help determine if the adverse effects of service changes are borne disproportionately by low-income populations.

The Disparate Impact and Disproportionate Burden thresholds are evaluated based on population data from the U.S. Census or ridership survey data. The thresholds apply to the difference in the minority or low-income population or ridership on the affected route(s) compared to the minority or low-income population served by the system. Proposed policy thresholds are shown below.

Agency	Minority Service Population	Disparate Threshold	Low-income Service Population	Disproportionate Threshold
CAT	43%	+/- 5%	21%	+/- 2.5%
Triangle Transit	40.5%	+/- 10%	18.5%	+/- 5-10%

If an agency finds that disparate impacts or disproportionate burdens exist, they will examine if any alternatives to the proposed service change exist that would have less impact to minority or low-income populations.

# FARE CHANGES – POLICY THRESHOLDS

Under FTA regulations, a fare equity analysis is required when fare changes occur, regardless of the amount of fare increase or decrease. Similar to major service changes, policy thresholds must be established by agencies to evaluate the impacts of proposed fare changes.

The Disparate Impact and Disproportionate Burden thresholds for fare changes are evaluated based on ridership survey data. This is measured by analyzing ridership surveys to determine if minority riders are more likely to use a given mode of service, fare type, or payment media that would be subject to the proposed fare change. Proposed policy thresholds are shown below.

Agency	Minority Ridership	Disparate Threshold	Low-income Ridership	Disproportionate Threshold
CAT	82%	+/- 3%	73%	+/- 5%
Triangle Transit	55%	+/- 10%	41%	+/- 10%

If an agency finds that disparate impacts or disproportionate burdens exist, they will examine if any alternatives to the proposed fare change exist that would have less impact to minority or low-income populations.

# OVERVIEW OF REGIONAL RIDERSHIP

The local transit providers conduct surveys of their riders to collect demographic information on the ridership. CAT last collected surveys in 2010 and Triangle Transit most recently collected survey data in 2013. The information from these surveys helps determine the number of transit riders using the different fare types and proportion of minority and low-income people that use each fare type.

## **PROVIDE YOUR COMMENTS**

CAT and Triangle Transit need to hear from the public in considering updated policies along with proposed fare increases. The agencies are holding public meetings, canvassing at transit centers, meeting with community organizations and promoting information online to get input on the policies. The comments gathered will be used as the agencies finalize the policy updates.

Provide your comment at tonight's meeting or complete a comment form online at: www.gotriangle.org/fareincrease

For additional information, please send an email to serviceplanning@gotriangle.org or leave a voicemail message at 919-485-PLAN (7526).



## MEMORANDUM

То:	Project File		
From:	Brandy Huston, Planning Communities, LLC		
Date:	November 13	, 2020	
	Subject:	GoRaleigh Interdepartmental and Agency Partners Meeting	

## **RECORD OF MEETING**

## <u>Attendees</u>

Morgan Simmons	GoRaleigh
Audrea M. Caesar	Office of Equity and Inclusion
Bynum Walter	City Planning
Stephanie Plancich	CAMPO-TPAC
Ann Steedly	Planning Communities
Brandy Huston	Planning Communities
Larissa Via	Planning Communities

## Meeting Purpose

The meeting was held to capture unique perspectives and identify any gaps in understanding of equity, participation and outreach in transit.

#### Meeting highlights:

After introductions and the project overview, the group led the discussion on equity and engagement perspectives. Each external participant was also encouraged to discuss their approach and share lessons learned.

## Equity and Engagement Perspectives

CAMPO-TPAC asked what the city is thinking around equity and engagement perspectives so they can align their programs.

The City Planning Office manages the comprehensive plan for the City of Raleigh. The representative noted that the face of engagement is area planning and rezoning projects. The focus is on entitlement while getting things built is getting more challenging. In area planning, the City

has established great connections with retired white property owners because they have the time, while other populations are harder to reach.

The Office of Equity and Inclusion noted its focus is on embedding equity throughout city processes, practices and procedures, both internally and externally, with boards and commissions. They hope to share the work they are doing, understand work in the transit space, and want to identify how to work together.

# Equity Initiatives

The group was asked what the current equity initiatives of their department or organization are that relate to transit.

# City Planning Initiatives

- City Planning noted its two initiatives through RET BRT implementation.
- They are looking for initiatives that already have work underway and the initiatives are very close to GoRaleigh's desired outcome.
- They've brainstormed approximately 20 initiatives and about half are underway.
- There is a need for an initiative on the history of Raleigh's built environment.
- Raleigh has existing environmental justice issues from past decisions: for example, in 2014, the city rezoned historically black single-family neighborhoods to zone R-30, allowing high-density development.
- There needs to be an official document to make sure the City's staff are aware of this recent history.
- Addressing this initiative would help the City address why there is distrust in the community.
- There needs to be greater education on the racial history of Raleigh.
- The question of where and when the City would have the budget or capacity to take this on was considered.

# CAMPO-TPAC Initiatives

- CAMPO-TPAC needs a community voice participating in prioritizing initiatives.
- They are working to improve outward communication and getting better feedback. Building trust and understanding the history was acknowledged.
- CAMPO indicates it needs to find a "community champion" to be that voice and support the equity initiatives.
- It was noted that a tool that sets up demographic participation goals would be helpful.
- There needs to be a set target and methodology for agency alignment with engagement goals.

- The Office's first focus is capacity and trust building and the need to ensure staff understand how to authentically engage with communities.
- The Office will be working on building trust and what the Shaw University community wants to give the community ownership.
- Their partner's feedback is that the City doesn't do anything for them.
- There is a need to be representation of the community at all levels as the demographics change overtime.
- The Office will compile a racial equity action plan because tracking progress and identifying key metrics is essential.

# Exercise Results

The exercise gathered feedback on barriers and opportunities from the group. Some of the barriers included lack of integrated agency planning, communications, contacts, and information, lack of understanding the local history, and limited efforts in online events. Opportunities included an integrated shared web location for City engagement activities, staff training, LEP Committee ambassador, partnerships with neighborhoods and communications, and engagement handbooks and plans.

# Next Steps

GoRaleigh presented next steps for its equity and Title VI efforts.

**Attachment: Exercise Results** 

Barriers	Opportunities		
lack of cross-departmental planning and communications	Creation of a web location for all City engagement activities to provide a single source information for staff and the community		
Staff new to the area that do not know local history and/or local players active in our planning efforts			
	Staff training is a barrier or opportunity. We have staff who should know Title VI and other non-discrimination regulations that don't have even a basic understanding of		
Communications orientation v. engagement	those responsibilities. A regular city-wide staff training opportunity, required for applicable staff, could potentially make a huge difference.		
City doesn't keep track of community contacts, nurturing and caring for them. Don't leverage those relationships. Every department has their own list			
	LEP Committee - ambassador into the neighborhood		
Limited ability to have multiple efforts covered in 1 agency-led session or community- hosted event during the pandemic (online limitation)	Work with neighboring communities. Have a shared landing space		
	Keep scalability in mind - share with municipalities		
	Partner with Communications		
	Community engagement handbook/plans - Planning Department		

### MEMORANDUM

To: Project File

From: Brandy Huston, Planning Communities, LLC

Date: December 5, 2020

**Subject:** Equity, Transit, and Community Engagement: A Conversation with GoRaleigh

### **RECORD OF MEETING**

#### Meeting Purpose

The GoRaleigh Community Partner Meetings were conducted to establish a stronger foundation for future community partner-based engagement and gather feedback on GoRaleigh equity and engagement efforts. The key meeting objectives were to:

- 1. Obtain input and feedback on equity to inform program updates;
- 2. Get input on community engagement to support public participation strategy and plan updates; and
- 3. Discuss future community partnerships and understand how to best work together on transit to foster long-term commitment from the community partners.

The GoRaleigh Community Partner Meetings were held virtually on Zoom (with Google Meet as a backup option) in the Fall of 2020 on:

- November 18: 10:00 11:30 am
- November 30: 2:30 4:00 pm
- December 3: 10:00 11:30 am

#### <u>Agenda</u>

- Welcome and Introductions
- Overview
- Group Discussion
  - Equitable Transit
  - Community Engagement
  - Partner Connections
- Wrap-up/Next Steps

#### <u>Overview</u>

After introductions and overview of the meeting purpose and objectives, the GoRaleigh team presented on Equity and Title VI updates. This review included outlining the definition of equity and considerations to the barriers around equity and transit services. The team reviewed the City of Raleigh's current approach to equity, how GoRaleigh is strategically working toward greater public and partner engagement, and also discussed the methods taken for public participation/equitable engagement updates. Breakout sessions focused on three key areas: equitable transit, community engagement, and making partner connections. The meetings concluded with a final review of next steps and a call-to-action for supporting GoRaleigh in expanding its partner connections and engagement efforts.

# Equitable Transit

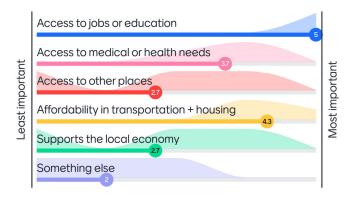
The topic of Equitable Transit opened the discussion to understanding what the most important things GoRaleigh's transit system can provide to the populations that partners serve and what their top transit and accessibility needs are. Participants indicated that the most important areas, in order of relative importance, are:

- 1. Access to jobs or education
- 2. Affordability in transportation + housing
- 3. Access to medical or health needs
- 4. Access to other places
- 5. Supports the local economy
- 6. Something else

Out of all the meeting groups, participants were in general agreement that areas 1-5 are the most important factors to provide.

The Mentimeter result slide below illustrates the exercise and general trend among participant's selections for these preferred areas.

# What are the most important things our transit system can provide to the populations you serve?



Example slide result from the November 18 Breakout Session from Question 1

# Barriers

Removing barriers within the community was also addressed during the discussion question *What are the top transit service or accessibility needs*? Ideas included:

- Providing services safely during the pandemic
- More direct access to locations with less transfers
- Access to dependable transportation to work, food, connecting to public assistance, public housing, regional centers for human services
- medical/doctor's appointments
- Getting to work
- Affordable fare
- Frequent service
- Jobs
- Affordability and convenience
- People with disabilities who are unable to drive need more on-demand options, particularly on nights and weekends. Working wheelchair lifts on regular buses is also important
- Ability to get to doctor's appointments
- Extended hours for transit use
- Lower fees (maybe income based for homeless)
- Dependable time schedules with easy of transfer
- Punctuality for paratransit
- Routes that are within their locations or as near as possible
- Connection between home and job
- Connection between home and services such as doctor, groceries, and drug store
- Commute from work to child care
- Reliable, on-time and low cost, speedy, clean, friendly
- Dependability
- Transit is a safe clean place
- Ability to reach significant destinations
- Limited wait time

Participants noted the following barriers while discussing equitable transit and engagement:

- Geography/Service Availability:
  - Most of the service transit system is north-to-south; this doesn't help the communities pushed farther out (east-to-west).
  - Transit services are in the Wake County core but few are in eastern Wake.
  - Areas like public housing, regional centers, child care centers, NC Works, or WIC are not well connected to transit and people can't get to where they need to go.

- Transit system is not structured to work for everyone in the same way benefits some more than others because some parts of the city have more access.
- Social/Cultural:
  - Some are isolated by ethnicity and language, and are closely tied to faith-based leaders.
  - Mistrust and not want to connect.
  - Lack of "real commitment and dedication" investment from agency to make transit system work for everyone
- Economic:
  - Some people can't afford an Uber or a bus ticket to get to the first-mile/last-mile location.
  - Jobs are seasonal, hourly, inconsistent, or during odd hours so there are no real sustainable transportation options and they may not know how to use it.
  - Transit may not run to their place of employment.
  - Some people can't take jobs because they can't get to them.
  - Some jobs they can take, but the hours don't line up with the transit system and they remain homeless. This is a key barrier with the transit system. They have to travel to find employment.
  - Some people don't have income to pay for a bus ticket. We see >2,000 individuals / year and they run through bus tickets very quickly.
- Education/Awareness:
  - Not everyone knows how to connect to the services and programs offered.
  - GoRaleigh needs to make sure service amenities like bus signs and parking meters are legible for people with disabilities or those with poor eyesight.
  - More education is a good idea. Organizations need education. Service providers need better education on transit service and opportunities to get help or information;
- Effectiveness/Reliability:
  - GoWake is a competitive calling process which can lead to unreliable, delayed, or inconsistent service results. When a car would take 30 minutes - GoWake might take two hours.
  - Users dependent on ADA paratransit must submit a notice well ahead of time and there are limited hours to submit the request; i.e. they can't have spontaneous trips if not submitted 24-48 hours ahead of time.
- Safety:
  - The amenities are scary places and are subject to predators
  - There is a lack of safe stops w/ an emergency blue light.
  - There needs to be proper lighting and shelters especially in low income and marginalized communities.
  - Bus amenities need connected sidewalks because they need to be wheelchair accessible. When they aren't, people with disabilities have to use the more expensive option - ADA paratransit.
  - Construction projects in downtown Raleigh need to have disability accessible routes or assistance available.

Additional general feedback includes the following:

- Many are frustrated because they are looking forward to becoming productive citizens and they experience barriers.
- Transportation to meetings is somewhat of a barrier; the City has been doing a better job of moving meetings around, especially if the topic is about a particular area of town. The meetings need to be walkable [or transit accessible].
- There is a study where a county implemented a policy to make sure all sidewalks are wheelchair accessible so more people could use bus service instead of paratransit led to savings of \$1 million dollars a year.

# **Community Engagement**

The discussion on Community Engagement gathered input on who should be better engaged in transit planning and LEP language groups.

Participants brainstormed who should be better engaged in transit planning. Suggestions included:

- Actual transit users
- Transportation deficient households
- Human services agencies
- Limited-English proficiency populations
- BiPOC communities
- Nonprofits and agencies that serve low-income families
- Rural transit users
- Busy working families and individuals
- Youth
- Seniors
- Low-income populations
- People with disabilities, people who use public transportation, and the North Carolina Department of Health and Human Services (DHHS)
- Homeless advocates, cyclists, neighborhood groups, merchants, special needs advocates
- I think we have the right people "at the table" but we need more responses sometimes from those who need to be heard or to express themselves. Also, don't give up and stay engaged until we have met their needs if at all possible.
- The City has really done great in adding different routes and those staff members come to the table fully charged, which is always good.
- Transit dependent
- Residents
- City Officials
- Business, organizations and residents that will be impacted by the plan
- Those who English isn't their first language

Participants noted the following regarding LEP populations who live in the area and they encounter that the agency may want to consider improving engagement efforts:

- "Other" languages included tribal [African, Eritrean, Ethiopian] languages.
- Spanish is the primary LEP language encountered.
- There are also Russian, Polish, Arabic, and a substantial community from the Middle East in the Raleigh area.
- Those with refugee backgrounds

Participants also noted the following for the LEP language groups that the partners most encounter:

Language	Total #
Spanish	7
Chinese	2
Arabic	2
French	0
Hindi	1
Vietnamese	2
Korean	2
Other	4

The discussion led to additional feedback that includes the following key points:

- When gathering input, be sensitive in ensuring that the populations GoRaleigh is seeking to serve are able to maintain their dignity in answering questions.
- Reframe questions in such a way that feels less agency-like and more friendly or folksy in understanding social determinants of health.
- Get a large enough sample size by working at a different level, such as through NC works or capital area workforce development.
- People need to be able to access education and training to get out of poverty and they need support getting jobs closer to them.
- Church and faith-based outreach could support GoRaleigh's initiative because it would include people who may not be working or attending formal meetings.
- Sharif Brown is a certified transit trainer who provides travel training services to people with disabilities. He is possibly the only person in NC with this certification.

- GoRaleigh needs to reimagine what transit looks like the message/perception is that it's only useful for people who can't afford to buy or use a car this leads to challenges for those who depend on it because it's not as effective as it could be. This is different from the perspective and marketing messages that transit is just another form of transportation and can be used if needed.
- Consider non-traditional places of communication i.e. other organizations, churches, barber shops those at the community level that are focal points where people meet regularly.
- The more informed individuals are and the more information that is out there the better it is for everyone to cover all the bases.
- Texting is one of the key social mediums that gets information to the younger generation.

# **Partner Connections**

Participants also discussed key questions around partner connections, specifically with what resources they need to engage with the populations they serve around transit (the "Top 3"). In order of top selections, participants indicated that the most important resources, or support, they need are:

Resources	Total #
GoRaleigh staff in attendance/participating	4
Informational handouts	4
Shareable electronic information (social media posts, videos, etc)	4
Meeting/Presentation Materials	3
Information on Best Practices	2
Training or Technical Assistance	1
Something else	0

The discussion led to additional feedback that includes the following key points:

- The Mayor's Committee for Persons with Disabilities would welcome GoRaleigh as a monthly guest speaker to present or gather feedback. Once they return to in-person meetings, the transportation department could reserve on-street parking closer to the doors for persons with disabilities.
- GoRaleigh could provide educational or marketing material to Lori with the Mayor's Committee to send out in the local or statewide listserv. Material could also be shared on

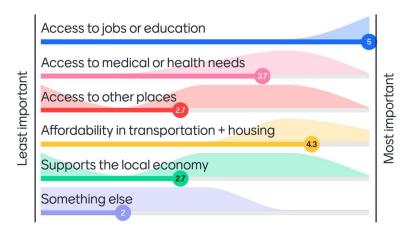
the Committee's Facebook or Twitter accounts, which are very active social media platforms.

- Plan with the NC Health Human Services Dept (HHS) because they are very focused on social determinants of health and transportation.
- The Alliance of Disability Advocates Center for Independent Living would be a partner to work with.
- Currently people are experiencing "Zoom fatigue". GoRaleigh may need to incorporate other creative, interesting, or entertaining elements to their outreach like fun animations, gift card drawings for participation, or a "decorate your door" prize.
- GoRaleigh is welcome to participate in CAC meetings. RCACS: all the chairs are meeting in December and January.
- We don't have a transportation committee and we can add this to the Housing committee.
- The League of Women Voters can help facilitate GoRaleigh presentations, publicize initiatives, or including information in their weekly newsletter, on Facebook, or via Twitter. They would also welcome having a representative speak at one of their meetings. They have been holding meetings on Zoom this year.
- The South Wilmington Men's Shelter would like to invite someone from GoRaleigh to their meetings to better work together. They were glad that Morgan/GoRaleigh reached out and made them aware of the meeting otherwise they would have missed out. They don't always know when opportunities are offered. It would be better if there was some way to have access to a schedule and/or a distribution of information about public meetings. An email or social media would be a good start.
- WakeUpWake County has a Housing Transportation and Land Use Committee.

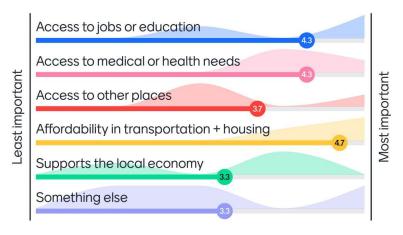
# Mentimeter Exercise Results

November 18, 2020 Meeting

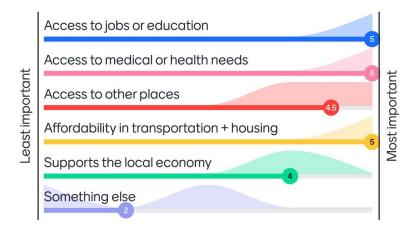
What are the most important things our transit system can provide to the populations you serve?



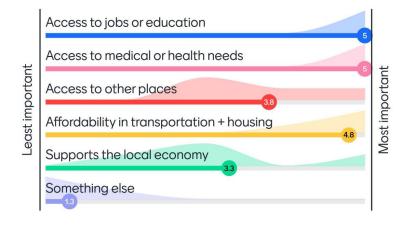
November 30, 2020 Meeting



December 3, 2020 Meeting (Group 1)



December 3, 2020 Meeting (Group 2)



# Service and Fare Equity Analysis Tracking Log

Project and Document Name (i.e.FY 2018 Route Change Service Equity Analysis)	Type of Analysis (Fare or Service Equity)	Project Status (Draft Complete, Final Complete, In progress)	Document Date (MM/YYYY)
GoRaleigh 2017 Smartcard Fare Equity Analysis	Fare Equity Analysis	Final Complete	04/2017
GoRaleigh 2017 Service Changes Service Equity Analysis	Service Equity Analysis	Final Complete	06/2017
2018 Fare Equity Analysis of Free Youth GoPasses	Fare Equity Analysis	Final Complete	05/2018
2018 Title VI Fare Structure Equity Review	Fare Equity Analysis	Final Complete	09/2018
FY 2020 Service Changes Title VI Service Equity Analysis	Service Equity Analysis	Final Complete	07/2019
R-Line Service Changes Title VI Service Equity Analysis	Service Equity Analysis	Final Complete	01/2020
Title VI Service Equity Analysis for Garner Route 20 and Carleigh Route 21	Service Equity Analysis	Final Complete	06/2020



# GoRaleigh 2017 Service Changes Title VI Service Equity Analysis

June 2017

Prepared for:





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# Introduction

GoRaleigh is a publicly-owned transit service currently operating a total of 20 radial bus routes, 6 connector routes, 3 express routes and a downtown circulator that serves the City of Raleigh, North Carolina. GoRaleigh is conducting a Service Equity Analysis under Title VI of the Civil Rights Act of 1964 to evaluate proposed service changes for 26 routes in 2017, as shown in the table below:

**Table 1: Proposed Service Changes** 

Proposed Changes					
Extend Sunday Service         Add Sunday Service         Eliminate Service					
1,2,4,5,6,7,8,11,12,15,18,19,	3,7L,10, 11L, 13, 15L, 16, 21,	31			
55X	22, 23L, 24L, 25L, 70X	(replaced by 3, 10, 15 and 15L)			

Proposed changes expand Sunday service for 13 routes and involve the addition of Sunday service for 13 routes. The proposed changes also involve the elimination of one route, the 31 New Hope Commons, which currently operates on Sunday only. Currently, the proposed 3,10, and 15L Sunday route additions (and existing Route 15) overlap significantly with the existing Route 31.

# Background

The proposed 2017 Sunday service additions and extensions aim to enhance weekend service for GoRaleigh's ridership, which was an area for potential growth as identified in the *2016 Wake County Transit Systems Customer Survey Report*. This study evaluates service equity under Title VI of the Civil Rights Act of 1964, in accordance with agency guidelines for implementation of the Act, for the proposed major service changes to GoRaleigh.

#### Title VI Requirements

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin under any program or activity receiving Federal financial assistance. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority and low-income populations from being subject to disproportionately high and adverse environmental effects. The Federal Transit Administration (FTA) Circular 4702.1B was published by the agency in order to comply with Title VI and fulfill the requirement for transit agencies receiving Federal funds to develop and implement an agencywide Title VI program. FTA Circular 4702.1B outlines requirements for determining and addressing potential disparate impacts that major service changes may have on minority or low-income populations. Any transit agency recipient that operates 50 or more fixed-route vehicles in peak service and is located in an urbanized area of 200,000 people or more is required to determine if proposed service changes would adversely impact minority or low-income populations.

# Methodology

The main components of the service equity analysis include identifying the location of any Title VI or low-income populations within the service area for each of the current routes and determining whether planned service changes will have a *disparate* impact on minority populations protected under Title VI or cause low-income populations to bear a *disproportionate burden* from the changes.

Ridership data from the 2016 Wake County Transit Systems Customer Survey was used for analyzing Sunday service additions and service hour expansions. When evaluating the major service change associated with Route 31, Census data was used, because no ridership data was available for Route 31. Census data was also used for proposed replacement routes. Using Census data for comparing service areas of the elimination of Route 31 and its proposed replacement routes enabled the analysis to maintain a true "apples to apples" comparison in the evaluation of the Route 31 major service change. The American Community Survey (ACS) 5-year estimates 2010-2014 were used, because they were the most current and complete dataset. (ACS 2015 estimates contained only partial minority and lowincome data for the block groups being analyzed). Census block groups that fell within 1/3 mile of a GoRaleigh route were considered part of that route's service area. Minority and low-income populations within those census block groups were analyzed. Minority populations, low-income populations, and major service changes and thresholds are defined below.

#### **Minority Populations**

According to FTA Circular 4702.1B, "minority" is defined as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Data for minority populations was obtained from the American Community Survey (ACS) 5-year estimates (2010-2014), using table B02001 "Race." All populations aside from "White, Non-Hispanic" were determined to be minority populations.

#### Low-Income Populations

According to the FTA circular, "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or that falls within a locally-developed income threshold that is at least as inclusive. For service equity analyses conducted by GoRaleigh, persons with household incomes at or below 150 percent of the federal poverty level for a regionally-average household size are determined to be low income. Low-income population is defined by FTA as any readily-identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data for lowincome populations was collected from the ACS using table C17002 "Ratio of Income to Poverty Level in the Past 12 Months" (2010-2014 5-year estimates).

# Major Service Change Definition and Thresholds

FTA Circular 4702.1B provides guidance that requires transit agency recipients to define "major service change" and develop policies for evaluating impacts of proposed major service changes to minority and low-income populations. GoRaleigh's approved definition of "major service change" triggering further analysis is as follows:

- The addition or elimination of a route;
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours; or
- The expansion or reduction in regular days of service on any route.

For major service changes, impact comparisons are made using population data around impacted routes compared with the population of the overall GoRaleigh service area. Findings of disparate and disproportionate impacts are made using GoRaleigh's Title VI Policy thresholds, as discussed below.

#### Disparate Impact Policy

The GoRaleigh disparate impact policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by minority populations. GoRaleigh considers impacts to be disparate any time adverse impacts borne by minority populations differ from impacts borne by non-minority populations by **5 percent**. GoRaleigh evaluates the threshold based on the difference in minority populations or ridership on the affected routes compared to the minority populations served by the system overall. When disparate impacts are identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disparate impacts.

#### **Disproportionate Burden Policy**

The GoRaleigh disproportionate burden policy establishes a threshold for determining when adverse impacts of major service changes are borne disproportionately by low-income populations. GoRaleigh considers impacts to be disproportionate when adverse impacts borne by low-income populations differ from impacts borne by non-low income populations by **2.5 percent**. GoRaleigh evaluates the threshold based on the difference in the low-income population or ridership on the affected routes compared to the low-income populations served by the system overall. When a disproportionate burden is identified, GoRaleigh will consider modifying the proposed change to avoid, minimize, or mitigate the disproportionate burden.

# **Existing GoRaleigh Service Area Population**

GoRaleigh provides bus service for the City of Raleigh and immediate surrounding areas in Wake County. Figure 1 (page 13)displays all existing GoRaleigh routes and the service area for the GoRaleigh system, which is a one-third mile buffer around all existing GoRaleigh bus routes. Table 2 summarizes the population data for the existing GoRaleigh service area. Total populations for Census group data differ slightly as the low-income population is determined for all people except institutionalized people, people in military quarters, people in college dormitories, and unrelated individuals under 15 years old. Total populations for ridership group data differ slightly because survey participants were more likely to disclose their racial/ethnic background than their income level on onboard surveys. This resulted a higher sample of data points for minority status than income status.

#### **Table 2: Population Characteristics**

Data Set	Title VI Population Total Population	Total Population	Measure		
			#	%	
Census	Minority	421,950	159,408	37.8	
	Low-Income	409,490	105,751	25.8	
Ridership Survey	Minority	24,365	19,063	78.2	
	Low Income	21,213	12,260	57.8	

Sources: 2016 Wake County Transit Systems Customer Survey, Daily Ridership estimates; US Census Bureau, American Community Survey 5-year Estimates (2010-2014), Table B02001, "Race"; US Census Bureau, American Community Survey 5year Estimates (2010-2014), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months".

# **Service Equity Impacts**

Route and service changes recommended for 2017 have been developed with the goal of mirroring a Saturday level of service on Sundays. This includes adding Sunday service to 13 routes, extending span of service on 13 routes, and eliminating Route 31 (Sunday only). Implementation is proposed to occur in the summer of 2017. All existing and proposed routes are displayed in Figure 2 (page 14). Each recommended service change was evaluated and classified as either a 'minor service change' or 'major service change' using the proposed GoRaleigh policy and definition. The results of that evaluation and resulting service equity analysis for proposed major service changes are provided in the following sections.

# **Minor Service Changes**

The following changes were reviewed against the main service change thresholds and were found not to constitute a major service change. All of the following routes are proposed to add hours of service on Sunday to match Saturday levels:

#### Span of Service Extension

- 1 Capital
- 2 Falls of Neuse
- 4 Rex Hospital
- 5 Biltmore Hills
- 6 Crabtree
- 7 South Saunders
- 8 Six Forks

- 11 Avent Ferry
- 12 Method
- 15 WakeMed
- 18 Worthdale
- 19 Apollo Heights
- 55X Poole Road Express

Sunday hours added range from 3-6+ additional hours. Since span of service for these routes is only proposed to change on Sundays, these changes do not constitute a major service change of 25 percent change in the span of service as measured in weekly revenue vehicle hours.

# **Major Service Changes**

The remaining proposed changes were deemed to be major service changes based on the thresholds for expansion of regular days of service and the elimination of a route. Impacts for the addition of Sunday service on 13 routes and the elimination of Route 31 (Sunday only) are evaluated in the following sections.

# Day of Service Additions (Sunday)

Thirteen routes are proposed to receive Sunday service, which constitutes a major service change based on the policy threshold of "the expansion or reduction in regular days of service of any route." Table 3, on the following page, presents each of the major service changes along with the minority and lowincome populations served. Percentages that are greater than or less than those for GoRaleigh's overall service area by more than the respective disparate impact or disproportionate burden thresholds are highlighted.

Additional Sunday service will provide 11.9 to 17.5 hours of service per route. For example, *Route 70X* – *Brier Creek Express* will introduce 11 hours and 51 minutes of Sunday service (6:17am to 6:08pm) and *Route 15L* – *Trawick* will introduce 17 hours and 30 minutes of Sunday service (5:50am to 11:20pm).

Table 3, shows that there is a mix of routes that fall above or below the disparate impact threshold (5 percent for minority populations) and the disproportionate burden threshold (2.5 percent for low-income populations). An analysis of minority populations determined that routes 3, 10, 13, and 22 have a higher percentage of minority ridership than the system average, by a percentage greater than the disparate impact threshold. Conversely, Routes 21, 25L, and 70X have a lower percentage of minority ridership than the system average greater than the disparate impact threshold. An analysis of low-income populations determined that routes 13, 21, 23L, and 24L have a higher percentage of low-income ridership than the system average, by a percentage greater than the disproportionate burden threshold. Meanwhile, Routes 7L, 10, 11L, 15L, 16, 22, 25L, and 70X have a lower percentage of low-income ridership than the system average, by a percentage greater than the disproportionate burden threshold.

Routes experiencing Sunday service additions have minority ridership that is slightly higher than the proportion of GoRaleigh's overall minority ridership and low-income ridership that is slightly lower-than the system average. Sunday service additions are expected to offer an increased benefit to minority and low-income riders within the proposed service area in the form of an additional day of public transit provision. Effects of Sunday service additions are expected to be equitably distributed and beneficial. The proposed changes are not anticipated to create disparate or disproportionate impacts to minorities or low-income populations.

Route	Route	Description of Service	Total	Minority		Total	Low-ir	ncome
#	Name	Change	Pop.	Total	%	Pop.	Total	%
Sunday S	ervice Additio	ons		•			•	
3	Glascock	Add Sunday Service - 7:00 AM to 8:42 PM	415	369	88.9%	343	191	55.8%
7L	Carolina Pines	Add Sunday Service - 6:45 AM to 9:00 PM	622	511	82.1%	548	296	54.1%
10	Longview	Add Sunday Service - 7:00 AM to 9:40 PM	414	385	92.9%	409	185	45.2%
11L	Buck Jones	Add Sunday Service - 6:33 AM to 10:49 PM	430	348	80.9%	418	190	45.5%
13	Chavis Heights	Add Sunday Service - 6:00 AM to 6:55 PM	561	534	95.2%	470	416	88.5%
15L	Trawick	Add Sunday Service - 5:50 AM to 11:20 PM	346	275	79.5%	304	142	46.6%
16	Oberlin	Add Sunday Service - 7:15 AM to 10:55 PM	605	344	56.9%	551	249	45.2%
21	Caraleigh	Add Sunday Service - 6:30 AM to 9:55 PM	672	494	73.6%	471	286	60.7%
22	State Street	Add Sunday Service - 6:30 AM to 10:14 PM	599	523	87.3%	542	238	43.9%
23L	Millbrook Crosstown	Add Sunday Service - 6:22 AM to 7:00 PM	414	333	80.4%	341	211	61.9%
24L	North Crosstown	Add Sunday Service - 6:57 AM to 7:15 PM	382	294	76.9%	375	294	78.4%
25L	Triangle Town Center	Add Sunday Service - 7:20 AM to 8:15 PM	380	271	71.2%	361	180	50.0%
70X	Brier Creek Express	Add Sunday Service - 6:17 AM to 6:08 PM	136	93	68.4%	122	57	47.1%
Overall G	oRaleigh Serv	rice Area	۰	1	1		•	
Proposed	Proposed Sunday Service Additions		5,976	4,773	79.9%	5,255**	2,935	55.9%
All Existing Routes		24,365	19,063	78.2%	21,213*	12,260	57.8%	
Source: 20	16 Wake County	y Transit Systems Customer Survey						
	<b>.</b>	ntage than system average, shold (5% minority; 2.5% low-				nan system a rity; 2.5% lov		eeds

# Table 3: Proposed Major Service Changes – Sunday Service

\*3,152 of *Wake County Transit Customer Survey* respondents did not provide a response when asked about their annual household incomes (for all existing routes).

\*\* 751 of *Wake County Transit Customer Survey* respondents did not provide a response when asked about their annual household incomes (for all Sunday routes).

#### **Route 31 Elimination**

*Route 31 – New Hope Commons* currently only runs on Sunday. It has been operating in lieu of regular Sunday service on several other existing routes until permanent Sunday services could be implemented. It is proposed that Route 31 be eliminated in coordination with added Sunday service on routes 3, 10, and 15L as displayed in Figure 2 (page 14). This qualifies as a major service change. The minority and low-income populations served by this route are both higher than the system average as shown in Table 4.

Routes 3 and 10 have minority and low-income populations that are higher than the system average, and exceed GoRaleigh's Title VI policy threshold. Route 15L serves a minority population that is higher than the system average, and exceeds GoRaleigh's Title VI policy threshold. The replacement of Route 31 with Route 3,10, and 15L will lead to a larger number of minority and low-income individuals receiving bus service in the area. For example, Route 31 has 19,100 minority and 11,630 low-income individuals in its service area. Comparatively, the combined routes that will replace 31 have 20,900 minority and 12,024 low-income individuals in their collective service area.

Additionally, Route 15 is currently operates on Sunday, and is proximate to Route 31. Route 15 has a service area 13,660 minority and 7,812 low-income individuals. This route's expansion in service hours will also increase the bus service provision to Title VI populations in the area.

Route	Route	Description of Service	Total Pop.	Mino	Minority		Low-ind	come
#	Name	Change		Total	%		Total	%
Route Elin	nination							
31	New Hope Commons	Eliminate route; currently Sunday only route	36,621	19,100	52.2%	32,919	11,630	35.3%
Sunday R	oute Additio	ns						
3	Glascock	Adding Sunday service; currently operates weekdays and Saturdays	14,927	7,292	48.9%	11,878	4,556	38.4%
10	Longview	Adding Sunday service; currently operates weekdays and Saturdays	15,014	8,834	58.8%	12,335	5,116	41.5%
15L	Trawick	Adding Sunday service; currently operates weekdays and Saturdays	23,219	10,561	45.5%	22,948	5,694	24.8%
Overall G	oRaleigh Ser	vice Area	•				-	•
Route31	Route31 Alternative Sunday (3,10,15L)		42,089	20,900	<b>49.7%</b>	39,266	12,024	<mark>30.6%</mark>
All Existing Routes		421,950	159,408	37.8%	409,490	105,751	25.8%	
<i>Sources</i> : US Census Bureau, American Community Survey 5-year Estimates (2010-2014), Table B02001, "Race." US Census Bureau, American Community Survey 5-year Estimates (2010-2014), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months"								

#### Table 4: Proposed Major Service Change - Route 31 Replacement

 Higher percentage than system average, exceeds threshold (5% minority; 2.5% low-income)
 Lower percentage than system average, exceeds threshold (5% minority; 2.5% low-income)

Route 31 only operates on Sunday, and the 2016 Wake County Transit Systems Customer Survey did not collect any data for this route. Therefore, the route 31 service change analysis (as shown in Table 4) was conducted using Census data. To achieve a true "apples to apples" comparison, Census data was also used here for Routes 3, 10, and 15L (in addition to 31), instead of ridership survey data as was used in Table 3 for Sunday service additions. The American Community Survey (ACS) 5-year estimates 2010-2014 were used, because they were the most current and complete dataset. (ACS 2015 estimates contained only partial minority and low-income data for the block groups being analyzed). Census block groups that fell within 1/3 mile of a GoRaleigh route were considered part of that route's service area. Minority and low-income populations within those census block groups were analyzed.

The Route 31 replacement will impact individuals living near Lions Park who currently take Route 31outbound on Sunday. A one-quarter to one-mile walk will be needed to transfer between Route 3 and Route 15L. Alternatively, individuals could take Route 3-inbound, transfer to route 15-outbound, and then transfer to 15L, but they would experience a longer time in commute. Similarly the Route 31 replacement will impact individuals living north of Enloe High School. A one-quarter to one-mile walk will be needed to transfer between Route 10 and Route 15. Alternatively, individuals could take Route 10-inbound and transfer to Route 15-outbound.

Overall, the Route 31 replacement will enable a larger population of Title VI populations to have access to GoRaleigh's bus services. The new service area will reach an additional 1,800 minority individuals (an increase of 9.4%) and 394 low-income individuals (an increase of 3.4%). Additionally, the proportion of Title VI populations in the Route 31 service area (52.2% minority; 30.6% low-income) is similar to that of its replacement routes (49.7% minority, 30.6% low-income). Overall, the elimination of Sunday Route 31 and addition of Routes 3, 10, and 15L (along with the addition in span of service for Route 15) is not anticipated to create disparate or disproportionate impacts to minorities or low-income populations.

# **Mitigation and Alternatives**

The impacts associated with the elimination of the 31 route are anticipated to be minimal. In its current form route 31 operates in the capacity of a "stop-gap" service, meaning that route 31 only operates on Sunday to provide service in lieu of routes that currently do not operate on Sunday. The addition of Sunday service for routes 3, 10, and 15L will provide an approximate substitute for route 31 service, while leading to a larger service area in the vicinity.

Mitigation is embedded in these service changes. While the elimination of *Route 31 - New Hope Commons* removes service for some low-income and minority populations, the replacement of this route with 3, 10, and 15L would result in a larger GoRaleigh service area, in which a larger number of minority and low-income persons in the area would receive service.

# **Public Involvement**

In March 2017, GoRaleigh held eight public meetings to obtain feedback on the Wake County Transit Plan, which includes proposed Sunday service changes reviewed in this service equity analysis. The dates, locations, and attendance of public outreach meetings can be found in Table 5. At the meetings Wake County residents were invited to learn more about the FY18 Draft Work Plan and provide input. An opportunity to discuss the route changes with GoRaleigh staff was provided. A total of 125 attendees were present for the eight public outreach meetings and a total of 68 comments were made. These comments covered a wide array of topics, but the most commonly occurring themes had to do with providing more commuter or light rail service (8 comments); expanding/adding Sunday Service (4 comments), and offering more bus stop amenities/shelters (4 comments). The expansion and addition of Sunday service was the second most discussed topic by the public. The comments related to this topic are as follows:

- "I think there should be Sunday Service for all routes connecting to Crabtree Valley Mall. That is a heavily used connection, yet GoRaleigh 16 and 70X do not even run on Sundays."
- "The work Plan for FY 2018 includes expanded Sunday service. I request that the Sunday Service on GoRaleigh Route 4 be extended to include service on Creedmoor Road to Town North where service is currently provided on Monday-Saturday. Currently on Sunday Route 4 ends at Rex Hospital."
- "I would like to see expanded services on Sundays to Morrisville/Cary parkway."
- "I would like to see all-day service (And Weekend service) between the Cary Train Station and the Regional RTC implemented as a high priority. Cary Train Station is a busy transit hub and is getting busier, but currently the only way to make a connection to the greater regional network in the middle of the day, is to ride all the way into Raleigh which is horribly inconvenient and takes an hour and a half..."

GoRaleigh is planning to address public input by increasing Sunday service to mirror Saturday service. This includes both Sunday service hours expansion (13 routes) and the addition of new Sunday service (13 routes). This includes adding Sunday service for the 16 and 70X as mentioned above. This also addresses the extension of Sunday service on Route 4, as mentioned above. As the Wake Transit Plan continues to be implemented, public requests about additional service in Cary and around the Triangle may be addressed by other regional providers.

Geographic Region	Date	Attendance	Location
Raleigh (South/Central)	March 20, 2017	25	Chavis Community Center
Raleigh (South West)	March 21, 2017	12	Carolina Pines Community Center
Northern Wake County	March 22, 2017	5	Wake County Northern Regional Center
Raleigh (South East)	March 23, 2017	32	Barwell Road Community Center
Western Wake County	March 27, 2017	30	Cary Train Station
Raleigh (North/Central)	March 28, 2017	12	Millbrook Exchange Center
Eastern Wake County	March 29, 2017	5	Wake County Eastern Regional Center
Southern Wake County	March 30, 2017	4	Wake County Southern Regional Center

#### Table 5: Outreach Meetings

GoRaleigh staff also attended Community Advisory Council (CAC) meetings, Capital Area Metropolitan Planning Organization Technical Coordinating Committee meetings, and Regional Transportation Alliance meetings in the spring and summer of 2017 to provide information to community leaders and interested individuals. At these meetings, agency staff provided a presentation with an overview of the "Four Big Moves," which included information about proposed Sunday service changes. Agency staff also responded to questions from attendees.

GoRaleigh also created and posted information about the proposed Sunday service changes on its website. GoRaleigh created a press release March 31, 2017 and posted it on the "news" section of its website. The press release discusses transit funding and investments in the region, public input on investment decisions, the timeline for implementation, and it provides a link to the Wake Transit blog where more information can be found.

GoRaleigh has also helped provide content for the Wake Transit blog. The blog provides an overview of the Wake County Transit Plan and links to a number of online reports, materials, and information that provide the public with a comprehensive understanding of the plan. The Fiscal Year 2018 Annual Work Plan document includes information about the proposed Sunday service additions discussed in this service equity analysis.

# **Conclusions**

The service equity analysis conducted for the increased span of Sunday service, addition of Sunday service, and the elimination of Route 31 – New Hope Commons has shown that these changes are not anticipated to result in disparate impacts for minority populations or disproportionate burdens for low-income populations. Overall, service available to minority and low-income populations will increase as a result of these changes. Riders will have access to expanded service hours and new routes on Sundays.

The review of census data for the replacement of 31 with 3, 10, and 15L demonstrates that the existing service area will remain largely intact, while simultaneously increasing transit access for Title VI Populations. The new service area will reach an additional 1,800 minority individuals (an increase of 9.4%) and 394 low-income individuals (an increase of 3.4%).

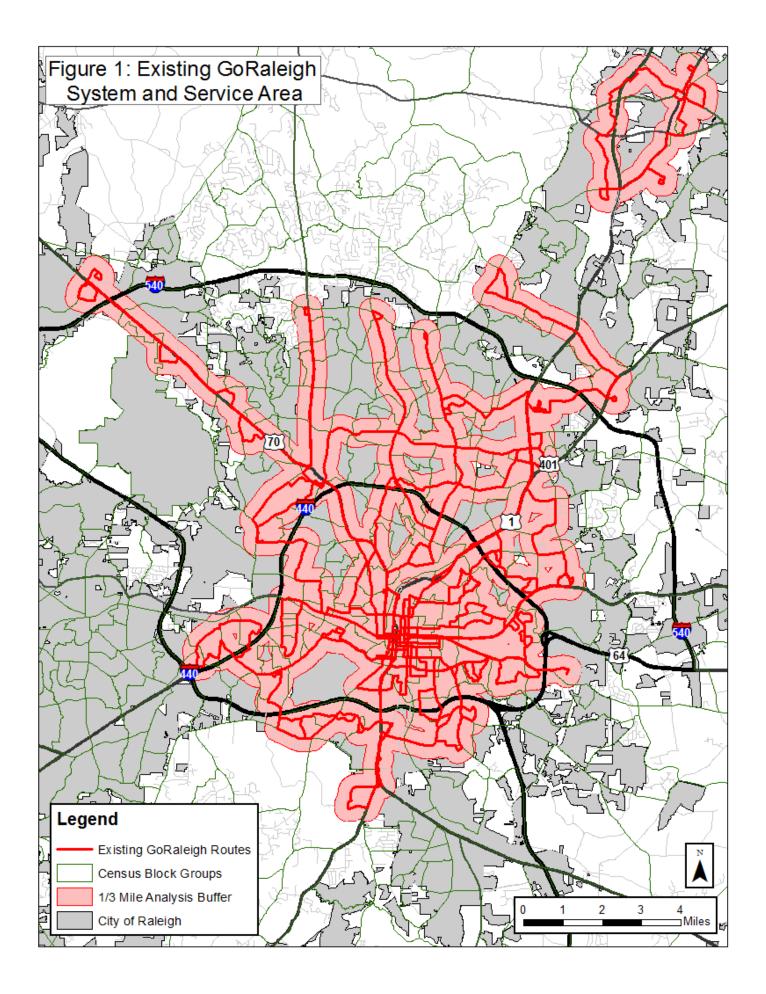
The results from this service equity analysis support the plan for the proposed changes to these routes with continued attention by GoRaleigh to ensure that further mitigation and alternatives are identified as needed.

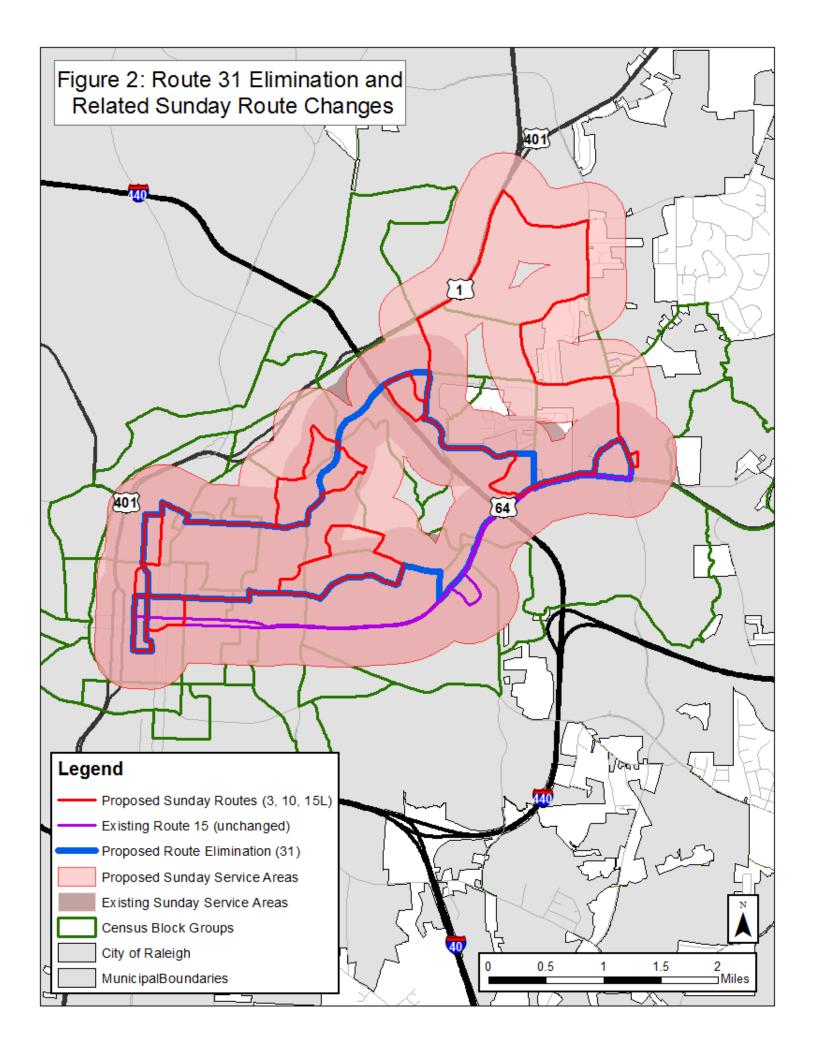
# References

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Federal Transit Administration. (2012). Circular 4702.1B Title VI Requirements and Guidelines for Federal Transit Administration Recipients. Washington, D.C. Retrieved from: <u>http://www.fta.dot.gov/documents/FTA\_Title\_VI\_FINAL.pdf</u>







TO:	Raleigh Transit Authority (RTA)- Full Board
FROM:	Morgan L. Simmons, Senior Transit Planner
DATE:	June 11, 2020
SUBJECT:	Title VI Service Equity Analysis for Garner Route 20 and Carleigh Route 21

# HISTORY OF THE SUBJECT

☑ *March 2020:* Approval of the Public Hearing Process for Garner Route 20, anticipated for *April 9, 2020*.

☑ *Mid-March 2020:* Postponement of all public hearing meetings and tasks, due to the pandemic.

✓ May 2020: Request to restart the public hearing process for Garner Route 20 and to start the public hearing process for Caraleigh Route 21- Approved by the Full Board

In accordance with Title VI requirements of the Civil Rights Act of 1964, the Federal Transit Administration (FTA) Circular 4702.1B, and Executive Order 12898, transit providers are required to evaluate any proposed service changes to determine whether minority and low-income populations will be disproportionately burdened by the changes. This is referred to as a Title VI Service Equity Analysis or 'service equity analysis'.

If approved by the Raleigh Transit Authority (RTA), GoRaleigh will add additional services to Garner Route 20 and Caraleigh Route 21.

The service equity analysis included:

☑ Review of proposed route changes,

- Assessment of minority and low-income populations within the transit service area, and
- Assessment of planned service changes, to determine whether it may have a disparate impact on minority populations or low-income populations.

# Findings:

The analysis showed no potential disparate impacts to minority populations or disproportionate burdens on low-income populations, as a result of the proposed service additions to both routes.

The additional frequencies to both routes will decrease passenger wait times and enhance overall rider experience that benefits all populations, to include minority and low-income.

Municipal Building 222 West Hargett Street Raleigh, North Carolina 27601

One Exchange Plaza 1 Exchange Plaza, Raleigh, North Carolina 27601

City of Raleigh Post Office Box 590 • Raleigh North Carolina 27602-0590 (Mailing Address) The results of this service equity analysis support the proposed service changes to both routes, with continued attention by GoRaleigh to ensure no mitigation or alternative action is needed.

# **ACTION REQUESTED:**

Information only; for consideration and approval at the next available RTA meeting.

ATTACHMENT A: Title VI Service Equity Analysis for Fall 2020 Service Changes Service Equity Analysis for Garner Route 20 and Carleigh Route 21

# **GORALEIGH** FALL 2020 SERVICE CHANGES *Title VI Service Equity Analysis*

#### INTRODUCTION

GoRaleigh is an independent subsidiary of the City of Raleigh, which is responsible for providing fixed route, public transportation service in Raleigh, North Carolina. GoRaleigh and the City of Raleigh's Department of Transportation Transit Program administers public transportation for the City, including a fixed route transportation system, paratransit service, and a free downtown circulator. The agency currently provides 37 fixed service routes, of which five are connector routes, and three express routes.

Fixed routes provide service to much of the Raleigh urbanized area and extend to the town of Rolesville, Garner and Knightdale as of Fall 2019, shown in *Figure 1*. GoRaleigh serves approximately 5 million fixed-route passenger trips annually, 30 thousand passenger trips per weekday and an additional 500 thousand annual paratransit trips in previous fiscal years.

GoRaleigh is conducting a service equity analysis under Title VI of the Civil Rights Act of 1964 to evaluate proposed service changes for *Garner Route 20* and *Caraleigh Route 21* for Fall 2020 implementation.

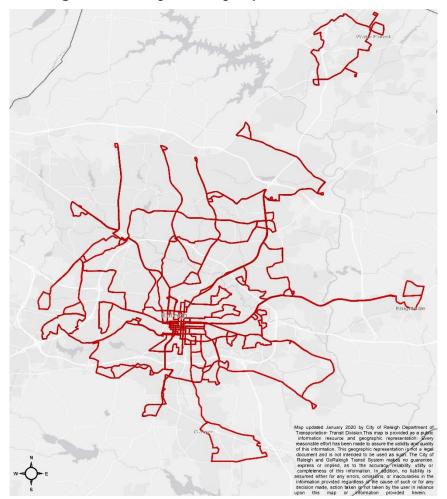


Figure 1: Existing GoRaleigh System and Service Area

# BACKGROUND

The 2016 Wake CountyTransit Plan outlined a broad set of transit planning and investment priorities for all transit agencies operating within Wake County. A corresponding Short-Range Transit Plan outlined details on the proposed changes for each agency under the initial years of the Wake Transit Plan. GoRaleigh has proposed to implement service adjustments and improvements to fixed routes in Fall 2020 as a part of the Wake Transit Plan and associated Short Range Transit Plans for GoRaleigh. These changes are a part of the agency's ongoing efforts to enhance transit services and improve efficiency as well as supports two of the four "Big Moves" identified in the Wake Transit Plan:

- "Connect All Wake County Communities", which connects local municipalities throughout the county and;
- ☑ "Enhanced Access to Transit" with increased service hours and frequency throughout the system.

Garner Route 20 proposed service changes were included in the amended FY 2020 Annual Work Plan for the Wake Transit Plan, but was postponed for implementation due to the COVID-19 pandemic. Caraleigh Route 21 is included in the FY 2021 Annual Work Plan, anticipated for approval June 2020.

When the new Garner Route 20 service was initiated in October 2019, a service equity analysis was completed and approved by the Raleigh Transit Authority (RTA). This current equity analysis is an extension of the original analysis for Route 20 and a new analysis for Route 21.

# **TITLE VI GUIDELINES**

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination based on race, color, or national origin under any program or activity receiving federal financial assistance. Federal Transit Administration (FTA) Circular 4702.1B was published by the agency in October 2012 in order to comply with the law and fulfill the requirement for transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI, there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes."

Title VI protections address a wide range of population groups with respect to potential discrimination they may experience based on their age, race, ethnicity, color, country of origin, immigration status, physical/mental disability, sex (gender), or religious affiliation.

As a grantee receiving FTA financial assistance, GoRaleigh is required to demonstrate compliance with FTA Circular 4702.1B when undertaking applicable actions. The circular outlines requirements for determining and addressing potential disparate and disproportionate impacts that major service changes may have on minority and low-income populations, respectively. According to Chapter 4 of the FTA Circular, fixed route transit providers that are in urbanized

areas with a population of 200,000 or more and operate 50 or more fixed route vehicles in the peak are required to thoroughly study the impacts of any fare or major service changes and consider mitigation strategies as needed. As GoRaleigh meets these thresholds, the agency is required to perform a Title VI Service Equity Analysis of any major service change recommendations on minority and low-income populations.

# METHODOLOGY

This service equity analysis includes:

- reviewing proposed route changes and determining whether it constitutes major service changes requiring further analysis,
- identifying any Title VI or low-income populations within the transit service area for each of the current and proposed routes,
- determining whether planned service changes will have a disparate impact on minority populations protected under Title VI, and
- evaluating service changes to determine whether low-income populations will bear a disproportionate burden of the changes.

Considering the proposed service changes will add frequency to both routes and the service area remains the same, the analysis examined the existing service areas of both routes. The data used included:

- Demographic data from the US Census Bureau, 2014-2018 American Community Survey (ACS) 5-Year Estimates, which included:
  - Population coded by table B03002, field B03002001.
  - Low-income status at 150% of the US federal poverty level, which is coded by the appropriate fields in table C17002.
  - Minority coded by table B03002, which subtracts the white, non-Hispanic population (B03002003) from the total population (B03002001).

The analysis incorporates two assumptions: 'Low income' is defined as 150% of the census defined poverty rate and 'service area' includes a breakdown of every census block group within the designated area.

The analysis of impacts to minority and low-income populations are determined on a route-byroute basis. Impact comparisons are made using population data around impacted routes compared with the population of the overall GoRaleigh service area. As discussed further in this analysis, the proposed service changes are determined whether to have a disparate impact if the minority population for the affected route(s) differs from GoRaleigh's overall service area by more than 5 percent and either experiences a relatively higher proportion of negative impacts or has a relatively lower opportunity to benefit from positive changes. Service changes are determined to have a disproportionate impact if the low-income population for the affected route(s) differs from GoRaleigh's overall service area by more than 2.5 percent and either experiences a relatively higher proportion of negative impacts or has a relatively lower opportunity to benefit from positive changes. These population groups are identified as *Minority Populations* and *Low-Income Populations*.

# **Population Definitions**

*Minority Populations*- According to FTA Circular 4702.1B, "minority" is defined as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.

Low-Income Populations- According to the FTA circular, "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or that falls within a locally-developed income threshold that is at least as inclusive. For service equity analyses conducted by GoRaleigh, persons with household incomes at or below 150 percent of the federal poverty level for a regionally-average household size are determined to be low-income, a more inclusive threshold that the poverty guidelines. A low-income population is further defined by FTA as any readily-identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action.

# MAJOR SERVICE CHANGE POLICIES AND THRESHOLDS

GoRaleigh is required by FTA to define "major service change" and develop policies for evaluating impacts of proposed major service changes to minority and low-income populations. GoRaleigh's approved definition of "major service change" triggering further analysis is as follows:

- The addition or elimination of a route;
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours; or
- The expansion or reduction in regular days of service on any route.

In addition to defining major service changes, FTA requires that agencies establish thresholds for evaluating the impacts of proposed major service changes. A disparate impact policy will help determine if proposed service changes will disproportionately impact minority populations while a disproportionate burden policy will help determine if the adverse effects of service changes are borne disproportionately by low-income populations. For major service changes, a threshold of 5 percent is used by GoRaleigh to determine disparate impacts and a threshold of 2.5 percent for determining disproportionate impacts. Both thresholds are evaluated based on the population data from the US Census Bureau and apply to the difference in the minority or low-income populations served by the system overall.

# Service Area Populations

The following section describes the minority and low-income populations of GoRaleigh's existing service area. The service area includes a quarter-mile buffer around all existing GoRaleigh bus routes. *Table 1* summarizes the population data for the existing GoRaleigh service area.

Table 1: Oortaleigh Existing Oervice Area							
<b>Total Service Population</b>	Minority P	opulation	Low-Income	Population			
316,011	161,503	51.11%	96,069	30.40%			
<b>Note:</b> Demographic data from the Estimates, which included:	e US Census Bureau	, 2014-2018 America	an Community Surve	ey (ACS) 5-Year			
Louinateo, which included.							

#### Table 1: GoRaleigh Existing Service Area

Population coded by table B03002, field B03002001.

• Low-income status at 150% of the US federal poverty level, which is coded by the appropriate fields in table C17002.

• Minority coded by table B03002, which subtracts the white, non-Hispanic population (B03002003) from the total population (B03002001).

#### **Municipal Populations**

The proposed service changes would impact the towns of Garner and a portion of the city of Raleigh. The following tables present the total minority and low-income populations in these identified areas, based on the service buffer.

	Garner	Raleigh
Total Population	28,048	449,477
Minority Population	13,094	209,077
Minority Percentage	46.7%	46.5%
Total Population*	27,750	429,912
Low-Income Population	5,741	124,373
Low-Income Percentage	20.7%	28.9%

**Table 2**: Municipal Minority and Low-Income Populations

**Note**: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table B03002, "Hispanic or Latino Origin by Race."

US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."

\*Census population for low-income individuals excludes institutionalized people, people in military quarters, people in college dormitories, and unrelated individuals under 15 years old

# MAJOR SERVICE CHANGE IMPACTS

*Table 3* summarizes the proposed service changes and it's association to the major service change thresholds criteria. All proposed service changes meet the criteria and is classified as a *major service change*. Both routes are proposed for additional frequency, but no change to the route and its exisiting service area.

Route	Description of Proposed Changes	Service Threshold Comparison
20 Garner	The proposed service would include a second bus that would travel along the same route, but in a clockwise direction along the loop, making it a bi- directional route with increased frequency of 30 minutes.	<ul> <li>A 25 percent expansion or reduction in route-miles or revenue vehicle miles, or</li> <li>A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours</li> </ul>
21 Caraleigh	The proposed change would increase the frequency of the weekday service to 30 minutes all-day and provide 30-minute frequency until 7 p.m. on the weekends.	<ul> <li>A 25 percent expansion or reduction in route-miles or revenue vehicle miles, or</li> <li>A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours</li> </ul>

**Table 3:** Proposed Fall 2020 Route Service Changes and Threshold Analysis

#### **Evaluation of Impacts**

*Table 4* summarizes the route changes and provides a clear indicator of no changes in both minority and low-income populations, as a result of service change implementation.

The analysis shows no potential disparate impacts to minority populations or disproportionate burdens on low-income populations. Currently, minority and low-income population percentages for both routes exceed the system threshold; showing the proposed enhanced services would be of benefit to these communities.

The additional frequencies will decrease passenger wait times and enhance overall rider experience that benefits all populations, to include minority and low-income.

Due to the proposed service changes not creating disparate or disproportionate impact to minority and low-income populations, this analysis concludes no mitigation efforts or strategies are needed at this time.

Route	20 Garner		21 Caraleigh		GoRaleigh System
	Additional Frequency; No		Additional Frequency; No		
Description		an of Service or		an of Service or	
	Servie	ce Area	Servic	e Area	
	Existing	Proposed	Existing	Proposed	
	Route	Route	Route	Route	
Total Population	12,790	12,790	7849	7849	316,010
Minority #	9993	9993	4529	4529	161,503
Minority %	78%	78%	58%	58%	51%
Low-Income #	5646	5646	2966	2966	96,069
Low-Income %	44%	44%	38%	38%	30%

#### Table 4: Route Demographics and Threshold Analysis

#### PUBLIC INVOLVEMENT

Under FTA Circular 4702.1B Title VI guidelines, recipients of Federal financial assistance are required to establish a public participation plan that describes the proactive strategies, procedures, and desired outcomes for public participation activities. GoRaleigh's most recent Public Participation Plan was prepared in 2018. Promoting inclusive public participation is a central consideration for the FTA Circular 4702.1B, which further requires integrating the content and considerations of Title VI, the Executive Order on LEP, and the DOT LEP Guidance into the public participation process for any federally-funded service area changes.

In consideration of public health precautions for the COVID-19 pandemic, transit staff used all available avenues to engage with the public while maintaining CDC-recommended social distancing. Information was distributed and/or accessed in a variety of ways, to include but not limited to:

- ☑ Updated project page on the GoRaleigh website,
- ☑ Initiation of survey to collect public comments,
- email blast to identified local stakeholders within the route areas,
- ☑ frequent social media postings, and
- ☑ physical placards and electronic postings on buses and station message boards

The public comment period started *May 20, 2020* and will end on *June 17, 2020*. Comments received, to date, include 2 emails and 34 completed surveys. Staff received comments from participants throughout Raleigh and Garner- *Figure 2*.

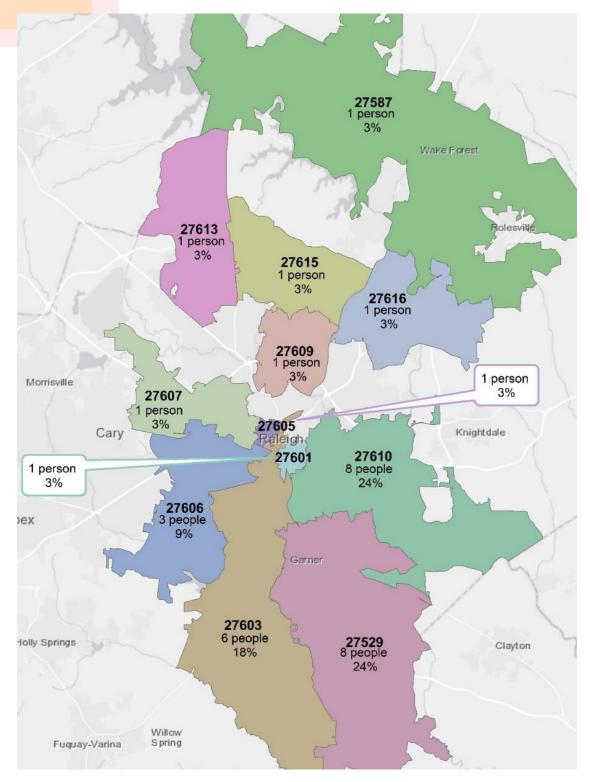


Figure 2: Survey Participation, based on zipcode

The majority of survey comments received favored the proposed changes for both routes:

For Garner Route 20:			
In Favor of Current Service	In Favor of Proposed Service Additions	Neutral to Either Option	No Response
1 Survey Participant	26 Survey Participants	4 Survey Participants	3 Survey Participants
3%	76%	12%	9%

For Caraleigh Route 21:					
In Favor of Current	In Favor of Proposed	Neutral to Either			
Service	Service Additions	Option	No Response		
0 Survey Participants	20 Survey Participants	5 Survey Participants	9 Survey Participants		
0%	59%	15%	26%		

Demographics of Survey Participants [Responses with the Highest Percentage]					
Transit Travel Patterns	Racial Identity	Gender Identity	Annual Household Income		
Transit Ride who uses the system 5+ times a week	Caucasian/White	Men	75K to 100K		
12 out of 34	15 out of 34	14 out of 34	8 out of 34		
35%	44%	41%	24%		

In addition, during the public comment period of the FY 2021 Annual Work Plan in early 2020, Raleigh staff received extensive support from the Town of Garner for Route 20 as well as several non-profit stakeholders that provide social services along Route 21's path.

#### CONCLUSION

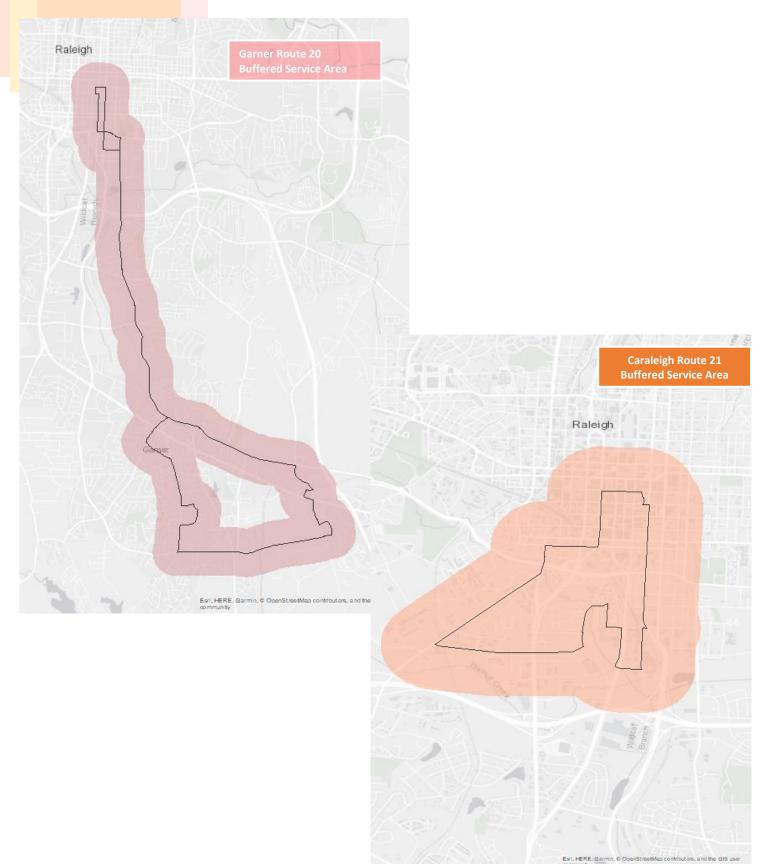
The service equity analysis performed for *Garner Route 20* and *Caraleigh Route 21* has shown these changes to not disproportionately impact minority populations or burden low-income populations. Both routes serve a higher percentage of both populations, in comparison to the overall system, and the proposed changes would be of great benefit to the populations.

The results of this service equity analysis support the proposed service changes to both routes, with continued attention by GoRaleigh to ensure no mitigation or alternative action is needed.

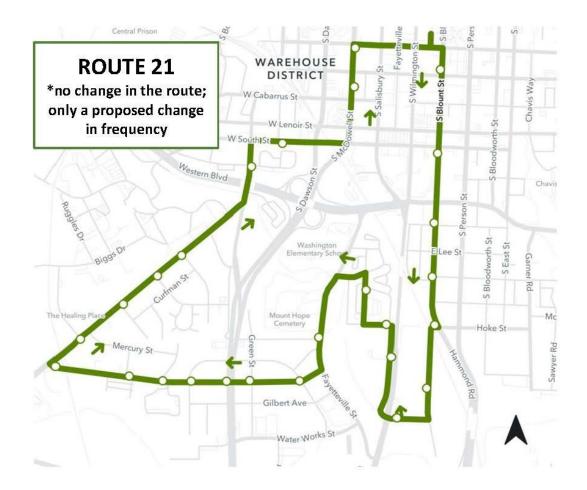
APPENDICIES:

- Service Area Buffer for Route 20 and Route 21
- Caraleigh Route 21 Fact Sheet
- Garner Route 20 Fact Sheet
- Survey Responses
- Survey Participation, based on Zip code

## **SERVICE AREA BUFFER FOR ROUTE 20 & ROUTE 21**



## **CARALEIGH ROUTE 21 FACT SHEET**



**Current Service:** This route serves the southern portion of downtown Raleigh, providing transportation options to several rehabilitation and social service organizations. The service operates from 5:30 a.m. to 10:00 p.m. weekday and 6:30 a.m. to 10:00 p.m. weekend.

Monday through Friday, morning and evening peak hours: 30-minute frequency

Monday through Friday, off-peak hours: 1-hour frequency

Saturday and Sunday, all-day: 1-hour frequency

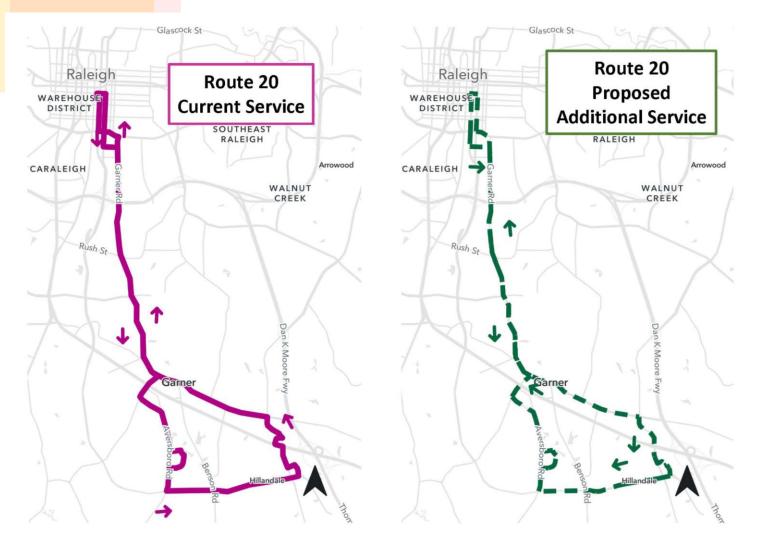
**Proposed Service Additions:** The proposed additions will increase overall frequency. The route will continue to serve the same destinations and maintain its current service times.

Monday through Friday, all-day: 30-minute frequency

Saturday and Sunday, until 7:00 p.m.: 30-minute frequency

Saturday and Sunday, after 7:00 p.m.: 1-hour frequency

## GARNER ROUTE 20 FACT SHEET



**Current Service:** This service serves major destinations such as the Garner Town Hall, Forest Hills Shopping Center, White Oaks Shopping Center and traverses to GoRaleigh Downtown Station. The all-day, weekday service operates hourly from 5:30 a.m. to 12:30 a.m.

**Proposed Additional Service**: The proposed service would add an additional bus to the route, increasing the frequency from 1-hour to 30-minutes. It will maintain its current service times and serve the same destinations.

## **SURVEY RESPONSES (as of June 3, 2020)**

Question: For Gar	ner Route 20, which	do you prefer?	
	Responses	Number of Participants	
Route	with Current Service	1	3%
Route with Propos	sed Service Additions	26	<b>76%</b>
Neu	Itral to Either Options	4	12%
	Blank	3	<b>9%</b>
	Total	34	1 <b>00%</b>

#### Question: For Caraleigh Route 21, which do you prefer?

Responses	Number of Participants	
Route with Current Service	0	0%
Route with Proposed Service Additions	20	<b>59%</b>
Neutral to Either Options	5	15%
Blank Response	9	<b>26%</b>
Total	34	100%

## Question: Prior to the pandemic [COVID-19], how often did you travel on the GoRaleigh bus system in an average week?

Responses	Number of Participants	
Not a transit rider	4	12%
1 time a week	5	<b>15%</b>
2 times a week	0	0%
3 times a week	2	<b>6%</b>
4 times a week	1	3%
5+ times a week	12	35%
Blank Response	10	<b>29%</b>
Total	34	1 <b>00%</b>

#### Question: What is your racial identity?

Responses	Number of Participants	
African- American/Black	9	26%
Asian	0	0%
Caucasian/ White	15	44%
Hispanic/Latinx	0	0%
Native American/Indian	0	0%
Other [Feel free to self-identify in the comments section]	0	0%
Prefer Not to Answer	1	3%
Blank Response	9	26%
Total	34	100%

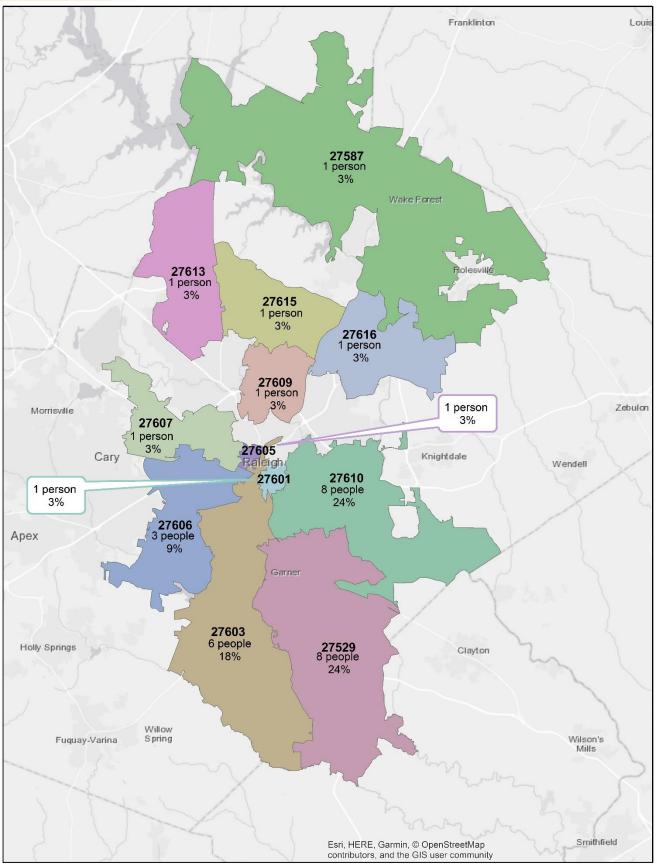
Question: What is your gender identity?

R	esp	onses	Number of Participants	
		Man	14	41%
	И	/oman	10	<b>29%</b>
	Non-	binary	0	0%
Prefer Not	to A	nswer	1	3%
		Blank	9	<b>26%</b>
		Total	34	100%

## Question: What is your total annual household income?

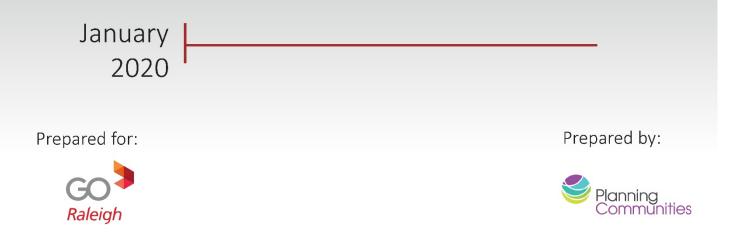
Responses	Number of Participants	
Less than 10,000	3	<b>9%</b>
10,000 to 14,999	1	3%
15,000 to 19,999	2	6%
20,000 to 24,999	3	<b>9%</b>
25,000 to 34,999	1	3%
35,000 to 49,999	4	12%
50,000 to 74,999	3	9%
75,000 to 100,000	8	24%
More than 100,000	0	0%
Prefer Not to Answer	0	0%
Blank Response	9	<b>26%</b>
Total	34	<b>100%</b>

## SURVEY PARTICIPATION, BASED ON ZIPCODE





# GoRaleigh R-Line Service Changes Title VI Service Equity Analysis



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### 1.0 Introduction

GoRaleigh, the City of Raleigh's Department of Transportation Transit Program, administers public transportation for the City, including a fixed route transportation system, paratransit service, and a free downtown circulator. The agency currently provides fixed-route service along 32 bus routes, including five connector routes and three express routes. Fixed routes provide service to much of the Raleigh urbanized area; GoRaleigh's service area is shown in **Figure 1.** GoRaleigh served 5,049,367 fixed-route passenger trips annually, 30,004 passenger trips per weekday and an additional 503,265 annual paratransit trips in Fiscal Year (FY) 2018. The existing R-Line route and service area is shown in **Figure 2**. The R-Line downtown circulator served approximately 151,091 passengers annually in Fiscal Year (FY) 2018.

GoRaleigh is conducting a Service Equity Analysis under Title VI of the Civil Rights Act of 1964 to evaluate proposed service changes to Raleigh's free downtown circulator, also known as "the R-Line". This bus service features hybrid electric buses that connects riders to restaurants, retail, entertainment venues, museums, hotels, parking facilities, community facilities, social services, and apartments, including senior housing, in downtown Raleigh.

#### 1.1 Background and Overview

GoRaleigh has proposed service changes to the current R-line route, being considered by the Raleigh Transit Authority (RTA) as of Winter 2019. In addition, subsequent to the proposed R-Line route change, the RTA is considering the potential future implementation of electric cab services during the evening service hours only. If approved, the currently proposed R-Line would serve the central business district during the daytime hours and the electric cab services would serve high ridership areas during the evening hours (starting around 8 pm) around Fayetteville Street and Glenwood South.

The proposed bus route is a 4.3-mile route, in comparison to the current 3.8-mile circulator route. The proposed electric cab coverage area is approximately 0.17 square miles near Fayetteville Street and 0.13 square miles in the vicinity of Glenwood South.

Both service change options are being evaluated separately. The first option would change the current R-Line route and would include bus service only ("Bus only option"). The proposed route and service area is shown in **Figure 2**. The second option would also change the current R-Line route during daytime and early evening hours but would switch from bus service to electric cabs (E-cabs) for nighttime service starting at 8:00 p.m. ("Bus and E-cab option"). The proposed E-cab service areas are shown in **Figure 3**. Both service change options would decrease bus runtime from 27 minutes to 17 minutes and would increase coverage from 3.8 miles to 4.3 miles.

#### Title VI Guidelines

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination based on race, color, or national origin under any program or activity receiving Federal financial assistance. Federal Transit Administration (FTA) Circular 4702.1B was published by the agency in October 2012 in order to comply with the law and fulfill the requirement for transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA Circular on Title VI compliance

states that while low-income populations are not a protected class under Title VI, there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transitproviders to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes."

Title VI protections address a wide range of population groups with respect to potential discrimination they may experience based on their age, race, ethnicity, color, country of origin, immigration status, physical/mental disability, sex (gender), or religious affiliation.

As a grantee receiving FTA financial assistance, GoRaleigh is required to demonstrate compliance with FTA Circular 4702.1B. The Circular outlines requirements for determining and addressing potential disparate and disproportionate impacts that major service changes may have on minority and low-income populations. According to Chapter 4, fixed route transit providers that are located in urbanized areas with a population of 200,000 or more and operate 50 or more fixed route vehicles in the peak are required to thoroughly study the impacts of any fare or major service changes and consider mitigation strategies. As GoRaleigh meets these thresholds, the agency is required to perform a Title VI Service Equity Analysis of any major service change recommendations on minority and low-income populations.

#### 1.2 Methodology

The main components of the service equity analysis include:

- Reviewing proposed route changes and determining if they constitute major service changes requiring further analysis (see Section 1.3 Major Service Change Policies and Thresholds)
- Identifying the location of any Title VI or low-income populations within the transit service area for each of the current and proposed routes.
- Determining whether planned service changes will have a *disparate* impact on minority populations protected under Title VI.
- Evaluating service changes to determine whether low-income populations will bear a *disproportionate burden* of the changes.

Once the FY 2020 proposed R-Line route change was reviewed and major service changes were identified, the following steps were taken to perform the analysis of potential impacts:

- Data from the US Census American Community Survey (ACS) 5-year annual estimates was collected at the Block Group level for GoRaleigh's existing and proposed service areas.
- A 1/8-mile buffer was applied to current and proposed bus routes to capture Census data to represent the service areas. After analyzing the data, it was determined that the typical 1/3-mile buffer is too large for this area and does not accurately represent the service area. Using Geographic Information Systems (GIS), the Census Block Groups intersecting this buffer, as well as the E-cab service areas, were used to calculate the low-income and minority populations for the existing and proposed "R-Line" services. Block Groups where only a small portion (less than 10 percent) was covered by the route buffer were excluded from the analysis.
- Population data from the ACS for the routes was compared to the population served by the system overall. These values were compared to the 5 percent (minority) or 2.5 percent (low-income) thresholds (see Section 1.3 Major Service Changes and Thresholds for more detail).

The analysis of impacts to minority and low-income populations is calculated on a per-route basis. Impact comparisons are made using population data around impacted routes compared with the population of the overall GoRaleigh service area. Impacts to minority and low-income populations are determined using agency service change policies and thresholds (see Section 1.3). For any impacts identified, proposed service changes are evaluated to determine whether mitigation measures could lessen impacts to minority and low-income populations.

#### **Population Definitions**

#### **Minority Populations**

According to FTA Circular 4702.1B, "minority" is defined as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Minority population was obtained from the ACS 5-year estimates (2013-2017), using table B03002 "Hispanic or Latino Origin by Race." All populations aside from "White, Non-Hispanic" were determined to be minority populations.

#### Low-Income Populations

According to the FTA Circular, "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or that falls within a locally-developed income threshold that is at least as inclusive. For service equity analyses conducted by GoRaleigh, persons with household incomes at or below 150 percent of the federal poverty level for a regionally-average household size are determined to be low-income, a more inclusive threshold than the poverty guidelines. A low-income population is further defined by FTA as any readily-identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data for low-income populations was collected from the ACS using table C17002 "Ratio of Income to Poverty Level in the Past 12 Months" (2013-2017 5-year estimates).

#### 1.3 Major Service Change Policies and Thresholds

As described in section 1.1 Background and Overview, GoRaleigh is required by FTA to define "major service change" and develop policies for evaluating impacts of proposed major service changes to minority and low-income populations.

GoRaleigh's approved definition of "major service change" triggering further analysis is as follows:

- The addition or elimination of a route;
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours; or
- The expansion or reduction in regular days of service on any route.

#### Major Service Change Impact Thresholds

In addition to defining major service changes, FTA requires that agencies establish thresholds for evaluating the impacts of proposed major service changes. A disparate impact policy will help determine if proposed service changes will disproportionately impact minority populations while a disproportionate burden policy will help determine if the adverse effects of service changes are borne disproportionately by low-income populations. For major service changes, a threshold of 5 percent is

used by GoRaleigh to determine disparate impacts and a threshold of 2.5 percent for determining disproportionate impacts. Both thresholds are evaluated based on the population data from the ACS and apply to the difference in the minority or low-income population or ridership on the affected routes compared to the minority or low-income populations served by the system overall.

#### 1.4 Service Area Populations

The following section describes the minority and low-income populations of the existing R-Line service area. **Figure 2** in the Appendices shows the service area for the existing route used for Title VI analysis. The service area includes a one-eighth mile buffer around the existing R-Line bus route. **Table 1** summarizes the population data for the existing service area prior to proposed R-Line service changes.

Total Population	Minority Population	Percent Minority
9,384	3,879	41.3%
Total Population*	Low-Income Population	Percent Low-Income
7,637	3,005	39.4%
"Hispanic or Latino Origin by Race"; Ta	Community Survey 5-year Estimates (201 ble C17002, "Ratio of Income to Poverty	Level in the Past 12 Months."
*Census population for low-income in people in college dormitories, and unr	dividuals excludes institutionalized people elated individuals under 15 years old.	e, people in military quarters,

#### Table 1 – Existing R-Line Service Area

While ACS data is used in the analysis of impacts in this report, it should be noted that demographic information from the 2016 Wake County Transit Systems Customer Survey shows a considerably higher proportion of GoRaleigh riders (almost 68 percent) are identified as African American. This survey also shows that almost 50 percent of GoRaleigh riders have annual household income of \$25,000 or lower.

#### **Municipal Populations**

The proposed service change would occur within the City of Raleigh. **Table 2** presents the total minority and low-income populations within the city limits.

Table 2 -City of Raleigh Minority Population (2013-2017)

Total Population	Minority Population	Percent Minority					
449,477	209,077	46.5%					
Total Population*	Low-Income Population	Percent Low-Income 28.9%					
429,912	124,373						
Sources: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table B03002, "Hispanic or Latino Origin by Race"; Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."							
	ble C17002, "Ratio of Income to Poverty I	evel in the Past 12 Months."					

## 2.0 Major Service Change Impacts

The proposed changes being evaluated for service equity impacts include changes to the route of the R-Line downtown circulator and the proposed addition of E-cabs to replace R-Line bus service during nighttime service hours. The following sections analyze these proposed changes against GoRaleigh's established policies and thresholds for Title VI service equity evaluations.

#### 2.1 Determination of Major Service Changes

Table 3 summarizes the service changes associated with the proposed revisions to the R-Line routing and operations, location of the route, and notes major service change thresholds met by the proposed changes to the R-Line downtown circulator. The bus only option includes a change in route. The bus and E-cab option includes the same proposed route change as well as switching to electric cab service for nighttime hours. While frequency of the service would not increase, reliability and on-time service are expected to improve.

Option Name	Summary of Proposed Changes	Service Threshold Comparison		
Option A: Bus only	Delete route segments on Glenwood Avenue and add route segments on N West Street. Add route segment on Salisbury Street and delete route segment on East Hargett Street and East Martin Street.	• Less than 25% expansion in route miles. Included for informational and comparative purposes		
Option B: Bus & E-Cab	Same route changes as above. Switches from bus service to E-cabs for nighttime service starting at 8:00 PM. Two service areas: Glenwood Avenue and Fayetteville Street.	<ul> <li>More than 25% reduction in span of service (for bus service)</li> <li>Addition of electric cab service (new service)</li> </ul>		

#### Table 3- Proposed FY 2020 R-Line Route and Service Changes and Service Change Threshold Analysis

#### 2.2 Evaluation of Impacts

**Table 4** summarizes the route changes and the minority and low-income populations served by each route. This information is used for the impact analysis for each proposed route.

	Summary of	Rou	ite	Total	Minority		Low-income	
Route Name	Changes	Status		Population*	Total	%	Total	%
		Exist	ing	9,384 / 7,637*	3,879	41.3	3,005	39.3
	Deletion and addition of route segments (Options A & B).	Exist (Dele route se	ted	2.921 / 2,890*	924	31.6	1,017	35.2
R-Line		Proposed R- Line: Transit Route		6,957 / 5,241*	3,331	47.9	2,205	42.1
	Addition of nighttime E-cab service (Option B).	Proposed Electric Cab		9,982 / 8,235*	3,859	38.7	3,214	39.0
Overall GoRaleigh Serv	vice Area	<u>.</u>						
	All Existing Routes			395,633	180,908	45.7	115,838	30.7
		Higher percentage than system average, exceeds threshold			em	Lower percentage than system average, exceeds threshold		
*Census population for low-income individuals excludes institutionalized people, people in military quarters, people in college dormitories, and unrelated individuals under 15 years old. The total counts for these populations are included in parenthesis.								

The proposed R-Line route alignment would move from Glenwood Avenue to N. West Street and from East Hargett Street and East Martin Street to Salisbury Street. The proposed route will be 4.3 miles with a travel time of 30 to 31 minutes. The existing R-line route is currently 3.8 miles with a travel time of 28 to 35 minutes. The proposed route changes will lead to increased route miles and more consistent travel times.

The proposed R-Line route would increase the proportions of minority and low-income populations served. When compared with the existing route, the percentage of minority population served by the new route rises from 41.3 percent to 47.9 percent, increasing from below to above the proportion of minority populations served by all GoRaleigh routes. The percentage of low-income populations served rises from 39.3 percent to 42.1 percent, both greater proportions than the low-income population served by all GoRaleigh routes. The portion of the existing route that would no longer be served has lower proportions of minority and low-income populations (31.6 and 35.2, respectively) than either the existing or proposed R-line route as a whole.

This analysis shows that R-Line bus route and operational changes are not anticipated to generate disparate impacts to minority populations or disproportionate burdens low-income populations from the proposed R-Line route. The proposed route serves these populations at rates that are higher than the current R-Line route (and than the overall GoRaleigh system). Thus, while all potential R-Line riders will experience some decrease in are served, minority and low-income populations are anticipated to experience a relatively smaller decrease in service area coverage.

E-cab services would replace bus service in the evening hours after 8:00 pm. E-cab service would center around two high-frequency ridership areas along Fayetteville Street and near Glenwood South. The Glenwood South portion of the service area includes the senior housing located along Glenwood Avenue. Like the existing bus service, use of the E-cab service would be fare free for riders.

The E-Cab service area would serve a lower proportion of minority populations (38.7 percent) and a slightly lower proportion of low-income populations (39.0 percent) than the existing R-Line route (41.3 percent and 39.3 percent, respectively). The proportion of minority populations that will be served by proposed E-cab service is also lower than the system average of 45.7 percent by a percentage difference that is in excess of the Title VI threshold (5 percent difference). However, the total minority population served by E-cabs (3,859) is nearly identical to the population served by the existing route (3,879). The proportion of low-income populations served by both existing and proposed E-cab service is well above the system average of 30.7 percent by percentage differences in excess of the Title VI threshold (2.5 percent). Also, while the proportion decreases very slightly, the total low-income population served by E-cab service is **greater** than the low- income population served by the existing route (3,214 and 3,005, respectively).

This analysis shows that the shortening of the R-Line bus route service hours and the change of service to E-cabs for nighttime hours are not anticipated to generate disproportionate burdens to low-income populations, but there is some potential for disparate impacts to minority populations from these proposed service changes during nighttime hours. During these hours, riders within the E-cab service areas will have access to E-cab services, while those who fall outside of the E-cab service areas will be impacted. During daytime hours disproportionate and disparate impacts are not anticipated as described previously. Mitigation options for all potential impacts are discussed in the following section.

Results from the 2016 Wake County Transit Systems Customer Survey show that of the riders on the R-Line who responded, 63 percent would be considered minority and 78 percent would be considered low-income; thus, the impacts (positive and negative) to actual Title VI populations may be greater than reflected in the Census-based analysis. Thus, it is important to consider potential benefits, impacts, and any mitigation options that may be appropriate for all Title VI populations from both the proposed route change and the potential nighttime service change.

### 3.0 Mitigation and Alternatives

The impacts associated with route changes to R-Line service and the addition of E-cabs for nighttime service are anticipated to be limited. Threshold-based mitigation may be required for minority populations for nighttime service changes. In addition, R-Line ridership characteristics show that a clear majority of current R-Line riders identify as minority and a substantial majority identify as low-income. Thus, mitigation and alternatives are being considered in the planning process.

Throughout the process of developing the proposed R-Line route and service changes and options, GoRaleigh considered several downtown stakeholders' feedback to design a route that best serves the target area. The stakeholder group weighed in on five proposed options: three R-Line route changes; bus service during the day and E-cabs in the evening; and E-cabs all day. The group's input assisted GoRaleigh in narrowing the options to the proposed R-Line route change option and the option with Ecabs in the evening. The proposed route was designed in consideration of current and future pedestrian facilities as well as site development that may be needed for new stop sites. Mitigation options for any potential impacts from switching to E-cab service in the evening might include:

- Promote use of alternate GoRaleigh fixed routes until 11 PM (note: these routes are not fare free)
- Continue to coordinate with local non-profits and social services to distribute passes for fixed route services to minority, low-income riders and other Title VI populations in this area
- Promote currently available options for youth and senior fare free travel on fixed routes
- Support other mobility options (scooters, etc.)
- Coordinate with other county and city departments, and non-profits to promote services available to low-income and other Title VI populations, especially during nighttime hours and overnight

#### 4.0 Public Involvement

Under FTA Circular 4702.1B Title VI guidelines, recipients of Federal financial assistance are required to establish a public participation plan that describes the proactive strategies, procedures, and desired outcomes for public participation activities. GoRaleigh's most recent Public Participation Plan was prepared in 2018. Promoting inclusive public participation is a central consideration for the FTA Circular 4702.1B, which further requires integrating the content and considerations of Title VI, the Executive Order on LEP, and the DOT LEP Guidance into the public participation process for any federally funded service changes.

#### Stakeholder Meetings

GoRaleigh held a series of stakeholder meetings to assess the downtown transportation need and revise the R-Line circulator service from September 2018 to May 2019. Meetings were held on the following dates:

- September 24, 2018
- October 29, 2018
- November 26, 2018
- January 7, 2019

- February 28, 2019
- March 25, 2019
- May 13, 20

The downtown stakeholder group consisted of representatives from local and county government, universities, downtown organizations, non-profits, and advocacy groups, including:

- Campbell University Law School
- City of Raleigh (downtown)
- City of Raleigh (Economic Development and Innovation)
- Downtown Living Advocates (DLA)
- Downtown Raleigh Association (DRA)
- GoRaleigh

- Raleigh Convention Center (RCC)
- Raleigh Transit Authority (RTA)
- Shaw University
- Wake County Department of Social Service
- Wake County
- County Manager's Office

Through these meetings, staff engaged the groups using a variety of activities, to include data assessment, breakout sessions, and surveys. A summary of these meetings is included in Appendix 2.

#### Online Survey

The formal public comment period was between November 11 and December 12, 2019. An online survey was developed and made available on the city's R-Line webpage and through a QR code posted on public materials located at shelters, stops, and on post cards. A total of 340 survey responses were received. Overall, 44.7 percent of survey respondents favored the proposed route, with 33.8 percent in favor of the current route and 21.5 percent neutral to either option. Respondents indicated that the most important part of the rider experience for the R-line was linking to highly active downtown areas. Riders indicated that they use the R-line to reach several areas, with the Warehouse District, Glenwood South, and Fayetteville Street receiving the most responses. The most common purposes for R-line trips include recreation/events, shopping/dining, and work. Additional details are included in the summary found in Appendix 2.

#### Public Meetings

Public meetings were held on November 20, 2019 at the Raleigh Municipal Building. An afternoon session was held from 11:00 am to 2:00 pm, and an evening session was held from 4:00 pm to 6:30 pm. The meetings were set up in an open house format, allowing participants to review information and their own pace. A PowerPoint presentation was available for use as the public discussed the project with staff members one-on-one. Approximately 20 residents attended the meetings.

#### Presentations

GoRaleigh has presented R-line information to several local organizations. **Table 5** lists the names and dates of these presentations.

Meeting	Date
Glenwood South Neighborhood Collaborative – Executive Board	November 11, 2019
Meeting	
Downtown Raleigh Alliance Quarterly Rundown	November 12 and November
	14, 2019
Downtown Raleigh Community Activation Committee –	November 13, 2019
November Social	
Central CAC Meeting	December 2, 2019
Hillsborough Wade CAC Meeting	December 3, 2019

#### Table 5 – Local Organization Presentations

#### Notifications

To support outreach to date, GoRaleigh has used a variety of promotional and notification strategies. These include website and social media updates, GoRaleigh.org listserv distribution, and placards posted on buses and at stations.

#### Public Hearing

A public hearing was held on December 12, 2019. One person spoke in favor of the proposed route.

#### 5.0 Conclusions

The impacts associated with route changes to R-Line service and the addition of E-cabs for nighttime service are anticipated to be limited. Threshold-based mitigation may be required for minority populations. Also, ridership characteristics indicate that higher proportions of both minority and low-income populations may be affected than is reflected in the R-Line service area population. Thus, GoRaleigh will continue to promote the use of other fixed-route transit options in the area that serve areas that will no longer be served by the R-line and to identify opportunities to expand access and use of discount or fare-free passes for fixed route services, additional mobility options, and available social services. Public feedback to date has been supportive of the proposed R-Line route and service changes.

### References

American Community Survey 5 Year Estimates. 2013-2017. US Census Data. Retrieved from: <u>https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</u>

City of Raleigh. (2016). Wake County Transit Systems Customer Survey Summary Report. Retrieved from: <u>https://www.raleighnc.gov/content/PWksTransit/Documents/WakeCoTransitSystemsCustomerSurveyFinalReportJune2016.pdf</u>

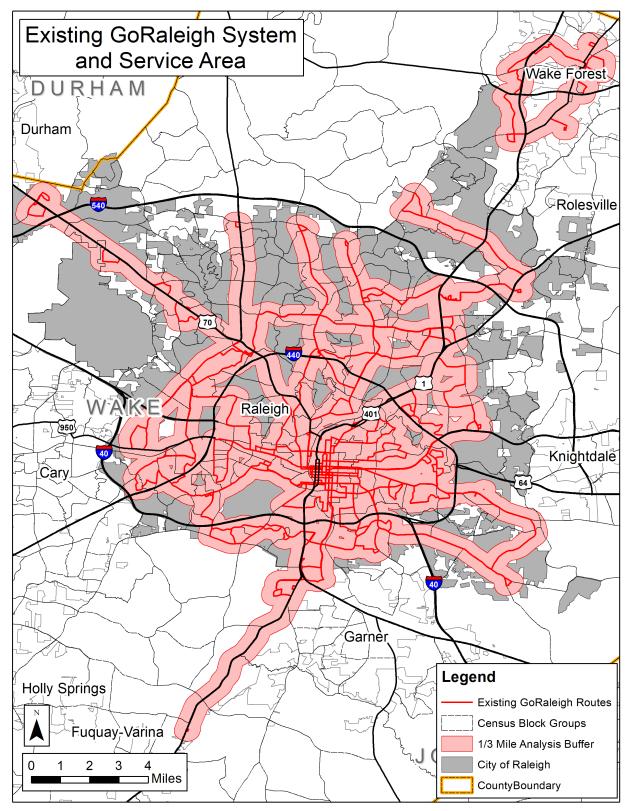
Federal Transit Administration. (2012). Circular 4702.1B Title VI Requirements and Guidelines for Federal Transit Administration Recipients. Washington, D.C. Retrieved from: <u>https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/title-vi-requirements-and-guidelines-federal-transit</u>

Wake Transit. (2016). *Wake Transit Plan*. Raleigh, NC. Retrieved from <a href="https://goforwardnc.org/county/wake-county/the-plan/">https://goforwardnc.org/county/wake-county/the-plan/</a>

Wake Transit. (n.d.). *Wake Bus Plan Short Range Transit Plans*. Raleigh, NC. Retrieved from <u>https://goforwardnc.org/wp-content/uploads/2018/08/Short-Range-Transit-Plan-Booklet.pdf</u>

## **Appendix A: Maps**

Figure 1: Existing GoRaleigh System and Service Area



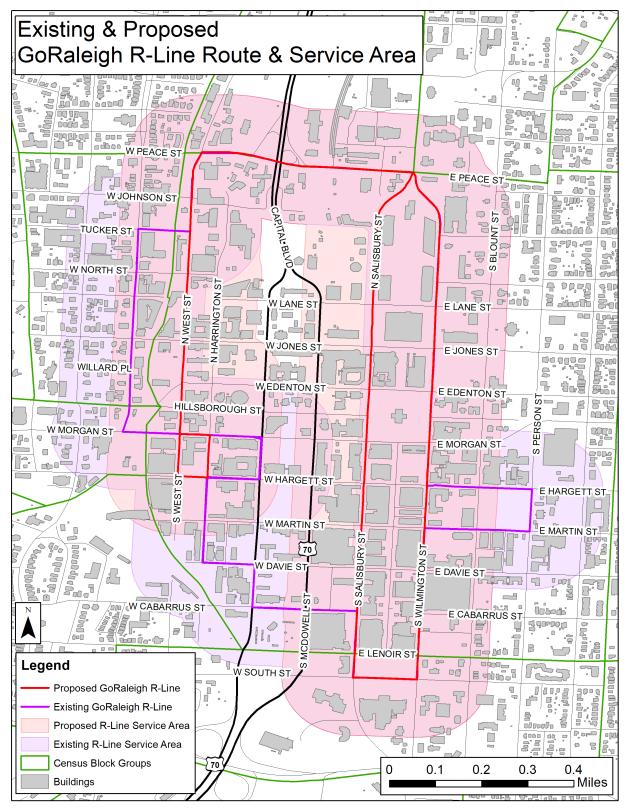


Figure 2: Existing & Proposed GoRaleigh R-Line Route & Service Area

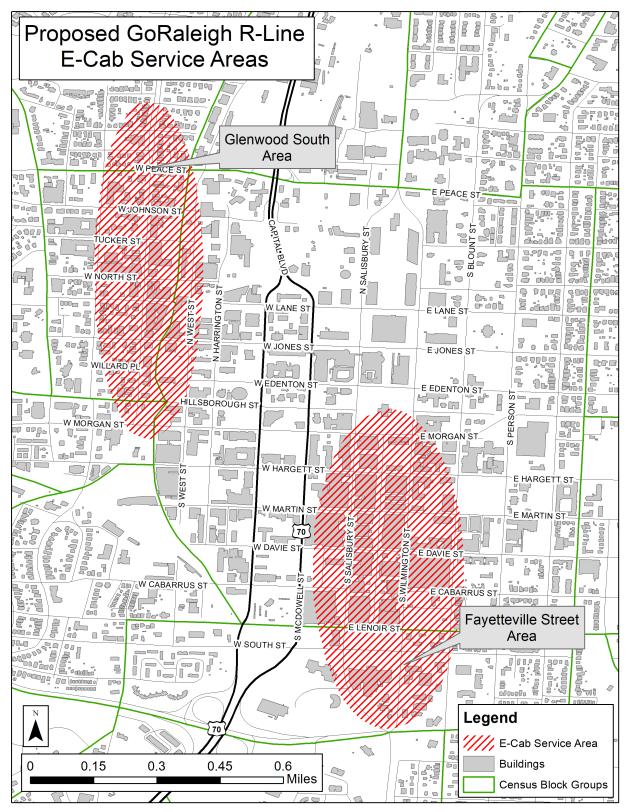


Figure 2: Proposed GoRaleigh R-Line E-Cab Service Areas

## Appendix B: Stakeholder Engagement Materials



December 3, 2019

**To:** Raleigh Transit Authority (RTA)

From: Morgan L. Simmons Senior Transit Planner

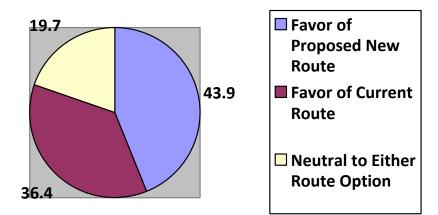
**RE:** Proposed R-Line Route Change (Status of Public Engagement and Comment Period)

The Raleigh Transit Authority approved during the **October 2019** board meeting to open the public engagement and comment period for the proposed R-Line route. Since this approval, staff has completed several tasks to gauge the public's opinion about the change. The public comment period officially started **Monday, November 11<sup>th</sup>** and will end on **Thursday, December 12<sup>th</sup>**.

#### Online Survey

An online survey was developed and made available on the R-Line's city webpage (<u>www.raleighnc.gov/rline</u>) as well as through a QR code posted on public materials located at shelters, stops and on post cards.

As of *Wednesday, November 27<sup>th</sup>*, the survey has 265 responses with 43.9% in favor of the proposed route, 36.4% in favor of the current route and 19.7% neutral to either option. Please refer to Attachments A, B and C for a more detailed assessment of the survey results.





#### Public Meetings

Staff completed public meetings on **Wednesday, November 20<sup>th</sup>** - *afternoon session from 11am to 2pm* and *evening session from 4pm to 6:30pm*. It was located in Conference Room 303 in the Raleigh Municipal Building. The meeting was staged in an 'open house' format to allow citizens to review information at their own pace, while staff and a PowerPoint was made available during one-on-one discussions. In addition, staff made available a large-scale map for the public to specifically identify likes and dislikes of the proposed route. Lastly, hard copies and computers were available for interested people to take the survey. With both sessions, staff interacted with 20 citizens.

#### Presentations at Local Organizations

Transit Planning and TDM staff collectively presented R-Line information at the following organizations:

- Glenwood South Neighborhood Collaborative- Executive Board Meeting November 11<sup>th</sup> at 5pm 7 people in attendance
- *Downtown Raleigh Alliance Quarterly Rundown* November 12<sup>th</sup> at 6pm // November 14<sup>th</sup> at 9:30am 30-50 people in attendance for each session
- *Downtown Raleigh Community Activation Committee- November Social* November 13<sup>th</sup> at 5:30pm 40+ people in attendance

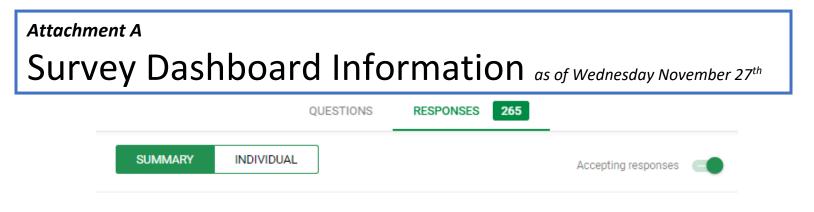
#### Upcoming Presentations at Local CACs

Staff will be presenting at several CACs in the coming days. Unfortunately, North Central's meeting was canceled, and Mordecai's meeting is currently pending. For those CACs, staff has given materials to the city contact to include in the CAC's newsletters, email listservs and other CAC communications.

- **Central CAC** December 2<sup>nd</sup> at 7pm
- Hillsborough Wade CAC- December 3<sup>rd</sup> at 7pm

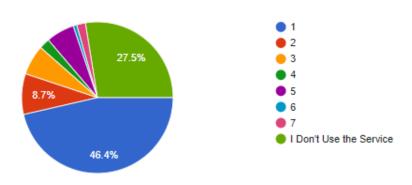
Staff, with the assistance of stakeholders and interested organizations have distributed information throughout the R-Line service area, and will continue to do so, leading up to the schedule public hearing on **December 12<sup>th</sup>**.

Morgan L. Simmons Senior Transit Planner



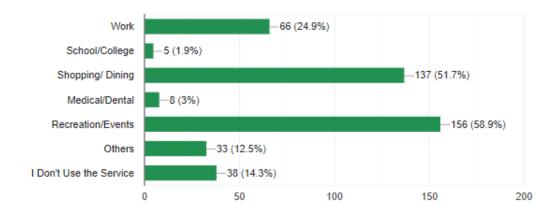
#### How many days a week do you typically ride the R-Line?

265 responses



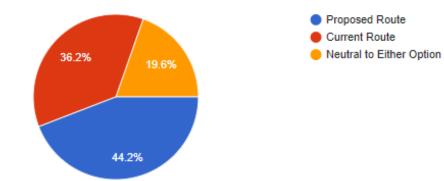
# What is your main purpose for using the service? (Check multiple boxes if it applies)

265 responses



## For you, which do you prefer?

265 responses



## What comments do you have about the proposed route?

Please refer to <u>Attachment C</u> for detailed comment list

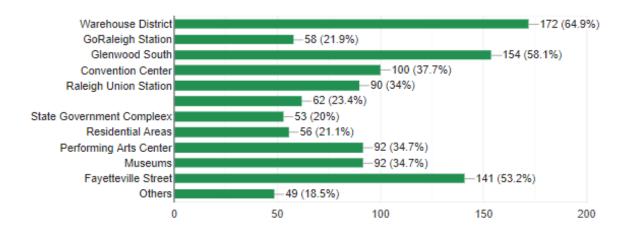
265 responses

None	
N/A	
Good for Fayetteville and Glenv	wood district. Forget everyone else. Hardly a circulator.
n/a	
Much better that it goes in two	directions and on main streets.
It's streamlined and safer for th	he bus and the drivers
Street. At this time we park in t find parking closer to One City I am trying to be creative, hoping from their vehicle everyday. Per Dillon Parking Deck and then ar	company I work for (McClatchy) will be joining The N&O at OCP on Fayetteville the Dillon Parking Deck. We rent 90 spaces from McLaurin. I have not been able t Plaza, nor have I been able to find a company willing to swap parking locations. I g to find a solution that will help our employees not have to walk 5 blocks to and rhaps your RLine could be a resource for us. We would need a bus stop at The nother bus stop at One City Plaza on Fayetteville Street, or nearby. I would really ct me concerning this. Thank you, Angie Braswell, McClatchy, 111 West Hargett abraswell@mcclatchy.com

I hate that it is not cyclical. This makes absolutely no sense and doesn't cover as much ground. Such a waste. I love the current route and I'm teaching my kids how to use it!

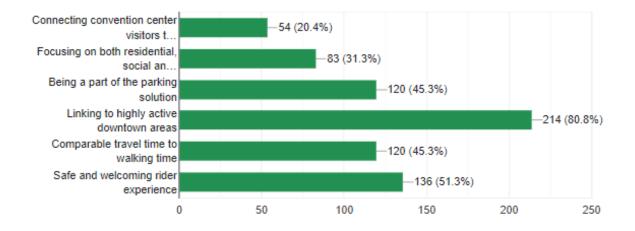
# When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)

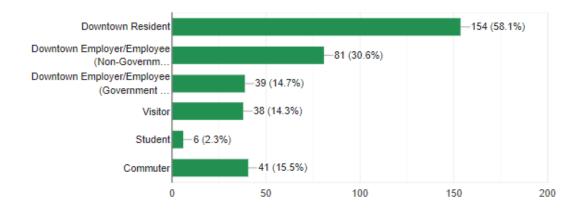
265 responses



What is most important to your R-Line rider experience? (Check up to 3)

265 responses

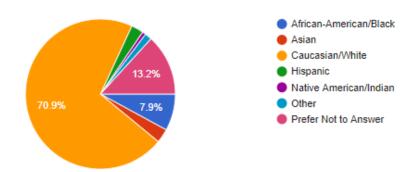




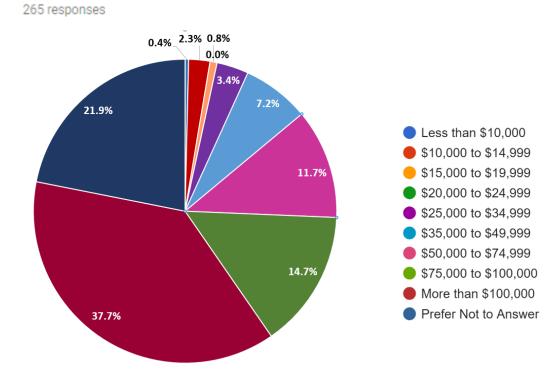
## What do you closely identify as? (Check multiple boxes if it applies) 265 responses

Do you identify as.....

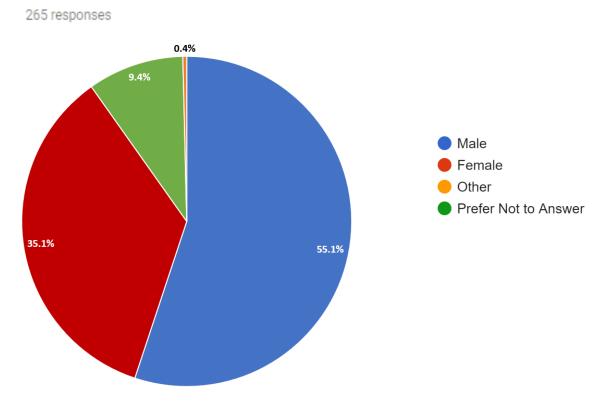
265 responses



## What is your total annual household income?



Do you identify as.....



## **Attachment B - Responses**

н	low many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	(Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual ho income?
	4	Work	Proposed Route	Glenwood South;Convention Center;Residential Areas	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Commuter	African-American/Black	Male	More than \$100,000
	1	Shopping/Dining;Recreation/Events	Proposed Route	Glenwood South;Convention Center;Performing Arts Center;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,000
	4	Work	Proposed Route	Warehouse District;GoRaleigh Station;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area)	Connecting convention center visitors to downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Government Sector);Commuter	Caucasian/White	Male	\$50,000 to \$74,999
	I Don't Use the Service	Work	Proposed Route	Warehouse District;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector);Commuter	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
	1	School/College;Shopping/Dining;Recreation/Events	Current Route	Warehouse District;Raleigh Union Station;Performing Arts Center;Museums	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Female	\$75,000 to \$100,000
	1	Shopping/ Dining;Recreation/Events	Current Route	Hillsborough Street (in the Downtown Area);Museums	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
	I Don't Use the Service	Recreation/Events;I Don't Use the Service	Proposed Route	Warehouse District; Glenwood South; Convention Center; Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience Focusing on both residential, social and retail components of Glenwood	Visitor	Caucasian/White	Female	More than \$100,000
	1	Work	Proposed Route	GoRaleigh Station;Glenwood South;Hillsborough Street (in the Downtown Area);Fayetteville Street	South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	\$50,000 to \$74,999
	2	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Raleigh Union Station;Performing Arts Center;Fayetteville Street	areas;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	\$35,000 to \$49,999
	3	Recreation/Events	Current Route	Warehouse District;Glenwood South	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas	Downtown Resident	Prefer Not to Answer	Male	\$75,000 to \$100,000
	1	Recreation/Events;Others	Neutral to Either Option	Warehouse District; Glenwood South; Fayetteville Street	Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$75,000 to \$100,000
	1	Shopping/ Dining; Recreation/Events; Others	Current Route	Glenwood South;Convention Center;Performing Arts Center;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	More than \$100,000
	1	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District; Glenwood South; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
	1	School/College;Recreation/Events	Current Route	Warehouse District;Glenwood South;Performing Arts Center;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Female	Prefer Not to Answer
	5	Work	Current Route	Warehouse District; Glenwood South; Convention Center	Linking to highly active downtown areas; time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	African-American/Black	Male	\$15,000 to \$19,999
	2	Shopping/ Dining; Medical/Dental; Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Residential Areas;Performing Arts Center;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Male	More than \$100,000
	1	Shopping/ Dining; Recreation/Events	Current Route	· · · ·	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Female	\$25,000 to \$34,999
	1	Work;Shopping/Dining;Recreation/Events	Current Route	Warehouse District; Glenwood South; Performing Arts Center; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Warehouse District;Glenwood South;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Hispanic	Male	\$25,000 to \$34,999
	6	Work;Shopping/ Dining;Recreation/Events;Others	Current Route	Warehouse District;Glenwood South;Convention Center;Residential Areas;Performing Arts Center;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$50,000 to \$74,999
	2	Shopping/ Dining; Recreation/Events; Others	Current Route	Warehouse District; Glenwood South; Raleigh Union Station; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Native American/Indian	Male	Prefer Not to Answer
	1	Shopping/ Dining	Proposed Route	Glenwood South;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	Prefer Not to Answe
	1	Shopping/ Dining	Neutral to Either Option	Warehouse District;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
	3	Work;Shopping/ Dining;Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Convention Center; Hillsborough Street (in the Downtown Area); Performing Arts Center; Fayetteville Street		Commuter	Hispanic	Female	\$50,000 to \$74,999
	1	Work;Shopping/ Dining	Proposed Route	Warehouse District;Convention Center;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector);Commuter	Caucasian/White	Female	\$50,000 to \$74,999
	2	Work;Recreation/Events	Proposed Route	Warehouse District;Hillsborough Street (in the Downtown Area);Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Government Sector)	Prefer Not to Answer	Male	Prefer Not to Answer
	3	Work;Shopping/ Dining	Neutral to Either Option	Warehouse District; Glenwood South; Raleigh Union Station; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
	1	Shopping/ Dining	Proposed Route	Others	Connecting convention center visitors to downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$50,000 to \$74,999
	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;State Government Compleex;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	More than \$100,000
	2	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Museums	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	More than \$100,000
	5	Work;Recreation/Events	Current Route	Warehouse District;Hillsborough Street (in the Downtown Area);Residential Areas;Museums	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	More than \$100,000
	I Don't Use the Service	I Don't Use the Service	Current Route	Warehouse District;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
	I Don't Use the Service	I Don't Use the Service	Current Route	Warehouse District;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
	2	Work;Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Performing Arts Center	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000
	I Don't Use the Service	Work	Proposed Route	State Government Compleex;Residential Areas;Fayetteville Street	areas Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Government Sector)	Prefer Not to Answer	Prefer Not to Answer	More than \$100,000
	I Don't Use the Service	I Don't Use the Service	Proposed Route	Glenwood South;Hillsborough Street (in the Downtown Area)	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	(dovernment sector) Visitor	Caucasian/White	Male	More than \$100,000
	7	Work;Shopping/ Dining;Recreation/Events	Current Route	Warehouse District;Glenwood South;Convention Center;Museums;Fayetteville Street	Eccusing on both residential social and retail components of Glenwood	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	\$75,000 to \$100,000
	3	Shopping/ Dining; Recreation/Events; Others	Proposed Route	Warehouse District; Glenwood South; Convention Center; Raleigh Union Station; Performing Arts Center; Museums	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
	1	Shopping/ Dining	Current Route	Warehouse District;Convention Center;Residential Areas	Linking to highly active downtown areas; Comparable travel time to walking	Downtown Resident	Caucasian/White	Female	Prefer Not to Answe

How many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual he income?
1	Shopping/ Dining;Recreation/Events	Current Route	Warehouse District;Convention Center;Performing Arts Center;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
1	Shopping/ Dining; Recreation/Events; Others	Proposed Route	Raleigh Union Station; Residential Areas; Museums	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
1	Work;Shopping/ Dining;Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Convention Center	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Female	\$50,000 to \$74,999
3	Work;Shopping/ Dining	Current Route	Warehouse District; Glenwood South; Residential Areas	Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non-	Caucasian/White	Female	\$75,000 to \$100,000
2	Work;Shopping/ Dining;Recreation/Events	Neutral to Either Option	Warehouse District;Glenwood South;Hillsborough Street (in the Downtown Area);Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Government Sector) Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	More than \$100,000
1	Shopping/ Dining; Recreation/Events	Proposed Route	GoRaleigh Station;Convention Center;Raleigh Union Station;State Government Compleex;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Asian	Male	More than \$100,000
1	Recreation/Events	Current Route	Glenwood South;Convention Center;Performing Arts Center	Focusing on both residential, social and retail components of Glenwood South;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	Prefer Not to Answe
2	Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Performing Arts Center	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	Prefer Not to Answe
I Don't Use the Service	Recreation/Events	Current Route	Warehouse District;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Performing Arts Center	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Female	Prefer Not to Answe
I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District; GoRaleigh Station; Raleigh Union	Linking to highly active downtown areas;Safe and welcoming rider	Downtown Employer/Employee (Non-Government	Caucasian/White	Male	\$75,000 to \$100,00
I Don't Use the Service	Shopping/ Dining	Current Route	Station;Museums;Fayetteville Street State Government Compleex	experience Comparable travel time to walking time	Sector);Commuter Downtown Employer/Employee (Government	Caucasian/White	Male	More than \$100,00
1	Work;Recreation/Events	Current Route	Warehouse District;Convention Center;State Government Compleex;Performin	Connecting convention center visitors to downtown areas; Being a part of	Sector);Visitor;Commuter Downtown Employer/Employee (Government	Prefer Not to Answer	Female	Prefer Not to Answ
- 1	Recreation/Events	Current Route	Arts Center Warehouse District;Glenwood South;Raleigh Union Station;Fayetteville Street		Sector);Visitor;Commuter Downtown Resident	Caucasian/White	Female	Prefer Not to Answ
1	Recreation/Events	Current Route	Warehouse District;Glenwood South	walking time Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,00
1	Recreation/Events	Current Route	Performing Arts Center;Fayetteville Street	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,00
4	Work;Shopping/ Dining	Neutral to Either Option	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Museums;Fayetteville Street	Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	\$50,000 to \$74,99
7	Work;Shopping/ Dining;Recreation/Events;Others	Proposed Route	Glenwood South;State Government Compleex;Performing Arts Center	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Government Sector);Commuter	Other	Male	More than \$100,00
I Don't Use the Service	Recreation/Events	Neutral to Either Option	Warehouse District; Convention Center; Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,00
I Don't Use the Service	Shopping/ Dining; Recreation/Events; Others	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Raleigh Union Station;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	\$35,000 to \$49,99
1	Recreation/Events	Current Route	Glenwood South;Residential Areas	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Visitor	Caucasian/White	Male	Prefer Not to Answ
1	Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street;Others	Focusing on both residential, social and retail components of Glenwood	Downtown Resident	Caucasian/White	Male	More than \$100,00
5	Work;Shopping/Dining;Recreation/Events	Current Route	Warehouse District;Glenwood South;Raleigh Union Station;Performing Arts Center	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answ
I Don't Use the Service	Others	Neutral to Either Option	GoRaleigh Station; Raleigh Union Station; Others	Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Commuter	Caucasian/White	Male	More than \$100,00
1	Shopping/ Dining	Proposed Route	Warehouse District; Glenwood South; Fayetteville Street	Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	\$50,000 to \$74,99
1	Recreation/Events	Neutral to Either Option	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hiliborough Street (in the Downtown Area);State Government Complex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Asian	Male	\$75,000 to \$100,00
7	Work;Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Hillsborough Street (in the Downtown Area);State Government Compleex;Fayetteville Street	areas;Comparable travel time to walking time	Downtown Resident	Other	Female	More than \$100,00
1	Shopping/ Dining	Current Route	Warehouse District;Hillsborough Street (in the Downtown Area);Performing Art Center;Fayetteville Street	<ul> <li>Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience</li> </ul>	Visitor	Caucasian/White	Male	More than \$100,00
3	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;Glenwood South;Raleigh Union Station;State Government Compleex	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	African-American/Black	Female	\$35,000 to \$49,99
7	Work;Shopping/ Dining;Recreation/Events	Current Route	Glenwood South;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums		Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Commuter	Hispanic	Male	\$25,000 to \$34,99
5	School/College;Shopping/ Dining;Recreation/Events	Neutral to Either Option	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Complexs;Residential Areas;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	African-American/Black	Male	\$35,000 to \$49,99
1	Shopping/Dining;Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Performing Arts Center;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience Connecting convention center visitors to downtown areas;Focusing on both	Downtown Resident	Caucasian/White	Female	Prefer Not to Answe
5	Work	Current Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Performing Arts Center;Museums;Fayetteville Street	residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	Prefer Not to Answe
1	Work;Shopping/ Dining;Recreation/Events	Current Route	Warehouse District;Glenwood South;Hillsborough Street (in the Downtown Area);Fayetteville Street		Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Commuter	Caucasian/White	Male	More than \$100,00
5	Work	Proposed Route	State Government Complex;Fayetteville Street	Comparable travel time to walking time;Safe and welcoming rider	Downtown Employer/Employee (Government Sector)	African-American/Black	Female	\$50,000 to \$74,999
		Current Route	Warehouse District; Hillsborough Street (in the Downtown Area); Residential	experience Being a part of the parking solution;Linking to highly active downtown	Downtown Resident;Downtown Employer/Employee (Non-	Prefer Not to Answer	Male	Prefer Not to Answe
1 I Don't Use the Service	Work;Shopping/ Dining;Recreation/Events Work;Recreation/Events;Others	Proposed Route	Areas;Fayetteville Street Warehouse District;Glenwood South;Residential Areas;Fayetteville	areas;Safe and welcoming rider experience Linking to highly active downtown areas;Comparable travel time to walking	Government Sector) Commuter	Caucasian/White	Male	Prefer Not to Answe

	How many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	k For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual household income?
78	1	Recreation/Events	Proposed Route	Warehouse District	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
79	2	Work;Shopping/ Dining;Medical/Dental	Proposed Route	Warehouse District; Glenwood South; Residential Areas; Performing Arts Center; Others	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	More than \$100,000
80	1	Work;Shopping/ Dining	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	\$75,000 to \$100,000
81	1	Recreation/Events	Current Route	Warehouse District;Convention Center	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
82	3	Shopping/ Dining;Others	Current Route	Warehouse District;Fayetteville Street;Others	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
83	1	Shopping/ Dining	Proposed Route	Glenwood South;State Government Compleex;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	Prefer Not to Answer
84	I Don't Use the Service	Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Museums;Fayetteville Street	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Comparable travel time to walking time	Visitor	Caucasian/White	Male	\$75,000 to \$100,000
85	4	Work;Shopping/Dining	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;State Government Compleex;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Commuter	Caucasian/White	Male	Prefer Not to Answer
86	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums;Fayetteville Street	Linking to highly active downtown areas;Safe and welcoming rider experience	Visitor	Caucasian/White	Female	\$75,000 to \$100,000
87	5	Work;Shopping/Dining;Recreation/Events;Others	Current Route	Warehouse District; Glenwood South; Convention Center; Hillsborough Street (in the Downtown Area); Residential Areas; Fayetteville Street; Others	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector);Commuter	Hispanic	Male	\$35,000 to \$49,999
88	I Don't Use the Service	I Don't Use the Service	Current Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Museums;Fayetteville Street;Others	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
89	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District;Raleigh Union Station;Museums;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$75,000 to \$100,000
90	1	Work;Shopping/Dining	Proposed Route	Convention Center;Others	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	Prefer Not to Answer
91	5	Work;Recreation/Events	Current Route	Others	Comparable travel time to walking time;Safe and welcoming rider experience Focusing on both residential, social and retail components of Glenwood	Downtown Employer/Employee (Non-Government Sector);Commuter	Caucasian/White	Male	\$75,000 to \$100,000
92	1	Recreation/Events	Neutral to Either Option	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Performing Arts Center;Museums;Fayetteville Street	South;Linking to highly active downtown areas;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	More than \$100,000
93	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Raleigh Union Station;Performing Arts Center	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience Focusing on both residential, social and retail components of Glenwood	Downtown Resident	Caucasian/White	Male	More than \$100,000
94	1	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;Glenwood South;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	South;Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,000
95	I Don't Use the Service	Shopping/ Dining	Proposed Route	Warehouse District;Glenwood South;Raleigh Union Station;Performing Arts Center;Museums	time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
96	5	Work;Shopping/ Dining;Recreation/Events	Current Route	GoRaleigh Station;Glenwood South;Raleigh Union Station;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Other	Female	\$35,000 to \$49,999
97	1	Shopping/ Dining	Proposed Route	Warehouse District; Glenwood South; Fayetteville Street	Linking to highly active downtown areas	Commuter	Caucasian/White	Female	More than \$100,000
98	1	Work	Proposed Route	Warehouse District; Glenwood South; Fayetteville Street; Others	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
99	1	Shopping/ Dining; Recreation/Events; Others	Current Route	Warehouse District; Glenwood South; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
100	1	Shopping/ Dining; Recreation/Events; Others	Current Route	Warehouse District;Glenwood South;Convention Center;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Visitor;Commuter	Caucasian/White	Male	More than \$100,000
101	2	Shopping/ Dining;Recreation/Events;Others	Current Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;State Government Compleex;Performing Arts Center;Museums;Payetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	\$50,000 to \$74,999
102	1	Shopping/ Dining;Others	Proposed Route	Others	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
103	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Raleigh Union Station;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience Focusing on both residential, social and retail components of Glenwood	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	\$50,000 to \$74,999
104	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;Glenwood South;Museums	South;Being a part of the parking solution;Linking to highly active downtown areas	Visitor	Caucasian/White	Male	\$25,000 to \$34,999
105	1	Shopping/ Dining;Recreation/Events	Neutral to Either Option	Warehouse District; Glenwood South; Performing Arts Center; Fayetteville Street GoRaleigh Station; Convention Center; Raleigh Union Station; Hillsborough Street	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
106	2	Recreation/Events	Neutral to Either Option	(in the Downtown Area);Performing Arts Center;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time Linking to highly active downtown areas;Safe and welcoming rider	Commuter	African-American/Black	Male	\$75,000 to \$100,000
107	1	Shopping/ Dining; Medical/Dental	Proposed Route	GoRaleigh Station;Raleigh Union Station Warehouse District;GoRaleigh Station;Glenwood South;Convention	experience	Downtown Resident	Caucasian/White	Male	\$10,000 to \$14,999
108	I Don't Use the Service	Recreation/Events	Current Route	Center;Raleigh Union Station;Hillsborough Strattin;Gerhardur Souri,Convention Government Complexe;Residential Areas;Performing Arts Center;Museums;Fayetteville Street;Others	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution	Visitor	Caucasian/White	Male	\$25,000 to \$34,999
109	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;GoRaleigh Station;Raleigh Union Station;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
110	3	Work;Recreation/Events	Proposed Route	Glenwood South;Convention Center	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	More than \$100,000
111	1	Shopping/ Dining;Medical/Dental	Neutral to Either Option	Warehouse District;Glenwood South	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
112	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Raleigh Union Station;Museums;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	\$35,000 to \$49,999
113	5	Shopping/Dining;Medical/Dental;Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Residential Areas;Fayetteville Street	Focusing on both residential social and retail components of Glenwood	Downtown Resident	Caucasian/White	Female	\$10,000 to \$14,999
114	2	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Convention Center;Performing Arts Center;Others	Connecting convention center visitors to downtown areas; Linking to highly active downtown areas; Comparable travel time to walking time; Safe and welcoming rider experience	Commuter	Caucasian/White	Female	\$25,000 to \$34,999
115	7	School/College;Shopping/Dining	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Complexe;Residential Areas;Performing Arts Center;Museums;Fayetteville Street		Student	Caucasian/White	Female	Less than \$10,000

Н	low many days a week do you typically ride the R-Line?	Line? multiple boxes if it applies) For you, which do you preter? (Check multiple boxes if it applies) (Check up to 3) boxes if it applies)			Do you identify as	Do you identify as	What is your total annual household income?		
116	3	Others	Current Route	GoRaleigh Station;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Commuter	African-American/Black	Female	\$10,000 to \$14,999
117	1	Shopping/ Dining;Recreation/Events;Others	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Performing Arts Center;Museums	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	Prefer Not to Answer
118	I Don't Use the Service	Shopping/ Dining	Current Route	Warehouse District;Glenwood South	Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	\$75,000 to \$100,000
119	1	Recreation/Events	Proposed Route	Residential Areas;Fayetteville Street	Being a part of the parking solution;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
120	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Raleigh Union Station;State Government	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	\$75,000 to \$100,000
120	1	Recreation/Events	Current Route	Compleex;Museums Fayetteville Street	Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
122	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Performing Arts Center;Museums;Fayetteville Street;Others	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	Prefer Not to Answer
123	1	Work;Recreation/Events	Neutral to Either Option	Warehouse District;Convention Center;Raleigh Union Station;State Government Compleex;Performing Arts Center;Museums;Fayetteville Street	: Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector);Commuter	Caucasian/White	Male	\$50,000 to \$74,999
124	I Don't Use the Service	I Don't Use the Service	Proposed Route	GoRaleigh Station;Raleigh Union Station;State Government Compleex;Performing Arts Center;Museums;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Visitor	Caucasian/White	Female	\$35,000 to \$49,999
125	1	Recreation/Events	Proposed Route	Glenwood South;Convention Center;Residential Areas;Performing Arts Center;Fayetteville Street;Others	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	More than \$100,000
126	1	Work;Shopping/ Dining;Medical/Dental;Recreation/Events	Proposed Route	Warehouse District;Glenwood South;State Government Compleex	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	\$50,000 to \$74,999
127	1	Work;Shopping/ Dining	Proposed Route	Convention Center;State Government Compleex	Connecting convention conter vicitors to downtown properlinking to highly	Downtown Employer/Employee (Government Sector);Commuter	Caucasian/White	Female	\$75,000 to \$100,000
128	1	Shopping/ Dining;Recreation/Events;Others	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Residential Areas;Museums;Fayetteville Street;Others	Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$50,000 to \$74,999
	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Convention Center; State Government	Connecting convention center visitors to downtown areas; Linking to highly	Downtown Resident	Caucasian/White	Male	More than \$100,000
129	1	Recreation/Events	Proposed Route	Compleex;Residential Areas;Performing Arts Center Performing Arts Center;Museums;Others	active downtown areas;Safe and welcoming rider experience Being a part of the parking solution;Linking to highly active downtown	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
130					areas;Safe and welcoming rider experience Linking to highly active downtown areas;Comparable travel time to walking				
131 132	1	Shopping/ Dining;Medical/Dental;Recreation/Events Recreation/Events	Neutral to Either Option Proposed Route	Glenwood South;Hillsborough Street (in the Downtown Area);Museums Warehouse District;Residential Areas;Others	time Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
132	2	Recreation/Events	Proposed Route	Warehouse District;Glenwood South;State Government Compleex;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Safe and welcoming rider	Visitor	Caucasian/White	Female	\$50,000 to \$74,999
133	2	Work;Shopping/ Dining;Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Fayetteville Street	experience Being a part of the parking solution;Linking to highly active downtown	Downtown Resident;Downtown Employer/Employee (Non-	Caucasian/White	Male	\$25,000 to \$34,999
134	3	Shopping/ Dining; Recreation/Events; Others	Current Route	Warehouse District;Glenwood South;Convention Center;Fayetteville Street	areas;Comparable travel time to walking time Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Safe and welcoming rider	Government Sector) Visitor	Prefer Not to Answer	Prefer Not to Answer	\$50,000 to \$74,999
135	1	Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Residential Areas; Performing Arts Center	experience Linking to highly active downtown areas;Comparable travel time to walking	Downtown Resident;Downtown Employer/Employee (Non-	Prefer Not to Answer	Female	Prefer Not to Answer
	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	Fayetteville Street;Others	time Being a part of the parking solution;Linking to highly active downtown areas	Government Sector) Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
137	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District; Glenwood South; Hillsborough Street (in the Downtown	Linking to highly active downtown areas;Safe and welcoming rider	Downtown Resident;Downtown Employer/Employee (Non-	Prefer Not to Answer	Prefer Not to Answer	More than \$100,000
138 139	2	Work;Shopping/ Dining	Proposed Route	Area);Fayetteville Street;Others Warehouse District;Glenwood South;Convention Center	experience Connecting convention center visitors to downtown areas;Being a part of the parking solution;Safe and welcoming rider experience	Government Sector) Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
140	1	Work	Proposed Route	Glenwood South;Convention Center;Hillsborough Street (in the Downtown Area);Museums;Others	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Female	Prefer Not to Answer
141	1	Shopping/ Dining;Recreation/Events	Proposed Route	Glenwood South;Residential Areas;Performing Arts Center	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	More than \$100,000
142	1	Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Glenwood South	Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Non-Government Sector);Visitor	Hispanic	Male	\$75,000 to \$100,000
143	2	Work;Recreation/Events;Others	Current Route	Warehouse District; Glenwood South; Residential Areas; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$50,000 to \$74,999
144	1	Recreation/Events	Neutral to Either Option	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Asian	Male	\$75,000 to \$100,000
145	1	Recreation/Events	Neutral to Either Option	Warehouse District; Glenwood South; Convention Center; Performing Arts Center; Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
146	1	Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Museums; Fayetteville Street; Others	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	\$50,000 to \$74,999
147	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hilbsbrough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Student;Commuter	Caucasian/White	Female	More than \$100,000
148	1	Shopping/ Dining; Others	Proposed Route	GoRaleigh Station;Convention Center	Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000
149	2	Recreation/Events	Neutral to Either Option	State Government Compleex;Performing Arts Center;Museums	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000
150	1	Shopping/ Dining	Proposed Route	Convention Center;State Government Complex;Others	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	\$50,000 to \$74,999
151	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Fayetteville Street	Linking to highly active downtown areas			Prefer Not to Answer	More than \$100,000
152	2	Shopping/ Dining	Neutral to Either Option	Fayetteville Street;Others	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	rable travel time to walking time		Male	Prefer Not to Answer
153	5	Recreation/Events	Current Route	Warehouse District;Glenwood South;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Museums;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	nponents of Glenwood		Male	\$75,000 to \$100,000
154	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Raleigh Union Station;Museums	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Comparable travel time to walking time	ghly Downtown Resident Caucasian/White		Male	More than \$100,000
155	1	Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Fayetteville Street	time;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	More than \$100,000
156	1	Shopping/ Dining	Proposed Route	Raleigh Union Station;Performing Arts Center;Museums;Others	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000
157	I Don't Use the Service	I Don't Use the Service	Current Route	GoRaleigh Station;Convention Center;Hillsborough Street (in the Downtown Area)	Being a part of the parking solution;Linking to highly active downtown areas	Commuter	Caucasian/White	Male	More than \$100,000
157					Focusing on both residential, social and retail components of Glenwood				

	How many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual household income?
159	1	Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Linking to highly active downtown areas	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
160	Warehouse District;Convention Center;Raleigh Union Station;State Government         Being a part of the parking solution;Linking to highly active downtown           1         Shopping/Dining;Recreation/Events         Proposed Route         Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville         Being a part of the parking solution;Linking to highly active downtown		Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	More than \$100,000			
161	I Don't Use the Service	Work	Proposed Route	Warehouse District;Glenwood South;Convention Center;Hillsborough Street (in the Downtown Area);Performing Arts Center;Fayetteville Street	Connecting convention center visitors to downtown areas;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
162	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;Fayetteville Street	Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Hispanic	Male	More than \$100,000
163	1	Shopping/ Dining	Neutral to Either Option	Warehouse District; Glenwood South; Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,000
164	1	Shopping/ Dining	Current Route	Warehouse District;Glenwood South;Fayetteville Street	Linking to highly active downtown areas Being a part of the parking solution;Linking to highly active downtown	Visitor Downtown Resident;Downtown Employer/Employee	Caucasian/White	Male	\$25,000 to \$34,999
165	I Don't Use the Service	Work;Shopping/ Dining	Current Route	Warehouse District; Glenwood South; State Government Compleex; Others	areas;Comparable travel time to walking time Focusing on both residential, social and retail components of Glenwood	(Government Sector)	Caucasian/White	Male	More than \$100,000
166	1	Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Convention Center; State Government Compleex; Performing Arts Center; Fayetteville Street	South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	More than \$100,000
167	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Linking to highly active downtown areas	Visitor	Caucasian/White	Male	Prefer Not to Answer
168	1	Recreation/Events	Neutral to Either Option	Warehouse District;Glenwood South;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Caucasian/White	Male	Prefer Not to Answer
169	1	Others	Proposed Route	Warehouse District; Glenwood South; Raleigh Union Station; Residential Areas	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
170	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District;GoRaleigh Station;Convention Center;Others	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
171	1	Others	Current Route	Glenwood South	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Native American/Indian	Female	More than \$100,000
172	I Don't Use the Service	Recreation/Events	Proposed Route	Warehouse District;Convention Center;Performing Arts Center	Being a part of the parking solution; Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	More than \$100,000
173	1	Recreation/Events	Neutral to Either Option	Residential Areas;Museums;Others	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider excerience	Downtown Resident	Caucasian/White	Male	More than \$100,000
174	1	Shopping/ Dining; Recreation/Events	Proposed Route	Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Museums;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Government Sector)	Prefer Not to Answer	Prefer Not to Answer	More than \$100,000
175	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,000
176	1	Recreation/Events;Others	Current Route	Warehouse District; Glenwood South; Performing Arts Center	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	African-American/Black	Female	\$50,000 to \$74,999
177	1	Shopping/ Dining	Neutral to Either Option	Raleigh Union Station; Residential Areas; Fayetteville Street; Others	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$35,000 to \$49,999
178	1	Shopping/ Dining	Proposed Route	Warehouse District; Glenwood South; Others	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
179	I Don't Use the Service	Work	Proposed Route	GoRaleigh Station	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Commuter	Caucasian/White	Female	Prefer Not to Answer
180	1	Shopping/ Dining	Proposed Route	Warehouse District; Convention Center; Raleigh Union Station	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
181	1	Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Convention Center;Hillsborough Street (in the Downtown Area)	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
182	I Don't Use the Service	Others	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Raleigh Union Station;Performing Arts Center;Museums	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Commuter	Prefer Not to Answer	Male	\$35,000 to \$49,999
183	3	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Convention Center; Raleigh Union Station; Performing Arts Center; Museums; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
184	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Fayetteville Street	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Safe and welcoming rider experience	Student;Commuter	Asian	Male	\$25,000 to \$34,999
185	I Don't Use the Service	Recreation/Events	Proposed Route	Warehouse District;Raleigh Union Station;Performing Arts Center;Museums	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Asian	Male	Prefer Not to Answer
186	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Being a part of the parking solution;Safe and welcoming rider experience	Commuter	Caucasian/White	Male	More than \$100,000
187	1	Work;Recreation/Events	Current Route	Warehouse District; Glenwood South	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	Prefer Not to Answer
188	1	Shopping/ Dining	Current Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Fayetteville Street	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	Prefer Not to Answer
189	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Commuter	African-American/Black	Male	More than \$100,000
190	1	Work	Proposed Route	Warehouse District; Convention Center; Raleigh Union Station; Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$50,000 to \$74,999
191	2	Others	Neutral to Either Option	State Government Compleex	Being a part of the parking solution	Commuter	African-American/Black	Prefer Not to Answer	\$35,000 to \$49,999
192	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District; Glenwood South; Raleigh Union Station; Hillsborough Street (in the Downtown Area); Performing Arts Center; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$50,000 to \$74,999
193	1	Work;Shopping/ Dining	Proposed Route	Convention Center;State Government Compleex;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	\$50,000 to \$74,999
194	3	Work;Shopping/ Dining;Medical/Dental;Recreation/Events;Others	Current Route	Warehouse District; Glenwood South; Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
195	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Hillsborough Street (in the Downtown Area);Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Female	More than \$100,000
196	1	Recreation/Events	Current Route	Warehouse District;Glenwood South;Hillsborough Street (in the Downtown Area)	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Female	\$50,000 to \$74,999
197	1	Recreation/Events	Current Route	Warehouse District;Convention Center;Museums	Being a part of the parking solution;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
198	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Performing Arts Center;Museums;Others	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	More than \$100,000
199	3	Shopping/ Dining	Proposed Route	GoRaleigh Station;Glenwood South	Comparable travel time to walking time	Downtown Employer/Employee (Government Sector)	African-American/Black	Male	\$35,000 to \$49,999
200	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	Warehouse District;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Performing Arts Center;Museums;Fayetteville Street	Connecting convention center visitors to downtown areas;Being a part of the parking solution	Commuter	African-American/Black	Female	\$75,000 to \$100,000
201	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Commuter	African-American/Black	Male	More than \$100,000
	1	Others	Neutral to Either Option	Warehouse District;Residential Areas;Others	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000

	How many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (C multiple boxes if it applies)	For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual household income?
203	1	Shopping/ Dining	Proposed Route	Warehouse District;Glenwood South;Convention Center;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
204	1	Shopping/ Dining; Recreation/Events	Neutral to Either Option	Warehouse District;Residential Areas	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	More than \$100,000
205	5	Work;Shopping/Dining;Recreation/Events	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Residential Areas;Performing Arts Center;Fayetteville Street	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Commuter	Other	Female	Prefer Not to Answer
206	3	Shopping/ Dining	Current Route	Warehouse District; Glenwood South; Raleigh Union Station	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	More than \$100,000
207	1	Recreation/Events	Current Route	Warehouse District; Glenwood South; Convention Center; Raleigh Union Station; Residential Areas; Performing Arts Center; Museums; Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
208	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Glenwood South;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector);Commuter	Asian	Male	More than \$100,000
209	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Convention Center;Raleigh Union Station;State Government Compleex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	Prefer Not to Answer
210	1	Recreation/Events	Proposed Route	Convention Center;Raleigh Union Station;Museums;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	More than \$100,000
211	4	Recreation/Events	Current Route	Residential Areas	Focusing on both residential, social and retail components of Glenwood South	Downtown Resident	Caucasian/White	Male	More than \$100,000
212	1	Shopping/ Dining	Current Route	Warehouse District;Glenwood South;Museums;Fayetteville Street;Others	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector);Student;Commuter	Prefer Not to Answer	Male	\$35,000 to \$49,999
213	1	Work;Shopping/Dining	Current Route	Warehouse District; Glenwood South; Performing Arts Center	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$75,000 to \$100,000
214	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	GoRaleigh Station;Convention Center;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	African-American/Black	Female	\$35,000 to \$49,999
215	1	Shopping/ Dining;Recreation/Events;Others	Neutral to Either Option	Glenwood South;Residential Areas	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	More than \$100,000
216	3	Work;Shopping/Dining;Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Gienwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Compleex;Residential Areas;Museums;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Comparable travel time to walking time	Downtown Resident	Prefer Not to Answer	Prefer Not to Answer	More than \$100,000
217	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District; Glenwood South; Residential Areas	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White Female		More than \$100,000
218	I Don't Use the Service	I Don't Use the Service	Current Route	GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Residential Areas;Fayetteville Street;Others	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	Prefer Not to Answer
219	2	Shopping/ Dining; Recreation/Events; Others	Current Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Residential Areas;Performing Arts Center;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Commuter	Caucasian/White	Female	\$50,000 to \$74,999
220	I Don't Use the Service	Recreation/Events;I Don't Use the Service	Proposed Route	Warehouse District;Hillsborough Street (in the Downtown Area);Museums	Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	More than \$100,000
221	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Raleigh Union Station;State Government Compleex;Residential Areas	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	\$50,000 to \$74,999
222	6	Work;Shopping/ Dining	Current Route	Glenwood South;Hillsborough Street (in the Downtown Area);Fayetteville Street;Others	Connecting convention center visitors to downtown areas;Comparable travel time to walking time	Downtown Resident	African-American/Black	Male	Prefer Not to Answer
223	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Residential Areas	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	More than \$100,000
224	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District; Raleigh Union Station; State Government Compleex	Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White Female		\$10,000 to \$14,999
225	5	Work;Shopping/Dining;Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area)	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
226	1	Work	Proposed Route	Glenwood South;State Government Compleex;Museums	Being a part of the parking solution	Downtown Employer/Employee (Non-Government Sector)	Prefer Not to Answer	Prefer Not to Answer	\$75,000 to \$100,000
227	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District; Glenwood South; Fayetteville Street	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Male	\$35,000 to \$49,999
228	I Don't Use the Service	I Don't Use the Service	Proposed Route	Others	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000
229	I Don't Use the Service	Work;Shopping/Dining;Recreation/Events	Proposed Route	GoRaleigh Station;Glenwood South;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Commuter	Caucasian/White	Female	More than \$100,000
230	2	School/College	Neutral to Either Option	Fayetteville Street	Being a part of the parking solution	Student	African-American/Black	Male	Prefer Not to Answer
231	I Don't Use the Service	I Don't Use the Service	Proposed Route	Glenwood South;Raleigh Union Station;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Government Sector)	Prefer Not to Answer	Female	Prefer Not to Answer
232	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Museums	Linking to highly active downtown areas	Visitor	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer
233	1	Shopping/ Dining;Recreation/Events	Current Route	Glenwood South;Fayetteville Street	Focusing on both residential, social and retail components of Glenwood South	Downtown Resident	Caucasian/White	Female	Prefer Not to Answer
234	1	Shopping/ Dining	Current Route	Warehouse District;Glenwood South;Convention Center;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums Warehouse District;Convention Center;Raleigh Union Station;Hillsborough	the parking solution;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	More than \$100,000
235	1	Recreation/Events	Current Route	Warehouse District, Convention Center; Kaleign Union Station; Hillsborougn Street (in the Downtown Area); Performing Arts Center GoRaleigh Station; Convention Center; Performing Arts	Being a part of the parking solution;Linking to highly active downtown areas Connecting convention center visitors to downtown areas;Safe and	Downtown Resident	Caucasian/White	Female	More than \$100,000
236	I Don't Use the Service	Recreation/Events	Neutral to Either Option	Center;Museums;Fayetteville Street	welcoming rider experience Focusing on both residential, social and retail components of Glenwood	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	\$35,000 to \$49,999
237	I Don't Use the Service	Shopping/ Dining	Shopping, Ulning Neutral to Ether Uption Kesidential Areas;Museums		South Connecting convention center visitors to downtown areas;Focusing on both	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	\$75,000 to \$100,000
238	3	Work;Shopping/Dining;Recreation/Events	Current Route	GoRaleigh Station;Glenwood South;Convention Center;Performing Arts Center;Museums	residential, social and retail components of Glenwood South,Linking to highly active downtown areas Focusing on both residential, social and retail components of Glenwood	Downtown Resident	Caucasian/White	Male	\$35,000 to \$49,999
239	2	Work	Current Route	Glenwood South;Fayetteville Street Convention Center;Raleigh Union Station;State Government	South;Being a part of the parking solution;Safe and welcoming rider experience Being a part of the parking solution;Linking to highly active downtown	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	\$50,000 to \$74,999
240	2	Shopping/ Dining;Recreation/Events;Others	Proposed Route	Compleex;Performing Arts Center;Museums;Fayetteville Street	areas;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$35,000 to \$49,999
241	1	Work;Shopping/ Dining	Current Route	Warehouse District;Glenwood South;Convention Center;Hillsborough Street (in the Downtown Area);Performing Arts Center Warehouse District;Glenwood South;Raleigh Linion Station;Hillsborough Street	South;Linking to highly active downtown areas;Lomparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	More than \$100,000
242	I Don't Use the Service	Shopping/ Dining	Current Route	Warehouse District; Glenwood South; Raleigh Union Station; Hillsborough Street (in the Downtown Area); Residential Areas; Performing Arts Center; Museums; Fayetteville Street; Others	Focusing on both residential, social and retail components of Glenwood South;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Male	\$75,000 to \$100,000
243	I Don't Use the Service	Recreation/Events	Proposed Route	Glenwood South;Fayetteville Street;Others	Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident	Caucasian/White	Male	More than \$100,000

	How many days a week do you typically ride the R-Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	For you, which do you prefer?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	What is your total annual household income?	
	1	Recreation/Events	Proposed Route	Glenwood South;Fayetteville Street	Linking to highly active downtown areas;Comparable travel time to walking			Female	More than \$100,000	
244	1	Recreation/Events	Fibbosed Route	Genwood South, rayettevnie Street	time Linking to highly active downtown areas;Comparable travel time to walking	VISIO	African-American/Black	remaie	More than \$100,000	
245	1	Recreation/Events	Neutral to Either Option	Warehouse District; Glenwood South	time	Visitor	Caucasian/White	Male	More than \$100,000	
246	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Warehouse District;GoRaleigh Station;Glenwood South;Convention Center;Raleigh Union Station;Hillsborough Street (in the Downtown Area);State Government Complex;Residential Areas;Performing Arts Center;Museums;Fayetteville Street;Others	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Gienwood South;Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Visitor	Asian	Male	\$75,000 to \$100,000	
247	1	Recreation/Events	Proposed Route	Glenwood South;Hillsborough Street (in the Downtown Area);Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$75,000 to \$100,000	
248	I Don't Use the Service	Work;Shopping/Dining;Recreation/Events	Neutral to Either Option	GoRaleigh Station;Performing Arts Center;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Caucasian/White	Female	\$75,000 to \$100,000	
249	I Don't Use the Service	Recreation/Events	Current Route	GoRaleigh Station;Convention Center;Raleigh Union Station;Museums;Fayetteville Street	Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	African-American/Black	Male	\$10,000 to \$14,999	
250	I Don't Use the Service	Shopping/ Dining; Recreation/Events	Current Route	Convention Center;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector)	Caucasian/White	Male	More than \$100,000	
251	I Don't Use the Service	I Don't Use the Service	Current Route	Glenwood South;Hillsborough Street (in the Downtown Area);Museums	Being a part of the parking solution;Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector);Student	Caucasian/White	Female	\$15,000 to \$19,999	
252	I Don't Use the Service	I Don't Use the Service	Neutral to Either Option	Others	Safe and welcoming rider experience	Visitor	Caucasian/White	Female	Prefer Not to Answer	
253	5	Work	Neutral to Either Option	Glenwood South;State Government Compleex;Performing Arts Center;Museums	Being a part of the parking solution	Downtown Resident;Downtown Employer/Employee (Non- Government Sector)	Prefer Not to Answer	Prefer Not to Answer	Prefer Not to Answer	
254	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Convention Center;State Government Compleex	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Resident	Caucasian/White	Female	More than \$100,000	
255	5	Work;Shopping/Dining;Recreation/Events	Current Route	Warehouse District;Glenwood South;Raleigh Union Station;State Government Compleex;Museums;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector); Visitor	Caucasian/White	Female	More than \$100,000	
256	I Don't Use the Service	I Don't Use the Service	Proposed Route	Convention Center;Raleigh Union Station;Fayetteville Street	Connecting convention center visitors to downtown areas;Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector);Visitor	African-American/Black	Other	More than \$100,000	
257	1	Recreation/Events	Neutral to Either Option	Hillsborough Street (in the Downtown Area);Performing Arts Center	Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Male	\$75,000 to \$100,000	
258	1	Shopping/ Dining; Recreation/Events	Proposed Route	Warehouse District;Glenwood South;Raleigh Union Station;Hillsborough Street (in the Downtown Area);Performing Arts Center;Museums;Fayetteville Street;Others	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Downtown Employer/Employee (Government Sector);Visitor;Commuter	African-American/Black	Male	\$50,000 to \$74,999	
259	1	Shopping/ Dining	Proposed Route	Glenwood South	Linking to highly active downtown areas	Downtown Employer/Employee (Government Sector)	Caucasian/White	Female	\$50,000 to \$74,999	
260	5	Recreation/Events;Others	Neutral to Either Option	Others	Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Government Sector)	Hispanic	Prefer Not to Answer	\$75,000 to \$100,000	
261	I Don't Use the Service	I Don't Use the Service	Proposed Route	Hillsborough Street (in the Downtown Area);State Government Compleex;Museums;Fayetteville Street	Comparable travel time to walking time;Safe and welcoming rider experience	Downtown Employer/Employee (Non-Government Sector)	Caucasian/White	Female	Prefer Not to Answer	
262	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;State Government Compleex;Performing Arts Center	Connecting convention center visitors to downtown areas;Being a part of the parking solution;Safe and welcoming rider experience	Downtown Resident	Caucasian/White	Female	\$35,000 to \$49,999	
263	3	Shopping/Dining;Recreation/Events	Proposed Route	Warehouse District;GoRaleigh Station;Hillsborough Street (in the Downtown Area);Museums	Focusing on both residential, social and retail components of Glenwood South;Linking to highly active downtown areas;Safe and welcoming rider experience	Commuter	African-American/Black	Male	More than \$100,000	
264	4	Work;Shopping/Dining;Recreation/Events	Current Route	GoRaleigh Station; Glenwood South; Raleigh Union Station; Residential Areas	Focusing on both residential, social and retail components of Glenwood South;Being a part of the parking solution;Linking to highly active downtown areas	Downtown Resident;Downtown Employer/Employee (Non- Government Sector);Commuter	Caucasian/White	Male	\$10,000 to \$14,999	
265	I Don't Use the Service	I Don't Use the Service	Proposed Route	Warehouse District;Performing Arts Center;Fayetteville Street	Being a part of the parking solution;Linking to highly active downtown areas;Comparable travel time to walking time	Visitor	Caucasian/White	Female	More than \$100,000	

# **Attachment C - Collection of Open Responses**

	What comments do you have about the proposed route?
1	None
2	Much better that it goes in two directions and on main streets.
3	It's streamlined and safer for the bus and the drivers
	Far more efficient. The dotted line routes from the 2007 era make no sense as few people. Get on there and it a lot of time. A very very short walk is just as quick to. Those spots and can add at least 5 plus minutes to a route a rely served.
-	how to use it!
	Though the proposed route offers a solution to the direction issue we have with the current, the proposed does not cover a wide enough area. I even propose it continue a few blocks east last Moore square so it gets closer to Transfer Food Hall and truly connect the dtr outer edges on east and west
7	Looks like it would be faster and more efficient.
8	I hope this means a more efficient way to get around downtown but I would like to know where the proposed stops are.
-	The new route cuts out stops that I don't see used very often. Why ?
10	Seems off the busy path
	<ul> <li>Why is the proposed route better than the current route? Well it be able to serve more people? Be quicker?</li> <li>on West will be more difficult for the residents of Glenwood Towers to utilize. Glenwood Towers is operated by Raleigh Housing Authority for elderly low-income tenants. The proposed change does not take them into consideration. I would propose the route turn on Johnson St., turn left on Glenwood Ave and turn left on Tucker St then the bus will be back on West. There is already a bus stop in front of Glenwood Towers.</li> <li>I understand that the traffic on Glenwood Ave can be heavy at times. A suggestion is for the bus to go down West turn on Johnson Street then turn left on Boylan. This street would be accessible to a lot of residents and stay off of Glenwood Ave. This route suggestion would also go by Glenwood Towers.</li> <li>Another concern is for the bus stops to be on West St. This street is not walkable between Peace and Jones. Some sections do not have sidewalks and are hazardous to pedestrians. There are railroad tracks on West that the bus would have to cross and wait to cross - making the route longer and an increase in safety concerns.</li> <li>Currently, there is a lot of construction happening on West St. that makes it difficult for vehicle traffic and pedestrians to navigate.</li> <li>I understand that changes are necessary for the current statistics but supporting the areas that have the most population and construction of new residential housing and hotels is important.</li> <li>I appreciate the opportunity to provide feedback. As a resident of downtown Raleigh, I value and appreciate the R-Line for the service that it provides while</li> </ul>
	Glenwood needs to be in the mix, and the two sides of the eastern loop are an easy walk from each other.
_	Skips the whole warehouse district
	I don't like the fact that the proposed route doesn't appear to service Glenwood Ave
16	Far more efficient. The dotted line routes from the 2007 era make no sense as few people. Get on there and it a lot of time. A very very short walk is just as quick to. Those spots and can add at least 5 plus minutes to a route a rely served. That looks just bizarre. It's eliminating the whole Warehouse District? And Glenwood Avenue? Going both directions on West and Peace Streets? Why?
	What's presumably to be gained? What's prompting the change? Certainly, the route should be reconsidered from time to time and adjusted to meet changing needs, but the current route works for me, and this would be less convenient.
	I like the current route!
_	None.
	This no longer becomes a loop and cuts out the amphitheater stop. It looks like it will take longer to get from Glenwood to the South of Fayetteville St.
_	It would be awesome if the R-Line would link to Cameron Village every hour or so since Peace St has become so constructive.
22	It looks as though the proposed route will be much more efficient Much shorter for Glenwood South residents. But please don't have bus drivers stop for an indeterminate amount of time every 15 minutes. Unannounced breaks
23	really irritate passengers who are timing their trip.
24	Seems more efficient
25	None
27	The buses need to be cleaner with security at night. The buses need to run more frequently during high use times. The current route is too circuitous, and I think removing the loop around Moore Square will be a significant improvement. That said, I don't know that the other changes are real improvements. It's paramount the City continue to run 2 buses at a time regardless of what happens. Also has the City thought about using the R Line to connect Rus Bus with the center of Downtown? If the R Line doesn't do this, what frequent service will? It is really dumb that it is now routed to the train station, but anyone arriving has to take an exorbitantly long ride to get to City Plaza where all the hotels and
29	convention center is. If I came in to town, I would just walk. Really dumb to have a free transit option, but make any visitors to town hate it. I used RLine when it started. Route was too long. Faster to walk I feel like it would be really helpful to know metrics for each proposed route. What is the frequency of the route? How long will it take the bus to complete the route? Are there cost savings from adopting a new route?

- 31 Proposed route is awful
- **32** Good for Fayetteville and Glenwood district. Forget everyone else. Hardly a circulator.
- **33** Good for Fayetteville and Glenwood district. Forget everyone else. Hardly a circulator.

Fayetteville St, that road is the most often closed on weekends. Seaboard Station isn't a particularly useful stop. Glenwood should remain a focus of the route, not West

- **34** St (which is impacted by trains and construction).
- **35** The proposed route would allow me to use the R line as it would serve the residential areas of downtown.
- **36** It almost looks like 2 separate routes. Maybe it should be to keep things moving.

.

Why are you cutting out warehouse? It's a new and growing area... Also the loop idea makes getting around very easy I see no reason to make it a look back type route **37** that would make going from one side to the other take 3x longer.

.

I think the proposed route is far superior to the existing route. Having the buses travel in opposite directions reduces wait times and should increase ridership and make it a service people can count on.

- **39** it cuts out many of the restaurants in the new warehouse district that i the evenings are where i try to go
- **40** It covers the warehouse district. Ideally I would like ot see a combination route involving Cameron Village
- **41** people would use.
- 42 trafficked area.
- **43** The changes proposed make sense
- 44 Seems like not serving the growing Warehouse District and area around Moore Square/City Market as well as the route currently does is a huge miss.

.. – .

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	What comments do you have about the proposed route?
45	Stops in both directions.
46	More convenient To go to raleigh downtown restaurants
47	Don't like not having access on Glenwood and then having to back track a ways to finally get to convention center.
48	than necessary?
49	The R-Line should to continue to cover All downtown as it attracts more for tourists and local.
50	Should go faster, current route is so slow it doesn't get anywhere faster than I can walk
51	to Cameron Village.
52	Why is there a desire NOT to serve the warehouse district and NOT to complete a loop? How would this change stations and headways? There is really very little information given to make an informed decision.
53	Way too limited. Nothing by the amphitheater area.
54	I don't like that the southwest side of downtown is farther from the route.
55	Need to expand to Cameron Village
56	It doesn't make sense to go from the Warehouse District all the way back up West Street to Peace Street and over to Salisbury. It makes more sense to go up to Hillsborough Street, and then over to Salisbury.
57	more efficient route. You're serving the two busiest areas in the CBD: Downtown and Glenwood South with additional ability to walk to the Warehouse District (that wasn't served 24/7 anyway) and Moore Square (very easy walk). The proposed route would speed up the wait. Lights are already synchronized on the main roads. You can squeeze out more efficiency from the same cost. You also don't have to hope your destination is in the clockwise direction served by the old R-Line. (There's also usually a break for the bus driver at the Convention Center, which adds to the travel time if their break happens to be between your origin and destination.) The proposed route allows one to go in both directions now. Please don't let the vocal minority (if it exists) win and rule out this clearly more efficient route to the silent majority. P.S. Bus drivers would also appreciate this change as they have difficulty making lefts with cars on the cross-street signals making it difficult for the length of the bus to complete the turn (mainly onto Glenwood). The less left turns, the better.
58	N/A
59	issue.
	Is running the track back and forth on West more efficient than the loop? How much have wait times and ride times increased for people on the ends? It seems to leave a section in the southwest downtown in a weird spot. Theoretically it could take a very long time to get to that area based on where you board. Current circular route makes more sense.
	Plus it doesn't take into account bus transfers that happen on or close to Glenwood. Please re-review proposed route!! I don't own a car. And I rely heavily on transit to get to where I need to go!
<b>C2</b>	Still doesn't go anywhere. Daily bus rider in the Triangle, Bill City Connector model would be better than either proposed to
	route
	It's okay but it would depend on what headways would be.
	Doesn't serve Raleigh Union Station
	Praise to the person initiating this change.
-	Does not pass through warehouse district or drop off at Red Hat Amphitheatre.
	The proposed route takes out a large area of downtown that has stops worthy of visiting. City Market and Moore Square park cannot be excluded!
	The proposed route is inconvenient.
_	None
	More direct and efficient route that seems to be in close proximity to most target destinations.
	Live in Glenwood South / work near warehouse district
_	The proposed route won't serve me as well.
	At what point would the drop off occur on Salisbury st. Prefer current route with one bus going clockwise and the other counter clockwise on the map
/5	TransferCo, Oakwood, Shaw, the well populated residential neighborhoods south and east, etc.
	Wish you could have a Park & Ride lot somewhere along the route. That would be an inducement for ppl like me who live beyond DTR and who must arrive by auto to rely on RLine once they arrived in downtown. Perhaps a portion of the state gov surface lots near Gov Mansion/NC Bar could be specially appropriated for RLine parking. (Obvi this requires negotiations with State of NC. Maybe they have other parking areas they could repurpose for this.) Note by doing so and promoting that availability this would make moving route to Person that much more efficient.)
	Consider moving the turnaround block to Dillon block instead of Weaver St. block to make for seamless connection to RUS and RUSBUS.

Frequency MUST become more frequent and regular (and I realize my route change suggestions negatively impacts that need, but hopefully within tolerance).

Also, it would help a lot if RLine route had some way to affect traffic light system so that RLine buses got priority/wouldn't get delayed by as many red lights along the way. If we could include technical innovations like that, the route could be geographically expanded more easily.

- 76 (Note to explain answer to Q1: I have been a VERY frequent RLine rider and a proponent for most of the past 8+ years, just not riding it lately due to unrelated factors.)
- **77** I would be more likely to use the service with the new proposed route.
- **78** shorter wait times and ride times are what i am looking for.

l'd like to propose that the new route include the following: from N Wilmington, make right into East Davie for two blocks (servicing patrons from The Edison, Palladium Plaza, Founders Row, The Davie Pub, DGX, Oak City Meatball, Rubins's Deli, City Market, and much closer to Transfer Co. Food Hall, then make left to N. Person Street, encompassing Moore Square, then left onto E Hargett then right to N Wilmington.

**79** Itâ€<sup>™</sup>s important to include City Market and Transfer Company Food Hall! Davie Street would benefit very much.

#### 80 None

- 81 Don't like how long it would take me to get from one corner of the rope to the other corner
- **82** I wish the route would go more into the warehouse district.
- 83 Much better route

# Page 2 of 7

	What comments do you have about the proposed route?
	The proposed route shouldn't loop twice through Peace St but instead pass by Nash Square on Hargett St and turn right onto Salisbury St. This would increase the
	usefulness of it for travel from Glenwood South to Fayetteville St.
84	Also I would question the need to go all the way to Seaboard Station. Is it necessary at all? I think Northbound could turn left onto Edenton and potentially end at West & Johnson St (with a loop for 1 block onto Glenwood Ave). In my opinion as a downtown visitor it is not an area that I need the bus to - I would prefer quicker travel between the areas of Glenwood/Warehouse/Fayetteville St.
85	You're moving the stop I would use farther away. That's not so bad, though. The biggest issue I have is that the new right cuts out one downtown Raleighs newest and best districtsthe Warehouse district. With places like the Dillon opening and the new train station, now it will be harder to commute around downtown.
86	I like that it's two-way Service b/c it makes it faster and more direct to the destinations.
87	The current line is very help since it takes you all around raleigh to see the developing area of Morgan street. Changing the route will not only increase commute time but will miss the new office building that is been built.
	both directions from my location rather than one way.
	However, I don't think it's a better plan overall, as it makes cross-town trips impractical. I would prefer that the new route serve the same destinations as the old but on a tighter route:
	- Glenwood served by West St as proposed
00	<ul> <li>West to east path along Martin/Davie St serving Warehouse District, Nash Square, Fayetteville St, and Moore Square (from Wilmington)</li> <li>Run north along Wilmington to Peace Street</li> </ul>
	- East to west path along Peace to West Street, connecting Seaboard and Smoky Hollow
	doesn't service the warehouse district or moore square very well. i do like the bidirectional change though, waiting for a bus was not great.
	I'm concerned the closed loop from Peace Street to West and Harrington won't be useful to people.
-	I need stop R5
92	We need an efficient circulator bus to connect the major centers of Raleigh - a north hills to Cameron village to downtown bus would be very useful!
93	It appears more straightforward for most connections
94	Less accessible to where I live and is is more on west street which is less traveled by pedestrians than Glenwood, making it feel less safe for myself as a female when I walk to the stop later in the evenings.
_	The proposed route will likely be more predictable w/ fewer turns. We should enable brt on those roads.
96	Downtown borders St. Mary's R line down Glenwood would serve this border. Plus Glenwood is where people want to be
97	One major inconvenience of the current route is that both buses are traveling in the same direction in one big loop, which restricts the A-to-B routes that make this a good option. This new route looks like it will alleviate some of that and open this up to more people's needs.
98	Wish it covered the person St area
99	Make it run clockwise, so most of the time are right hand turns. Extend new route so it turns around at Martin street.
100	Better access to more downtown areas of interest.
101	It does not service most of the downtown area!
102	My objective is to get from S. Fayetteville to Seaboard Station as quickly as possible. This allows me to do so.
103	parking and walking.
104	I do not think the new route will be used as often. I live in North Raleigh?
	Salisbury/Wilmington better than current one way loop all around town, but lot of Salisbury has no destinations. Appendage on Peace/West is bad idea; results in out of direction travel. Also, West does not have destinations that Glenwood has. Why not wait until BRT routing downtown is selected, then complement that with R-Line
105	routing that can be circulator and distributor (instead of just a meanderer). And then whole system can run fare free (by the way it is one system; mobility integrator).
106	It seems to cover a smaller area
107	Better Union Station service is big plus. p.s.: Remove that ugly mesh from the windows so tourists can see our town.
108	Too narrow to bring in surrounding community.
109	As few stops as possible to decrease travel time is preferred.
110	I think the convention center still needs to be served somehow.
111	Will the route still have places where the busses stop and wait for extended times?
112	I'm curious as to why the loop doesn't extend one block further to stop directly in front of Union Station. Other than that, the new route is MUCH more convenient; I expect I'll be more inclined to utilize it in the future!
113	are plenty of us
114	It stinks. It is to far from Nash Square.
115	It makes no sense to shorten the route by Glenwood Avenue. I strongly believe it should broaden the transit more so on that side of town including Hillsborough st

**117** I would extend the west end one block to include Martin Street and the Union Station.

**118** nothing on Glenwood South or to extend into Cameron Village, and that's what I would need

**119** Goes where I go

**116** IT SEEMS LIMITING!

- 120 I mostly like it, but feel like there's a total gaping gap in Warehouse District access unless I'm missing something, the current route addresses this area better.
- **121** Stops shoulk be scheduled at/near Peace + Tucker.

map if additional pick up areas will be constructed (for example, would our students have the option of picking up the R-Line on the way into town only (across from our **122** stop on Peace St.)?

**123** There are no indicators on the map that display proposed stops on the route.

route needs to have more stops than it does now. You need a stop almost every block, so people can use it to get more places than just the parking decks. You might also consider just having 2 routes--one for downtown and one for Glenwood South, maybe with a third route linking the two. With that many routes, you would be able **124** to get somewhere whenever you were ready.

125 n/a

The proposed route makes a ton of sense: getting people back to DT raleigh from the Seaboard Station area without having to travel the entire perimeter. I also like getting rid of the convention center stop. It would also be great to have direct east-west route, analogous to north-south routes if possible. Most important is timing: **126** eliminate the long, 10-minute pauses on the route. Just have it run continuously so that it always makes more sense than walking!

127 I think the proposed route supports all downtown districts more effectively

# Page 3 of 7

	What comments do you have about the proposed route?
128	Great for commuting downtown and back
129	Would like to see a connecting loop to Cameron Village & Hillsborough St
130	Where are the stops? Can you create a map indicating where they are?
131	l'm for it if it is a quicker route
132	I wish it would go further north to the person street area
133	The West St. portion is great. The Wilmington/Salisbury portion is good but could be better but the one-way roads downtown make that a more difficult fix.
134	I think the proposed route will cover more dense areas more quickly.
	merge the two, the current Dawson/Wilmington and but the proposed West. East route on the southern end of downtown but hopefully with the other improvements the ride time isn't much longer from the warehouse district area to the SE end of the route.
137	More useful to residents living west of downtown than workers going from one point downtown to another (especially if they're heading southward)
138	The proposed route seems like it makes it easier to catch a bus, but does not connect as broad of an area of downtown
	I like that it still serves most of the same area, and should help with on-time service I would suggest the R-Line announces the nearest districts and attractions that can be assessed at each stop since some of the stops in those areas will be omitted on the proposed route (e.g. Moore Square, Warehouse, etc)
141	More concise route
142	It misses the Warehouse District and Moore Square
143	Seems a bit narrow. Would like more of a wide variety of stops.
144	I would want to see if time is better on the proposed route
145	Add a stop at Person Street Plaza
146	Keep the Moore Square and City Market stops
147	I wish the r line would connect Hillsborough street to downtown. As a NCSU student it would be great if any of the free buses connected the two
148	The buses are not reliable and inconsistent
149	R-Line Route should link Cameron Village Shopping Center to Downtown.
150	populated neighborhoods
151	That makes much more sense. I have never ridden because of the current route
	I don't want to waste taxpayer dollars. calendar for either the city of Raleigh or the R-Line, an obviously necessary but not sufficient indication of Raleigh's commitment to making these meetings publicly accessible.
154	Would be great to extend down West Street if the proposed extension under the railroad tracks gets funded.
155	Seems faster. Current route covers too large an area and comes too infrequently.
	I like the route being out and back instead of a loop. However, I think the route should extend into the Warehouse District. I don't think that West Street is a good route through Glenwood South. It is not walkable and is not easily accessed from the rest of Glenwood South. The residents of Glenwood Towers will have a hard time going down Johnson or Tucker Streets to get to West. There are sidewalks on only one side of both of these streets. Glenwood Ave is far more centrally located.
157	Narrowing the route would make it more difficult to reach areas further east/west.
158	It seems like it would slow down traffic because Wilmington and Salisbury St. are used very heavily to get in, out and through DTR from Capital Blvd. primarily.
	It doesn't cover enough of downtown I love that the new route goes by the Publix in both directions. I can't tell from the map, but does it link to different parking garages too? Also, please have shorter wait times between buses. When it was raining & cold last weekend we tried to take the bus, but missed it by a few minutes and decided it was faster to walk. Lastly, thank you for a safe ride. Our family always enjoys riding the R line and and I feel safe riding it alone as well.
	Needs more frequent service
-	Warehouse time to Fayetteville is extended.
-	l'm ok with proposed route if it provides more frequent service to stops. Half hour in between is too long.
	It is not terrible
_	I like the shorter times, but I don't see when I or others would use it. Maybe those going from the Performing Arts Center or a hotel to Glenwood? With the new Moore Square, you should be promoting it - it's not even mentioned as a stop option in the next question. Looks like it would be more convenient to my workplace near the NCGA, and the walk from west street to Glenwood would be ok. I use R as a way to get to Glenwood
166	after work occasionally to see friends

**167** The riders cannot see out at night due to tinted windows and interior lighting. You need to run paid ads of the establishments you are passing.

**168** More frequent and smaller/shuttle vehicles would better serve purpose

**169** Raleigh Union Statiob

I feel that having the bus go north on Wilmington Street is a mistake. The bus should turn right from Wilmington onto New Bern and then left onto Person Street, and continue up Person Street to at least Peace Street to connect the Person Street shops with the other business districts.

- **171** I like getting over to Glenwood South area for restaurants
- **172** Having a faster route would increase my frequency of use

**173** I would highly suggest that the route hit other sites near downtown, including Chavis Park, Pullen Park, and Dix Park.

**174** would like more frequency and continuous service rather than stopping for time points.

thru Boylan Heights and hit a bit of Hillsborough and Peace west of Glenwood. Thereâ€<sup>™</sup>s nothing happening on Wilmington orSalisbury north of Edenton. Be creative. **175** Stretch out a bit.

176 Walking from West to Glenwood means walking in the dark which can be unsafe for women

177 I don't like either route. I live near the Y on Hillsborough. The R Line should run further out Hillsborough, even to Cameron Village and the bell tower. Add a 3rd bus.

- **178** Use Person St instead of Wilmington St. Person St entertainment district is emerging.
- **179** I take the bus to RTP and live near peace and person and I'd like to have a bus with more frequency to take me to/from Raleigh Station.
- **180** Please charge a nominal fee for the R-Line. Please keep the app up and running. It is very helpful to see the current locations of busses.

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	What comments do you have about the proposed route?
181	It leaves out growing areas of interest in downtown.
182	l like it
	I like the idea of it moving more bi-directional on both the east and west sides of downtown. This means that I can take it from the north end of Glenwood South to the south end of The Warehouse District and back without having to make the entire loop through downtown. If I want to go through all of DT, that's still available to me as well, or I can jump on it at west near Publix and go directly to the east side. For riders from the east side of DT, they can take the RLine to Publix and then back to the east side without having to loop through the Warehouse District. IMO, this is a win/win sort of mapping
	a decent compromise -but going from convention center to Glenwood/Warehouse Dist. seems more time-consuming than necessary
	increasing bus frequency at peak hours (ex. lunch, evening)
	takes, which is a small loop around a fairly walkable area of downtown. The proposed route does not solve this problem, it merely tweaks it. The best thing to do would be to shut down R-Line service and put the savings toward making all Raleigh bus service free for passengers. If declining ridership is the problem, free bus service is a strong solution.
187	It cuts out the Warehouse District where I work and own a business
188	New plan Seems redundant. Going in a circle is better use of the route. Agree with replacing Glenwood with West
189	N/A
190	Looks like it will allow for faster service.
191	Why wouldn't the R-line include the two colleges downtown?
_	Not sure how it improves. Was hoping it would connect Cameron Villageamd Hillsborough Streets to downtown as well
_	Hopefully the bus will be more consistent. Accessing Seaboard Station is also a destination.
	bus with the new route
	I think you would see more ridership if you had stops closer to the Oakwood and Boylan Heights neighborhoods
	The proposed route does not service Glenwood South or the Warehouse District. I use the R-Line as an alternative to Taxi and Ride Sharing when I go out, and the proposed route does not service the areas I visit.
197	It doesn't hit any of the primary locations that people visit It is just outside of these areas.
198	Proposed route dodges traffic, but doesn't seem to serve as many businesses as it could.
	Looks much more direct and hits all major markets If the R_Line is for downtown Raleigh then the proposed route DOES NOT cover downtown. One street (cause each street is a one way street ) does not cover downtown and people can walk that route if they wanted to see those two streets. Other cities have free buses that cover downtown. If you want to promote the city then keep the existing route and continue to connect to the train station.
201	N/A
202	Consider expanding the route to include Cameron village area. West on peace to CV and then back down Hillsborogh to dt
203	the main problem with the existing route is that it's one-way.
204	Please come up to north person street! a stop near krispy kreme would help!
	I like the 2 ways route but why eliminate the warehouse district? now it will take me longer to get from the Dillon to the city plaza. there is no win with this. you are now accommodating a faster route one way instead of the other now. the existing loop was fine. just make *THAT* loop bidirectional. I wonder why it runs up and down Salisbury and Wilmington, those are virtually one block from one another. This seems to cut down on the most popular areas. I would like to see it expand out to stop near Person St Station area/Historic Oakwood. I agree that it's terrible going down Glenwood, far to busy on weekends, but just run it down West and then keep the route around the warehouse district and back to Red Hat ampitheater, covenation ctr, to Wilmington. I definitely use the West St stop the most, right behind the beer garden, to access the Glenwood area and I plan to use this stop to access Publix once it is open.
207	No Glenwood South is problematic
_	It is more useful since it runs in both directions now, though it is still quite a long route if you're traveling between Glenwood South and the Capital area of downtown that likely takes longer than walking.
209	Still not as useful as we who live downtown need to move around downtown. Needs to run east and west and cross Fayetteville St. in several blocks.
210	Please have the R Line travel person street to the Krispy Kreme this would be much better for the neighborhood and ridership
211	It's not cmprehensive enough
212	It doesn't cover enough destinations east of Wilmington. I would like to see the route expanded to include the west edge of St Augustines.
213	Disappointed in the idea of cutting out the warehouse district.
	No idea what the actual route was until now. go to the warehouse district, I think that was a waste. If you're on glenwood or fayetteville, you can walk there. I typically use the r line to get from my apartment to glenwood south bars. I will say I am almost always one of the non homeless people on there. I don't think you should kick the homeless off, let them be warm, just

the r line as their first/only bus experience and I don't think they will if that stop is taken away. I am so glad it wouldn't go on glenwood south anymore and instead go on the street behind it because half the time the driver wouldn't go, and the traffic is too bad. I would wait there at about 2am and see it on the tracking skipping the whole road and end up having to uber. The other thing that needs to be worked on is the advertising. I am always telling people about it, and nobody knows till they ride it with me. I get embarrassed when it doesn't show up consistently and I have other people with me trying to show how cool it is and that we don't need an uber lol. I recommend coming to our first friday events at the Lincoln or any other first Friday, and partner with first friday to advertise a route of how to use the r line to get to different first friday events. The night market would be a good way to advertise too. It'd be smart to go to all the nice apartments downtown and just advertise at whatever resident events they have too, that should be the target audience. I see the point of wanting people who work downtown to use it, but realistically they aren't going far so that's not going to be your target. Another thing is that it needs to be more consistent and have time points at least for the end of the line. I track it, but hate trying to predict when it's going to leave the end of the line, it never works out and I either end up running to the stop or waiting for a long time. It dis encourages

focus more on advertising to other groups. I'd like to see it come by Marbles still with the new route, beyond that I like it. I will say a lot of kids going to marbles will ride

- **216** In order to know how helpful the route would be, I would like to see the proposed stops as well and info on frequency.
- entertainment. The R line is not used by the new generation of people moving downtown as it is not a safe/clean environment as you would experience in a city where mass transition is the main source of transportation for the majority of people. My husband and I bought a house and moved downtown on East street 2 years ago after moving here from manhattan. In my 13 years in nyc many of the places I lived,, busses were my main source of transportation. The R line here does not have a clean/safe environment that will encourage and welcome people to utilize it rather than Uber or drive. We need to focus not just on where the most important stops are at the moment but what will be important in the near future adapt.
- 218 Needs to go east of city to at least Moore Square/City Market. Also to include Transfer Food Hall.

The new route seems more inefficient, since the bus must travel to the north side of the city to come back from the warehouse district. The new route also falls two **219** blocks north of Boxcar and The Pit on Davie St., which together form a bit of a hotspot downtown. I would focus on getting the R-line closer to these businesses.

**220** Seems much more strategic and intentional. Existing route feels a bit all over the place. Difficult to remember. Needs to be simpler.

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	What comments do you have about the proposed route?
21	of DT Raleigh.
	If you only have 2 buses but now going in opposite directions, wouldnt the normal wait time of 20 minutes be double to 40 ? I think it would encourage ridership if the bus traveling north on Wilmington turned right on Jones and left on Person, then left on Peace. It would bring the Person Street district into the loop and make the bus a more attractive option for residents in Mordecai, Oakwood, Oakdale.
24	I love that it's bi-directional one-way loop is a vital first step, so that is good to see here, but it still forms a U-shape to get between most of Downtown and Glenwood South, so the travel times wi remain bad.
	I'm sure this is because you don't want the current stakeholders straight north of Downtown, like Peace University, to lose service. But the new route barely serves the Warehouse District in any meaningful way anyway, and as long as you route it this way, it will remain a last resort option that doesn't actually spur economic growth.
	What you'd need to do to get riders back on the bus is start at the Convention Center, go up Salisbury/Wilmington as proposed, but then cut over to West St much earlier, probably at Edenton/Morgan. Then go up West St through the Glenwood South corridor to Peace St. You could even have it cut east along Peace St to serve the University and that area, and the travel time savings from using West St instead of Glenwood would still make that a viable option to get downtown from there. Or you turn it west along Peace St to Cameron Village, which could open up more funding source businesses.
25	Either way, this proposal is a step in the right direction, but still needs major work if the goal is to get ridership back and spur economic development.
_	I like that it will run both directions.
_	seems to hit all of the same areas
	The proposed route seems to provide much better access to local businesses on the East and west side of Downtownnthan the existing route. It also appears likely to make more loops during the same amount of time providing more efficient service than the existing route.
29	l'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings.
30	No comment.
	The current route seems too long. I'm in favor of a shorter route. Why go all the way up to Peace Street? My recommendation would be to lower the north route along Peace Street to W Jones St/Edenton St. This would change the route to connect it to the Museum Block
_	Need to take into consideration Glenwood Towers residents.
	I don't like that it doesn't stop at the Raleigh Convention Center or the Warehouse District. I think the R line should branch out to include Cameron Village library, Hillsboro St all the way to Meredith College, include western Blvd at Mckimmon Ctr and points east: Mission Valley, Pullen Park, Dix Park, Farmers Market, South st and future Southeat Raleigh stops. It should have stops at city parking garages and it should stick to routes where CAT buses now go so as not to impact new streets. It should be free. Possibly it should use some smaller vehicles until ridership is up. Downtown is now more than Fayetteville St. R line should be re evaluated every 2 years. Point is to get ridership up to relieve congestion and support businesses and community.
236	Used the RLine much more when living in Glenwood South. Still important for events/visitors.
	I think it should include the shops and restaurants on Person Street
-	Doesn't seem as comprehensive or like a true "loop†or "circulator.†Also seems silly and wasteful to double back on the same block.
	I use it most to connect to Glenwood from downtown because there's no good parking on Glenwood
	But I would like the Morris Square block to still circulate. And a closer stop to the train station.
	Why cut out Glenwood South when that's such a popular after-5 p.m. destination? Fayetteville Street traffic is declining when it comes to evening food and beverage and this new proposed route doesn't seem to reflect current trends in Downtown Raleigh entertainment behavior.
42	The route would eliminate the Moore Square area. I like being able to ride from Moore square to shopping and museums on weekends. I would ride more with my out of town visitors if we could see out the windows. The R line wrap covering detracts from the downtown experience in my view. I live on Glenwood South and Seaboard Station would be one of my primary destinations on the R-Line, but since it currently only goes in one direction, it would take 3
243	min plus wait time to go a few blocks. I would use the proposed version more.
44	Looks to be more efficient
45	I like the new route except I wish it went through the Warehouse District still.
46	None
	I think it's an improvement on the current route So many people live in the Oakwood & Mordecai area now that the R-Line would be so much better used if it actually came down Person Street rather than Wilmingto Street.Even if it just came as far as Krispy Kreme it would serve people who lived in Oakwood and worked downtown so much better than it does now, and it would bring people who live downtown to to the restaurants on Person Street. I could use it most days if it did that.
	None
	Only covers a span of 3-4 blocks East to west, which seems redundant.
	It looks about the same to me, why are we changing it?

looks good

#### 252

**253** The city should be charging for this service. It is unfair to offer a free bus to some riders in one area but charge riders in other areas.

**254** seems compacted and improves service to the heart of downtown

**255** The proposed route cuts out east downtown, all of Glenwood Ave. and the warehouse district, why is this proposed?

- **256** Make more sense than current route, serving more populated areas
- **257** Proposed route doesn't access warehouse district.

I Like the proposed route however I thing a second route that runs perpendicular running down Hillsborough Street connecting to Cameron Village and maybe the **258** Pullen Park/Dorothea Dix Park area. I think that would connect a lot of people to areas that are popular downtown.

**259** n/a

- 260 Use money for good of poor people!!!!!!!
- **261** With the new route, I'd be more likely to use it to get around downtown.
- **262** I would use the proposed route because it is just that much closer to my residence.
- **263** I like access to the warehouse district for shopping and entertainment purposes.
- **264** I want access to the areas currently being served.

# Page 6 of 7

 What comments do you have about the proposed route?

 I most often go downtown to go out to dinner on a weekend night and then go see a performance at the Duke Energy Center. I think the proposed route would serve my needs better than the current route.

 265

L

# Page 7 of 7

Additional Attachment to accompany Attachments B & C 'Concentration of Detailed Comments Received'

# Stops Hargett Stops Hillsborough Wilmington Salisbury Ware operational Southwest Amphitheater Glenwood Inquiry Person

Reference in the Word Cloud	Salisbury/Wilmington	Hillsborough	Eastern	Glenwood	Warehouse	Amphitheater	Cameron	Person	Southwest	RUS	Hargett/Nash	Stops	Operational	Inquiry
Meaning as per comments provided	mention of not traveling alongSalisbury/Wilmington	mention of traveling along Hillsborough	mention of areas nearest Moore Square, Transfer Co Food Hall and/or City Market	mention of lack of access on Glenwood South	mention of lack of access to the Warehouse District	mention lack of access to the Amphitheater	mention of adding access Cameron Village	mention of adding more access to Person Street	mention lack of Southwest access	mention of lack of access to Raleigh Union Station	mention of traveling near Hargett/Nash Square area	Stop Requests/ Inquiries/Proposals	mention of operational suggestions	General inquiry



June 4, 2019

To: Route Committee

From: Morgan L. Simmons Transit Planner

**RE:** Update on the R-Line Revisioning Stakeholder Group

From September 2018 to May 2019, city transit staff led a stakeholder group to assess the downtown transportation need and revise the R-Line circulator service. This stakeholder group consisted of representatives from local and county government, universities, downtown organizations, non-profits and advocacy groups.

Through a series of monthly meetings, staff engaged the group through a variety of engagement activities, to include data assessment, breakout sessions, and survey activities. The information collected resulted in the development of five (5) transportation options for the stakeholders to score. This memo includes a detailed summary of the 7-8 month process and the final recommendations (Please refer to the attachment).

Based on the scoring criteria and staff consideration, this stakeholder process yielded two (2) recommendations for consideration for the Raleigh Transit Authority (RTA).

Staff is requesting the RTA's consideration and review of these recommendations. Prior to approval or execution of any recommendation, public consideration would be needed as well as additional assessment of the two recommendations completed.

Morgan L. Simmons Transit Planner

#### **MEETINGS**

#### Meeting 1- September 24

#### Meeting Type: In-Person, Presentation Format with Collected Input

**Attendees**: Campbell University Law School, City of Raleigh (Downtown), City of Raleigh (Economic Development and Innovation), Downtown Living Advocates (DLA), Downtown Raleigh Association (DRA), GoRaleigh, Raleigh Convention Center (RCC), Raleigh Transit Authority (RTA), Wake County Department of Social Service, Wake County, County Manager's Office

The inaugural meeting provided a brief overview of the anticipated process, history and current conditions of the R-Line Circulator as well as current challenges with the system. Currently, the R-Line is serving a downtown area that has grown over 50% since 2010, with more identified destinations of interest in the area. In addition, the R-Line now competes with such mobility choices as rideshare, bikeshare, as well as electric scooters.

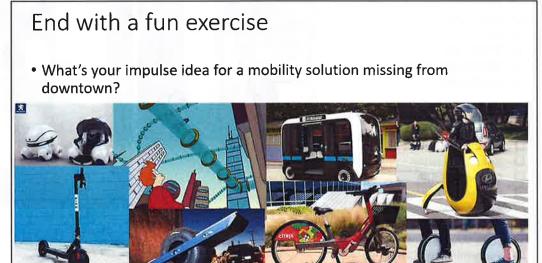
Staff charged the group to consider the \$900,000 funding availability, which is the current R-Line operation budget. In addition, the group would need to consider whether the current service goals and objectives still addressed downtown needs.

Next, staff defined the roles of the stakeholder group, which would be to:

- □ Redefine goals and objectives of the new service
- □ Identify and evaluate alternatives
- Refine the alternatives
- □ Provide a final recommendation

Finally, staff ended the meeting with a brainstorming session, showing a collage of transportation modes and asking the group to identify any ideas that came to mind.

Figure 1: Slide from Meeting 1 Presentation



Group Feedback: The following was identified as a mode or topic that the group wanted to continue to explore:

- Electric small vehicles (takes up curb space, but is not traditional)
- o Loading Zones for ridesharing type modes
- o Autonomous vehicles (for consideration for the future)

#### Meeting 3- November 26

#### Meeting Type: In-Person, Presentation Format with Collected Input

**Attendees**: Campbell University Law School, City of Raleigh (Downtown), City of Raleigh (Economic Development and Innovation), Downtown Living Advocates (DLA), Downtown Raleigh Association (DRA), Greater Raleigh Visitors Center and Convention, Raleigh Transit Authority (RTA), Wake County, County Manager's Office

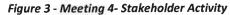
After recapping the previous meetings, staff provided a pros/cons matrix of a variety of modes of interest to the group. The group instructed staff to provide a brief analysis of the feasibility of each mode.

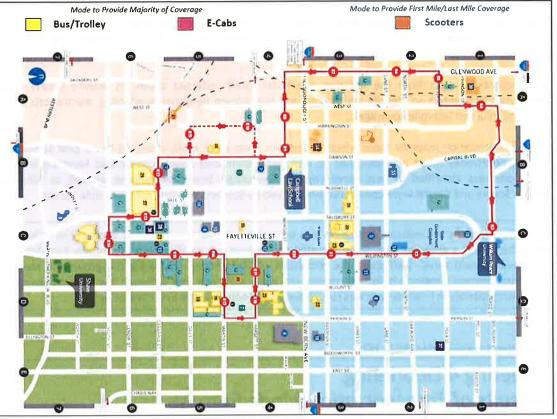
igure 2: Meeting 3 Presenta SOLUTION	PROS	CONS			
R-Line	Accessibility, comfort, ease of use, free	Limited service area, inflexible, subsidy			
Scooter	No wait	Phone required, safety, legality, accessibility			
TNC	24 x 7, short wait	Expensive for short trips, loading passengers impacts traffic flow			
E Cab	Affordable fare, on-demand, point-to-point	Subsidized, limited capacity			
Transportation Pod Cars	Accessibility, on-demand	Not legal in NC, Supportive infrastructure, not immune to traffic congestion			
Autonomous Vehicles		Not legal in NC, Technology immature			
Trolley	Geometrically agile, visible, inviting	Vehicle useful life is shorter than 40 foot bus			
Fare-Free Zone	Accessibility, comfort, ease of use, free	Enforcement			

In addition, staff provided an overview of the Raleigh Downtown Transportation Plan, charging the group to consider the implementation of this plan's recommendation and the R-Line service area.

**Corrective Measures**: After this meeting, staff determined that the the best way to get the most input from the group was to first define 'a successful service'. This corrective measure was implemented in Meeting #4.

In a final work session, stakeholders were given a downtown area map, and asked to highlight areas on the map that were best served by bus/trolley, electric cabs and/or scooters (as a first-mile, last-mile mode). The results of this exercise would be shared at Meeting 5.





#### Meeting 6- March 25

#### Meeting Type: In Person, Presentation Format with Collected Input

**Attendees**: Downtown Living Advocates (DLA), Greater Raleigh Visitors Center and Convention, GoRaleigh, Shaw University (Representatives from the Raleigh Transit Authority and the Wake County, County Manager's Office provided feedback after the meeting).

At this meeting, staff provided five transportation alternatives for the group to score. These alternatives were derived based on:

- ☑ ridership demand and activity (based on the July 2018 sample month),
- ☑ important transportation elements identified throughout the stakeholder process (goals, objectives, etc.) and,
- ☑ funding/budget constraints.

Each transportation option was provided on a map that showed:

- above average ridership (for morning, afternoon and evening)
- ☑ current parking opportunities
- $\blacksquare$  identified destination to be served (as determined by the stakeholder group)
- operation comparison with the current R-Line service

Staff used the current budget of \$900,000 to determine the operational feasibility for each bus/trolley option. In addition, staff used available cost estimates provided by an electric cab company (Downtowner Transportation Services of Florida) to determine feasibility of the electric cab options.

Stakeholders scored each of the options based on the important elements identified throughout the process. Finally, the participants individually selected the Top 2 Choices. Staff collected 8 scoring sheets.

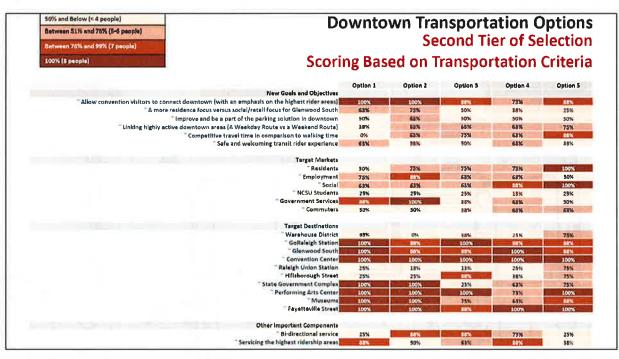
Option 1: Bus/Trolley Route Only (page 12) Option 2: Bus/Trolley Route Only (page 13) Option 3: Bus/Trolley Route Only (page 14) Option 4: Bus Trolley/ Electric Cab (page 15)

**Option 5:** Electric Cab Only (page 16)

#### Figure 5: Final Stakeholder Input Scoring Sheet



#### **Figure 7: Second Tier Selection Process**



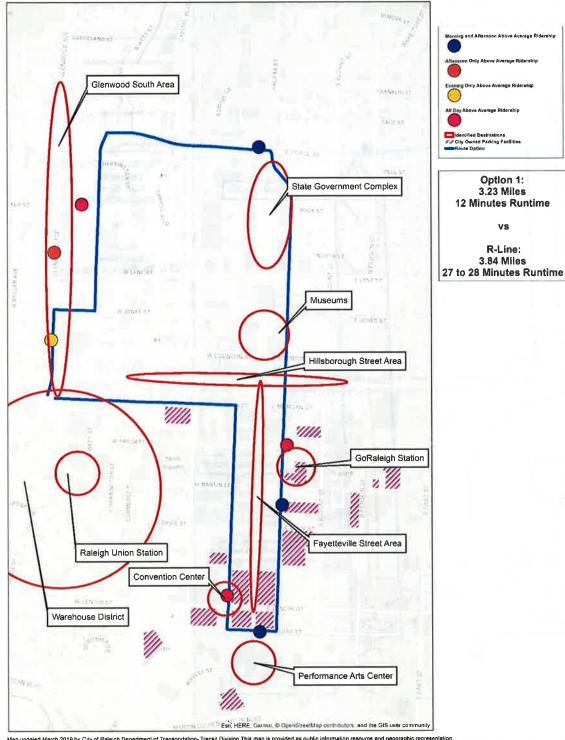
In addition, with the second tier of selection, staff evaluated at three (3) levels of confidence (51%, 75%, 100%). It was identified that Option 2 was the strongest contender on all confidence levels, with Options 4 and 5 being a second choice.

#### Figure 8: Second Tier Selection Process

	1 <sup>st</sup> Choice 2 <sup>nd</sup> Choice	Option 1	Option 2	Option 3	Option 4	Option 5
First Tier of Selection Number of Stakeholders who selected the option with	in their 'Top 2' options					
	Based on all voters unanimously (100%) feit these targets were addressed,	8 Targets	7 Targets	3 Targets	3 Targets	5 Targets
Second Tier of Selection Addresses this Number of Important Categories (out of 24)	At least 75% of voters felt these targets were addressed	11 Targets	13 Targets	9 Targets	9 Targets	15 Targets
	At least the majority of voters (at least 51%) felt these targets were addressed.	14 Targets	17 Targets	17 Targets	17 Targets	16 Targets
		First Choice Second Choice ✓ Option 2 ✓ Option 4 ✓ Option 5				



# Downtown Transportation Option 1 (Bus/Trolly Only)

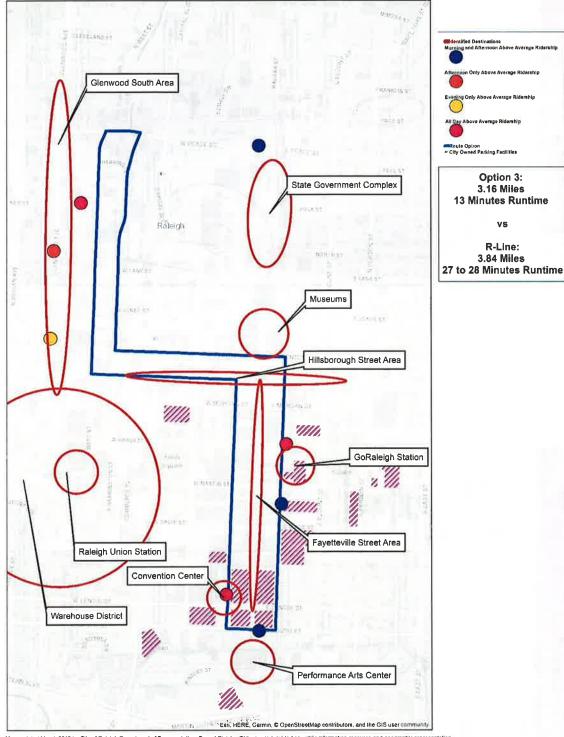


Map updaled March 2019 by City of Raleigh Department of Transportation-Transiti Division This map is provided as public information resource and geographic representation. Every reasonable effort has been made to assure the validly and quality of this information. This geographic representation are not legal documents and are not informated to be used as such. The City of Raleigh and Gordareigh Transit System makes no guarantee, express or implied, as to the accuracy, reliability, utility or completeness of this information. In addition, no liability is assumed either for any percent, circlesion are information provided regardless of the cause of such or for any decision made, action taken or not taken by the user in reliance upon this map or information provided herein.

**R-Line Revisioning Stakeholder Engagement Process** 

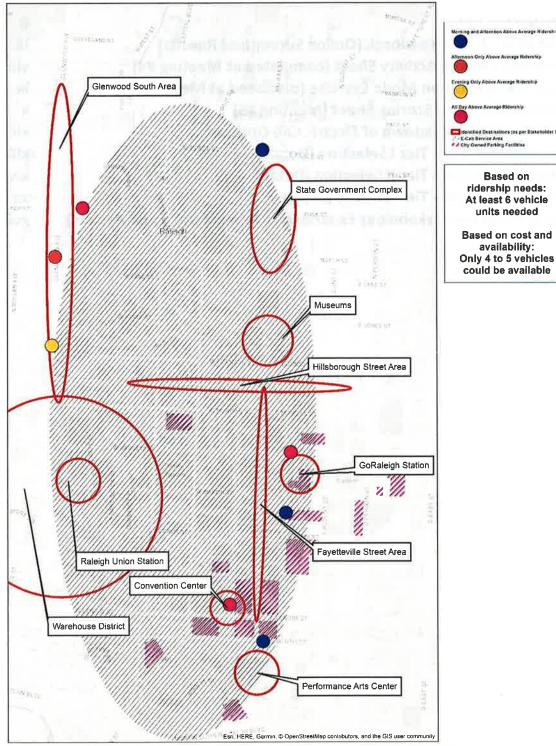


# Downtown Transportation Option 3 (Bus/Trolly Only)



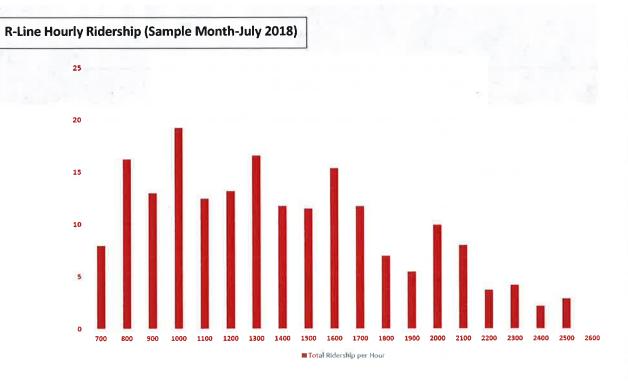


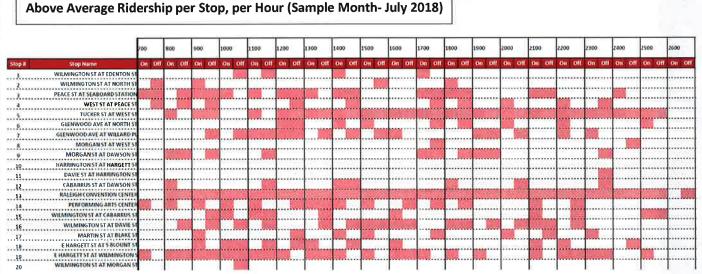
## Downtown Transportation Option 5 All-Day Service: Electric Cabs



Map updated March 2019 by City of Raleigh Department of Transportation- Transit Division. The map is provided as public information resource and geographic representation. Every reasonable effort has been made to assure the validity and quality of this Information. This geographic representation are not legal documents and are not interded to be used as such. The City of Raleigh and GoRaleigh Transit System makes no guaranies, express or implied, as to the accuracy, reliability, utility or completeness of this information. In addition, no liability is assumed either for any prores, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken or not taken by the user in reliance upon this map or information provided herein.

#### **R-LINE RIDERSHIP DATA**





 ${\rm Q}_7$  . Based on this trip, who do you think was most served by the service?

- O Downtown Residents
- O Employers/Employees
- O Visitors
- O Students
- O Others

Q8. If you said 'Others' in Q7-please define. If not, please type N/A. 7

10 I.I.

 $Q_9$  Based on this trip, what area did passengers travel 'from' the most? (Caught the bus from this destination)

- O Warehouse District
- O GoRaleigh Station
- O Glenwood Street
- O Convention Center
- O Raleigh Union Station
- O Hillsborough Street
- O Government
- O Residential Areas
- O Others

Q10. If you said 'Others' in Q9, please define. If not, type N/A,  $^{\rm 3}$ 

YOL 27538

Qit. Based on this trip, what area did passengers travel 'to' the most? (Caught the bus and traveled to this destination)  $^{\circ}$ 

- O Warehouse District
- O GoRaleigh Station
- Glenwood Street
- O Convention Center
- Raleigh Union Station
- O Hillsborough Station
- O Government
- O Residential Areas
- O Others

Vetor an over

Q12. If you said 'Others' in Q11, please define. If not, type  $N/A_{\rm e}{}^{\rm o}$ 

THE REPORT OF

#### Appendix vi

# Q5. What were some of the positives observed during the trip? (Consider condition of the bus, route performance, timing, etc.)

5 responses

Gets from east side of downtown to Glenwood South quickly. Trackable online,

Very clean, calm, warm (especially nice on a rainy day!), bus driver James is always polite and kind, timing was nearly exact -- 30 minutes for the entire loop

The driver was awesome - very nice and friendly. The bus was clean and nice. The weather was very cold and rainy, so having nice, safe, warm and dry transit was great. I promote the R line a lot but had not ridden it for several months, it was good for me to see it in action personally. The only disappointment was that so few people were riding it at 3pm on a Friday.

Free

The bus operator greeted each customer and announced the temporary detour affecting the current trip, no missed bus stops. At this time of day, there was no traffic delaying the trip.

Q6. What were some of the negatives observed during the trip? What needs to be improved? (Consider condition of the bus, route performance, timing, etc.)

5 responses

Takes a long time to get back from Glenwood South. Not a lot of riders. Schedule seems a bit haphazard. Sits at Convention Center for long time.

Only the anchoring stops are spoken by recording (Convention Center, Glenwood South); someone with accessibility needs would need help knowing when to exit the bus. The seating forces eye contact among riders... great in theory to encourage interaction but can also bring unwanted attention from other riders. The only alternative would be to sit in the back of the bus, which is not always ideal. The perforated window protection is unwelcoming. It makes the bus dark and it's difficult to see outside unless looking out of a window relatively far away. Going all the way to Seaboard also seems unnecessarily far away, but the construction of Peace/Smokey Hollow may solve that. (Downtown residents could take the bus to Publix!)

I've tried to think critically on this but based upon my ride Friday I didn't see negatives

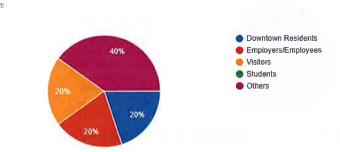
We spent too long on Glenwood South to get to where we wanted to go.

The condition of this R-Line unit (1290) provided a noisy/bumpy ride; very uncomfortable. The interior is extremely dim and dreary. The bus wrap on the windows makes it difficult to see through and inhibits viewing the city and destination. There is a rear seat that doesn't have any back/bottom cushion; apparently vandalized.

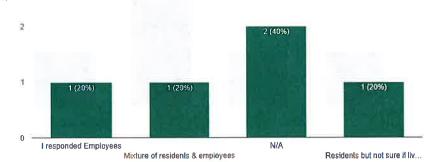
# Q7. Based on this trip, who do you think was most served by the service?

5 responses

R-Line Revisioning Stakeholder Engagement Process

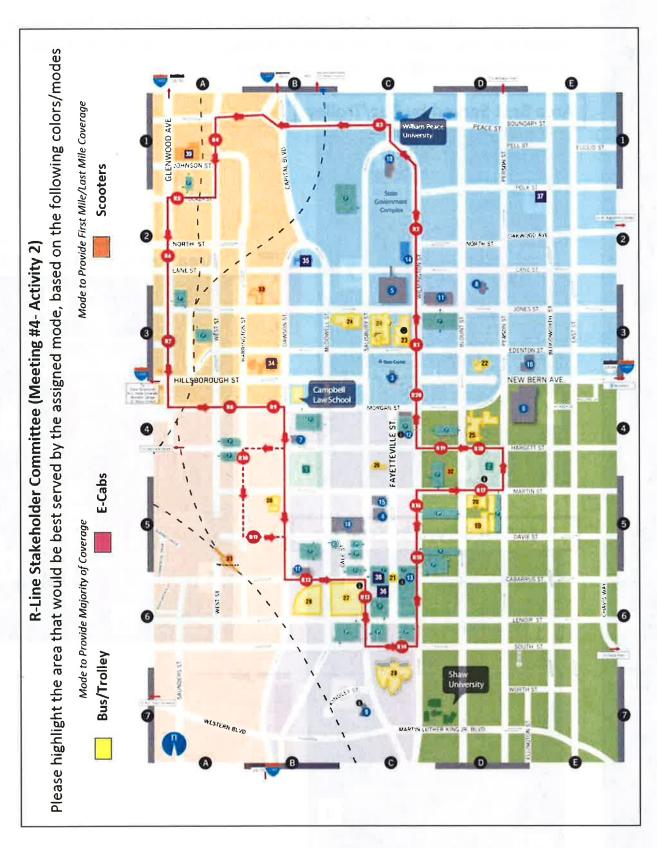


Q8. If you said 'Others' in Q7, please define. If not, please type N/A. 5 responses



Appendix viii





#### FINAL STAKEHOLDER INPUT SCORING SHEET (MEETING #6)



### R-Line Revisioning Stakeholder Meeting # 6 Final Stakeholder Input

Instructions: Review each option and check if the option meets and/or addresses the various important categories, as identified by the stakeholder group. Once complete, please provide your Top 2 choices for best options to address downtown transportation needs.

#### **Option 1**

#### New Goals and Objectives

- Allow convention visitors to connect downtown (with an emphasis on the highest rider areas)
- □ A more residence focus versus social/retail focus for Glenwood South
- Improve and be a part of the parking solution in downtown
- Linking highly active downtown areas (A Weekday Route vs a Weekend Route)
- Competitive travel time in comparison to walking time
- Safe and welcoming transit rider experience

#### **Target Markets**

- Residents
- Employment
- Social
- NCSU Students
- Government Services
- Commuters

#### **Target Destinations**

- Warehouse District
- GoRaleigh Station
- Glenwood South
- Convention Center
- Raleigh Union Station
- Hillsborough Street
- State Government Complex
- Performing Arts Center
- Museums
- Fayetteville Street

#### **Other Important Components**

- Bi-directional service
- Servicing the highest ridership areas

#### **Option 2**

#### New Goals and Objectives

- Allow convention visitors to connect downtown (with an emphasis on the highest rider areas)
- A more residence focus versus social/retail focus for Glenwood South
- □ Improve and be a part of the parking solution in downtown
- Linking highly active downtown areas (A Weekday Route vs a Weekend Route)
- Competitive travel time in comparison to walking time
- Safe and welcoming transit rider experience

#### **Target Markets**

- Residents
- Employment
- Social
- NCSU Students
- Government Services
- Commuters

#### **Target Destinations**

- Warehouse District
- GoRaleigh Station
- Glenwood South
- Convention Center
- Raleigh Union Station
- Hillsborough Street
- State Government Complex
- Performing Arts Center
- Museums
- Fayetteville Street

#### **Other Important Components**

- Bi-directional service
- Servicing the highest ridership areas

#### ESTIMATED FUNDING BREAKDOWN OF ELECTRIC CAB OPTIONS

Based on Cost Estimates provided by the Downtowner Service, serving Tampa Florida

Based on the July 2018 sample month, R-Line ridership would require at least 5 to 6 electric cabs during its peak hours and at least 1 to 2 electric cabs during its non-peak hours.

Cost: \$30.00 to 35.00 an houi	(carrying at least .	3-4 passengers)
--------------------------------	----------------------	-----------------

For	All	Day Service Scenario	
	<b>T</b> 7		

- ✓ budget of 900K Budget
  - ☑ approx. 120 hours weekly of weekly service

Potential Affordability at least 4 to 5 electric cabs For 'After Hours' Only Service Scenario
☑ budget of 180K Budget
☑ approx. 27 hours of weekly service

Potential Affordability at least 3 to 4 electric cabs\*\*



\*For this analysis, night hours started approximately at 8pm. After the 8pm hour, average ridership during the July 2018 sample month showed a steady decrease. Staff wanted to ensure a 'night peak' was captured in calculating operational and cost feasibility.

\*\*This calculation is a correction.

Appendix xiv

# FINAL RECOMMENDATION- TIER II SELECTION (DETAIL)

w (< 4 people)	Between 51% and 75% (5-6 people)	(-1 1/ //00 P //32
50% and Below (< 4 people)	Between 51% and	Bachings 76% and

100% (8 people)

	New Goals and Objectives	-	Time			
" Allow convention visitors to connect downtown (with an emphasis on the highest rider areas)	n an emphasis on the highest rider areas)	100%	100%	88%	75%	88%
" A more residence focus vers	" A more residence focus versus social/retail focus for Glenwood South	63%	75%	50%	38%	25%
" Improve and be a	" Improve and be a part of the parking solution in downtown	50%	63%	50%	50%	50%
" Linking highly active downtown area	" Linking highly active downtown areas (A Weekday Route vs a Weekend Route)	38%	%69%	63%	63%	75%
" Competitive	" Competitive travel time in comparison to walking time	%0	63%	75%	63%	88%
"Sa	" Safe and welcoming transit rider experience	63%	38%	50%	63%	38%
	Target Markets					
	" Residents	50%	75%	75%	75%	100%
	" Employment	75%	88%	63%	63%	50%
	" Social	63%	63%	63%	88%	100%
	" NCSU Students	25%	25%	25%	13%	25%
	" Government Services	88%	100%	38%	63%	50%
	" Commuters	50%	50%	38%	63%	63%
	Target Destinations					- provident (
	" Warehouse District	38%	%0	38%	25%	75%
	" GoRaleigh Station	100%	88%	100%	88%	88%
	" Glenwood South	100%	88%	88%	100%	88%
	" Convention Center	100%	100%	100%	100%	100%
	" Raleigh Union Station	25%	13%	13%	25%	75%
	" Hillsborough Street	25%	25%	88%	38%	75%
	" State Government Complex	100%	100%	25%	63%	75%
	" Performing Arts Center	100%	100%	100%	75%	100%
	" Museums	100%	100%	75%	63%	%38
	" Fayetteville Street	100%	100%	%88	100%	100%
	Other Important Components					
	" Bi-directional service	25%	88%	88%	75%	25%
	" Canifring the highest ridership areas	BBSK.	50%	63%	CCar	2007

#### FINAL INPUT ABOUT THE STAKEHOLDER EXPERIENCE (ONLINE SURVEY AND RESULTS)

-		and had been
	R-Line Stakeholder Group	
	Thank you for participating in the re-visioning process for the R-Line service. Your contribution has been invaluable. Please complete the following survey regarding your stakeholder experience.	
	* Required	
	Email address *	
	No more an (MISH).	
	How would you rate the frequency of the meetings? *	
	1 2 3 4 5	
	Not Good O O O Excellent	
	How would you rate the level of materials and details provided for the discussions at each meeting? *	
	1 2 3 4 5	
	Not Enough Supporting Materials and Details provided OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	
	In your opinion, what was the best part of this experience? *	
	Your alternat	
	In your opinion, what was the part of this experience that requires improvement? *	
	Do you believe you gained something from this experience? (Yes or No; Please elaborate on your answer choice) *	
	Youn pressone	
	If given the opportunity to participate again, please rank the likelihood you would volunteer to participate? *	
	1 2 3	
	I would not participate O O I would participate	
	What are some final thoughts you would like to share with staff about this experience? *	
	You's answer	
	Thank you for your contributions! We appreciate your input and look forward to the next steps in this process!	



#### Do you believe you gained something from this experience? (Yes or No; Please elaborate on your answer choice)

4 (espolises

Yes. Learning the ridership information and the process for service change

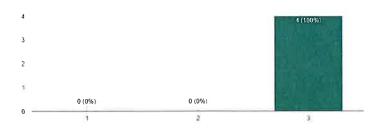
Yes, I enjoyed the dialogue and the opportunity to have input on the growth and services of the city

Great opportunity to hear other's perspectives on the routes. It helps think about my own view but also those of others

Yes as noted in 'best part of the experience' question, but also it was eye opening to learn of the options that COR staff need to consider

If given the opportunity to participate again, please rank the likelihood you would volunteer to participate?

Liggpo1(4)



What are some final thoughts you would like to share with staff about this experience?

4 responsea

#### Excellent work done on this project!

I hope to continue being a part of committee's that address the needs of the community and how the city will grow and utilize resources that service all citizens.

For me, I would prefer longer meetings and we would meet less often. I thought a lot of time was spent on catching everyone up.

I believe the process was quite thorough and inclusive. Various perspectives were encouraged, and my questions were respectfully answered. Thank you for allowing the tourism voice to be included by allowing me to be there for our CVB.

Thank you for your contributions! We appreciate your input and look forward to the next steps in this process!

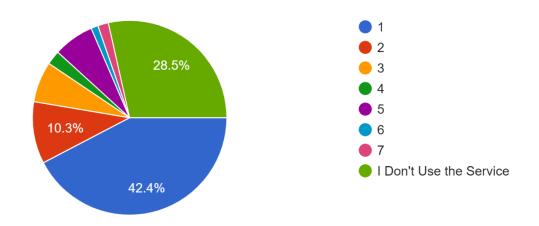
# Item A Survey Dashboard Information as of Thursday, December 12<sup>th</sup>

#### 340 Responses

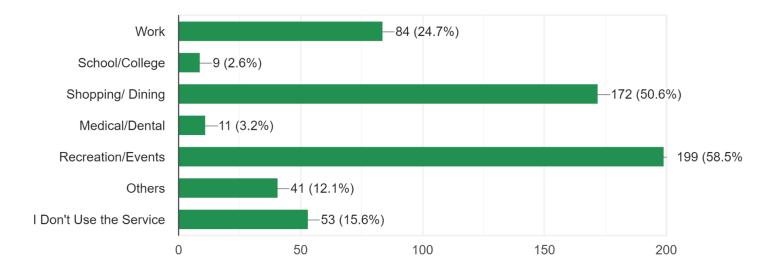
Survey Period: Monday, November 11<sup>th</sup> to Thursday, December 12<sup>th</sup>

# How many days a week do you typically ride the R-Line?

340 responses

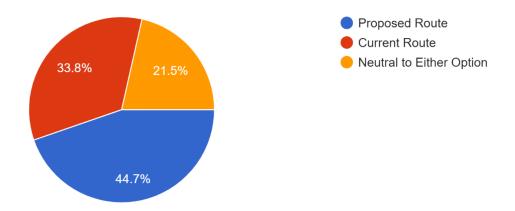


What is your main purpose for using the service? (Check multiple boxes if it applies)



# For you, which do you prefer?

340 responses



# What comments do you have about the proposed route?

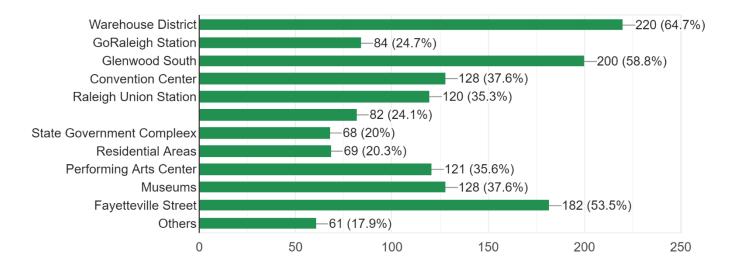
340 responses

None	
N/A	
Good for Fayetteville and Glenwood district. Forget everyone else. Hardly a circulator.	
n/a	
Keep current route	
Much better that it goes in two directions and on main streets.	
It's streamlined and safer for the bus and the drivers	
During first quarter 2020, the company I work for (McClatchy) will be joining The N&O a Street. At this time we park in the Dillon Parking Deck. We rent 90 spaces from McLaur find parking closer to One City Plaza, nor have I been able to find a company willing to am trying to be creative, hoping to find a solution that will help our employees not have from their vehicle everyday. Perhaps your RLine could be a resource for us. We would r Dillon Parking Deck and then another bus stop at One City Plaza on Fayetteville Street, appreciate if you would contact me concerning this. Thank you, Angie Braswell, McCla Street, Raleigh. 919-889-5629, abraswell@mcclatchy.com	rin. I have not been able to swap parking locations. I e to walk 5 blocks to and need a bus stop at The or nearby. I would really

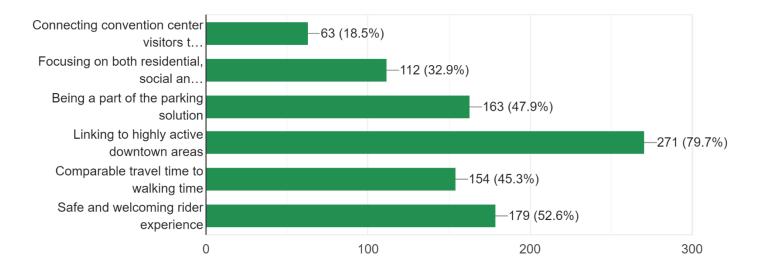
I hate that it is not cyclical. This makes absolutely no sense and doesn't cover as much ground. Such a waste, I

# When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)

340 responses

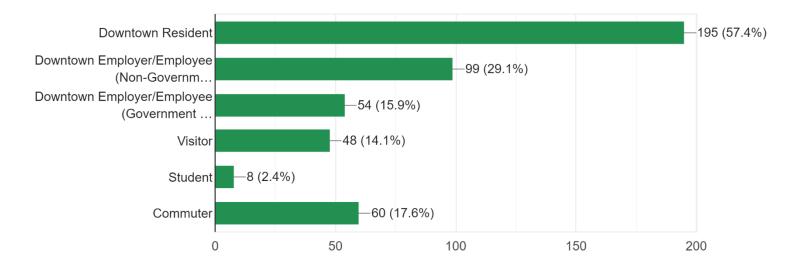


# What is most important to your R-Line rider experience? (Check up to 3)

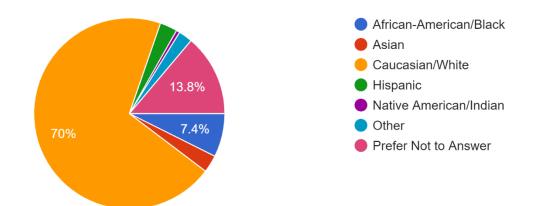


# What do you closely identify as? (Check multiple boxes if it applies)

340 responses

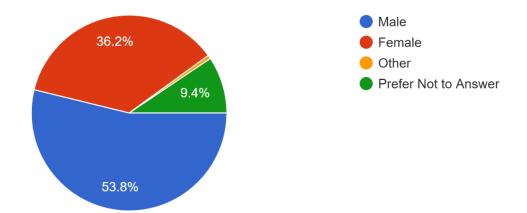


# Do you identify as.....

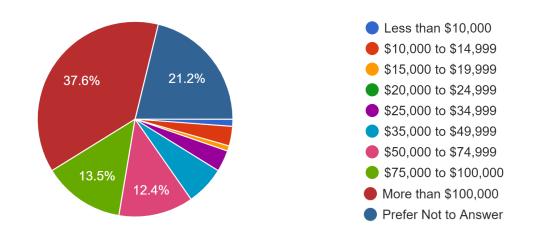


# Do you identify as.....

340 responses



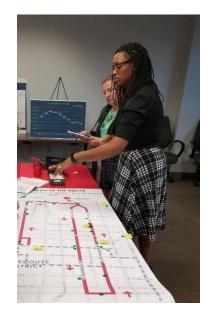
# What is your total annual household income?



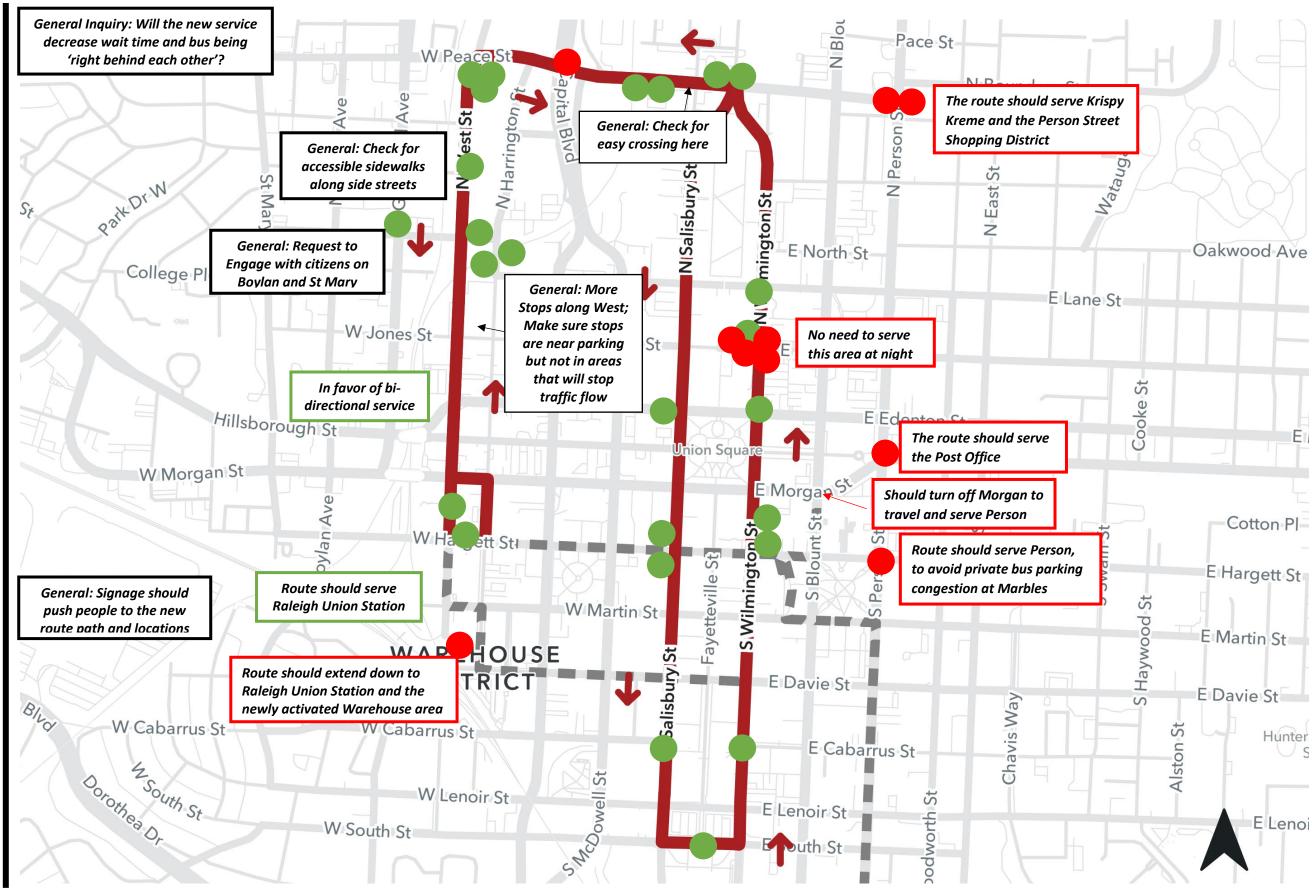
# **Results from 'Likability Exercise' (Item B)**

A large map was made available for the public to identify liked and disliked areas of the proposed route. This map exercise was available at both public meeting sessions as well as several local organization presentations.









1	None
2	Much better that it goes in two directions and on main streets.
3	It's streamlined and safer for the bus and the drivers
	During first quarter 2020, the company I work for (McClatchy) will be joining The N&O at OCP on Fayetteville Street. At this tim 90 spaces from McLaurin. I have not been able to find parking closer to One City Plaza, nor have I been able to find a company
	to be creative, hoping to find a solution that will help our employees not have to walk 5 blocks to and from their vehicle every for us. We would need a bus stop at The Dillon Parking Deck and then another bus stop at One City Plaza on Fayetteville Street,
	would contact me concerning this. Thank you, Angie Braswell, McClatchy, 111 West Hargett Street, Raleigh. 919-889-5629, abr
5	I hate that it is not cyclical. This makes absolutely no sense and doesn't cover as much ground. Such a waste. I love the current
6	Though the proposed route offers a solution to the direction issue we have with the current, the proposed does not cover a wi few blocks east last Moore square so it gets closer to Transfer Food Hall and truly connect the dtr outer edges on east and wes
7	Looks like it would be faster and more efficient.
8	I hope this means a more efficient way to get around downtown but I would like to know where the proposed stops are.
	The new route cuts out stops that I don't see used very often.
.0	Why ? Seems off the busy path
.1	Why is the proposed route better than the current route? Well it be able to serve more people? Be quicker?
	My concerns are for the residents of Glenwood South. The proposed route doesn't seem to be accessible for a lot of people fro
	West will be more difficult for the residents of Glenwood Towers to utilize. Glenwood Towers is operated by Raleigh Housing A proposed change does not take them into consideration. I would propose the route turn on Johnson St., turn left on Glenwood will be back on West. There is already a bus stop in front of Glenwood Towers.
	I understand that the traffic on Glenwood Ave can be heavy at times. A suggestion is for the bus to go down West turn on John street would be accessible to a lot of residents and stay off of Glenwood Ave. This route suggestion would also go by Glenwood
	Another concern is for the bus stops to be on West St. This street is not walkable between Peace and Jones. Some sections do in pedestrians. There are railroad tracks on West that the bus would have to cross and wait to cross - making the route longer and there is a lot of construction happening on West St. that makes it difficult for vehicle traffic and pedestrians to navigate. I understand that changes are necessary for the current statistics but supporting the areas that have the most population and c
	hotels is important. I appreciate the opportunity to provide feedback. As a resident of downtown Raleigh, I value and appreciate the R-Line for the the need for change.
-	Glenwood needs to be in the mix, and the two sides of the eastern loop are an easy walk from each other.
	Skips the whole warehouse district
5	I don't like the fact that the proposed route doesn't appear to service Glenwood Ave

ne we park in the Dillon Parking Deck. We rent willing to swap parking locations. I am trying day. Perhaps your RLine could be a resource t, or nearby. I would really appreciate if you raswell@mcclatchy.com

route and I'm teaching my kids how to use it!

ide enough area. I even propose it continue a st

om West St to St. Mary's Street. The route on Authority for elderly low-income tenants. The d Ave and turn left on Tucker St then the bus

nson Street then turn left on Boylan. This od Towers.

not have sidewalks and are hazardous to

nd an increase in safety concerns. Currently,

construction of new residential housing and

service that it provides while understanding

-	What comments do you have about the proposed route? (Item C)
n	Far more efficient. The dotted line routes from the 2007 era make no sense as few people. Get on there and it a lot of time. A v
	spots and can add at least 5 plus minutes to a route a rely served.
	That looks just bizarre. It's eliminating the whole Warehouse District? And Glenwood Avenue? Going both directions on West a
	What's presumably to be gained? What's prompting the change? Certainly, the route should be reconsidered from time to time the current route works for me, and this would be less convenient.
	like the current route!
	None.
	This no longer becomes a loop and cuts out the amphitheater stop. It looks like it will take longer to get from Glenwood to the S
	It would be awesome if the R-Line would link to Cameron Village every hour or so since Peace St has become so constructive.
	It looks as though the proposed route will be much more efficient
	Much shorter for Glenwood South residents. But please don't have bus drivers stop for an indeterminate amount of time every
~	irritate passengers who are timing their trip.
_	Seems more efficient
-	None
6	The buses need to be cleaner with security at night. The buses need to run more frequently during high use times.
	The current route is too circuitous, and I think removing the loop around Moore Square will be a significant improvement. That
	real improvements. It's paramount the City continue to run 2 buses at a time regardless of what happens. Also has the City tho
	Bus with the center of Downtown? If the R Line doesn't do this, what frequent service will?
	It is really dumb that it is now routed to the train station, but anyone arriving has to take an exorbitantly long ride to get to City
	center is. If I came in to town, I would just walk. Really dumb to have a free transit option, but make any visitors to town hate it
	used RLine when it started. Route was too long. Faster to walk
	feel like it would be really helpful to know metrics for each proposed route. What is the frequency of the route? How long will
UI	there cost savings from adopting a new route?
1	Proposed route is awful
2	Good for Fayetteville and Glenwood district. Forget everyone else. Hardly a circulator.
83	Good for Fayetteville and Glenwood district. Forget everyone else. Hardly a circulator.
_	Don't like removal of the warehouse district stops; I think there should be more (the "evening" portion should be permanent).
	that road is the most often closed on weekends. Seaboard Station isn't a particularly useful stop. Glenwood should remain a fo
i	impacted by trains and construction).
_	The proposed route would allow me to use the R line as it would serve the residential areas of downtown.
	It almost looks like 2 separate routes. Maybe it should be to keep things moving.
,	Why are you cutting out warehouse? It's a new and growing area Also the loop idea makes getting around very easy I see no
	would make going from one side to the other take 3x longer.
	I think the proposed route is far superior to the existing route. Having the buses travel in opposite directions reduces wait time
88	service people can count on.

very very short walk is just as quick to. Those

and Peace Streets? Why?

ne and adjusted to meet changing needs, but

South of Fayetteville St.

ry 15 minutes. Unannounced breaks really

at said, I don't know that the other changes are ought about using the R Line to connect Rus

y Plaza where all the hotels and convention it.

Il it take the bus to complete the route? Are

While i appreciate the focus on Fayetteville St, ocus of the route, not West St (which is

o reason to make it a look back type route that

nes and should increase ridership and make it a

39	it cuts out many of the restaurants in the new warehouse district that i the evenings are where i try to go
	It covers the warehouse district. Ideally I would like ot see a combination route involving Cameron Village
	Neither options make any sort sense, so I've never used it. I don't have a PHD in traffic engineering, but I feel like I could do a k would use.
4Z	Really wish the new route could incorporate the Person St shopping district and stop on Delway/halifax. Route seems to miss a area.
43	The changes proposed make sense
14	Seems like not serving the growing Warehouse District and area around Moore Square/City Market as well as the route current
5	Don't need a route on both Salisbury and Wilmington street since they're right next to each other. A mix of both routes would directions.
46	More convenient To go to raleigh downtown restaurants
17	Don't like not having access on Glenwood and then having to back track a ways to finally get to convention center.
8	Can the bus at least continue to W. Martin before turning back North to go past Union Station and CAM, and drop closer to the necessary?
19	The R-Line should to continue to cover All downtown as it attracts more for tourists and local.
0	Should go faster, current route is so slow it doesn't get anywhere faster than I can walk
	It would be better to not run down Glenwood, but rather run to Cameron Village and turn around there, supplementing 12/16 Cameron Village.
52	Why is there a desire NOT to serve the warehouse district and NOT to complete a loop? How would this change stations and he information given to make an informed decision.
	Way too limited. Nothing by the amphitheater area.
	I don't like that the southwest side of downtown is farther from the route.
55	Need to expand to Cameron Village
56	It doesn't make sense to go from the Warehouse District all the way back up West Street to Peace Street and over to Salisbury. Street, and then over to Salisbury.
57	This proposed route is amazing. I've been saying this for years as a long-time user of the old route for the past 5 years. People of efficient route. You're serving the two busiest areas in the CBD: Downtown and Glenwood South with additional ability to walk 24/7 anyway) and Moore Square (very easy walk). The proposed route would speed up the wait. Lights are already synchronize more efficiency from the same cost. You also don't have to hope your destination is in the clockwise direction served by the old bus driver at the Convention Center, which adds to the travel time if their break happens to be between your origin and destine both directions now. Please don't let the vocal minority (if it exists) win and rule out this clearly more efficient route to the sile appreciate this change as they have difficulty making lefts with cars on the cross-street signals making it difficult for the length Glenwood). The less left turns, the better.

better job drawing a route that more people

a lot of potential riders and heavily trafficked

ntly does is a huge miss.

be great- the current route but Stops in both

ne Depot? Why turn back a block earlier than

service that should follow the same path to

neadways? There is really very little

y. It makes more sense to go up to Hillsborough

e can walk short distances in return for a more Ik to the Warehouse District (that wasn't served zed on the main roads. You can squeeze out old R-Line. (There's also usually a break for the nation.) The proposed route allows one to go in ent majority. P.S. Bus drivers would also h of the bus to complete the turn (mainly onto

	What comments do you have about the proposed route? (Item C)
59	Biggest issue with the current route is the amount of time it takes to get from one side of downtown to the other. I anticipate th
55	issue.
60	Is running the track back and forth on West more efficient than the loop? How much have wait times and ride times increased fo
61	It seems to leave a section in the southwest downtown in a weird spot. Theoretically it could take a very long time to get to that
01	circular route makes more sense.
	The proposed route cuts service to the warehouse district and skips Glenwood. I'm one of the many riders that hop on Glenwood
62	it doesn't take into account bus transfers that happen on or close to Glenwood. Please re-review proposed route!! I don't own a
	where I need to go!
63	Still doesn't go anywhere. Daily bus rider in the Triangle, Bill City Connector model would be better than either proposed to
05	route
64	It's okay but it would depend on what headways would be.
65	Doesn't serve Raleigh Union Station
66	Praise to the person initiating this change.
67	Does not pass through warehouse district or drop off at Red Hat Amphitheatre.
68	The proposed route takes out a large area of downtown that has stops worthy of visiting. City Market and Moore Square park ca
69	The proposed route is inconvenient.
70	None
71	More direct and efficient route that seems to be in close proximity to most target destinations.
72	Live in Glenwood South / work near warehouse district
73	The proposed route won't serve me as well.
74	At what point would the drop off occur on Salisbury st.
75	Prefer current route with one bus going clockwise and the other counter clockwise on the map

this change will dramatically improve said

for people on the ends? at area based on where you board. Current

ood. So it's surprising to to see it removed. Plus a car. And I rely heavily on transit to get to

cannot be excluded!

<ul> <li>on RLine once they arrived in downtown. Perhaps a portion of the state gov surface lots near Gov Mansion/NC Bar could be sp this requires negotiations with State of NC. Maybe they have other parking areas they could repurpose for this.) Note by doing would make moving route to Person that much more efficient.)</li> <li><b>76</b> Consider moving the turnaround block to Dillon block instead of Weaver St. block to make for seamless connection to RUS and Frequency MUST become more frequent and regular (and I realize my route change suggestions negatively impacts that need, Also, it would help a lot if RLine route had some way to affect traffic light system so that RLine buses got priority/wouldn't get we could include technical innovations like that, the route could be geographically expanded more easily.</li> <li>(Note to explain answer to Q1: I have been a VERY frequent RLine rider and a proponent for most of the past 8+ vears, iust not I would be more likely to use the service with the new proposed route.</li> <li><b>78</b> shorter wait times and ride times are what i am looking for.</li> <li><sup>17</sup> I like to propose that the new route include the following: from N Wilmington, make right into East Davie for two blocks (server Plaza, Founders Row, The Davie Pub, DGX, Oak City Meatball, Rubins's Deli, City Market, and much closer to Transfer Co. Food encompassing Moore Square, then left onto E Harget then right to N Wilmington.</li> <li>1t's important to include City Market and Transfer Company Food Hall! Davie Street would benefit very much.</li> <li><b>80</b> None</li> <li><b>81</b> Don't like how long it would take me to get from one corner of the rope to the other corner</li> <li><b>82</b> I wish the route would go more into the warehouse district.</li> <li><b>83</b> Much better route</li> <li>The proposed route shouldn't loop twice through Peace St but instead pass by Nash Square on Hargett St and turn right onto S of it for travel from Glenwood South to Fayetteville St.</li> <li><b>84</b> Also I would question the need to go all the wa</li></ul>		Overall I like proposed better than status quo. But pls move route from Wilmington to Person expands coverage area to bette
<ul> <li>on RLine once they arrived in downtown. Perhaps a portion of the state gov surface lots near Gov Mansion/NC Bar could be sp this requires negotiations with State of NC. Maybe they have other parking areas they could repurpose for this.) Note by doing would make moving route to Person that much more efficient.)</li> <li>Consider moving the turnaround block to Dillon block instead of Weaver St. block to make for seamless connection to RUS and Frequency MUST become more frequent and regular (and I realize my route change suggestions negatively impacts that need, Also, it would help a lot if RLine route had some way to affect traffic light system so that RLine buses got priority/wouldn't get we could include technical innovations like that, the route could be geographically expanded more easily.</li> <li>(Note to explain answer to 01: I have been a VERY frequent RLine rider and a proponent for most of the past 8+ vears, just not 1 would be more likely to use the service with the new proposed route.</li> <li>B shorter wait times and ride times are what i am looking for.</li> <li>I'd like to propose that the new route include the following: from N Wilmington, make right into East Davie for two blocks (server) Plaza, Founders Row, The Davie Pub, DGX, Oak City Metaball, Rubin's Dell, City Market, and much closer to Transfer Co. Food encompassing Moore Square, then left onto E Hargett then right to N Wilmington.</li> <li>I's important to include City Market and Transfer Company Food Hall! Davie Street would benefit very much.</li> <li>None</li> <li>Don't like how long it would take me to get from one corner of the rope to the other corner</li> <li>Iwish the route would go more into the warehouse district.</li> <li>Much better route</li> <li>Also i would question the need to go all the way to Seaboard Station. Is it necessary at all? I think Northbound could turn left on 5 of it for travel from Glenwood South to Fayetteville St.</li> <li>Also i would question the n</li></ul>		TransferCo, Oakwood, Shaw, the well populated residential neighborhoods south and east, etc.
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<ul> <li>Plaza, Founders Row, The Davie Pub, DGX, Oak City Meatball, Rubins's Deli, City Market, and much closer to Transfer Co. Food encompassing Moore Square, then left onto E Hargett then right to N Wilmington. It's important to include City Market and Transfer Company Food Hall! Davie Street would benefit very much.</li> <li>None</li> <li>Don't like how long it would take me to get from one corner of the rope to the other corner</li> <li>I wish the route would go more into the warehouse district.</li> <li>Much better route</li> <li>The proposed route shouldn't loop twice through Peace St but instead pass by Nash Square on Hargett St and turn right onto S of it for travel from Glenwood South to Fayetteville St.</li> <li>Also I would question the need to go all the way to Seaboard Station. Is it necessary at all? I think Northbound could turn left o Johnson St (with a loop for 1 block onto Glenwood Ave). In my opinion as a downtown visitor it is not an area that I need the bit the areas of Glenwood/Warehouse/Fayetteville St.</li> <li>You're moving the stop I would use farther away. That's not so bad, though. The biggest issue I have is that the new right cuts districtsthe Warehouse district. With places like the Dillon opening and the new train station, now it will be harder to commune</li> <li>I like that it's two-way Service b/c it makes it faster and more direct to the destinations.</li> <li>The current line is very help since it takes you all around raleigh to see the developing area of Morgan street. Changing the rou</li> </ul>		
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will miss the new office building that is been built.		
		wiii miss the new office building that is been built.

ter serve Person St./Mordecai district,

ond DTR and who must arrive by auto to rely pecially appropriated for RLine parking. (Obvi g so -- and promoting that availability -- this

RUSBUS.

, but hopefully within tolerance).

delayed by as many red lights along the way. If

t riding it lately due to unrelated factors.)

vicing patrons from The Edison, Palladium Hall, then make left to N. Person Street,

Salisbury St. This would increase the usefulness

onto Edenton and potentially end at West & ous to - I would prefer quicker travel between

out one downtown Raleighs newest and best ute around downtown.

ute will not only increase commute time but

	I'm new to town and would like to use the R-Line to get around downtown. I work at Seaboard Station so the proposed route w
	directions from my location rather than one way.
	However, I don't think it's a better plan overall, as it makes cross-town trips impractical. I would prefer that the new route serve
88	tighter route:
	- Glenwood served by West St as proposed
	- West to east path along Martin/Davie St serving Warehouse District, Nash Square, Fayetteville St, and Moore Square (from W
	- Run north along Wilmington to Peace Street
	<ul> <li>East to west path along Peace to West Street, connecting Seaboard and Smoky Hollow</li> </ul>
89	doesn't service the warehouse district or moore square very well. i do like the bidirectional change though, waiting for a bus wa
90	I'm concerned the closed loop from Peace Street to West and Harrington won't be useful to people.
	I need stop R5
92	We need an efficient circulator bus to connect the major centers of Raleigh - a north hills to Cameron village to downtown bus
93	It appears more straightforward for most connections
04	Less accessible to where I live and is is more on west street which is less traveled by pedestrians than Glenwood, making it feel
94	to the stop later in the evenings.
95	The proposed route will likely be more predictable w/ fewer turns. We should enable brt on those roads.
96	Downtown borders St. Mary's R line down Glenwood would serve this border. Plus Glenwood is where people want to be
97	One major inconvenience of the current route is that both buses are traveling in the same direction in one big loop, which restr
	option. This new route looks like it will alleviate some of that and open this up to more people's needs.
98	Wish it covered the person St area
99	Make it run clockwise, so most of the time are right hand turns. Extend new route so it turns around at Martin street.
L00	Better access to more downtown areas of interest.
L01	It does not service most of the downtown area!
L02	My objective is to get from S. Fayetteville to Seaboard Station as quickly as possible. This allows me to do so.
103	I think that the new proposed route will consolidate this transit option and make it easier for me to ride and get assistance with
103	and walking.
L04	I do not think the new route will be used as often. I live in North Raleigh?
	Salisbury/Wilmington better than current one way loop all around town, but lot of Salisbury has no destinations. Appendage or
	direction travel. Also, West does not have destinations that Glenwood has. Why not wait until BRT routing downtown is selected
	that can be circulator and distributor (instead of just a meanderer). And then whole system can run fare free (by the way it is o
	that can be circulator and distributor (instead of just a meanderer). And then whole system can full fare free (by the way it is of
.06	It seems to cover a smaller area
	Better Union Station service is big plus.
	p.s.: Remove that ugly mesh from the windows so tourists can see our town.
108	Too narrow to bring in surrounding community.

would work great for me since it goes in both

ve the same destinations as the old but on a

Wilmington)

was not great.

s would be very useful!

el less safe for myself as a female when I walk

tricts the A-to-B routes that make this a good

th my walking various places instead of parking

on Peace/West is bad idea; results in out of ted, then complement that with R-Line routing one system; mobility integrator).

	What comments do you have about the proposed route? (Item C)
109	As few stops as possible to decrease travel time is preferred.
110	I think the convention center still needs to be served somehow.
111	Will the route still have places where the busses stop and wait for extended times?
112	I'm curious as to why the loop doesn't extend one block further to stop directly in front of Union Station. Other than that, the no I'll be more inclined to utilize it in the future!
113	proposed route does NOT provided coverage and convenience for residents living in the Glenwood South and St. Marys Street a plenty of us
114	It stinks. It is to far from Nash Square.
115	It makes no sense to shorten the route by Glenwood Avenue. I strongly believe it should broaden the transit more so on that sid
116	IT SEEMS LIMITING!
L17	I would extend the west end one block to include Martin Street and the Union Station.
118	nothing on Glenwood South or to extend into Cameron Village, and that's what I would need
19	Goes where I go
120	I mostly like it, but feel like there's a total gaping gap in Warehouse District access - unless I'm missing something, the current ro
121	Stops shoulk be scheduled at/near Peace + Tucker.
122	This will potentially offer our students (William Peace University) more direct (and shorter) routes to the main area of downtow additional pick up areas will be constructed (for example, would our students have the option of picking up the R-Line on the wa Peace St.)?
	There are no indicators on the map that display proposed stops on the route.
124	I like that it is bi-directional. I can board it on Peace Street going to downtown in one direction or going to Glenwood South goin needs to have more stops than it does now. You need a stop almost every block, so people can use it to get more places than ju just having 2 routesone for downtown and one for Glenwood South, maybe with a third route linking the two. With that many somewhere whenever you were ready.
125	
	The proposed route makes a ton of sense: getting people back to DT raleigh from the Seaboard Station area without having to t
126	rid of the convention center stop. It would also be great to have direct east-west route, analogous to north-south routes if poss long, 10-minute pauses on the route. Just have it run continuously so that it always makes more sense than walking!
127	I think the proposed route supports all downtown districts more effectively
128	Great for commuting downtown and back
129	Would like to see a connecting loop to Cameron Village & Hillsborough St
	Where are the stops? Can you create a map indicating where they are?
	I'm for it if it is a quicker route
	I wish it would go further north to the person street area
	The West St. portion is great. The Wilmington/Salisbury portion is good but could be better but the one-way roads downtown n

# new route is MUCH more convenient; I expect

# areas especially seniors of which there are

side of town including Hillsborough st

route addresses this area better.

own. However, I can't discern from the map if way into town only (across from our stop on

bing the other direction. However the route just the parking decks. You might also consider ny routes, you would be able to get

o travel the entire perimeter. I also like getting ssible. Most important is timing: eliminate the

make that a more difficult fix.

34	think the proposed route will cover more dense areas more quickly.
	merge the two, the current Dawson/Wilmington and but the proposed West.
	it's more streamlined to remove the loops around Moore Square and the Warehouse District and it avoids the traffic on Glenw
	route on the southern end of downtown but hopefully with the other improvements the ride time isn't much longer from the v
	route.
37	More useful to residents living west of downtown than workers going from one point downtown to another (especially if they'
.38	The proposed route seems like it makes it easier to catch a bus, but does not connect as broad of an area of downtown
39	like that it still serves most of the same area, and should help with on-time service
	would suggest the R-Line announces the nearest districts and attractions that can be assessed at each stop since some of the
40	proposed route (e.g. Moore Square, Warehouse, etc)
	More concise route
42	It misses the Warehouse District and Moore Square
43	Seems a bit narrow. Would like more of a wide variety of stops.
44	would want to see if time is better on the proposed route
45	Add a stop at Person Street Plaza
46	Keep the Moore Square and City Market stops
47	wish the r line would connect Hillsborough street to downtown. As a NCSU student it would be great if any of the free buses of
48 <sup>-</sup>	The buses are not reliable and inconsistent
49	R-Line Route should link Cameron Village Shopping Center to Downtown.
- ^	overlapping R line with Wolfline could provide a cost effective method of transit for west Raleigh residents, reducing traffic cor
50	neighborhoods
<b>1</b>	That makes much more sense. I have never ridden because of the current route
52	don't want to waste taxpayer dollars.
	It isn't horrible. But Raleigh's efforts to notify the public about the proposed change are inadequate and incompetent. The mee
53	calendar for either the city of Raleigh or the R-Line, an obviously necessary but not sufficient indication of Raleigh's commitme
i	accessible.
54	Would be great to extend down West Street if the proposed extension under the railroad tracks gets funded.
.55	Seems faster. Current route covers too large an area and comes too infrequently.
	I like the route being out and back instead of a loop. However, I think the route should extend into the Warehouse District. I do
	through Glenwood South. It is not walkable and is not easily accessed from the rest of Glenwood South. The residents of Glenv
	Johnson or Tucker Streets to get to West. There are sidewalks on only one side of both of these streets. Glenwood Ave is far m
5/	Narrowing the route would make it more difficult to reach areas further east/west.
58	It seems like it would slow down traffic because Wilmington and Salisbury St. are used very heavily to get in, out and through D

wood Ave. There is a loss of the West -> East warehouse district area to the SE end of the

y're heading southward)

e stops in those areas will be omitted on the

connected the two

oming from Raleigh's most densely populated

eeting on Nov 20 is not on the %\*&@!@\$! ent to making these meetings publicly

don't think that West Street is a good route wood Towers will have a hard time going down more centrally located.

DTR from Capital Blvd. primarily.

	What comments do you have about the proposed route? (Item C)
	I love that the new route goes by the Publix in both directions. I can't tell from the map, but does it link to different parking gara
160	times between buses. When it was raining & cold last weekend we tried to take the bus, but missed it by a few minutes and dec
	for a safe ride. Our family always enjoys riding the R line and and I feel safe riding it alone as well.
161	Needs more frequent service
L62	Warehouse time to Fayetteville is extended.
L63	I'm ok with proposed route if it provides more frequent service to stops. Half hour in between is too long.
L64	It is not terrible
	I like the shorter times, but I don't see when I or others would use it. Maybe those going from the Performing Arts Center or a h
165	Square, you should be promoting it - it's not even mentioned as a stop option in the next question.
~~	Looks like it would be more convenient to my workplace near the NCGA, and the walk from west street to Glenwood would be
.66	work occasionally to see friends
67	The riders cannot see out at night due to tinted windows and interior lighting. You need to run paid ads of the establishments
	More frequent and smaller/shuttle vehicles would better serve purpose
	Raleigh Union Statiob
	I feel that having the bus go north on Wilmington Street is a mistake. The bus should turn right from Wilmington onto New Ber
70	continue up Person Street to at least Peace Street to connect the Person Street shops with the other business districts.
71	I like getting over to Glenwood South area for restaurants
.72	Having a faster route would increase my frequency of use
73	I would highly suggest that the route hit other sites near downtown, including Chavis Park, Pullen Park, and Dix Park.
	would like more frequency and continuous service rather than stopping for time points.
	It's still lousy. Go down Person to Franklin. Go down Bloodworth to Transfer Hall so you can pick up more of Southeast Baleigh.
.75	It's still lousy. Go down Person to Franklin. Go down Bloodworth to Transfer Hall so you can pick up more of Southeast Raleigh. Heights and hit a bit of Hillsborough and Peace west of Glenwood. There's nothing happening on Wilmington orSalisbury north
76	Walking from West to Glenwood means walking in the dark which can be unsafe for women
77	I don't like either route. I live near the Y on Hillsborough. The R Line should run further out Hillsborough, even to Cameron Villa
.78	Use Person St instead of Wilmington St. Person St entertainment district is emerging.
L <b>79</b>	I take the bus to RTP and live near peace and person and I'd like to have a bus with more frequency to take me to/from Raleigh
L <b>80</b>	Please charge a nominal fee for the R-Line. Please keep the app up and running. It is very helpful to see the current locations of
L81	It leaves out growing areas of interest in downtown.
L <b>82</b>	l like it
	I like the idea of it moving more bi-directional on both the east and west sides of downtown. This means that I can take it from
	south end of The Warehouse District and back without having to make the entire loop through downtown. If I want to go throu
83	well, or I can jump on it at west near Publix and go directly to the east side.
	For riders from the east side of DT, they can take the RLine to Publix and then back to the east side without having to loop throu
	IMO, this is a win/win sort of mapping

rages too? Also, please have shorter wait ecided it was faster to walk. Lastly, thank you

hotel to Glenwood? With the new Moore

e ok. I use R as a way to get to Glenwood after

you are passing.

ern and then left onto Person Street, and

h. Go down South St. so you can go thru Boylan h of Edenton. Be creative. Stretch out a bit.

lage and the bell tower. Add a 3rd bus.

h Station.

f busses.

n the north end of Glenwood South to the ough all of DT, that's still available to me as

ough the Warehouse District.

84	a decent compromise -but going from convention center to Glenwood/Warehouse Dist. seems more time-consuming than nece
	increasing bus frequency at peak hours (ex. lunch, evening)
	The best feature of the R-Line is that it is a free service. There is zero friction for people who wan to ride, which is invaluable. 1
	which is a small loop around a fairly walkable area of downtown. The proposed route does not solve this problem, it merely tw
	shut down R-Line service and put the savings toward making all Raleigh bus service free for passengers. If declining ridership is
	solution.
87	It cuts out the Warehouse District where I work and own a business
88	New plan Seems redundant. Going in a circle is better use of the route. Agree with replacing Glenwood with West
	N/A
.90	Looks like it will allow for faster service.
91	Why wouldn't the R-line include the two colleges downtown?
	Not sure how it improves. Was hoping it would connect Cameron Villageamd Hillsborough Streets to downtown as well
93	Hopefully the bus will be more consistent. Accessing Seaboard Station is also a destination.
	The new route should stay on Glenwood. Reversing one bus on the existing route might help with delays. Seems like you still r
94	with the new route
95	I think you would see more ridership if you had stops closer to the Oakwood and Boylan Heights neighborhoods
	The proposed route does not service Glenwood South or the Warehouse District. I use the R-Line as an alternative to Taxi and
7()	route does not service the areas I visit.
<del>)</del> 7	It doesn't hit any of the primary locations that people visit It is just outside of these areas.
_	Proposed route dodges traffic, but doesn't seem to serve as many businesses as it could.
	Looks much more direct and hits all major markets
	If the R_Line is for downtown Raleigh then the proposed route DOES NOT cover downtown. One street (cause each street is a c
	and people can walk that route if they wanted to see those two streets. Other cities have free buses that cover downtown. If yo
	existing route and continue to connect to the train station.
)1	N/A
	Consider expanding the route to include Cameron village area. West on peace to CV and then back down Hillsborogh to dt
	the main problem with the existing route is that it's one-way.
04	Please come up to north person street! a stop near krispy kreme would help!
~-	I like the 2 ways route but why eliminate the warehouse district? now it will take me longer to get from the Dillon to the city pla
05	accommodating a faster route one way instead of the other now. the existing loop was fine. just make *THAT* loop bidirection
	Lucander why it was up and down Calishum, and Wilmington, these are virtually and black from and another. This seems to out
	I wonder why it runs up and down Salisbury and Wilmington, those are virtually one block from one another. This seems to cut
	to see it expand out to stop near Person St Station area/Historic Oakwood. I agree that it's terrible going down Glenwood, far t
	West and then keep the route around the warehouse district and back to Red Hat ampitheater, covenation ctr, to Wilmington.
	right behind the beer garden, to access the Glenwood area and I plan to use this stop to access Publix once it is open.
דו	No Glenwood South is problematic

#### cessary

The worst feature is the route that it takes, weaks it. The best thing to do would be to is the problem, free bus service is a strong

might wait a long time if you just miss the bus

Ride Sharing when I go out, and the proposed

one way street ) does not cover downtown ou want to promote the city then keep the

blaza. there is no win with this. you are now onal.

It down on the most popular areas. I would like to busy on weekends, but just run it down I. I definitely use the West St stop the most,

	What comments do you have about the proposed route? (Item C)
ZUX	It is more useful since it runs in both directions now, though it is still quite a long route if you're traveling between Glenwood Sc likely takes longer than walking.
209	Still not as useful as we who live downtown need to move around downtown. Needs to run east and west and cross Fayetteville
210	Please have the R Line travel person street to the Krispy Kreme this would be much better for the neighborhood and ridership
211	It's not cmprehensive enough
212	It doesn't cover enough destinations east of Wilmington. I would like to see the route expanded to include the west edge of St A
213	Disappointed in the idea of cutting out the warehouse district.
2 <b>14</b>	No idea what the actual route was until now.
215	I don't like that it doesn't come by Marbles anymore, that is the closest stop to my apartment the lincoln, now it's a bit of a wall to the warehouse district, I think that was a waste. If you're on glenwood or fayetteville, you can walk there. I typically use the r south bars. I will say I am almost always one of the non homeless people on there. I don't think you should kick the homeless of advertising to other groups. I'd like to see it come by Marbles still with the new route, beyond that I like it. I will say a lot of kids first/only bus experience and I don't think they will if that stop is taken away. I am so glad it wouldn't go on glenwood south any because half the time the driver wouldn't go, and the traffic is too bad. I would wait there at about 2am and see it on the trackin to uber. The other thing that needs to be worked on is the advertising. I am always telling people about it, and nobody knows ti when it doesn't show up consistently and I have other people with me trying to show how cool it is and that we don't need an u friday events at the Lincoln or any other first Friday, and partner with first friday to advertise a route of how to use the r line to market would be a good way to advertise too. It'd be smart to go to all the nice apartments downtown and just advertise at wh should be the target audience. I see the point of wanting people who work downtown to use it, but realistically they aren't goin Another thing is that it needs to be more consistent and have time points at least for the end of the line. I track it, but hate tryir of the line, it never works out and I either end up running to the stop or waiting for a long time. It dis encourages me to use it. I hope to see positive changes happening in the near future. It has been ignored for too long since it started.
216	In order to know how helpful the route would be, I would like to see the proposed stops as well and info on frequency.
17	It is important when selecting the new route it stops at transportation hubs such as union square, grocery stores such as the new entertainment. The R line is not used by the new generation of people moving downtown as it is not a safe/clean environment a transition is the main source of transportation for the majority of people. My husband and I bought a house and moved downto here from manhattan. In my 13 years in nyc many of the places I lived,, busses were my main source of transportation. The R line environment that will encourage and welcome people to utilize it rather than Uber or drive. We need to focus not just on where moment but what will be important in the near future adapt.
	Needs to go east of city to at least Moore Square/City Market. Also to include Transfer Food Hall.
10	The new route seems more inefficient, since the bus must travel to the north side of the city to come back from the warehouse north of Boxcar and The Pit on Davie St., which together form a bit of a hotspot downtown. I would focus on getting the R-line of
220	Seems much more strategic and intentional. Existing route feels a bit all over the place. Difficult to remember. Needs to be simp

# South and the Capital area of downtown that

lle St. in several blocks.

Augustines.

alk with the new route. I like that it doesn't go e r line to get from my apartment to glenwood off, let them be warm, just focus more on ds going to marbles will ride the r line as their nymore and instead go on the street behind it king skipping the whole road and end up having till they ride it with me. I get embarrassed o uber lol. I recommend coming to our first to get to different first friday events. The night whatever resident events they have too, that ing far so that's not going to be your target. ving to predict when it's going to leave the end . I love the R line and am the biggest fan, and

new publix and main hubs for work and t as you would experience in a city where mass town on East street 2 years ago after moving line here does not have a clean/safe ere the most important stops are at the

e district. The new route also falls two blocks e closer to these businesses.

npler.

221	I haven't used the R line simply because it doesn't start/end near where I live in downtown. I would be more likely to use if the Raleigh.
222	If you only have 2 buses but now going in opposite directions, wouldnt the normal wait time of 20 minutes be double to 40 ?
223	I think it would encourage ridership if the bus traveling north on Wilmington turned right on Jones and left on Person, then left district into the loop and make the bus a more attractive option for residents in Mordecai, Oakwood, Oakdale.
224	I love that it's bi-directional
	This line will never be a truly convenient, competitive option with driving or ridehail services as long as the route is so indirect. I way loop is a vital first step, so that is good to see here, but it still forms a U-shape to get between most of Downtown and Gler bad.
225	I'm sure this is because you don't want the current stakeholders straight north of Downtown, like Peace University, to lose serv Warehouse District in any meaningful way anyway, and as long as you route it this way, it will remain a last resort option that d
	What you'd need to do to get riders back on the bus is start at the Convention Center, go up Salisbury/Wilmington as proposed, probably at Edenton/Morgan. Then go up West St through the Glenwood South corridor to Peace St. You could even have it cut and that area, and the travel time savings from using West St instead of Glenwood would still make that a viable option to get d along Peace St to Cameron Village, which could open up more funding source businesses. Either way, this proposal is a step in the right direction, but still needs major work if the goal is to get ridership back and spur ec
	I like that it will run both directions.
	seems to hit all of the same areas
/	The proposed route seems to provide much better access to local businesses on the East and west side of Downtownnthan the
//X	
228	more loops during the same amount of time providing more efficient service than the existing route. I'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings.
228 229	more loops during the same amount of time providing more efficient service than the existing route.
228 229 230	more loops during the same amount of time providing more efficient service than the existing route. I'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings.
228 229 230 231	more loops during the same amount of time providing more efficient service than the existing route. I'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings. No comment. The current route seems too long. I'm in favor of a shorter route.
228 229 230 231 232	more loops during the same amount of time providing more efficient service than the existing route. I'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings. No comment. The current route seems too long. I'm in favor of a shorter route. Why go all the way up to Peace Street? My recommendation would be to lower the north route along Peace Street to W Jones
228 229 230 231 232 233	more loops during the same amount of time providing more efficient service than the existing route. I'd love to see this include the Person Street area where you have several bars and restaurants, at least in the evenings. No comment. The current route seems too long. I'm in favor of a shorter route. Why go all the way up to Peace Street? My recommendation would be to lower the north route along Peace Street to W Jones S to connect it to the Museum Block

ne route expanded to include a larger area of DT

ft on Peace. It would bring the Person Street

. Making it a two-way corridor instead of a oneenwood South, so the travel times will remain

rvice. But the new route barely serves the doesn't actually spur economic growth.

ed, but then cut over to West St much earlier, ut east along Peace St to serve the University t downtown from there. Or you turn it west

economic development.

e existing route. It also appears likely to make

s St/Edenton St. This would change the route

estern Blvd at Mckimmon Ctr and points east: parking garages and it should stick to routes ridership is up. Downtown is now more than nesses and community.

ſ	
	What comments do you have about the proposed route? (Item C)
236	Used the RLine much more when living in Glenwood South. Still important for events/visitors.
237	I think it should include the shops and restaurants on Person Street
238	Doesn't seem as comprehensive or like a true "loop" or "circulator." Also seems silly and wasteful to double back on the same b
	I use it most to connect to Glenwood from downtown because there's no good parking on Glenwood
240	But I would like the Morris Square block to still circulate. And a closer stop to the train station.
244	Why cut out Glenwood South when that's such a popular after-5 p.m. destination? Fayetteville Street traffic is declining when i
//	this new proposed route doesn't seem to reflect current trends in Downtown Raleigh entertainment behavior.
	The route would eliminate the Moore Square area. I like being able to ride from Moore square to shopping and museums on w
	town visitors if we could see out the windows. The R line wrap covering detracts from the downtown experience in my view.
	I live on Glenwood South and Seaboard Station would be one of my primary destinations on the R-Line, but since it currently or
243	plus wait time to go a few blocks. I would use the proposed version more.
	Looks to be more efficient
245	I like the new route except I wish it went through the Warehouse District still.
	None
	I think it's an improvement on the current route
	So many people live in the Oakwood & Mordecai area now that the R-Line would be so much better used if it actually came dow
	Street.Even if it just came as far as Krispy Kreme it would serve people who lived in Oakwood and worked downtown so much l
	people who live downtown to to the restaurants on Person Street. I could use it most days if it did that.
	None
250	Only covers a span of 3-4 blocks East to west, which seems redundant.
	It looks about the same to me, why are we changing it?
	looks good
253	The city should be charging for this service. It is unfair to offer a free bus to some riders in one area but charge riders in other a
254	seems compacted and improves service to the heart of downtown
255	The proposed route cuts out east downtown, all of Glenwood Ave. and the warehouse district, why is this proposed?
256	Make more sense than current route, serving more populated areas
257	Proposed route doesn't access warehouse district.
250	I Like the proposed route however I thing a second route that runs perpendicular running down Hillsborough Street connecting
258	Park/Dorothea Dix Park area. I think that would connect a lot of people to areas that are popular downtown.
259	n/a
260	Use money for good of poor people!!!!!!
261	With the new route, I'd be more likely to use it to get around downtown.
262	I would use the proposed route because it is just that much closer to my residence.
263	I like access to the warehouse district for shopping and entertainment purposes.
	I want access to the areas currently being served.

block.

it comes to evening food and beverage and

weekends. I would ride more with my out of

only goes in one direction, it would take 30 min

own Person Street rather than Wilmington better than it does now, and it would bring

areas.

ng to Cameron Village and maybe the Pullen

		What comments do you have about the proposed route? (Item C)				
_	265	J most often go downtown to go out to dinner on a weekend night and then go see a performance at the Duke Energy Center. I needs better than the current route.				
Added	266	This change does not appear to make any real difference for those who use other than some would need to walk a bit further. I route went all the way to the bell tower at NC State. It would likely also get more students downtown and around the area.				
Comments from 11/27 to 12/12	267	Why on earth would you not take the R-line to Person Street so that people who live next to downtown, including Oakwood an commuting and going out at night? This could be hugely beneficialas it stands it is all business and has no chance of being used circulates. Please reconsider this! You could easily have it come down Person Street with stops at Jones and after, turning onto one R line bus go clockwise and one go counter clockwise to reduce access time to end of line locations?				
	268	Removal from Glenwood and lack of access to the Warehouse District.				
		I like the idea of two-way service.				
		It connects the city less than currently, needs to go in both directions, and needs to hit North Person street in the evenings.				
		Route should not go all the way to Peace Street. It should stay in the core of downtown by using Lane Street instead of Peace St				
		It looks like a good route, although I wouldn't use it much. I would like to see another east /west route in northern Raleigh.				
	273	I would LIKE to ride it, though I don't NEED it. (I live outside downtown and drive - sorry to say.) What is the point of changing it? Are people saying it takes to long to go around? I see it would exclude Warehouse District, if				
	274	More area covered				
	2/4	The R line needs to travel in two directions rather than one. This would increase usage of the R-Line . It often is quicker for us to				
	275	the R-Line stop at Seaboard and wait 20 min for the bus if we want to go to say Hargett street. In addition, the Person street bu				
	270	create access to those who live close as well as bring additional people to the person street business district				
		i think it should go to the Ware house district				
		Looks faster				
		I'm happy to see the proposed route services Seaboard Station, the Museums, the Duke Energy theaters and the Amtrak station The R bus is a great resource for visitors, especially during holidays				
		I want it to travel down Salisbury as I work on Salisbury & Hillsborough and I would then use the R-line more frequently when I				
		I like aspects of both but I do not like losing South Glenwood and would like to have Union Station included				
		N/A Haven't used it				
		I like the Glenwood service				
		prefer as is				
		frequency				
		More efficient by not being a "loop" but still provides good coverage to downtown				
		like the new route				
		This makes much more sense than the current route.				
		Although the proposed route streamlines the R-Line service, it steps away from some of the areas that have benefited from the				
	289	South and in the Warehouse District (where some stops have already been eliminated due to construction changes. Also timest				
		of the R-Line is to be an express bus service; it should be moving along at all times.				

. I think the proposed route would serve my

# . It would make a huge difference for me if the

and Mordecai, could actually use it for sed by locals because people don't live where it nto Peace after 5 or 6pm. And why not have

Street.

if changed...

to walk To our destination rather than walk to business district needs a stop which would

on.

I travel to the State Library

he service, such as direct stops on Glenwood estops are excessive and too long. The purpose

	What comments do you have about the proposed route? (Item C)
	The R-Line should come up Person St at night. There is no one living or working on Wilmington after 6PM. This new route doesn
	can't get to the R-Line reasonably from residential areas.
	why not consider a Figure-8 route instead? People on Fayetteville Street or near the Convention Center want an easy way to get
	Jones Street and back, but the current route only makes it easy to go one way
	Keep current route
293	It is different that current. Hopefully there will be other suggestions.
294	The proposed changes to the R-Line route will not benefit the people that will be visiting Raleigh (in town for a convention/stayi area) because it does give direct access to the businesses/restaurants on Glenwood Ave and the Morgan Street Food Hall. Consi open longer than the restaurants in the convention center area, you will have to be familiar with Raleigh to know where to get c line to directly provide service to the same street the establishments that serve alcohol are on.
295	The proposed route makes a lot of sense, however, it seems to leave out the Southwestern corner of downtown (the Warehous CAM and other Warehouse district areas. Would it be possible to preserve a bit of the route that currently serves that area, whi new route?
<u>296</u>	Would like to see service farther into the southwest corner of the warehouse district. Can you extend to Cabarrus?
<u>'97</u>	why is there a proposal to change? what factors are driving this? Cost, congestion? It helps to know why a change is proposed so
98	The worst part about the current route is the scheduled stop time around the convention center. I could quickly get from where example, but getting back took twice as much time often because the bus would just stop half-way to wait for an arbitrary sched improvement to just keep them circulating. Then anyone can look at the app or website to see how far away it is, understand at understand about how long it will take to travel to their destination.
	I may use it in the new configuration
	Maybe break it into two systems that overlap or change it all to an on demand service
	It should go down Blount or Person so it's more than 1 block away from Salisbury.
	It doesn't say how long the r line will run for each day
	It seems interesting. Could be improved a bit, but should work depending on the stops.
	Will it be a faster route to get between Glenwood and downtown?
	Seems more limiting. We live in East Raleigh and use it to get to the areas furthest from us.
<b>30</b> 6	I would keep the bus on Glenwood down to Morgan, then down West to Martin (to service the train station). West between Pea scary to wait for a bus after dark. I would also retain the loop around Moore Square Park, especially now that it is renovated. I w that riders can see our lovely city!

sn't fix the issues of the old route which is you

et to the Warehouse District and back or to

lying in the hotels in the convention center isidering the restaurants on Glenwood Ave are t off on West Street. Overall, it is safer for the r-

use District). We use the R-line often to reach hile still implementing the other parts of the

so you can address the perceived/real issues.

re I work on E Davie St to Glenwood South for eduled departure time. It would be a big about how long it will take to arrive, and then

eace and Morgan is not very busy and a bit would also like to see the buses unwrapped so

	The proposed route will obviously greatly increase delays and travel times. W.r.t. the proposed route, there is nothing along so
	St.) that would interest visitors or residents that is not equally served by the current northern leg along Wilmington St. This pro
	(restaurants, museums, retail, etc.) in the Warehouse District. Part of the usefulness of the R-Line is that it drives by and gives e
	even non-downtown residents would be unaware of otherwise. It is not just a typical transit route.
	I do not object to changing the part of the route along Glenwood Ave to using West St instead since Glenwood is a zoo on week
307	continue on to Dawson and/or Harrington/Davie/Cabarrus.
	The existing route already has excessive delays in scheduling, due mainly to the facts that a) either one bus is dropped from the
	GPS route tracking unit so the Transloc app/webapp cannot show you a current position, and b) unlike when the R-Line started
	maintain separation between the buses running the circulator route. More typically, they play "tag" at the Civic Center, with or
	until that one almost reaches the RCC again itself, whereupon the other bus finally departs. The net effect is one active bus on t
	parked RCC bus to even move on the Transloc app, I start walking
200	Why doesn't the proposed R-line have stops at all the apartment complexes in downtown? Lots of people live in downtown in a
308	it serve these residents as well? Why is Glenwood South so much more important than the rest of downtown?
309	Looks good except don't loop using Morgan; use Martin and Hargett (one block further south to stay off of traffic-heavy Morga
310	Keep current route
311	This route will take longer to go from city market area to performance arts area. There should be a bus that runs clockwise.
312	Misses warehouse district where my office is and restaurants are
313	Looks much faster.
314	I would love to see more micromobility options - scooters and ebikes
315	It's not as broad it would only circulate in a small part of town. It is helpful for it to be in Glenwood for people commuting from line everyday for work.
	Much better routing; having two-way service is essential. However one route is not enough. Should have two routes to minimiz
	be to get people between any two points in 10 minutes or less. Just as important is the frequency of service. At all times a rider
316	a frequency of under 10 minutes is essential; ideally the frequency should be closer to 5 minutes. Even with the improved routi
	the route will fail.
317	Want it to be fast reliable alternative for navigating downtown's different nodes
318	No
319	I believe the R-Line would be utilized more if the route ran in both directions.
320	The proposed route looks like it could make my commute back home from work shorter. I typically ride the R Line in the mornir Capital - the current route's ride from the Capital back to the Performing Arts Center takes longer than if I just walk back home
321	The proposed route would streamline my usage making it more attractive.
322	I like it! Esp that it goes in 2 directions rather than just counter clockwise. I would love it if it could connect to Transfer Compan
	It does not go near my work

southbound Salisbury (before roughly Morgan roposal also drops major points-of interest s exposure to restaurants, etc. that visitors and

ekends, but do not loop back to Peace St -

ne route at prime time or drivers turn off their d service years ago, drivers make no effort to one bus parked while the other runs the route, n the route. After waiting ten minutes for the

areas besides Glenwood South. Why doesn't

an.)

m parking decks in the area. I for one use this

ize the travel time required. The goal should er should see a bus coming down the street, so ting, if buses come only every 20-30 minutes,

ings to work from Duke Performing Arts to the e in the evening.

any.

	What comments do you have about the proposed route? (Item C)
324	This gets the buses off Glenwood, which is a hard street to maneuver
325	I like the Old route for servicing South Glenwood and Moore Square. I like the New route for servicing the whole length of Salisb
	service to the new Union Station.
326	not as use full
327	Seems faster, within a block of old route
328	I like how it runs on both sides of the State Gov't Complex.
329	Running two way on peace street is a great idea instead of having to go through Glenwood south in order to go deeper into dow
330	Not have a long wait time for the bus to arrive to pick you up
331	It's near where I live
332	It does not adequately service the Glenwood and Warehouse districts.
333	I like the proposed route's efficiency
334	Make a pickup at Glenwood and peace
335	More than one bus circulating
336	I live in Oakdale. The new route would give me an easy fast way to get downtown without having to drive. I love the idea!
337	Note for first question: my true answer is '2-3 times per year' but there is no options for that so I had to select 'I don't use the se
338	Would like to see a route going west/east on Hillsborough
339	Not sure it's diverse enough to hot multiple areas of visitors
340	Cuts out the warehouse district

sbury Street. I dislike BOTH for not providing
wntown.
service'

# Summary of Survey Respones Collected (Item D)

		-							-
How many days a week do you typically ride the R Line?	What is your main purpose for using the service? (Check multiple boxes if it applies)	For you, which do you prefer?	What comments do you have about the proposed route?	When riding the R-Line, which areas do you prefer to go to? (Check multiple boxes if it applies)	What is most important to your R-Line rider experience? (Check up to 3)	What do you closely identify as? (Check multiple boxes if it applies)	Do you identify as	Do you identify as	Wha h
Answer Choices:	Answer Choices (can select multiple choices):	Answer Choices:	Open Ended Questions	Answer Choices:	Answer Choices:	Answer Choices:	Answer Choices:	Answer Choices:	
1 day (144 Counts)	Work (84 Counts)	Proposed Route (152 Counts)		Warehouse District (220 Counts)	Connecting convention center visitors to downtown areas (63 Counts)	Downtown Resident (195 Counts)	African-American/Black (25 Counts)	Male (183 Counts)	Less tł
2 days <mark>(35 Counts)</mark>	School/Colleg <mark>e (9 Counts)</mark>	Current Route (121 Counts)		GoRaleigh Station (84 Counts)	Focusing on both residential, social and retail components of Glenwood South (112 Counts)	Downtown Employer/Employees (Non-Government Sector) (99 Counts)	Asian (10 Counts)	Female (123 Counts)	\$10
3 days <mark>(23 Counts)</mark>	Shopping/Dining (172 Counts)	Neutral to Either Option (73 Counts)		Glenwood South (200 Counts)	Being a part of the parking solution (163 Counts)	Downtown Employer/Employees (Government Sector) (53 Counts)	Caucasian/White (238 Counts)	Other <mark>(1 Count)</mark>	\$1!
4 days <mark>(8 Counts)</mark>	Medical/Dental (11 Counts)			Convention Center (128 Counts)	Linking to highly active downtown areas (271 Counts)	Visitors <mark>(48 Counts)</mark>	Hispanics (10 Counts)	Prefer Not to Answer (32 Counts)	\$20,00
5 days <mark>(23 Counts)</mark>	Recreation/Events (199 Counts)			Raleigh Union Station (120 Counts)	Comparable travel time to walking time (154 Counts)	Student <mark>(8 Counts)</mark>	Native American/Indians <mark>(2</mark> Counts)		\$25
6 days <mark>(4 Counts)</mark>	Others ( <mark>41 Counts)</mark>			Hillsborough Street (in the Downtown Area) (82 Counts)	Safe and welcoming rider expereince (179 Counts)	Commuter <mark>(60 Counts)</mark>	Other <mark>(8 Counts)</mark>		\$35
7 days <mark>(6 Counts)</mark>	I Don't Use the Service (53 Counts)			State Government Complex (68 Counts)			Prefer Not To Answer (47 Counts)		\$50
I Don't Use the Service (97 Counts)				Residential Areas <mark>(69 Counts)</mark>					\$75,
				Performing Arts Center (121 Counts)					More
				Museums <mark>(128 Counts)</mark>					Prefe
				Fayetteville Street (182 Counts)					
				Others (61 Counts)					
Total: 340 Counts							Total: 340 Counts	Total: 340 Counts	Т
	do you typically ride the R Line? Answer Choices: 1 day (144 Counts) 2 days (35 Counts) 3 days (23 Counts) 4 days (8 Counts) 5 days (23 Counts) 6 days (4 Counts) 7 days (6 Counts) 1 Don't Use the Service (97 Counts) Total: 340	do you typically ride the R Line?using the service? (Check multiple boxes if it applies)Answer Choices:Answer Choices (can select multiple choices):1 day (144 Counts)Work (84 Counts)2 days (35 Counts)School/College (9 Counts)3 days (23 Counts)Shopping/Dining (172 Counts)4 days (8 Counts)Medical/Dental (11 Counts)5 days (23 Counts)Recreation/Events (199 Counts)6 days (4 Counts)Others (41 Counts)7 days (6 Counts)I Don't Use the Service (53 Counts)1 Don't Use the Service (97 Counts)I Don't Use the Service (53 Counts)Total: 3440I	do you typically ride the R       using the service? (Check multiple boxes if it applies)       Por you, which do you prefer?         Answer Choices:       Answer Choices (can select multiple choices):       Answer Choices:         1 day (144 Counts)       Work (84 Counts)       Proposed Route (152 Counts)         2 days (35 Counts)       School/College (9 Counts)       Current Route (121 Counts)         3 days (23 Counts)       Shopping/Dining (172 Counts)       Neutral to Either Option (73 Counts)         4 days (8 Counts)       Medical/Dental (11 Counts)       Neutral to Either Counts)         6 days (4 Counts)       Others (41 Counts)       IDon't Use the Service (53 Counts)         7 days (6 Counts)       IDon't Use the Service (53 (97 Counts)       IDon't Use the Service (53 Counts)         1 Don't Use the Service (97 Counts)       IDon't Use the Service (53 Counts)       IDon't Use the Service (53 Counts)         1 Don't Use the Service (97 Counts)       IDon't Use the Service (53 Counts)       IDon't Use the Service (53 Counts)	to you typically idde the R       using the service? (Check M       Por You, which do you       What Comments do you have multiple boxes if it applies)         Answer Choices:       Answer Choices (can select multiple choices):       Answer Choices:       Open Ended Questions         1 day (144 Counts)       Work (84 Counts)       Proposed Route (152 Counts)       Open Ended Questions         2 days (35 Counts)       School/College (9 Counts)       Current Route (121 Counts)       Proposed Route (152 Counts)         3 days (23 Counts)       School/College (9 Counts)       Neutral to Either Counts)       Proposed Route (152 Counts)         5 days (8 Counts)       Medical/Dental (11 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)         6 days (4 Counts)       Medical/Dental (11 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)         7 days (6 Counts)       Others (41 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)         1 Don't Use the Service (53 Counts)       Others (41 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)         1 Don't Use the Service (53 Counts)       Others (41 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)         1 Don't Use the Service (53 Counts)       I Don't Use the Service (53 Counts)       Proposed Route (152 Counts)       Proposed Route (152 Counts)	toyou yunkino you         walking be service? 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# GoRaleigh FY 2020 Service Changes Title VI Service Equity Analysis

July 2019

Prepared for



Prepared by



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# 1.0 Introduction

Across the United States, there has been increasing interest in identifying reliable, safe, and affordable transportation access so people can reach key destinations. GoRaleigh, the City of Raleigh's Department of Transportation Transit Program, administers public transportation for the City, including a fixed route transportation system, paratransit service, and a free downtown circulator. The agency currently provides fixed-route service along 32 bus routes, including five connector routes and three express routes. Fixed routes provide service to much of the Raleigh urbanized area; GoRaleigh's service area is shown in Figure 1: Existing GoRaleigh System and Service Area. GoRaleigh served approximately 5,049,367 fixed-route passenger trips annually, 30,004 passenger trips per weekday and an additional 503,265 annual paratransit trips in Fiscal Year (FY) 2018.

GoRaleigh is conducting a Service Equity Analysis under Title VI of the Civil Rights Act of 1964 to evaluate proposed service changes for various routes in Fiscal Year (FY) 2020.

#### 1.1 Background and Overview

The 2016 Wake Transit Plan outlined a broad set of transit planning and investment priorities for all transit agencies operating within Wake County. Corresponding Short-Range Transit Plans outlined details on the proposed services and changes for each agency under the initial years of the Wake Transit Plan. GoRaleigh has proposed to implement service adjustments and improvements to fixed routes in Fiscal Year (FY) 2020 as a part of the Wake Transit Plan and associated Short Range Transit Plans for GoRaleigh and GoTriangle, and as part of the agency's ongoing efforts to enhance transit services and improve efficiency. The service changes support one of the four "Big Moves" identified in the Wake Transit Plan to "Connect All Wake County Communities", which entails connecting all 12 municipalities in the county, enhancing access to employment, shopping, and medical trips.

GoRaleigh is proposing to serve three additional routes including two routes that would transfer from current GoTriangle service to GoRaleigh service, an additional connector route service for one of these routes, and one new route. Routes to Garner and Knightdale would shift from GoTriangle to GoRaleigh and changes would be made to the routing and service hours/types for these routes. New service would be provided to the Town of Rolesville. GoTriangle performed a Service Equity Analysis for the agency's 2018-2024 Short Range Transit Plan, which includes transfer away of the Garner and Knightdale services, however, this report examined their system as a whole and did not evaluate individual routes in a specific year.

#### Title VI Guidelines

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination based on race, color, or national origin under any program or activity receiving Federal financial assistance. Federal Transit Administration (FTA) Circular 4702.1B was published by the agency in October 2012 in order to comply with the law and fulfill the requirement for transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit

providers to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes."

Title VI protections address a wide range of population groups with respect to potential discrimination they may experience based on their age, race, ethnicity, color, country of origin, immigration status, physical/mental disability, sex (gender), or religious affiliation.

As a grantee receiving FTA financial assistance, GoRaleigh is required to demonstrate compliance with FTA Circular 4702.1B when undertaking applicable actions. The circular outlines requirements for determining and addressing potential disparate and disproportionate impacts that major service changes may have on minority and low-income populations, respectively. According to Chapter 4 of the FTA Circular, fixed route transit providers that are located in urbanized areas with a population of 200,000 or more and operate 50 or more fixed route vehicles in the peak are required to thoroughly study the impacts of any fare or major service changes and consider mitigation strategies as needed. As GoRaleigh meets these thresholds, the agency is required to perform a Title VI Service Equity Analysis of any major service change recommendations on minority and low-income populations.

#### 1.2 Methodology

The main components of the service equity analysis include:

- Reviewing proposed route changes and determining if they constitute major service changes requiring further analysis (see Section 1.3 Major Service Change Policies and Thresholds)
- Identifying the location of any Title VI or low-income populations within the transit service area for each of the current and proposed routes.
- Determining whether planned service changes will have a *disparate* impact on minority populations protected under Title VI.
- Evaluating service changes to determine whether low-income populations will bear a *disproportionate burden* of the changes.

Once the FY 2020 proposed route changes were reviewed and major service changes were identified, the following steps were taken to perform the analysis of potential impacts:

- Data from the US Census American Community Survey (ACS) 5-year annual estimates was collected at the Block Group level for GoRaleigh's existing and proposed service areas.
- A 1/3-mile buffer was applied to current and proposed bus routes. Using Geographic Information Systems (GIS), the Census Block Groups intersecting this buffer were used to calculate the low-income and minority populations for GoRaleigh's overall service area and the routes being analyzed. Block Groups will not correspond perfectly with the buffer area; where only a small portion of the Block Group was covered by a route buffer, or where a bus route followed a section of interstate highway, these Block Groups were excluded.
- Population data from the ACS for the routes was compared to the population served by the system overall. These values were compared to the 5 percent (minority) or 2.5 percent (low-income) thresholds (see section 1.3 Major Service Changes and Thresholds for more detail).

The analysis of impacts to minority and low-income populations are determined on a route-by-route basis. Impact comparisons are made using population data around impacted routes compared with the

population of the overall GoRaleigh service area. As discussed in further detail in Major Service Change Policies and Thresholds, proposed service changes are determined to have the potential to have a disparate impact if the minority population for the affected route(s) differs from GoRaleigh's overall service area by more than 5 percent and either experiences a relatively higher proportion of negative impacts or has a relatively lower opportunity to benefit from positive changes. Service changes are determined to have a disproportionate impact if the low-income population for the affected route(s) differs from GoRaleigh's overall service area by more than 2.5 percent and either experiences a relatively higher proportion of negative impacts or has a relatively lower opportunity to benefit from positive changes. These population groups are defined below.

For any impacts identified, proposed service changes were evaluated to determine whether mitigation measures could lessen impacts to minority and low-income populations.

#### **Population Definitions**

#### **Minority Populations**

According to FTA Circular 4702.1B, "minority" is defined as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Minority population was obtained from the ACS 5-year estimates (2013-2017), using table B03002 "Hispanic or Latino Origin by Race." All populations aside from "White, Non-Hispanic" were determined to be minority populations.

#### Low-Income Populations

According to the FTA circular, "low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or that falls within a locally-developed income threshold that is at least as inclusive. For service equity analyses conducted by GoRaleigh, persons with household incomes at or below 150 percent of the federal poverty level for a regionally-average household size are determined to be low-income, a more inclusive threshold than the poverty guidelines. A low-income population is further defined by FTA as any readily-identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data for low-income populations was collected from the ACS using table C17002 "Ratio of Income to Poverty Level in the Past 12 Months" (2013-2017 5-year estimates).

#### 1.3 Major Service Change Policies and Thresholds

As described in section 1.1 Background and Overview, GoRaleigh is required by FTA to define "major service change" and develop policies for evaluating impacts of proposed major service changes to minority and low-income populations.

GoRaleigh's approved definition of "major service change" triggering further analysis is as follows:

- The addition or elimination of a route;
- A 25 percent expansion or reduction in route-miles or revenue vehicle miles;
- A 25 percent expansion or reduction in the span of service or frequency of any route, as measured in revenue vehicle hours; or
- The expansion or reduction in regular days of service on any route.

Major Service Change Impact Thresholds

In addition to defining major service changes, FTA requires that agencies establish thresholds for evaluating the impacts of proposed major service changes. A disparate impact policy will help determine if proposed service changes will disproportionately impact minority populations while a disproportionate burden policy will help determine if the adverse effects of service changes are borne disproportionately by low-income populations. For major service changes, a threshold of 5 percent is used by GoRaleigh to determine disparate impacts and a threshold of 2.5 percent for determining disproportionate impacts. Both thresholds are evaluated based on the population data from the ACS and apply to the difference in the minority or low-income population or ridership on the affected routes compared to the minority or low-income populations served by the system overall.

#### 1.4 Service Area Populations

The following section describes the minority and low-income populations of GoRaleigh's existing service area. Figure 1 in the Appendices shows the service area for existing routes, which is used as the basis for Title VI analysis. The service area includes a one-third mile buffer around all existing GoRaleigh bus routes. Table 1 summarizes the population data for the existing GoRaleigh service area prior to proposed FY 2020 route changes.

Total Service	Minority F	opulation	Low-income Population*		
Population	#	%	#	%	
395,633	180,908	45.7%	115,838	30.7%	
Sources: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table B03002, "Hispanic or Latino Origin by Race." and Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."					

Table 1 - GoRaleigh Existing Service Area

\*Census population for low-income individuals excludes institutionalized people, people in military quarters, people in college dormitories, and unrelated individuals under 15 years old

While ACS data is used in the analysis of impacts in this report, it should be noted that demographic information from the 2016 Wake County Transit Systems Customer Survey shows a considerably higher proportion of GoRaleigh riders (almost 68 percent) are identified as African American. This survey also shows that almost 50 percent of GoRaleigh riders have annual household income of \$25,000 or lower. This information shows the significance of bus service in the GoRaleigh service area to minority and transit dependent populations. Such findings are essential to keep in consideration when implementing changes to the existing routes or proposing new service even when Census data is required for the analysis.

#### **Municipal Populations**

The proposed service changes would impact the towns of Garner, Knightdale, and Rolesville, and portions of the city of Raleigh. The following tables present the total minority and low-income populations in each of three towns and the city.

#### Table 2 - Municipal Minority Populations

Municipality	Total Population	Minority Population	Percent Minority		
Garner	28,048	13,094	46.7%		
Knightdale	14,363	8,433	58.7%		
Rolesville	6,308	2,318	36.7%		
Raleigh	449,477	209,077	46.5%		
Source: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table B03002, "Hispanic or Latino Origin by Race."					

#### Table 3 - Municipal Low-Income Populations

Town	Total Population*	Low-Income Population	Percent Low-Income
Garner	27,750	5,741	20.7%
Knightdale	14,245	2,063	14.5%
Rolesville	6,308	348	5.5%
Raleigh	429,912	124,373	28.9%

Source: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."

\*Census population for low-income individuals excludes institutionalized people, people in military quarters, people in college dormitories, and unrelated individuals under 15 years old

# 2.0 Major Service Change Impacts

The proposed route changes being evaluated for service equity impacts are the addition of the Rolesville route, and the transition of the Garner and Knightdale routes from GoTriangle to GoRaleigh with changes to routing and type of service. The following sections screen these proposed route changes against GoRaleigh's established policies and thresholds for Title VI service equity evaluations.

#### 2.1 Determination of Major Service Changes

Table 4 summarizes the service changes associated with the proposed revisions to the operations, frequency or location of routes and notes major service change thresholds met by each proposed route. All proposed FY 2020 route changes meet the criteria for major service changes. The Rolesville route is a new service; the Garner and Knightdale routes were previously served by GoTriangle but would be new services to the GoRaleigh system and have other proposed route and service changes which meet additional thresholds for major service changes. The GoRaleigh Knightdale route (Route 33) would be a localized service, replacing the existing GoTriangle Knightdale-Raleigh Express, and along with the Garner route (Route 20 / 20L) would shift to all day service from the current peak-only service.

Route #	Route Name	Description of Proposed Changes	Service Threshold Comparison		
20 / 20L	Garner	Route pairing replaces existing GoTriangle Route 102. Existing route would become two routes. Delete route segments on Hammond Road and add route segments on Garner Road. Peak-only service becomes all day. In 2023, weekday frequency would increase, and weekend service would be added.	<ul> <li>Addition of a new route*</li> <li>Greater than 25% expansion in span of service</li> </ul>		
33	New Hope- Knightdale	Replaces existing GoTriangle Knightdale-Raleigh express. Delete route segments serving downtown Raleigh. Peak-only service becomes all day. In 2023, weekend service will be added.	<ul> <li>Addition of a new route*</li> <li>Greater than 25% expansion in span of service</li> </ul>		
401	Rolesville	New route connecting Rolesville and Triangle Town Center. Peak service only.	Addition of a route		
*These e	*These existing GoTriangle routes are new to the GoRaleigh system				

#### Table 4- Proposed FY 2020 Route Changes and Service Change Threshold Analysis

#### 2.2 Evaluation of Impacts

Table 5 summarizes the route changes and the minority and low-income populations served by each route. This information is used for the impact analysis for each proposed route.

Route	Route	Description of	Route	Total	Mino	rity	Low-in	come	
#	Name	Changes	Status	Population	Total	%	Total	%	
20 / 20L	Garner	Deletion and addition of route segments. Peak- only service becomes all day	Existing	28,080	15,818	56.3	9,008	35.7	
			Proposed	34,897	22,532	64.6	13,536	41.1	
33	New Hope- Knightdale	Delete downtown route segments. Peak-only service becomes all day.	Existing	43,845	27,544	62.8	12,803	30.5	
			Proposed	33,909	20,519	60.5	7,173	21.2	
401	Rolesville	New route. Peak service only.	Proposed	48,225	21,516	44.6	7,428	15.5	
Overall GoRaleigh Service Area									
	All Existing Routes			395,633	180,908	45.7	115,838	30.7	
				er percentage than system age, exceeds threshold average, exceeds threshold					

#### Table 5 – Route Demographics and Threshold Analysis

#### Route 20 / 20L – Garner

The Garner route is currently served by GoTriangle (Route 102) and is moving to the GoRaleigh system as a paired route (Route 20 / 20L). The route alignment would move from Hammond Road to Garner Road (and would follow Garner Road on the return trip rather than I-40 and I-440), and the current peak only service would be expanded to all day service, with buses departing every 60 minutes. The Garner-Raleigh route would be split into two route designations (the 20 and 20L), but the same bus would continue through both routes; no transfer would be needed. Future proposed changes for FY 2024 would add all-day service with increased frequency as well as weekend service.

With the routing shifts, the proposed Garner route would serve both minority and low-income populations at greater rates (64.6 percent and 41.1 percent, respectively) than the current GoRaleigh system average and at greater rates than the existing route. When compared with the existing GoTriangle route, the percentage of minority population served by the new route rises from 56.3 percent to 64.6 percent and the percentage of low-income population rises from 35.7 percent to 41.1 percent. Results from the 2016 Wake County Transit Systems Customer Survey show that of the riders on this route who responded, 83.3 percent would be considered minority and 16.7 percent would be considered low-income.

Additionally, the current Raleigh-Garner route serves 16 stops in peak periods; the proposed route increases to 16 stops that would be served all day. Agency staff are currently working to finalize bus stops, working with the municipalities, thus the final number of bus stops may change prior to implementation of new service. For some existing riders utilizing the service during the peak period, transit times may increase.

The analysis shows no potential for disparate impacts to minority populations or disproportionate burdens on low-income populations from the proposed Route 20 / 20L. The proposed route serves these populations at a rate that is not only higher than the existing system average, but also higher than the current GoTriangle route, allowing these populations a proportionally higher potential to benefit from the shifted route, the increased span of service, and the additional stops served. Some existing riders may experience impacts from increased travel times.

#### Route 33 – New Hope-Knightdale

The Knightdale route is currently served by GoTriangle (Knightdale-Raleigh express) and is moving to the GoRaleigh system (Route 33). The existing route offers express service between Knightdale and WakeMed Hospital and downtown Raleigh, operating in peak hours only. The new service would expand to all-day but would no longer go directly to WakeMed or downtown Raleigh. In order to reach downtown or WakeMed on the proposed route, riders would transfer (likely to the Route 15-WakeMed) at the New Hope Walmart stop in East Raleigh initially; transfers would shift to the new East Raleigh Transit Center, currently programmed for construction in FY 2021, once it is completed. Future proposed changes for FY 2024 would add weekend service.

The proposed New Hope-Knightdale route would serve minority populations at a greater rate (60.5 percent) than the system average, but low-income populations at a lower rate (21.2 percent). However, these rates are both higher than the respective minority (58.7 percent) and low-income (14.5 percent) populations of the Town of Knightdale. The existing route serves minority populations at a higher rate (62.8 percent) and low-income populations at a comparable rate (30.5 percent) to the system average. Results from the 2016 Wake County Transit Systems Customer Survey show that of riders on this route who responded, 76.5 percent would be considered minority and 63.6 percent would be considered lowincome. With the elimination of the portion of the existing route through the WakeMed area and into downtown Raleigh, the proposed route not only serves minority populations at a lower rate than the existing route, it would serve fewer total minority individuals (20,519 compared to 25,544). The proposed route serves low-income populations at a substantially lower rate than the existing route and would serve fewer low-income individuals (7,173 compared to 12,803). While the proposed route serves less population (overall, minority and low-income) based on the route buffer analysis, it replaces an express route that provides peak only service for direct access to downtown Raleigh and WakeMed with a route that would no longer serve downtown Raleigh or WakeMed directly, but would offer all-day service; riders would need to transfer to buses to travel between destinations along the route in Knightdale and the hospital and downtown jobs, services, and amenities, but they would gain access to these areas during non-peak hours that they currently lack by utilizing the new service and transfer.

The current Knightdale-Raleigh express serves only 6 stops; the proposed route increases to 24 stops with expanded service hours. Agency staff are currently working to finalize bus stops, working with the municipalities, thus the final number of bus stops may change prior to implementation of new service. The proposed route may serve additional riders needing local access within east Raleigh and Knightdale.

By transferring to other routes such as the Route 15-WakeMed, riders would have expanded service on an all-day basis, although for existing KRX riders utilizing the service during peak period, transit times to downtown or WakeMed may increase due to both the additional stops and the need to transfer buses to connect between downtown Raleigh and Knightdale.

This analysis shows there may be some potential for disparate impacts to minority populations and disproportionate burdens on low-income populations from the proposed service changes, predominantly for riders who use the KRX to commute between downtown Raleigh and Knightdale at peak periods. The proposed route decreases the proportion and total number of low-income and minority individuals being offered service. However, since the route would be scheduled to connect with existing GoRaleigh services, the impacts would be limited to riders in the a.m. and p.m. peak who would experience increased travel times. In addition, future connections are planned with routes that would connect to Triangle Town Center and Crabtree Valley Mall. Within the eastern portions of the existing route, the proposed route would increase services available to minority, low-income and other individuals, offering additional stops and all-day service which was not previously available.

#### Route 401- Rolesville

The Rolesville route is a new service and would operate during peak hours only. The new Rolesville route would provide service to a new area of Wake County operating between Triangle Town Center in Northeast Raleigh and downtown Rolesville.

The proposed Rolesville route would serve minority populations at a rate close to the system average and within the 5 percent threshold at 44.6 percent. This is higher than the Town of Rolesville's minority population at 36.7 percent. The population of low-income individuals served by this route is lower than the system average by roughly one-half; the average is 30.7 percent while the population of the proposed route is 15.5 percent. However, this is substantially higher than the low-income population of the Town of Rolesville at 5.5 percent.

This analysis shows no potential for disparate impact to minority populations and limited to no potential for disproportionate burden on low-income populations. While the rate of low-income populations served by the proposed route is lower than the GoRaleigh system average, it is substantially higher than Rolesville's low-income population and likely serves relatively more of the low-income populations living in this area of Wake County. This route is new service and these population in this area would otherwise not receive any service.

# 3.0 Mitigation and Alternatives

Throughout the process of developing the proposed routes and service changes, GoRaleigh considered public comments as well as feedback from the local municipalities to design the routes that best served the target areas.

The Town of Knightdale expressed an interest in targeted service to particular areas, such as Habitat for Humanity homes and low-income housing, and requested service that provides a bi-directional connection to a Knightdale Station Park. The new Knightdale route involves the loss of direct access to downtown, requiring a transfer by existing (peak hour only) riders. However, these impacts are mitigated to an extent by the provision of all-day local service and a loop desired by the community, increasing the number of stops to 24 from 6 current stops and adding weekend service. Further, the loss of direct downtown access would be partially mitigated by a new East Raleigh Transit Center, programmed for construction in FY 2021, which would make the connection to downtown smoother and further supports transit and accessibility in this area of Wake County.

Compared to the existing route, the new Garner route would serve additional stops and provide all day local service and a loop desired by the community that better serves transit needs in this area of Wake County; weekend service would also be added. The new Rolesville route provides new service to this area of Wake County. By monitoring and including this route in future surveys, the need for future adjustments and any mitigation can be identified. This is something that can be applied to all routes within the context of the overall system.

# 4.0 Public Involvement

Under FTA Circular 4702.1B Title VI guidelines, recipients of Federal financial assistance are required to establish a public participation plan that describes the proactive strategies, procedures, and desired outcomes for public participation activities. GoRaleigh's most recent Public Participation Plan was prepared in 2018. Promoting inclusive public participation is a central consideration for the FTA Circular 4702.1B, which further requires integrating the content and considerations of Title VI, the Executive Order on LEP, and the DOT LEP Guidance into the public participation process for any federally-funded service area changes.

GoRaleigh held a series of public meetings to obtain feedback on the proposed FY 2020 routes in late April 2019. These meetings included informational handouts, display boards, comments forms, and the opportunity to discuss the proposed service changes with GoRaleigh staff and provide comments to the agency. Promotional materials for these public meetings are included in Appendix B. A public hearing was also held in early May 2019 at the Raleigh Transit Authority Meeting to present proposed service expansions. The public meeting opportunities are summarized in the following table:

Date	Date Meeting Type		Location		
April 16, 2019	Public Meeting	5:00pm - 7:00pm	Garner Town Hall - 2nd Floor		
April 18, 2019	Public Meeting	6:00pm - 8:00pm	Knightdale Station Park		
April 23, 2019	Public Meeting	4:00pm - 6:00pm	Rolesville Town Hall		
May 9, 2019	Public Hearing	4:00pm - 6:00pm	Raleigh Transit Authority Meeting - Council Chambers		

#### Table 6 - Public Meetings

Approximately 31 individuals were in attendance and eleven comments were received at the April public meetings in advance of the May public hearing. Public outreach will continue throughout summer 2019

to inform riders about the upcoming service changes including attendance at community events and festivals.

To support outreach to date and future outreach, GoRaleigh uses a variety of promotional and notification strategies. These include: website and social media updates; distribution via the goraleigh.org listserv; message boards; placards posted on buses and at GoRaleigh stations; handouts distributed by bus drivers; and press releases.

# 5.0 Conclusions

The service equity analysis performed for the proposed Garner and Rolesville routes has shown that these changes are not anticipated to result in disparate impacts for minority populations or disproportionate burdens for low-income populations. Overall, the Garner route would serve a higher number of minority and low-income individuals than the existing route and would increase the span of service to all day from peak only for the same number of stops. The new Rolesville route would provide new access for riders that are not currently served.

The existing Knightdale route provides express service from Knightdale to WakeMed and downtown Raleigh; this route runs only on weekdays during peak hours. However, the proposed route would serve additional stops and would include an expansion from peak-only service to all-day service and would add weekend service in 2023. The greatest potential for negative impacts on the Knightdale route is born by current riders utilizing express service; these riders would no longer have direct access to WakeMed or downtown Raleigh. To reach these destinations, riders would have to transfer, increasing travel times. Demographic analysis for the proposed Knightdale route shows potential for negative impacts: minority and low-income populations served by the proposed route are lower than those served by the existing route, although only low-income riders on the new route are served at a lower percentage than the system average.

The results from this service equity analysis support the plan for the proposed changes to these routes with continued attention by GoRaleigh to ensure that further mitigation and alternatives are identified as needed.

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# **Appendix A: Maps**

Figure 1: Existing GoRaleigh System and Service Area

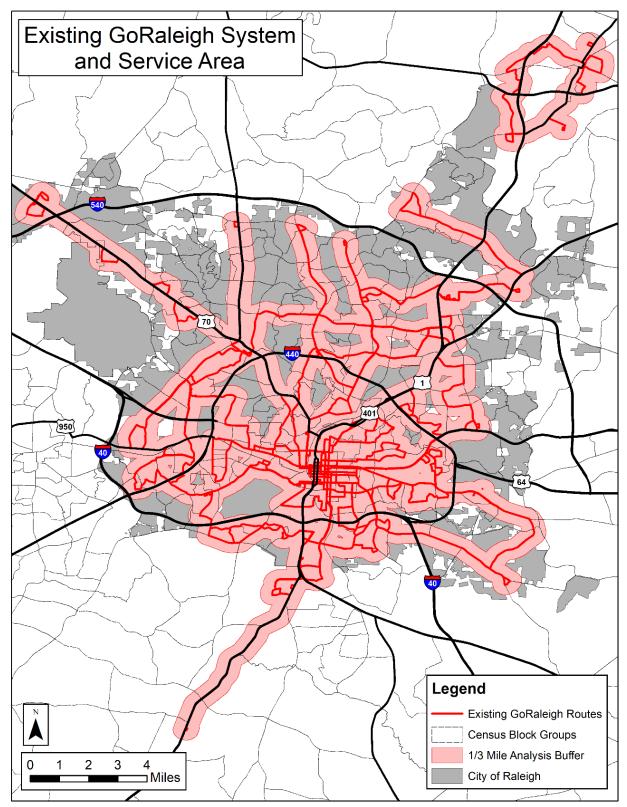
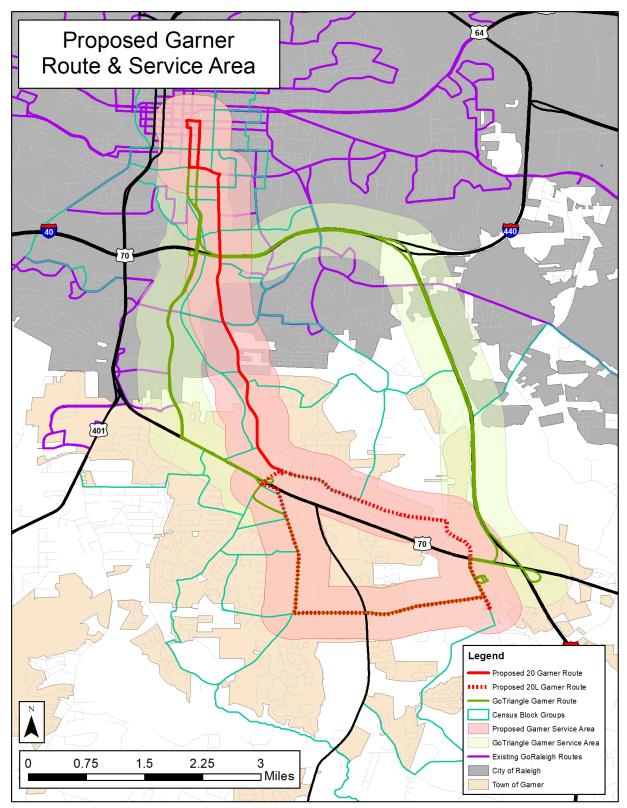


Figure 2: Proposed Garner Route and Service Area



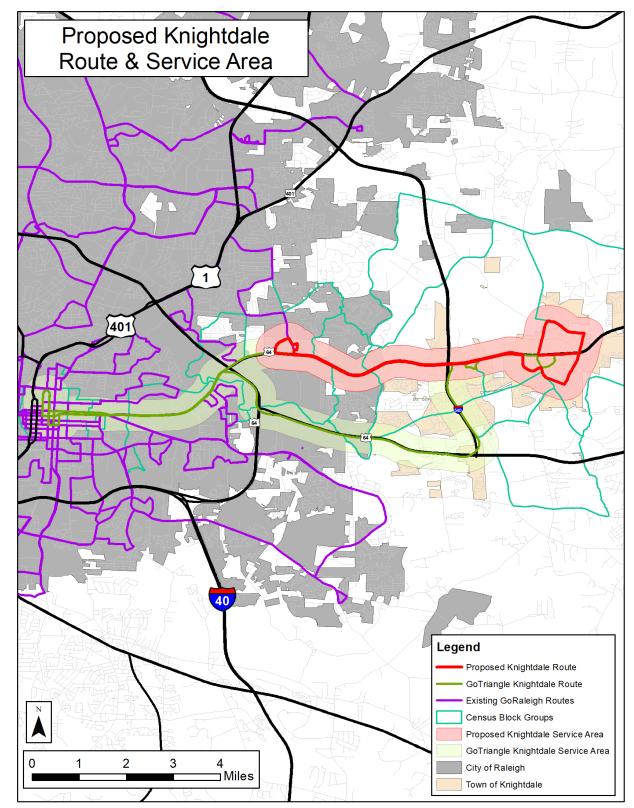
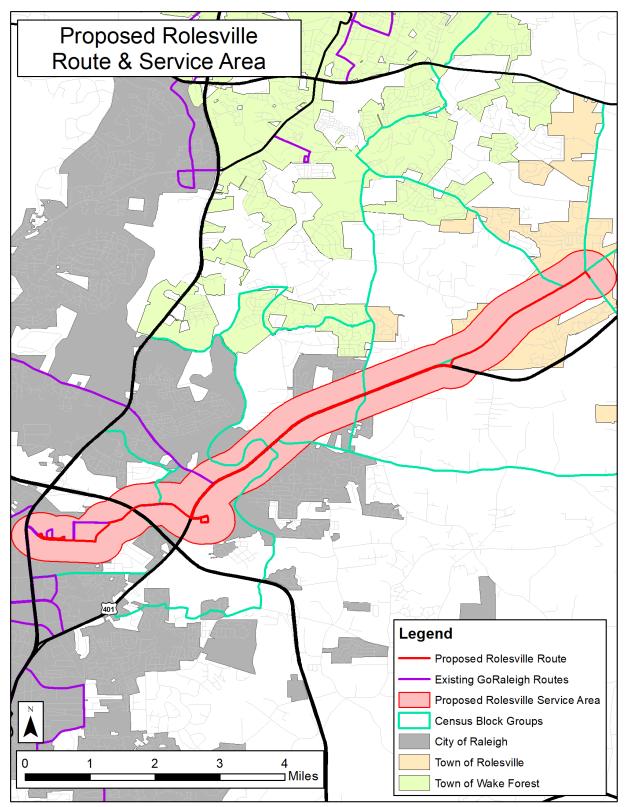


Figure 3: Proposed Knightdale Route and Service Area

Figure 4: Proposed Rolesville Route and Service Area



#### **Appendix B: Public Engagement Materials**

Figure 5: Announcements and Fliers

## GO PUBLIC MEETINGS: Raleigh September 2019 New Services

## GoRaleigh is extending bus service starting this September in Knightdale, Garner & Rolesville!

## KNIGHTDALE

- GoTriangle's route KRX would be replaced by GoRaleigh route 33.
- Route 33 would connect Knightdale to the New Hope Commons shopping center, which is served by multiple routes.
- GoRaleigh's route 15 (WakeMed) would connect onward with frequent service to downtown Raleigh.
- Route 33 will provide hourly service weekdays, 6am 9pm.

## GARNER

- GoTriangle's route 102 would become GoRaleigh route 20.
- The proposed GoRaleigh route 20 would operate along Garner Road, eliminating the Hammond Rd portion.
- Route 20 would provide all-day weekday service once an hour from 5:30am to 12:30am.

## ROLESVILLE

- New service will connect Rolesville with Triangle Town Center weekdays during peak hours only.
- Connections to multiple bus routes and frequent service will be available at Triangle Town Center.
- Major destinations: Rolesville, Rolesville Park-and-Ride, Wake Tech Northern Campus, Triangle Town Center.

For more information: goraleigh@raleighnc.gov or 919-996-3942



PUBLIC MEETINGS: September 2019 New Services

Services will extend to:

GARNER Mon-Fri, 6am-Midnight

KNIGHTDALE Mon-Fri, 6am-9pm

ROLESVILLE Mon-Fri, Express Service During Peak Periods Only **Public Meetings** 

Tuesday, April 16, 5pm-7pm Garner Town Hall - 2nd Floor 900<u>7</u><sup>th</sup> Ave, 3rd Floor, Garner

Thursday, April 18, 6pm-8pm Knightdale Station Park 810 N. First Ave, Knightdale

Tuesday, April 23, 4pm-6pm Rolesville Town Hall 502 Southtown Circle, Rolesville

🕺 Comments in person or goraleigh@raleighnc.gov thru May 9<sup>th</sup>

**PUBLIC HEARING: September 2019 New Services** 

Thursday, May 9<sup>th</sup>, 4pm at the Raleigh Transit Authority Meeting Council Chambers - 222 W. Hargett St, 2<sup>nd</sup> Floor

Proposed service expansions:

GARNER Mon-Fri, 6am-Midnight KNIGHTDALE Mon-Fri, 6am-9pm

GO

ROLESVILLE Mon-Fri, Express Service During Peak Periods Only



More info: goraleigh@raleighnc.gov or 919-996-3942

#### Figure 6: General Comments

Comment	How was information	Comment
Number	provided	
1	GoRaleigh Email	I attended two of your public meetings about you future expansions of bus routes coming this fall. One of my suggestions is why doesn't the Rolesville Route continue down Louisburg Rd (401) to Capital and give people on the road service. I drive that road a lot and see people frequently walking up and down that road to bus stops down on Capital Blvd. I do however like the Knightdale route that serves Knightdale and think that it will be a good route. I use transit for my leisure to go to and from downtown and to take my child to parks and outings. I also have a concern that I was told to direct to this email. I notice that some of the new bus routes still have old signage and bus numbering at the stops. It has proven to be confusing for some. Some think that there are now multiple buses serving a route and it is just a number change. Can you please change the numbers and signage at the stops to reflect the current routes running on all stops. Also when will we see the CATS bus stop signage changed. It seems that there branding happened years ago yet we still have a lot of old bus stop signage all over the city. Another thing that I hear a lot of in the city riding transit and along with coworkers is why this city and region is not working to build a rail system to move people faster than buses. BRT is a good option is some places but it is not always the best solution. We would all love to have the ability to vote on a comprehensive transit plan that includes buses, BRT and rail to include both commuter and light rail. I think we need to get ahead of the population growth or we could end up like Seattle who waited for years and they are just now building their rail plan after turning down federal funding years ago, which ended up going to Atlanta's Rail System. It attracts people to move, vacate and visit here because the city would have a network that is easy and fast to use. The best way to get people out of their cars is to give them a faster option than they have driving. We have to market it in a way that
		are just a few of my many suggestions. I hope that I can provide more feedback in the coming months and years for the system. <i>[Staff responded and provided additional information]</i>
		Routes to Garner, Knightdale, Rolesville. As usual, the NW quadrant is ignored. There is negligible service between Capital Blvd and Creedmoor Rd and none along
2	GoRaleigh Email	Glenwood to Brier Creek. Congrats! You've screwed the same large part of Raleigh again. [Staff responded and provided additional information]

#### Figure 7 – Garner Comments

Comment Number	How was information provided	Comment
1	At Garner Public Meeting	No Crosstown opportunities; customer currently traels to NC State Cennential Campus and would like to see better connections to other routes (GoRaleigh, NCState and GoTriangle) ; Better connections to the greenways as well
2	At Garner Public Meeting	Provided a stop suggestion (Cloverdale, right before Tyron Road); very interested in the services there
3	At Garner Public Meeting	Would like to have notifications at the stops for those who do not have phone or other forms of technology; Would like to see more convenient services and better connection
4	At Garner Public Meeting	Cab service out to Poole Road; Better connections to Poole Road area
5	At Garner Public Meeting	To have a bus coming closer will be greater; hope that the train service can stop one day
6	GoRaleigh Email	Inquiry: Would I eb able to use this route? I live off of Vandora Springs Road [Staff responded]
7	GoRaleigh Email	I think the idea to use Garner Road is excellent. As an educator in the ESL program given at Garner United Methodist Church, I am excited to see how this move will enable many students to come to class. We have spoken in the past about the dilemma that many residents along Garner Rd. do not have transportation. We even considered using the church bus to bring them down. With this plan and schedule, they can take class and do their food shopping at Food Lion. It will help the residents and businesses. Thank you for being so attuned to the needs of the community.

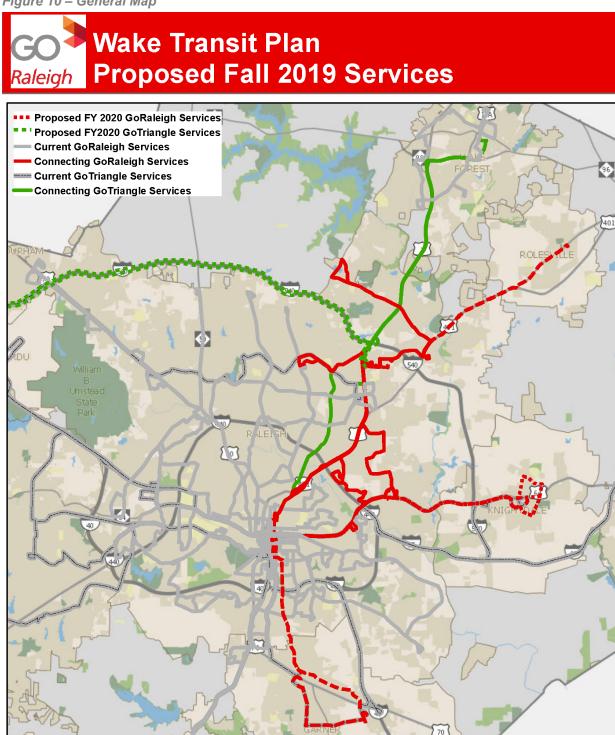
Comment Number	How was information provided	Comment
1	-	I am going to miss the straigh shot to downtown but I am glad you are going to keep the bus route and give more service
2	U	Parking is an issue where there are partnerships[s]. There should be some local service between Rex and New Hope Road.
3		Thank you for this opportunity to participate in the changes/improvements to Knightdale! Would love a local bus within the basic 1.25 fare. Definitely need clearly marked bus stops that are accessible to young and especially older ones. Stops at all of the local shopping areas, Walmarts, Lowes Food, Target, Aldi's, etc, The hotel, the Rex Wellness Center and Duke/Raleigh Urgent Care Center. Please be sure to provide detailed emails or posters or a website that will explain how to use the service, cost, etc because many are new to this area and NC in general. We look forward to these long awaited Great changes.
4		I'd like to consider population served using a larger radius. Perhaps weighting the numbers for .25, .33, .5, 1. Riders will be combination of choice and need and using various modes to the stops. I love the plan for Eastern Transit Center. I'd like trip planner to have walking or biking between stops or 2.5 mph, 5mph, or 10mph.

#### Figure 8 – Knightdale Comments

#### Figure 9 – Rolesville Comments

Comment Number	How was information provided	Comment
1	At the Rolesville Public Meeting	Keep in mind hours that high school students get out of schools and may have to get home from [after school] work; Market the benefits of riding the bus versus driving
2	At the Rolesville Public Meeting	I hope to see bicycle racks adjacent to the bus stops
3	GoRaleigh Email	This is a great plan for the community, the young people especially, having access to Wake Technical Comm. College, Capital Blvd, downtown Raleigh during the peak hours. Great idea. Cars, car insurance, gas are all very expensive, we need this service.
4	GoRaleigh Email	In response to the proposed transit route: Rolesville to Triangle Mall. I don't think it would be used near enough to offset the driver wages, gas, maintenance ect. Most people that live up here tend to make the longer drive to Crabtree Mall because the shopping is much better. Or they order on line. A better use of transit would be a route from Rolesville/WakeForest to sources of jobs: downtown Raleigh or North Raleigh during peak hours.
5	GoRaleigh Email	My bus operator for the WRX gave me a notice that an express route might come to Rolesville. I will not be able to attend the meeting on April 23rd, but I wanted to voice my support for a Rolesville Express route.
6	GoRaleigh Email	I am emailing my positive opinion on providing a Rolesville Mon-Fri. Express Service during peak hours only. I currently live in Wake Forest, off Mitchell Mill Road, and take the Wake-Forest express at the Park and Ride, Triangle Town Center to downtown Raleigh. However, if an express route was added from Rolesville with the same hours or half hours, I would prefer commuting from Rolesville, depending on the Park and Ride location. I think adding this additional route would be beneficial to those of us who live and/or commute through the Rolesville area to downtown. I would add that having schedules that alternate every half hour with the WFX would be beneficial for those who have a 7:30 am - 4:30 pm, 8:30 am - 5:30 pm or 9:30 am - 6:30 am schedule. I have heard a lot of comments during my commute to and from downtown that adding a half hour express route to downtown would really benefit a lot of us working downtown. I appreciate your considering my feedback.

#### Figure 10 – General Map

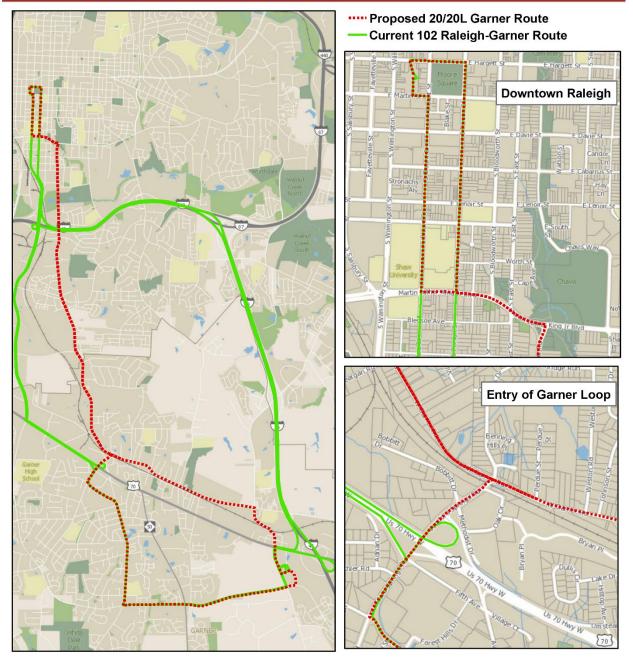


Map updated April 2019 by City of Raleigh Department of Transportation- Transit Division.

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#### Figure 11 – Proposed route for Garner

GO Raleigh Wake Transit Plan Proposed Garner Route Formerly Route 102 >>> Proposed Route 20 September 2019 Services



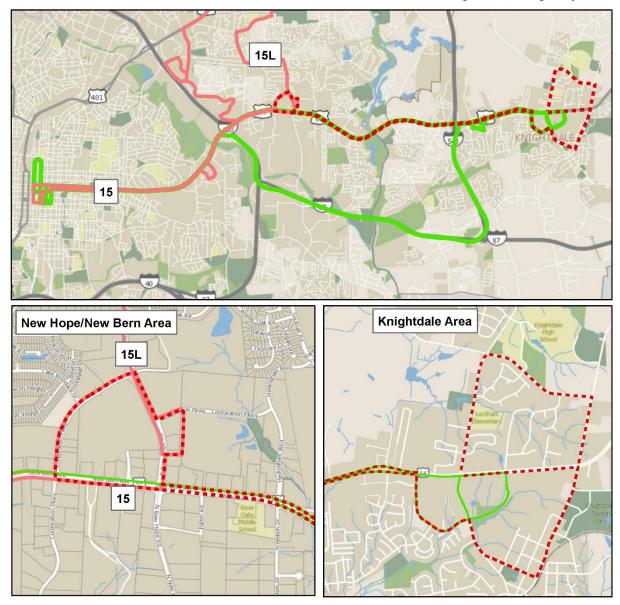
Map updated April 2019 by City of Raleigh Department of Transportation- Transit Division.

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Figure 12 – Proposed route for Knightdale

Wake Transit Plan Proposed Knightdale Route Formerly KRX Route >>> Proposed Route 33 September 2019 Services

- Proposed 33 Knightdale Route
- GoRaleigh Connecting Services
- Current KRX Knightdale-Raleigh Express



Map updated April 2019 by City of Raleigh Department of Transportation- Transit Division.

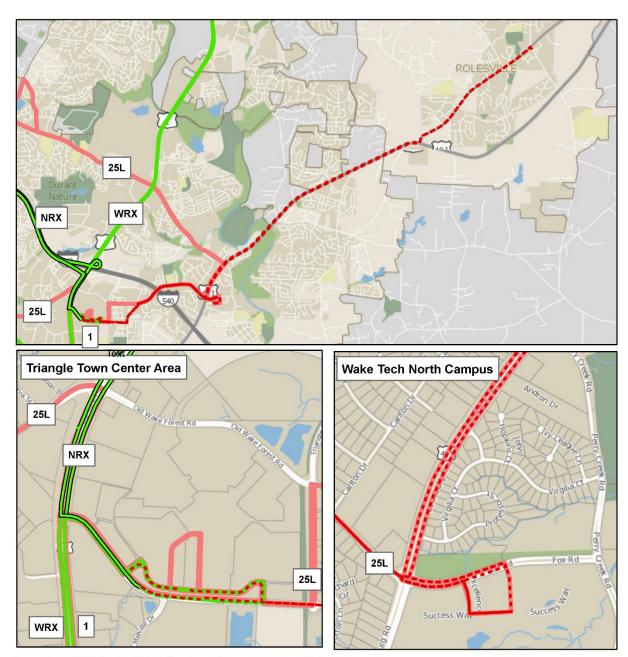
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Figure 13 – Proposed route for Rolesville

GO Raleigh

Wake Transit Plan Proposed Rolesville Route Proposed Route 401 September 2019 Services

- -- Proposed 401 Rolesville Route
- Proposed GoTriangle Route
- Connecting GoRaleigh Services
- Connecting GoTriangle Services



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# GoRaleigh 2017 Smartcard Fare **Equity Analysis**

April 2017

Prepared for:





Prepared by:

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## Overview

GoRaleigh has conducted a Fare Equity Analysis under Title VI of the Civil Rights Act of 1964 to analyze if the agency's plans to implement a new smartcard payment method will cause any disparate impacts on minority customers or create a disproportionate burden for low-income customers. This report documents how the planned implementation of smartcards will impact Title VI populations served by GoRaleigh and whether any mitigation is required in accordance with Federal Transit Administration (FTA) guidelines.

GoRaleigh provides transit services for the City of Raleigh, and operates 29 routes, serving approximately 24,365 passenger trips per weekday and logging approximately 5,201,970 passenger trips in FY 2016. In the spring and summer of 2017, GoRaleigh is planning to add a new form of fare payment. In addition to its existing methods of payment, smartcards will become available for transit customers. This form of payment will be accepted throughout the entirety of GoRaleigh's transit system, and will enable customers to pay for transit services with contactless, reusable, reloadable, smartcards. Smartcards will be available for purchase with cash or credit card through ticket vending machines (TVMs) located at the GoRaleigh Operations Center, GoRaleigh Station, and Crabtree Valley Mall. As a convenience, existing methods of payments will continue to be accepted and the locations in which they are vended will remain in service.

#### Title VI Requirements

Title VI of the Civil Rights Act of 1964, Section 601 states:

"No persons in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

The FTA Circular 4702.1B *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* was published in 2012 by the FTA in order to comply with the law and fulfill the requirement for all transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes."

As a recipient of financial assistance from the Federal Transit Administration (FTA), GoRaleigh is required to demonstrate compliance with the circular. In accordance with Chapter 4 of the circular, fixed route transit providers that operate 50 or more fixed route vehicles in the peak and are located in an urbanized area of a population of 200,000 or more are required to analyze the impacts of any fare system changes. GoRaleigh meets both thresholds and is thus required to analyze impacts of the proposed fare system changes.

#### Methodology

The main steps in completing this Fare Equity Analysis include:

- Determining demographic characteristics for populations served by GoRaleigh
- Evaluating whether planned fare changes will have a disparate impact on populations protected under Title VI and whether low-income populations will bear a disproportionate burden of the changes.
- Recommending methods to avoid, minimize or mitigate impacts, as needed.

Demographic data for GoRaleigh's service area was compiled in order to provide regional context and comparison for the survey data provided by the transit agencies. Data on race/ethnicity and household income was compiled from the US Census. The "Race" US Census Bureau data table B02001 was used to identify the composition of minority and non-minority populations within each Wake County census block group. For the purpose of this fare equity analysis, minority populations were considered all non-white populations. The "Household Income In the Past 12 Months" US Census Bureau data table B19001 was used to identify the composition of single- and multiple-family households that earn incomes below 150 percent of the poverty level. For the purpose of this fare equity analysis, any households that earned below \$25,000 annually were considered low-income.

Onboard survey data collected by each transit agency was compiled in order to assess ridership characteristics. Data on minority status, income, and type of fare used are provided in the 2016 Wake County Transit Systems Customer Survey. Transit data and proposed fare media changes were evaluated to determine whether the proposal will create a disparate impact or a disproportionate burden on Title VI populations.

This fare equity analysis also included census block group mapping of low-income and minority hotspots. A threshold of two standard deviations from the median was selected as the lower bound for designating hotspots. For example, if a census tract had a low-income population that was greater than two standard deviations from the median percentage of low-income households (incomes less than \$25,000 annually) in Wake County, than it was mapped as a hotspot. Similarly, if a census tract had a minority population that was greater than two standard deviations from the two standard deviations from the median percentage of low-income households (incomes less than \$25,000 annually) in Wake County, than it was mapped as a hotspot. Similarly, if a census tract had a minority population that was greater than two standard deviations from the median percentage of non-white individuals in Wake County, than it was mapped as a minority hotspot. Mapping also indicated instances where both low-income and minority hotspots existed on the same census tract.

GoRaleigh will use the following definitions and criteria to evaluate the impacts of the proposed fare structure on minority and low-income populations.

#### Population Definitions

#### **Minority Persons and Populations**

According to FTA Circular 4702.1B, a minority person is defined as an individual identifying as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Minority populations are defined by FTA as any readily identifiable group of minority persons who live in geographic proximity, or who may be geographically dispersed, but who may be similarly affected by a proposed action. Ridership data on minority populations is obtained from the transit agency ridership surveys.

#### Low-Income Persons and Populations

According to the FTA circular, "Low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or within a locally developed income threshold that is at least as inclusive as these guidelines. For these policies, persons with household incomes below 150 percent of the federal poverty level for a regionally average household size are determined to be low-income. Low-income population is defined by FTA as any readily identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action. Data on low-income populations is obtained from the U.S. Census Bureau and transit agency ridership surveys dependent upon the analysis required.

#### GoRaleigh Fare Equity Policy Thresholds

#### **Disparate Impact Policy**

The GoRaleigh disparate impact policy establishes a **3 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by minority populations. The threshold applies to the difference in the impacts of the proposed fare change on minority populations compared to the impacts on non-minority populations. This was measured by analyzing data from the 2016 Wake County Transit Systems ridership survey as to whether minority riders are more or less likely to use a given payment type or payment media.

#### Disproportionate Burden Policy

The GoRaleigh disproportionate burden policy establishes a **5 percent** threshold for determining when adverse impacts of fare changes are disproportionately borne by low-income populations. The threshold applies to the difference in the impacts of the proposed fare change on low-income populations compared to the impacts on other populations. This was measured by analyzing data from the 2016 Wake County Transit Systems ridership survey as to whether minority riders are more or less likely to use a given payment type or payment media.

## **Existing Conditions**

#### Payment and Fare Media

The following fare media are currently available for use on GoRaleigh's transit system:

- Cash is accepted onboard buses
- Paper-based fare cards for multi-use passes are accepted onboard buses

The table below illustrates the different fare types GoRaleigh currently offers.

#### Table 1: Existing Fare Structure

	FARE TYPE	FULL FARE	DISCOUNTED FARE*	DESCRIPTION				
	Local Cash Fare	\$1.25	\$0.60	One-way fare on GoRaleigh buses				
CAL	Local Day Pass	\$2.50	\$1.25	Unlimited rides on GoRaleigh buses for 1 day				
ĕ	Local 7-Day Pass	\$12.00	\$6.00	Unlimited rides on GoRaleigh buses for 7 days				
	Local 31-Day Pass	\$45.00	\$22.50	Unlimited rides on GoRaleigh buses for 31 days				
F	Regional Day Pass	\$4.50	\$2.00	Unlimited rides on regional + GoRaleigh buses for 1 day				
IONAL	Regional 7-Day Pass	\$16.50	\$7.50 Unlimited rides on regional + GoRaleigh buses for 7 days					
REGI	Regional 31-Day Pass	\$76.50	\$34.00	Unlimited rides on regional + GoRaleigh buses for 31 days				
S	Express Day Pass	\$6.00	\$2.50	Unlimited rides on express, regional, + GoRaleigh buses for 1 day				
PRESS	Express 7-Day Pass	\$22.00	\$9.25	Unlimited rides on express, regional, + GoRaleigh buses for 7 days				
EXF	Express 31-Day Pass	\$102.00	\$42.50	Unlimited rides on express, regional, + GoRaleigh buses for 31 days				
~	Stored Value Card	\$20.00	n/a (same)	\$25 worth of rides on regional + GoRaleigh buses				
HER.	GoPass (university)	Free	Free	Unlimited rides on regional + GoRaleigh buses				
ОТНІ	GoPass (other)	Free	Free	Unlimited rides on regional + GoRaleigh buses				

\*Discounts are available for Youth (ages 6-18), Seniors (ages 65+), and persons with disabilities.

#### Points of Purchase

GoRaleigh currently allows passengers to purchase their fares and passes in the following different ways:

- On-board: customers can purchase a standard fare when boarding a bus
- Ticket Outlets:
  - o Tickets for all fare types: GoRaleigh Operations Office and GoRaleigh Station
  - 7-day passes (regular and discount) and 31-day passes are sold at the following Harris Teeter locations: Cameron Village, North Ridge, Glenwood Village, Olde Raleigh Village, Stonehenge Shopping Center, Plaza West
  - **31-day passes** only: Avery C. Upchurch Government Complex
- **Online**: regional and express fares can be purchased on GoTriangle's website.

The table on the following page summarizes the existing fare structure and points of purchase.

	Fare Type		Board	GoRal Operat	-	GoRal Stat	-	Avery C. Upchurch Complex		Harris Teeter		Online	
		Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.
	Cash Fare	х	х										
CAL	Local Day Pass			х	х	х	х						
P	Local 7-Day Pass			х	x	х	х			х	х		
	Local 31-Day Pass			х	x	х	х	х		х			
٩L	Regional Day Pass			х	х	х	х					х	х
GIONAL	Regional 7-Day Pass			х	х	х	х					х	х
REG	Regional 31-Day Pass			х	х	х	х					х	х
ESS	Express Day Pass			х	х	х	х					х	х
PR	Express 7-Day Pass			х	х	х	х					х	х
EX	Express 31-Day Pass			х	х	х	x					х	х
ER	Stored Value Card			х	х	х	х					х	х
Ë	GoPass (university)			х	x	х	х						
Б	GoPass (other)			х	x	х	х						

#### **Table 2: Existing Ticket Purchase Locations**

### Proposed Changes

GoRaleigh is planning to upgrade its fare collection system to include smartcards. Smartcards are a secure, widely accepted medium for cashless payments for a wide spectrum of financial transactions, including automatic fare collection activities. Smartcard electronic payment media systems are operating on transit systems across the nation. Use of smartcards can substantially increase the level of convenience and facilitate transfers for transit riders and can increase efficiency and reduce costs for transit providers.<sup>1</sup> Smartcards can be linked to other modes of transportation (e.g., parking and highway tolls) and other industries such as retail, banking, and security with the objectives to make paying for transit faster and easier to use, and to allow the customer to have more flexibility in how they use the system.<sup>2</sup>

GoRaleigh customers will be able to purchase smartcards at new Transit Vending Machines (TVMs). TVMs accept credit card, debit card, cash and coin payments. GoRaleigh proposes to install a total of 3-5 TVMs at the GoRaleigh Operations Office, GoRaleigh Station, and Crabtree Valley Mall.

GoRaleigh will continue to accept other existing methods of payments and the locations in which they are vended will remain in service.

#### Payment and Fare Media

The base fares and multi-use passes will remain the same under the new system. In addition, customers will have access to new types of fare media. The following payment and fare media are proposed:

<sup>&</sup>lt;sup>1</sup> "Smartcard Interoperability Issues for the Transit Industry," *Transit Cooperative Research Group, 2006. Online: http://www.tcrponline.org/PDFDocuments/TCRP\_RPT\_115.pdf* 

<sup>&</sup>lt;sup>2</sup> Ibid

#### Payment Types

- **Cash** will continue to be accepted on-board buses and will be accepted at new ticket vending machines (TVMs).
- **Checks** will continue to be accepted at the GoRaleigh Operations Office and the GoRaleigh Station Information Booth.
- **Credit cards and debit cards** will continue to be accepted at the GoRaleigh Operations Office and the GoRaleigh Station Information Booth. Credit cards will also be accepted at by TVMs.

#### Fare Media Types

- Paper-based fares will continue to be available for purchase at existing locations.
- Smartcards will be installed to add purchase options for GoRaleigh transit customers. Three locations are being proposed for installation of TVMs, the machines that vend smartcards. These three proposed locations are the GoRaleigh Operations Office, GoRaleigh Station, and Crabtree Valley Mall. Local, regional, and express passes of all types (1-Day, 7-Day, and 31-Day) will be available for purchase at the TVMs. Smartcards can be programmed with a unique account number. The value on the card and passes can be recovered for registered accounts. They can also be linked to other transportation services including car share, bike share, or parking facilities, which GoRaleigh may have a use for in the future. New and replacement smartcards will cost \$2. GoRaleigh is currently proposing to provide the first 10,000 smartcards free of charge to riders to encourage smartcard adoption.

The table on the following page summarizes the differences in proposed fare structure and points of purchase. The proposed changes are shown in red.

	Fare Type		n- ard		aleigh ations		aleigh tion	Upc	ery C. hurch nplex		eter		otree y Mall	Onl	ine
		Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.	Reg.	Disc.
	Local Cash Fare	х	Х												
CAL	Local Day Pass			х	х	х	х					x	x		
PO	Local 7-Day Pass			х	х	х	х			Х		x	x		
	Local 31-Day Pass			х	х	х	х	Х		Х		x	x		
AL	Regional Day Pass			x*	х*	x*	х*					х	x	х	х
NOIE	Regional 7-Day Pass			x	x	х	x					x	x	х	х
REG	Regional 31-Day Pass			x	x	х	x					x	x	х	x
SS	Express Day Pass			х	X	х	Х					х	X	х	х
PRES	Express 7-Day Pass			x	x	x	x					x	x	х	х
EX	Express 31-Day Pass			x	x	x	x					x	x	х	х
ER	Stored Value Card			x*	x*	x*	x*					х	X	х	х
E	GoPass (university)			x*	х*	х*	x*					x	x		
0	GoPass (other)			x*	х*	x*	х*					x	x		

#### Table 3: Existing and Proposed Points of Purchase

All locations denoted in red show where TVMs are proposed to be installed, and/or will provide new fare purchasing opportunities or fare types for riders. The locations denoted with an asterisk (\*) show where TVMs are proposed to be added to existing locations, and offer alternative purchasing opportunities for existing fare types.

#### Summary of Changes

The smartcards and TVMs will provide additional payment options to GoRaleigh and its customers. Existing fare media and their purchase locations will remain the same. In addition to existing services, GoRaleigh is planning to add a total of five TVMs in three locations. These locations will include the GoRaleigh Operations Office, GoRaleigh Station, and Crabtree Valley Mall.

## Fare Equity Analysis

#### Fare Usage by Title VI Populations

An analysis of payment methods by GoRaleigh's low-income and minority riders can help predict whether a change in payment methods may adversely affect these populations. Table 4 below presents fare payment methods for all riders and Title VI populations. Table 5 demonstrates the fare type usage by minority and low-income populations, and where Title VI populations exceed the disparate and disproportionate thresholds.

#### **Table 4: Fare Payment Breakdown**

	FARE TYPE	Total Ridership Percentage	Minority Ridership Percentage	Low-Income Ridership Percentage	
	Cash Fare	33.8%	33.8%	35.5%	
LOCAL	Local Day Pass	41.1%	42.4%	37.5%	
ΓO	Local 7-Day Pass	5.9%	6.2%	8.4%	
	Local 31-Day Pass	6.9%	6.6%	6.6%	
IAL	Regional Day Pass	0.9%	0.9%	0.8%	
REGIONAL	Regional 7-Day Pass	0.4%	0.3%	0.5%	
REC	Regional 31-Day Pass	0.8%	0.8%	0.7%	
S	Express Day Pass	0.2%	0.2%	0.2%	
EXPRESS	Express 7-Day Pass	0.1%	0.1%	0.2%	
EXI	Express 31-Day Pass	0.3%	0.3%	0.2%	
~	Stored Value Card	0.5%	0.3%	0.6%	
OTHER	GoPass (university)	3.2%	2.4%	3.2%	
Б	GoPass (other)	5.9%	5.6%	5.6%	
	Total	100.0%	100%	100.0%	

_	Fare Type	White, Non- Hispanic	Minority	Not Low- Income	Low-Income	
-	Cash Fare	22.7%	77.3%	47.6%	52.4%	
OCAL	Local Day Pass	19.5%	80.5%	53.9%	46.1%	
ΓŎ	Local 7-Day Pass	17.7%	82.3%	29.3%	70.7%	
	Local 31-Day Pass	52.1%	47.9%	26.1%	73.9%	
JAL	Regional Day Pass	18.5%	81.5%	51.9%	48.1%	
REGIONA	Regional 7-Day Pass	30.8%	69.2%	46.2%	53.8%	
REG	Regional 31-Day Pass	72.6%	27.4%	83.6%	16.4%	
SS	Express Day Pass	25.0%	75.0%	37.5%	62.5%	
EXPRESS	Express 7-Day Pass	20.0%	80.0%	40.0%	60.0%	
EX	Express 31-Day Pass	20.0%	80.0%	60.0%	40.0%	
R	Stored Value Card	45.0%	55.0%	90.0%	10.0%	
OTHER	GoPass (university)	42.7%	57.3%	47.6%	52.4%	
0	GoPass (other)	26.9%	73.1%	51.2%	48.8%	
	Total - All Pass Types	25.3%	74.7%	48.8%	51.2%	
		Higher percentage	e than system aver	age, exceeds th	reshold	
		Lower percentage	e than system avera	age, exceeds the	reshold	

#### Table 5: Title VI Population Fare Usage

The following conclusions could be drawn about minority and low-income rider bus pass usage:

- Local day, local 7-day, regional day, express 7-day, and express 31-day passes are used by minority populations at a relatively higher percentage than the minority percentage for all fare types; however regional and express passes are used by less than 3 percent of all minority riders.
- Local 31-day, regional 31-day, stored value cards, and university GoPasses are used by minority populations at a lower percentage than the minority percentage for all fare types; as with regional passes, stored value cards are used by a small percentage of minority riders (less than 1 percent) and minority university GoPass usage is also low (less than 3 percent).
- Local 7-day, local 31-day, express day, and express 7-day are purchased by low-income populations at a higher percentage than the percentage of low-income purchasing for all fare types; however, express passes are used by less than 1 percent of all low-income riders.
- Regional 31-day, express 31-day, and stored value cards are used by low-income populations at a lower percentage than the low-income percentage for all fare types; however, all of these pass types combined represent only about 0.5 percent of low-income riders.

Any changes to the fare media types discussed above could result in adverse impacts to GoRaleigh's minority and low-income populations. However, GoRaleigh is planning to keep all existing fare media types and continue to sell these media in their current outlets and capacities while adding smartcard purchasing options.

#### Access to Transit Vending Machines

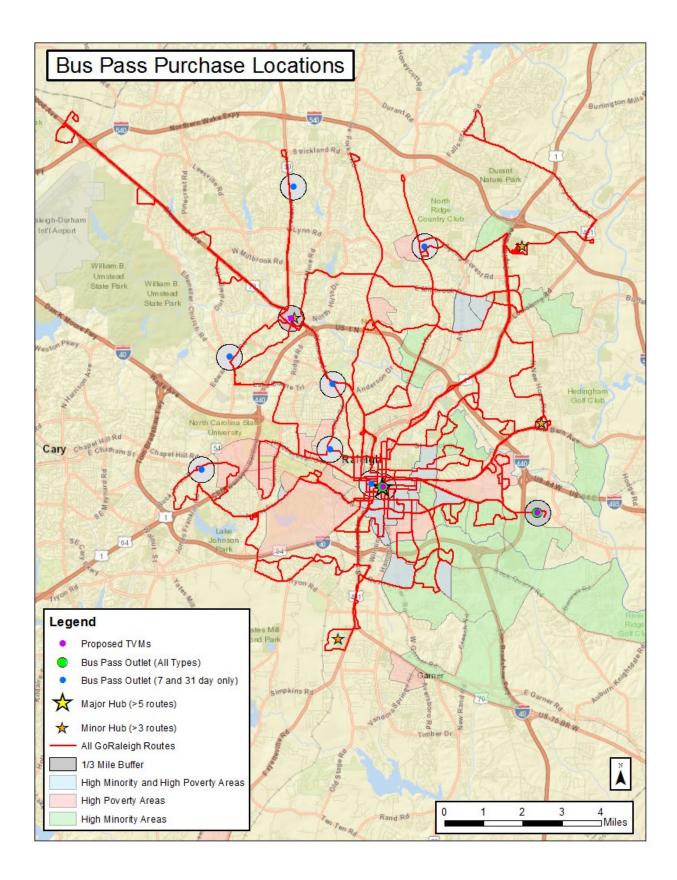
An analysis of existing and potential GoRaleigh purchasing locations can assist the agency in ensuring equitable access to Title VI populations as TVMs are installed. GoRaleigh will be installing 3-5 TVMs at its major hub (GoRaleigh Station) and two of its minor hub locations (GoRaleigh Operations Office and Crabtree Valley Mall). These locations were selected for the installation of TVMs because they exist at nodes in GoRaleigh's transit network, or the areas that are reached by the highest number of bus routes (see map on the following page).

The map on the following page shows the existing and planned locations where fare media can be purchased. A one-third mile buffer was used for these locations to demonstrate the walking-range proximity to fare media outlets. The map also depicts low-income and minority hotspots, where there is a high incidence of low-income populations (green area), minority populations (pink area), or both populations (blue area).

The three locations GoRaleigh has selected to install TVMs are major hub and minor hub locations, where multiple bus routes converge. Major hub locations are designated by more than five bus routes converging at a nexus point and minor hub locations are designated by more than three bus routes converging at a nexus point. Additionally, GoRaleigh Station is situated in a minority and low-income hot spot, and GoRaleigh's Operations' office is located on the border of a minority hotspot. GoRaleigh's TVM site selections offer minority and low-income populations the best opportunity to reach these locations via bus, with some additional opportunities to reach them by foot, bicycle or wheelchair.

#### Impacts of Smartcard Fare System

GoRaleigh's smartcard implementation will provide its ridership with additional opportunities for purchasing bus passes. No subtractions or removals of existing fare media types or locations will occur. Some riders may prefer smartcards as bus pass media because they enable bus boarding and point-ofpurchase time-savings. Other riders may prefer cash and existing bus pass media because it is familiar to them. GoRaleigh's use of multiple media, allows individuals to choose the medium that makes the most sense for their needs. No disparate impact or disproportionate burden will result from GoRaleigh's implementation of smartcard fare media. Additionally, all three of the initial TVMs locations will be at GoRaleigh hub locations, making them accessible via bus, and two of the three TVM locations will be situated in or adjacent to Title VI hotspots, making them increasingly accessible to Title VI populations living in the area around these hub locations. Thus, the location of TVMs will not adversely affect equitable access for Title VI populations. A summary of these findings is given in Table 6.



	Fare Type	Change in Fare Media Purchase Options	Disparate Impact?	Disproportionate Burden?
	Cash Fare	Can still use cash	No	No
OCAL	Local Day Pass	More purchase options	No	No
PO	Local 7-Day Pass	More purchase options	No	No
	Local 31-Day Pass	More purchase options	No	No
AL	Regional Day Pass	More purchase options	No	No
GIONAL	Regional 7-Day Pass	More purchase options	No	No
REG	Regional 31-Day Pass	More purchase options	No	No
SS	Express Day Pass	More purchase options	No	No
EXPRESS	Express 7-Day Pass	More purchase options	No	No
â	Express 31-Day Pass	More purchase options	No	No
с.	Stored Value Card	More purchase options	No	No
OTHER	GoPass (university)	Eligible riders can still obtain	No	No
Ö	GoPass (other)	Eligible riders can still obtain	No	No

#### **Table 6: Summary of Title VI Impacts**

## Mitigation and Enhancement Opportunities

Although no disparate impacts or disproportionate burdens will result from smartcard implementation and TVM installation, GoRaleigh has opportunities to provide enhancements and continue to ensure Title VI populations have equitable access to fare purchasing.

#### Location of Future TVMs

Currently, GoRaleigh has selected to install TVMs in three locations that are highly accessible to all of its ridership. This practice should be continued if GoRaleigh decides to install additional TVMs in the future. Low-income and minority hotspot areas proximate to hub locations or other purchasing outlets can be considered in site selection for TVMs. The map illustrates that GoRaleigh has planned to install TMVs at locations that already meet these conditions. If GoRaleigh continues to add TVMs in the future this type of mapping can be used to help identify other optimal site locations. Another opportunity to enhance purchasing access via TVMs or direct purchase would be to consider partners in addition to Harris Teeter that may have additional locations within or adjacent to identified hotspots.

#### Smartcard Fee

There is a one-time \$2 cost of purchasing a new smartcard, or replacing a smartcard if it is lost. Although GoRaleigh's ridership does not need to use smartcards and can continue to use the existing fare media, riders may prefer smartcards but not desire to pay the one-time fee. While the fee is relatively low, especially spread out over the course of a week, month, or year, it should be considered and GoRaleigh has the opportunity to take mitigating measures for low-income and minority populations. GoRaleigh is currently proposing to provide the first 10,000 smartcards free of charge to riders to encourage smartcard adoption. This strategy could be targeted to Title VI populations in whole or in part. Some mitigating options are shown below:

- Upfront distribution of free/discounted smartcards to Title VI populations. During the initial phases of TVM implementation GoRaleigh may opt to target the provision of some portion of the free or discounted smartcards to minority and low-income populations. GoRaleigh currently employs this method for day passes by enlisting social service agencies, non-profits, and other organizations to distribute them. This technique could be applied to smartcards
- Eligibility to waive the \$2 one-time fee for Title VI populations. Similar to GoRaleigh Access where individuals apply to be eligible for GoRaleigh's paratransit services, an approach could be taken for Title VI populations to apply for eligibility to have the \$2 one-time fee waived.

## Conclusion

GoRaleigh is planning to introduce smartcards, a new type of fare media into its system. Smartcards will be sold through TVMs and may enable time savings for boarding buses and paying for passes. GoRaleigh will continue to accept all forms of existing fare media. Smartcards are an add-on service aimed to provide more fare purchase options for GoRaleigh ridership.

In preparation for the implementation of smartcards and TVMs, GoRaleigh has conducted a fare equity analysis in order to ensure that the proposed changes do not result in a disparate impact on the basis of race, ethnicity, or national origin or a disproportionate burden on low-income households. The findings of this fare equity analysis show that neither a disproportionate burden on low-income riders nor a disparate impact on minority riders will occur.

Although there will be no disparate or disproportionate impacts to minority and low-income populations, opportunity is available to mitigate the one-time \$2 fee through targeted distribution of the initial 10,000 smartcards or fee waiver. Additionally, Title VI populations should continue to be considered in decision-making for deployment of future TVMs. Nexus points in GoRaleigh's transit network proximate to Title VI population hotspots have been identified as potential recommended TVM locations.

# Appendix A – Census Data

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 501	3,575	1533	42.9%	1365	371	27.2%
BG 1, CT 503	1,391	117	8.4%	845	178	21.1%
BG 2, CT 503	1,236	538	43.5%	1021	550	53.9%
BG 1, CT 504	971	42	4.3%	469	44	9.4%
BG 2, CT 504	800	323	40.4%	276	119	43.1%
BG 1, CT 505	1,258	238	18.9%	717	184	25.7%
BG 2, CT 505	1,581	781	49.4%	705	215	30.5%
BG 3, CT 505	897	224	25.0%	334	73	21.9%
BG 1, CT 506	2,022	1455	72.0%	322	145	45.0%
BG 2, CT 506	877	808	92.1%	320	158	49.4%
BG 3, CT 506	1,049	482	45.9%	485	171	35.3%
BG 1, CT 507	1,257	1033	82.2%	483	251	52.0%
BG 2, CT 507	916	706	77.1%	371	199	53.6%
BG 3, CT 507	1,337	1156	86.5%	577	204	35.4%
BG 1, CT 508	995	896	90.1%	413	302	73.1%
BG 2, CT 508	1,165	751	64.5%	393	190	48.3%
BG 3, CT 508	2,368	1287	54.3%	134	64	47.8%
BG 1, CT 509	1,541	1193	77.4%	265	156	58.9%
BG 2, CT 509	835	698	83.6%	211	166	78.7%
BG 3, CT 509	482	459	95.2%	229	146	63.8%
BG 1, CT 510	1,299	365	28.1%	838	293	35.0%
BG 2, CT 510	1,003	103	10.3%	442	96	21.7%
BG 1, CT 511.01	3,622	690	19.1%	0	0	n/a
BG 2, CT 511.01	1,478	1009	68.3%	537	232	43.2%
BG 3, CT 511.01	419	146	34.8%	5	0	0.0%
BG 1, CT 511.02	402	117	29.1%	0	0	n/a
BG 2, CT 511.02	3,133	695	22.2%	0	0	n/a
BG 3, CT 511.02	775	529	68.3%	45	30	66.7%
BG 1, CT 512	1,024	27	2.6%	669	134	20.0%
BG 2, CT 512	1,186	218	18.4%	613	98	16.0%
BG 3, CT 512	1,685	263	15.6%	612	339	55.4%
BG 1, CT 514	476	0	0.0%	288	61	21.2%
BG 2, CT 514	1,118	117	10.5%	449	220	49.0%
BG 3, CT 514	1,505	319	21.2%	599	115	19.2%
BG 4, CT 514	913	122	13.4%	314	106	33.8%
BG 5, CT 514	1,057	246	23.3%	473	222	46.9%
BG 1, CT 515.01	1,308	33	2.5%	681	103	15.1%
BG 2, CT 515.01	1,697	178	10.5%	659	56	8.5%

## Wake County Census Block Data for Title VI Populations

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 515.02	873	424	48.6%	327	100	30.6%
BG 2, CT 515.02	1,792	67	3.7%	711	47	6.6%
BG 1, CT 516	888	26	2.9%	413	18	4.4%
BG 2, CT 516	1,085	0	0.0%	433	58	13.4%
BG 3, CT 516	1,070	32	3.0%	485	53	10.9%
BG 4, CT 516	647	0	0.0%	236	19	8.1%
BG 5, CT 516	1,039	55	5.3%	322	19	5.9%
BG 1, CT 517	1,248	14	1.1%	405	44	10.9%
BG 2, CT 517	1,137	36	3.2%	467	27	5.8%
BG 3, CT 517	832	28	3.4%	328	18	5.5%
BG 1, CT 518	1,090	72	6.6%	600	141	23.5%
BG 2, CT 518	1,696	48	2.8%	664	0	0.0%
BG 3, CT 518	1,979	647	32.7%	934	148	15.8%
BG 1, CT 519	1,424	726	51.0%	687	122	17.8%
BG 2, CT 519	2,232	1639	73.4%	801	313	39.1%
BG 3, CT 519	1,401	1082	77.2%	536	209	39.0%
BG 1, CT 520.01	2,681	1443	53.8%	953	444	46.6%
BG 2, CT 520.01	1,839	1230	66.9%	633	303	47.9%
BG 1, CT 520.02	1,027	969	94.4%	439	149	33.9%
BG 2, CT 520.02	2,040	1535	75.2%	542	216	39.9%
BG 3, CT 520.02	1,386	1365	98.5%	454	134	29.5%
BG 4, CT 520.02	731	655	89.6%	272	129	47.4%
BG 1, CT 521.01	3,922	3103	79.1%	1235	340	27.5%
BG 2, CT 521.01	1,017	977	96.1%	455	151	33.2%
BG 3, CT 521.01	1,344	1179	87.7%	526	311	59.1%
BG 4, CT 521.01	1,330	1321	99.3%	429	146	34.0%
BG 1, CT 521.02	4,532	3917	86.4%	1537	430	28.0%
BG 2, CT 521.02	1,523	1176	77.2%	456	192	42.1%
BG 1, CT 523.01	1,348	251	18.6%	795	150	18.9%
BG 2, CT 523.01	2,457	926	37.7%	1008	301	29.9%
BG 3, CT 523.01	2,666	902	33.8%	1168	384	32.9%
BG 1, CT 523.02	1,099	586	53.3%	473	266	56.2%
BG 2, CT 523.02	2,968	508	17.1%	943	369	39.1%
BG 3, CT 523.02	3,676	1593	43.3%	1297	483	37.2%
BG 1, CT 524.01	3,121	928	29.7%	1546	296	19.1%
BG 2, CT 524.01	983	285	29.0%	0	0	n/a
BG 1, CT 524.04	2,196	302	13.8%	766	117	15.3%
BG 2, CT 524.04	1,402	496	35.4%	464	183	39.4%
BG 3, CT 524.04	968	371	38.3%	307	31	10.1%
BG 1, CT 524.06	1,780	712	40.0%	827	238	28.8%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 2, CT 524.06	2,413	1292	53.5%	1064	421	39.6%
BG 3, CT 524.06	2,829	1158	40.9%	1300	278	21.4%
BG 1, CT 524.07	1,865	619	33.2%	982	426	43.4%
BG 2, CT 524.07	1,963	655	33.4%	797	228	28.6%
BG 1, CT 524.08	1,250	683	54.6%	414	227	54.8%
BG 2, CT 524.08	1,569	437	27.9%	710	334	47.0%
BG 1, CT 524.09	526	377	71.7%	286	152	53.1%
BG 2, CT 524.09	1,249	567	45.4%	143	73	51.0%
BG 3, CT 524.09	2,548	1082	42.5%	858	301	35.1%
BG 1, CT 525.03	1,823	542	29.7%	915	129	14.1%
BG 2, CT 525.03	3,179	431	13.6%	1397	52	3.7%
BG 3, CT 525.03	1,386	182	13.1%	734	104	14.2%
BG 1, CT 525.04	2,760	430	15.6%	953	303	31.8%
BG 2, CT 525.04	1,023	101	9.9%	541	49	9.1%
BG 3, CT 525.04	1,752	210	12.0%	1014	112	11.0%
BG 1, CT 525.05	3,039	326	10.7%	1264	197	15.6%
BG 2, CT 525.05	2,438	1135	46.6%	1100	154	14.0%
BG 1, CT 525.06	1,270	60	4.7%	618	62	10.0%
BG 2, CT 525.06	678	163	24.0%	375	104	27.7%
BG 1, CT 525.07	718	102	14.2%	349	50	14.3%
BG 2, CT 525.07	2,421	649	26.8%	978	177	18.1%
BG 1, CT 526.01	1,974	276	14.0%	744	45	6.0%
BG 2, CT 526.01	1,005	69	6.9%	462	34	7.4%
BG 1, CT 526.02	1,836	398	21.7%	688	94	13.7%
BG 2, CT 526.02	967	46	4.8%	494	43	8.7%
BG 3, CT 526.02	1,361	357	26.2%	720	310	43.1%
BG 1, CT 526.03	1,464	198	13.5%	589	53	9.0%
BG 2, CT 526.03	1,278	241	18.9%	572	90	15.7%
BG 1, CT 527.01	2,391	680	28.4%	893	162	18.1%
BG 2, CT 527.01	1,746	734	42.0%	789	70	8.9%
BG 3, CT 527.01	1,610	1135	70.5%	571	223	39.1%
BG 1, CT 527.04	2,989	2095	70.1%	988	435	44.0%
BG 2, CT 527.04	2,093	1767	84.4%	790	402	50.9%
BG 3, CT 527.04	2,032	1097	54.0%	857	220	25.7%
BG 1, CT 527.05	1,626	660	40.6%	665	122	18.3%
BG 2, CT 527.05	2,793	658	23.6%	1212	210	17.3%
BG 1, CT 527.06	1,791	919	51.3%	696	104	14.9%
BG 2, CT 527.06	1,274	594	46.6%	507	159	31.4%
BG 3, CT 527.06	1,357	443	32.6%	399	29	7.3%
BG 1, CT 527.07	1,050	196	18.7%	457	24	5.3%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 2, CT 527.07	1,407	481	34.2%	593	119	20.1%
BG 3, CT 527.07	4,184	2179	52.1%	1392	329	23.6%
BG 1, CT 528.01	1,579	317	20.1%	547	18	3.3%
BG 2, CT 528.01	1,683	207	12.3%	628	55	8.8%
BG 3, CT 528.01	2,442	1274	52.2%	818	29	3.5%
BG 4, CT 528.01	768	22	2.9%	256	42	16.4%
BG 5, CT 528.01	545	205	37.6%	263	146	55.5%
BG 1, CT 528.02	1,985	1000	50.4%	787	55	7.0%
BG 2, CT 528.02	1,275	827	64.9%	546	282	51.6%
BG 3, CT 528.02	1,467	319	21.7%	498	32	6.4%
BG 4, CT 528.02	1,723	492	28.6%	579	68	11.7%
BG 1, CT 528.03	2,543	1113	43.8%	1060	310	29.2%
BG 2, CT 528.03	2,097	1778	84.8%	747	185	24.8%
BG 3, CT 528.03	5,534	5017	90.7%	1674	358	21.4%
BG 1, CT 528.06	578	488	84.4%	257	30	11.7%
BG 2, CT 528.06	4,303	3332	77.4%	1287	120	9.3%
BG 3, CT 528.06	4,879	2561	52.5%	1135	247	21.8%
BG 4, CT 528.06	7,028	5933	84.4%	2639	311	11.8%
BG 1, CT 528.07	2,406	1018	42.3%	889	60	6.7%
BG 2, CT 528.07	3,156	1870	59.3%	1017	147	14.5%
BG 1, CT 528.08	1,269	279	22.0%	577	76	13.2%
BG 2, CT 528.08	3,770	1800	47.7%	1434	436	30.4%
BG 3, CT 528.08	1,775	321	18.1%	742	29	3.9%
BG 4, CT 528.08	2,510	1046	41.7%	1053	84	8.0%
BG 1, CT 528.09	1,125	353	31.4%	380	57	15.0%
BG 2, CT 528.09	2,037	529	26.0%	625	100	16.0%
BG 1, CT 529.01	2,345	302	12.9%	887	134	15.1%
BG 1, CT 529.02	3,228	364	11.3%	1187	122	10.3%
BG 2, CT 529.02	2,495	619	24.8%	951	117	12.3%
BG 1, CT 529.03	2,981	611	20.5%	1113	122	11.0%
BG 1, CT 529.04	2,850	605	21.2%	1050	104	9.9%
BG 2, CT 529.04	2,851	464	16.3%	1002	163	16.3%
BG 3, CT 529.04	1,778	270	15.2%	699	27	3.9%
BG 1, CT 530.03	5,220	1770	33.9%	2379	423	17.8%
BG 2, CT 530.03	1,324	203	15.3%	501	0	0.0%
BG 1, CT 530.04	1,442	204	14.1%	700	104	14.9%
BG 2, CT 530.04	1,215	242	19.9%	429	11	2.6%
BG 1, CT 530.05	748	129	17.2%	321	10	3.1%
BG 2, CT 530.05	2,055	186	9.1%	696	37	5.3%
BG 3, CT 530.05	2,188	304	13.9%	741	27	3.6%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 530.06	3,014	209	6.9%	1090	84	7.7%
BG 1, CT 530.07	1,228	209	17.0%	477	31	6.5%
BG 2, CT 530.07	1,860	67	3.6%	703	16	2.3%
BG 1, CT 530.08	4,168	1550	37.2%	1896	264	13.9%
BG 2, CT 530.08	1,834	668	36.4%	620	67	10.8%
BG 3, CT 530.08	1,577	360	22.8%	730	90	12.3%
BG 4, CT 530.08	897	0	0.0%	332	0	0.0%
BG 1, CT 530.09	2,208	821	37.2%	845	97	11.5%
BG 2, CT 530.09	3,442	792	23.0%	1246	273	21.9%
BG 3, CT 530.09	809	25	3.1%	363	62	17.1%
BG 4, CT 530.09	1,615	383	23.7%	452	81	17.9%
BG 1, CT 531.05	3,966	729	18.4%	1467	261	17.8%
BG 1, CT 531.06	3,637	1676	46.1%	1320	265	20.1%
BG 1, CT 531.07	2,961	758	25.6%	1016	47	4.6%
BG 2, CT 531.07	3,662	1070	29.2%	1194	345	28.9%
BG 3, CT 531.07	4,125	1149	27.9%	1448	277	19.1%
BG 1, CT 531.08	2,063	147	7.1%	694	102	14.7%
BG 2, CT 531.08	5,038	817	16.2%	1723	108	6.3%
BG 1, CT 531.09	6,349	1088	17.1%	2102	187	8.9%
BG 2, CT 531.09	2,357	388	16.5%	861	201	23.3%
BG 1, CT 531.10	2,270	546	24.1%	800	106	13.3%
BG 2, CT 531.10	2,019	208	10.3%	672	53	7.9%
BG 3, CT 531.10	1,300	83	6.4%	468	70	15.0%
BG 1, CT 531.11	1,928	319	16.5%	614	103	16.8%
BG 2, CT 531.11	2,095	395	18.9%	806	61	7.6%
BG 3, CT 531.11	2,011	597	29.7%	691	296	42.8%
BG 1, CT 532.01	6,883	1180	17.1%	2135	25	1.2%
BG 2, CT 532.01	5,301	580	10.9%	1766	72	4.1%
BG 1, CT 532.02	2,432	293	12.0%	733	15	2.0%
BG 2, CT 532.02	2,241	186	8.3%	731	32	4.4%
BG 1, CT 532.03	3,741	1180	31.5%	1253	71	5.7%
BG 2, CT 532.03	4,010	642	16.0%	1247	152	12.2%
BG 1, CT 532.04	2,576	705	27.4%	945	124	13.1%
BG 2, CT 532.04	2,317	884	38.2%	822	43	5.2%
BG 1, CT 532.05	1,944	331	17.0%	677	102	15.1%
BG 1, CT 532.06	4,306	1409	32.7%	1488	237	15.9%
BG 1, CT 532.07	2,451	269	11.0%	779	71	9.1%
BG 2, CT 532.07	5,452	724	13.3%	1780	39	2.2%
BG 1, CT 534.05	1,343	208	15.5%	447	9	2.0%
BG 2, CT 534.05	2,415	325	13.5%	824	28	3.4%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 3, CT 534.05	1,049	156	14.9%	497	51	10.3%
BG 1, CT 534.08	2,718	1021	37.6%	890	13	1.5%
BG 2, CT 534.08	1,727	196	11.3%	516	25	4.8%
BG 1, CT 534.09	1,720	482	28.0%	498	16	3.2%
BG 2, CT 534.09	2,773	469	16.9%	874	33	3.8%
BG 3, CT 534.09	2,723	1091	40.1%	855	49	5.7%
BG 1, CT 534.10	5,315	2221	41.8%	1705	58	3.4%
BG 1, CT 534.11	2,850	1448	50.8%	989	26	2.6%
BG 2, CT 534.11	4,382	715	16.3%	1315	22	1.7%
BG 1, CT 534.12	3,827	267	7.0%	1312	106	8.1%
BG 2, CT 534.12	543	68	12.5%	199	0	0.0%
BG 3, CT 534.12	2,432	1071	44.0%	728	17	2.3%
BG 1, CT 534.13	4,631	764	16.5%	1401	143	10.2%
BG 2, CT 534.13	1,140	232	20.4%	457	53	11.6%
BG 1, CT 534.14	4,563	229	5.0%	1510	116	7.7%
BG 2, CT 534.14	4,032	1314	32.6%	1420	214	15.1%
BG 1, CT 534.15	3,450	889	25.8%	1067	46	4.3%
BG 1, CT 534.16	2,079	478	23.0%	836	81	9.7%
BG 2, CT 534.16	3,261	904	27.7%	1141	90	7.9%
BG 3, CT 534.16	1,087	424	39.0%	316	44	13.9%
BG 1, CT 534.17	2,995	1105	36.9%	1033	185	17.9%
BG 1, CT 534.18	2,279	481	21.1%	771	40	5.2%
BG 2, CT 534.18	1,479	342	23.1%	698	212	30.4%
BG 3, CT 534.18	2,387	396	16.6%	811	66	8.1%
BG 1, CT 534.19	1,148	68	5.9%	354	0	0.0%
BG 2, CT 534.19	1,829	130	7.1%	677	37	5.5%
BG 1, CT 534.20	1,941	354	18.2%	724	105	14.5%
BG 2, CT 534.20	4,280	914	21.4%	1500	241	16.1%
BG 1, CT 534.21	5,350	1019	19.0%	1830	129	7.0%
BG 1, CT 534.22	1,857	341	18.4%	650	27	4.2%
BG 2, CT 534.22	659	34	5.2%	212	0	0.0%
BG 1, CT 534.23	1,267	156	12.3%	564	53	9.4%
BG 2, CT 534.23	808	64	7.9%	343	33	9.6%
BG 1, CT 534.24	2,435	645	26.5%	909	39	4.3%
BG 2, CT 534.24	2,144	585	27.3%	684	20	2.9%
BG 1, CT 534.25	1,738	409	23.5%	572	38	6.6%
BG 2, CT 534.25	1,179	846	71.8%	404	45	11.1%
BG 1, CT 535.05	1,493	60	4.0%	518	3	0.6%
BG 2, CT 535.05	1,050	220	21.0%	396	22	5.6%
BG 3, CT 535.05	1,078	168	15.6%	503	55	10.9%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 535.06	699	18	2.6%	319	90	28.2%
BG 2, CT 535.06	762	158	20.7%	364	14	3.8%
BG 3, CT 535.06	1,503	107	7.1%	645	53	8.2%
BG 4, CT 535.06	2,246	248	11.0%	984	173	17.6%
BG 1, CT 535.07	654	70	10.7%	309	64	20.7%
BG 2, CT 535.07	1,929	707	36.7%	793	268	33.8%
BG 3, CT 535.07	1,507	242	16.1%	587	42	7.2%
BG 1, CT 535.09	1,225	150	12.2%	494	47	9.5%
BG 2, CT 535.09	2,035	295	14.5%	754	37	4.9%
BG 3, CT 535.09	1,984	307	15.5%	635	39	6.1%
BG 1, CT 535.12	3,387	1125	33.2%	1258	88	7.0%
BG 2, CT 535.12	1,915	341	17.8%	967	75	7.8%
BG 3, CT 535.12	759	145	19.1%	526	170	32.3%
BG 1, CT 535.13	2,026	804	39.7%	976	176	18.0%
BG 2, CT 535.13	2,100	620	29.5%	744	204	27.4%
BG 1, CT 535.16	2,723	1203	44.2%	1038	270	26.0%
BG 2, CT 535.16	1,311	475	36.2%	408	20	4.9%
BG 1, CT 535.17	3,253	1372	42.2%	787	215	27.3%
BG 2, CT 535.17	684	122	17.8%	255	49	19.2%
BG 3, CT 535.17	911	259	28.4%	336	38	11.3%
BG 4, CT 535.17	502	161	32.1%	189	34	18.0%
BG 1, CT 535.18	1,436	155	10.8%	609	69	11.3%
BG 2, CT 535.18	1,491	27	1.8%	559	52	9.3%
BG 3, CT 535.18	785	20	2.5%	374	24	6.4%
BG 1, CT 535.19	1,592	458	28.8%	724	78	10.8%
BG 2, CT 535.19	1,500	321	21.4%	698	170	24.4%
BG 3, CT 535.19	1,604	982	61.2%	500	181	36.2%
BG 1, CT 535.20	1,756	548	31.2%	720	28	3.9%
BG 2, CT 535.20	2,608	1103	42.3%	1128	321	28.5%
BG 3, CT 535.20	1,603	928	57.9%	555	125	22.5%
BG 1, CT 535.21	2,255	528	23.4%	797	27	3.4%
BG 2, CT 535.21	1,537	214	13.9%	570	69	12.1%
BG 1, CT 535.22	2,092	532	25.4%	805	85	10.6%
BG 2, CT 535.22	3,641	2186	60.0%	1427	85	6.0%
BG 1, CT 535.23	2,544	772	30.3%	1009	51	5.1%
BG 2, CT 535.23	3,232	972	30.1%	1187	102	8.6%
BG 1, CT 535.24	1,528	286	18.7%	836	209	25.0%
BG 2, CT 535.24	2,201	437	19.9%	736	40	5.4%
BG 1, CT 535.25	902	158	17.5%	313	20	6.4%
BG 2, CT 535.25	1,562	185	11.8%	612	10	1.6%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 536.01	3,513	2076	59.1%	1420	151	10.6%
BG 2, CT 536.01	3,428	1259	36.7%	1025	42	4.1%
BG 3, CT 536.01	2,012	961	47.8%	778	55	7.1%
BG 1, CT 536.02	5,551	3502	63.1%	1722	16	0.9%
BG 1, CT 536.03	4,287	1280	29.9%	1635	138	8.4%
BG 1, CT 536.04	2,084	742	35.6%	576	19	3.3%
BG 2, CT 536.04	2,382	630	26.4%	871	78	9.0%
BG 1, CT 536.05	2,079	735	35.4%	703	16	2.3%
BG 1, CT 536.06	1,772	760	42.9%	866	100	11.5%
BG 2, CT 536.06	700	100	14.3%	262	8	3.1%
BG 1, CT 536.07	8,714	5041	57.8%	3100	273	8.8%
BG 1, CT 536.08	3,381	1870	55.3%	1242	64	5.2%
BG 1, CT 536.09	706	339	48.0%	366	32	8.7%
BG 1, CT 536.10	7,043	3067	43.5%	3508	371	10.6%
BG 2, CT 536.10	2,798	649	23.2%	1685	87	5.2%
BG 1, CT 537.07	1,689	38	2.2%	833	44	5.3%
BG 2, CT 537.07	2,358	681	28.9%	996	141	14.2%
BG 3, CT 537.07	2,333	876	37.5%	1470	198	13.5%
BG 1, CT 537.09	1,577	588	37.3%	766	50	6.5%
BG 2, CT 537.09	2,646	967	36.5%	1557	378	24.3%
BG 3, CT 537.09	2,842	592	20.8%	1322	88	6.7%
BG 1, CT 537.11	2,070	270	13.0%	754	21	2.8%
BG 2, CT 537.11	1,798	165	9.2%	577	56	9.7%
BG 3, CT 537.11	1,732	564	32.6%	881	130	14.8%
BG 1, CT 537.12	1,590	387	24.3%	670	33	4.9%
BG 2, CT 537.12	1,238	24	1.9%	452	18	4.0%
BG 1, CT 537.13	2,276	826	36.3%	1160	205	17.7%
BG 2, CT 537.13	1,574	570	36.2%	789	120	15.2%
BG 1, CT 537.14	1,562	108	6.9%	601	95	15.8%
BG 2, CT 537.14	2,141	750	35.0%	951	171	18.0%
BG 3, CT 537.14	893	258	28.9%	467	70	15.0%
BG 1, CT 537.15	1,705	389	22.8%	751	123	16.4%
BG 2, CT 537.15	1,746	245	14.0%	699	38	5.4%
BG 1, CT 537.16	937	168	17.9%	566	127	22.4%
BG 2, CT 537.16	1,088	234	21.5%	448	37	8.3%
BG 3, CT 537.16	1,828	1126	61.6%	930	188	20.2%
BG 1, CT 537.17	2,591	804	31.0%	1182	73	6.2%
BG 1, CT 537.18	3,357	447	13.3%	1156	58	5.0%
BG 1, CT 537.19	2,019	220	10.9%	763	74	9.7%
BG 2, CT 537.19	2,044	185	9.1%	593	14	2.4%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 537.20	1,139	116	10.2%	370	29	7.8%
BG 2, CT 537.20	1,070	105	9.8%	396	14	3.5%
BG 3, CT 537.20	1,916	331	17.3%	603	34	5.6%
BG 1, CT 537.21	1,824	324	17.8%	704	52	7.4%
BG 2, CT 537.21	1,561	69	4.4%	592	17	2.9%
BG 1, CT 537.22	1,280	99	7.7%	744	207	27.8%
BG 2, CT 537.22	1,688	269	15.9%	793	147	18.5%
BG 3, CT 537.22	878	116	13.2%	400	13	3.3%
BG 4, CT 537.22	761	76	10.0%	357	41	11.5%
BG 1, CT 537.23	1,551	350	22.6%	772	61	7.9%
BG 2, CT 537.23	1,837	301	16.4%	756	53	7.0%
BG 1, CT 537.24	6,488	1590	24.5%	2672	341	12.8%
BG 1, CT 537.25	2,411	454	18.8%	1095	103	9.4%
BG 2, CT 537.25	2,736	778	28.4%	1285	82	6.4%
BG 1, CT 537.26	2,527	1351	53.5%	975	211	21.6%
BG 2, CT 537.26	850	211	24.8%	420	32	7.6%
BG 1, CT 538.03	2,425	165	6.8%	830	81	9.8%
BG 2, CT 538.03	1,541	381	24.7%	467	25	5.4%
BG 1, CT 538.04	3,510	310	8.8%	1218	47	3.9%
BG 1, CT 538.05	1,304	137	10.5%	422	22	5.2%
BG 2, CT 538.05	678	8	1.2%	258	19	7.4%
BG 1, CT 538.06	2,237	113	5.1%	788	35	4.4%
BG 2, CT 538.06	985	89	9.0%	382	10	2.6%
BG 1, CT 538.07	1,985	270	13.6%	735	19	2.6%
BG 2, CT 538.07	1,871	129	6.9%	713	25	3.5%
BG 1, CT 538.08	991	55	5.5%	383	0	0.0%
BG 2, CT 538.08	1,324	122	9.2%	500	10	2.0%
BG 3, CT 538.08	2,268	253	11.2%	764	64	8.4%
BG 4, CT 538.08	680	154	22.6%	252	8	3.2%
BG 1, CT 539	923	87	9.4%	373	34	9.1%
BG 2, CT 539	2,427	130	5.4%	767	51	6.6%
BG 3, CT 539	1,567	177	11.3%	614	188	30.6%
BG 4, CT 539	3,313	322	9.7%	1038	34	3.3%
BG 1, CT 540.01	1,618	164	10.1%	854	101	11.8%
BG 2, CT 540.01	1,785	474	26.6%	770	102	13.2%
BG 3, CT 540.01	1,743	964	55.3%	952	406	42.6%
BG 1, CT 540.04	1,471	132	9.0%	759	97	12.8%
BG 2, CT 540.04	1,139	407	35.7%	549	180	32.8%
BG 3, CT 540.04	1,229	681	55.4%	505	53	10.5%
BG 4, CT 540.04	1,563	660	42.2%	474	110	23.2%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 1, CT 540.06	2,367	1036	43.8%	908	297	32.7%
BG 2, CT 540.06	1,019	49	4.8%	406	11	2.7%
BG 1, CT 540.07	1,935	548	28.3%	982	141	14.4%
BG 2, CT 540.07	2,024	562	27.8%	835	99	11.9%
BG 1, CT 540.08	1,121	553	49.3%	444	20	4.5%
BG 2, CT 540.08	3,138	2060	65.6%	1162	325	28.0%
BG 3, CT 540.08	1,293	972	75.2%	465	140	30.1%
BG 4, CT 540.08	1,298	789	60.8%	487	193	39.6%
BG 1, CT 540.11	1,669	177	10.6%	597	63	10.6%
BG 2, CT 540.11	1,240	201	16.2%	481	26	5.4%
BG 1, CT 540.12	1,587	332	20.9%	602	49	8.1%
BG 2, CT 540.12	1,123	182	16.2%	448	19	4.2%
BG 3, CT 540.12	1,238	214	17.3%	391	0	0.0%
BG 1, CT 540.13	5,844	1157	19.8%	2193	113	5.2%
BG 2, CT 540.13	2,405	402	16.7%	1024	48	4.7%
BG 3, CT 540.13	1,354	375	27.7%	617	53	8.6%
BG 4, CT 540.13	3,718	558	15.0%	1288	141	10.9%
BG 1, CT 540.14	8,548	4876	57.0%	3099	455	14.7%
BG 2, CT 540.14	2,443	1365	55.9%	722	188	26.0%
BG 3, CT 540.14	2,724	1082	39.7%	946	336	35.5%
BG 1, CT 540.15	2,501	1114	44.5%	944	99	10.5%
BG 1, CT 540.16	985	254	25.8%	435	36	8.3%
BG 2, CT 540.16	2,401	657	27.4%	931	122	13.1%
BG 3, CT 540.16	2,368	124	5.2%	1026	51	5.0%
BG 1, CT 540.17	3,052	1137	37.3%	1225	223	18.2%
BG 1, CT 540.18	1,397	954	68.3%	600	227	37.8%
BG 2, CT 540.18	2,276	1612	70.8%	1206	418	34.7%
BG 1, CT 541.04	1,700	809	47.6%	763	106	13.9%
BG 2, CT 541.04	2,485	809	32.6%	843	177	21.0%
BG 3, CT 541.04	5,032	3643	72.4%	1435	154	10.7%
BG 4, CT 541.04	1,642	908	55.3%	542	35	6.5%
BG 1, CT 541.05	2,899	1820	62.8%	1147	84	7.3%
BG 2, CT 541.05	2,831	1106	39.1%	1061	58	5.5%
BG 3, CT 541.05	3,276	1268	38.7%	1548	177	11.4%
BG 4, CT 541.05	2,853	1164	40.8%	1145	219	19.1%
BG 5, CT 541.05	747	396	53.0%	216	0	0.0%
BG 1, CT 541.06	1,559	994	63.8%	506	98	19.4%
BG 2, CT 541.06	1,890	1069	56.6%	731	160	21.9%
BG 3, CT 541.06	4,725	3652	77.3%	1570	149	9.5%
BG 1, CT 541.08	2,241	1158	51.7%	818	165	20.2%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 2, CT 541.08	3,229	1763	54.6%	983	73	7.4%
BG 3, CT 541.08	1,338	717	53.6%	475	102	21.5%
BG 1, CT 541.09	2,065	901	43.6%	684	18	2.6%
BG 2, CT 541.09	1,782	467	26.2%	634	121	19.1%
BG 1, CT 541.10	2,236	1111	49.7%	744	0	0.0%
BG 2, CT 541.10	4,759	1823	38.3%	1635	166	10.2%
BG 3, CT 541.10	2,229	792	35.5%	887	35	3.9%
BG 1, CT 541.11	1,994	596	29.9%	734	113	15.4%
BG 1, CT 541.12	3,957	1974	49.9%	1304	225	17.3%
BG 1, CT 541.13	1,084	353	32.6%	387	69	17.8%
BG 2, CT 541.13	1,491	592	39.7%	648	54	8.3%
BG 1, CT 541.14	2,652	922	34.8%	959	26	2.7%
BG 2, CT 541.14	2,278	984	43.2%	718	103	14.3%
BG 1, CT 541.15	1,483	225	15.2%	389	0	0.0%
BG 2, CT 541.15	2,616	1277	48.8%	1222	173	14.2%
BG 3, CT 541.15	2,560	1428	55.8%	853	78	9.1%
BG 4, CT 541.15	1,444	496	34.3%	549	67	12.2%
BG 1, CT 542.03	3,672	431	11.7%	1192	54	4.5%
BG 1, CT 542.04	2,631	455	17.3%	836	133	15.9%
BG 2, CT 542.04	2,179	525	24.1%	882	159	18.0%
BG 1, CT 542.05	2,622	782	29.8%	1020	271	26.6%
BG 2, CT 542.05	2,285	659	28.8%	857	275	32.1%
BG 1, CT 542.06	5,095	653	12.8%	1841	354	19.2%
BG 2, CT 542.06	796	118	14.8%	295	37	12.5%
BG 1, CT 542.07	8,766	2203	25.1%	3166	184	5.8%
BG 1, CT 542.08	7,078	1140	16.1%	2685	434	16.2%
BG 1, CT 542.09	5,098	2569	50.4%	1991	148	7.4%
BG 2, CT 542.09	4,762	1212	25.5%	1300	13	1.0%
BG 1, CT 542.10	2,131	212	9.9%	789	177	22.4%
BG 2, CT 542.10	3,889	1228	31.6%	1469	159	10.8%
BG 3, CT 542.10	3,658	709	19.4%	1200	39	3.3%
BG 1, CT 542.11	1,715	70	4.1%	723	137	18.9%
BG 2, CT 542.11	9,070	1649	18.2%	2852	158	5.5%
BG 1, CT 543.01	1,386	853	61.5%	498	74	14.9%
BG 2, CT 543.01	1,354	77	5.7%	463	143	30.9%
BG 3, CT 543.01	1,934	437	22.6%	625	79	12.6%
BG 4, CT 543.01	1,128	257	22.8%	429	57	13.3%
BG 1, CT 543.02	1,155	618	53.5%	359	86	24.0%
BG 2, CT 543.02	899	273	30.4%	359	46	12.8%
BG 3, CT 543.02	2,100	803	38.2%	765	69	9.0%

Census Tract (CT) and Block Group (BG)	Total Population	Minority Population	Minority Hotspot* Locations	Total No. of Households	Households earning <\$24,999	150% Poverty Hotspot* Locations
BG 4, CT 543.02	1,680	545	32.4%	535	189	35.3%
BG 5, CT 543.02	786	216	27.5%	313	43	13.7%
BG 1, CT 544.02	1,391	367	26.4%	539	80	14.8%
BG 2, CT 544.02	2,424	673	27.8%	971	277	28.5%
BG 3, CT 544.02	1,805	150	8.3%	584	74	12.7%
BG 1, CT 544.03	1,097	584	53.2%	370	98	26.5%
BG 2, CT 544.03	1,070	198	18.5%	351	39	11.1%
BG 3, CT 544.03	1,482	232	15.7%	530	100	18.9%
BG 1, CT 544.04	2,645	719	27.2%	987	83	8.4%
BG 2, CT 544.04	1,541	1118	72.6%	388	13	3.4%
BG 3, CT 544.04	1,558	691	44.4%	648	215	33.2%
BG 1, CT 545	1,910	592	31.0%	639	169	26.4%
BG 2, CT 545	2,235	1229	55.0%	683	174	25.5%
BG 3, CT 545	2,827	829	29.3%	1167	308	26.4%
BG 4, CT 545	1,940	927	47.8%	855	316	37.0%
BG 1, CT 9801	28	0	0.0%	14	0	0.0%
BG 1, CT 9802	101	2	2.0%	51	0	0.0%



# GoRaleigh 2018 Title VI Fare Structure Equity Review

September 2018

Prepared for:





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# Background and Overview

Across the United States, there has been increasing interest in identifying reliable, safe, and affordable transportation access so people can reach key destinations. GoRaleigh, the City of Raleigh's Department of Transportation Transit Program, administers public transportation for the City, including a fixed route transportation system, paratransit service, and a free downtown circulator. The agency provides fixed-route service along 29 bus routes, including five connector routes and three express routes. Approximately 443,800 Wake County residents live within one-third mile of a GoRaleigh transit route and are considered part of the agency's service area. GoRaleigh served approximately 16,357 passenger trips per weekday and logged approximately 5,131,091 passenger trips in FY 2018. These 29 routes provide services for the Cities of Raleigh, Wake Forest, and Zebulon in Wake County. GoRaleigh's individualized paratransit services are provided through GoRaleigh Access – this service is available to GoRaleigh riders who qualify under the Americans with Disabilities Act (ADA).

Equity evaluations are required for fare changes proposed by GoRaleigh in accordance with Federal Transit Administration (FTA) guidelines for Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of age, race, color, national origin, disability, sex (gender), or religion. GoRaleigh implemented changes to all fares in 2014 and performed the necessary Title VI analysis for proposed changes. A Fare Equity Analysis was also performed for the introduction of the GoCard in 2017 and free Youth Pass in 2018. This report is not being prepared in response to any proposed fare change but examines the potential existing equity issues inherent in the various fare types within GoRaleigh's overall fare structure as a baseline for considering equity as future fare changes may be proposed.

#### Title VI Guidelines

While this report is not being prepared in response to any proposed fare change, it provides a baseline assessment of potential equity issues to consider for future proposed fare changes. Thus, the report is being prepared using FTA guidelines for equity analysis to support future agency decision-making around fares. Title VI of the Civil Rights Act of 1964, Section 601 states:

"No persons in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

The FTA Circular 4702.1B *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* was published in 2012 by the FTA to comply with the law and fulfill the requirement for all transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes." Title VI protections address other population groups with respect to the potential for discrimination based on age, race, color, national origin, disability, sex (gender), or religion

As a recipient of financial assistance from the Federal Transit Administration (FTA), GoRaleigh is required to demonstrate compliance with the circular when undertaking applicable actions. In accordance with Chapter 4 of the circular, fixed route transit providers that operate 50 or more fixed route vehicles in the peak and are located in an urbanized area of a population of 200,000 or more are required to analyze the impacts of any fare system changes. GoRaleigh meets both thresholds and is thus required to analyze impacts of the proposed fare system changes. This assessment provides a baseline for the agency's future analysis of proposed fare changes.

#### Methodology

The fare equity review reviews the differences in the characteristics of GoRaleigh riders by fare types. It evaluates the utilization rates of GoRaleigh's various fare types as demonstrated by GoRaleigh's ridership to assess whether there is current potential for disproportionate burdens or disparate impacts for GoRaleigh minority and low-income riders based on policy thresholds for these impacts.

The main steps in completing this fare equity review include:

- Determining demographic characteristics for populations served by GoRaleigh;
- Evaluating whether GoRaleigh's current fare structure has a disparate impact on populations protected under Title VI and whether low-income populations bear a disproportionate burden under current fares; and
- Recommending methods to avoid, minimize or mitigate existing effects, as needed.

#### Data Sources

Demographic data for GoRaleigh's service area was compiled to provide regional context and comparison for GoRaleigh ridership survey demographic data. Data on race/ethnicity, income, and age was compiled from the US Census. The "Hispanic or Latino Origin by Race" table B03002 was used to identify the racial and ethnic composition of the populations within the City of Raleigh and Wake County. Census respondents select their race and ethnicity in two separate questions and thus ethnically Hispanic or Latino individuals will also have race designated. Demographic data for income came from "Household Income in the Past 12 Months" table B19001, while data for age came from "Age and Sex" table S0101. In all these cases, American Community 5-year estimates for 2016 were used.

Survey data was obtained from the 2016 Wake County Transit Systems Customer Survey, which surveyed riders on the bus and collected information on demographic characteristics for riders as well as the type of fare used. Fare type utilization by low-income, minority, and age status of GoRaleigh ridership was extracted from the survey. For race and ethnicity, survey respondents could select more than one option. Thus, while respondents could select both the "Hispanic / Latino" ethnicity and a "Race" they were not required to do so. If a respondent selected "Hispanic / Latino" and a race, they are included in both categories as they would be in Census data, but there were respondents who only selected "Hispanic / Latino" and did not identify race. An open-ended "Other" option was provided on the transit survey; some of these answers were sorted into an appropriate existing category (for example, a free response answer of "Caucasian" would be moved to the "White" category).

Respondents who selected more than one race or whose open-ended answer did not fit into an existing option are included in the "Other" category.

#### **Population Definitions**

#### **Minority Persons and Populations**

According to FTA Circular 4702.1B, a minority person is defined as an individual identifying as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino (ethnicity), and Native Hawaiian or Other Pacific Islander. Minority populations are defined by FTA as any readily identifiable group of minority persons who live in geographic proximity, or who may be geographically dispersed, but who may be similarly affected by a proposed action.

#### Low-Income Persons and Populations

According to the FTA circular, "Low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or within a locally developed income threshold that is at least as inclusive as these guidelines. For these policies, persons with household incomes below 150 percent of the federal poverty level for a regionally average household size are determined to be low-income. Low-income population is defined by FTA as any readily identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action.

#### GoRaleigh Fare Equity Policy Thresholds

The following are current GoRaleigh Title VI impact policy thresholds.

#### Disparate Impact Policy

The GoRaleigh disparate impact policy establishes a **3 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by minority populations. The threshold applies to the difference in the impacts of a proposed fare change on minority populations compared to the impacts on non-minority populations. For purposes of this review this was adapted to consider the potential differential effects of each fare type on minority populations compared with non-minority populations. This was measured by analyzing data from the 2016 Wake County Transit Systems rider survey to determine whether minority riders use a given payment type or payment media more or less frequently in comparison with the proportion of minority riders that use all fare types on average.

#### Disproportionate Burden Policy

The GoRaleigh disproportionate burden policy establishes a **5 percent** threshold for determining when adverse impacts of fare changes are disproportionately borne by low-income populations. The threshold applies to the difference in the impacts of the proposed fare change on low-income populations compared to the impacts on other populations. For purposes of this review this was adapted to consider the potential differential effects of each fare type on low-income populations compared with non-low-income populations. This was measured by analyzing data from the 2016 Wake County Transit Systems ridership survey to determine whether low-income riders use a given payment type or payment media more or less frequently in comparison with the proportion of low-income riders that use all fare types on average.

# Existing Fares and Rider Characteristics

This section summarizes GoRaleigh's current fare structure as well as demographics about riders and the population in the area. GoRaleigh currently offers a wide variety of options for riders. Different fare types apply to different geographical areas and different periods of time. Table 1 provides a breakdown of fare types and prices.

	FARE TYPE	FULL FARE	DISCOUNT FARE*	DESCRIPTION
_	One-Way Fare	\$1.25	\$0.60	One-way fare on GoRaleigh buses
LOCAL	Day Pass	\$2.50	\$1.25	Unlimited rides on GoRaleigh buses for 1 day
2	7-Day Pass	\$12.00	\$6.00	Unlimited rides on GoRaleigh buses for 7 days
	31-Day Pass	\$45.00	\$22.50	Unlimited rides on GoRaleigh buses for 31 days
AL	Day Pass	\$4.50	\$2.00	Unlimited rides on regional + GoRaleigh buses for 1 day
REGIONAL	7-Day Pass	\$16.50	\$7.50	Unlimited rides on regional + GoRaleigh buses for 7 days
REG	31-Day Pass	\$76.50	\$34.00	Unlimited rides on regional + GoRaleigh buses for 31 days
SS	Day Pass	\$6.00	\$2.50	Unlimited rides on express, regional, + GoRaleigh buses for 1 day
EXPRESS	7-Day Pass	\$22.00	\$9.25	Unlimited rides on express, regional, + GoRaleigh buses for 7 days
Ĕ	31-Day Pass	\$102.00	\$42.50	Unlimited rides on express, regional, + GoRaleigh buses for 31 days
	GoPass			Unlimited rides on express, regional, + GoRaleigh buses for 1 year; Purchased by property managers, developers, and employers; Provided to tenants and employees for free or substantial discount
GOPASS	University GoPass	Varies	N/A	Unlimited rides on express, regional, + GoRaleigh buses for 1 year; Available to University students, employees, or both for free or for a nominal fee
	Youth GoPass	Free	N/A	Unlimited rides on express, regional, + GoRaleigh buses for 1 year.; Available to youth aged 13-18; Riders must complete an application to receive this pass.
	\$50.00 Value Card	\$40.00	N/A	Can be used for any full or discounted one-way fare, or any one- day pass on express, regional, + GoRaleigh buses
VALUE	\$25.00 Value Card	\$20.00	N/A	Can be used for any full or discounted one-way fare, or any one- day pass on express, regional, + GoRaleigh buses
STORED VALUE	\$13.50 Value Card	\$12.00	N/A	Can be used for any full or discounted one-way fare, or any one- day pass on express, regional, + GoRaleigh buses
S	GoCard	\$2.00	N/A	Stores any type and value of GoRaleigh pass (i.e. 1 versus 7 days). Only one type of pass can be loaded on a card at any given time.

#### Table 1: Current Fare Structure

\*Discounted fares are available to teens (aged 13-17) not using the Youth GoPass and persons with disabilities. Free fares are available to seniors on GoRaleigh buses and youth (aged 12 and under) on all buses. Other than youth aged 12 and under, riders must present a valid GoRaleigh ID each time they board.

Sources: GoRaleigh website; GoTriangle website

Table 2 presents data from the 2016 Wake County Customer Survey on the proportion of fare types used by all GoRaleigh riders. Local Day Passes are the most frequently purchased fare type by GoRaleigh customers (39.8 percent) followed by one-way fare purchases (25.5 percent). Thereafter, other fare type utilization drops substantially with GoRaleigh customers utilizing Senior, Youth, and Disability Passes (7.2 percent), Local 31-Day Passes (6.8 percent), Local 7-Day Passes (5.7 percent), and University and Other GoPasses (3.6 percent and 8.1 percent, respectively) at smaller proportions. All other fare types are utilized to a much lesser extent (less than one percent for each type).

The vast majority of GoRaleigh's customers purchase specifically local trip type fares (71.0 percent), followed by users of Other Pass types (19.5 percent), which may reflect local or other trips by users of several free and discounted fare types (university and employer-provided GoPasses; senior, youth and disability fares; stored value cards; free routes). There is limited utilization of Regional (2.0 percent) and Express (0.6 percent) fare types for riders surveyed on GoRaleigh routes.

	Fare Type	Percent of GoRaleigh Riders
	One-way Fare	25.5%
LOCAL	Day Pass	39.8%
PO	7-Day / Weekly Pass	5.7%
	31-Day Pass	6.8%
AL	Day Pass	0.8%
REGIONAL	7-Day Pass	0.4%
REG	31-Day Pass	0.8%
SS	Day Pass	0.2%
EXPRESS	7-Day Pass	0.1%
ũ	31-Day Pass	0.3%
	University Provided GoPass	3.6%
отнек	Other GoPass or Fare Type*	8.1%
OTH	Senior, Youth, Disability Fare	7.2%
	Stored Value Card	0.6%
	All Fare Types	100%

#### **Table 2: Fare Payment Method**

\*Other GoPass or Fare Type includes riders who use employer provided GoPasses or rode a fare free route Source: 2016 Wake County Customer Survey

Table 3 provides information on race and ethnicity of GoRaleigh riders and the population in the surrounding region. Compared to the surrounding region, there is a higher proportion of minority riders on GoRaleigh. This is especially true for African Americans (65.7 percent on GoRaleigh versus 29.0 percent and 20.6 percent in the city and county, respectively). Hispanic/Latino GoRaleigh riders use GoRaleigh at a proportion that is similar to their population in the surrounding region. Native American and Native Hawaiian / Pacific Islander GoRaleigh riders also use GoRaleigh at a proportion that is similar to their populations make up a very small

proportion of the total population in both the census data and survey data. GoRaleigh riders who are White, Asian and Other GoRaleigh riders use GoRaleigh at a lower proportion than their population in the surrounding region.

	White	African American	Asian	Native American	Native Hawaiian / Pacific Islander	Other	Hispanic / Latino*
GoRaleigh Riders	21.5%	65.7%	1.7%	0.6%	0.1%	2.7%	10.2%
City of Raleigh	59.6%	29.0%	4.6%	0.3%	0.1%	6.4%	10.8%
Wake County	67.1%	20.6%	6.2%	0.3%	0.05%	5.7%	9.9%

#### Table 3: Race/Ethnicity

\*City and county census race categories total to 100% and reflect all ethnicities (Hispanic and non-Hispanic); Hispanic / Latino ethnicity is captured noted separately. Races for GoRaleigh riders surveyed total less than 100% because while respondents could select both a race and ethnicity they were not required to do so, and a number of respondents only selected ethnicity (Hispanic/Latino). Sources: 2016 Wake County Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table 4 presents information on reported household income of GoRaleigh riders and the city and county. The most commonly reported income category among GoRaleigh riders is households making less than \$15,000 per year, representing more than a quarter of responses (30.6 percent); and more than half of GoRaleigh riders (57.8 percent) report living in households that make less than \$25,000. This reflects that much of GoRaleigh's ridership is dependent on transit. Ridership decreases as household income increases. In contrast, Wake County and Raleigh both show a more even spread of the population across income categories, with a peak in the \$50,000 - \$74,999 category. A notable proportion of riders, 13.1 percent, chose not to provide this information. Questions about income may be considered sensitive.

	Less than \$15,000	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 to \$150,000	More than \$150,000
GoRaleigh Riders	30.6%	27.2%	18.2%	15.8%	4.6%	2.1%	1.0%	0.6%
City of Raleigh	9.6%	8.7%	10.0%	14.2%	18.9%	12.6%	14.0%	12.0%
Wake County	7.5%	7.0%	8.4%	12.4%	17.6%	13.5%	17.3%	16.3%

#### **Table 4: Household Income**

Sources: 2016 Wake County Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table 5 provides information on the reported age of GoRaleigh riders and city and county residents. Nearly half (46 percent) of GoRaleigh reported riders are between the ages of 18-34 with slightly more than one-third of riders between the ages of 35-54 (35.6 percent). Ridership proportions show notable drops among those aged 55 and older and again among those aged 65 and older when compared with the city and county. A different methodology was applied for approaching youth riders and thus data cannot be directly compared for this category.

_	Under 18*	18-24	25-34	35-44	45-54	55-64	65+
GoRaleigh Riders	2.5%	20.9%	25.2%	18.5%	17.1%	10.0%	5.6%
City of Raleigh	21.9%	13.2%	18.4%	14.9%	12.6%	9.5%	9.4%
Wake County	25.0%	9.3%	14.8%	15.5%	14.6%	10.8%	9.9%

#### Table 5: Age

\* Different methodology was applied for approaching youth riders.

Sources: 2016 Wake County Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

# Equity Review of Existing Fare Structure

This section reviews fare types based on riders' race and ethnicity, income status, and age. The utilization of each fare type for each type of rider is compared against the overall rider characteristics for all fare types. Fare types that are utilized by minority and low-income riders at rates above or below the Title VI thresholds from the proportional utilization of minority and low-income riders of all fare types are highlighted. In cases where the threshold value is exceeded, potential equity issues are discussed.

	Fare Type	White (non- Hispanic)	Total Minority	African American	Asian	Native American	Native Hawaiian Pacific Islander	Other	Hispanic / Latino*
	One-Way Fare	16.5%	83.5%	68.0%	1.1%	0.8%	0.2%	2.8%	12.1%
LOCAL	Day Pass	16.6%	83.4%	68.2%	0.9%	0.5%	0.1%	2.2%	12.0%
Ĕ	7-Day Pass	16.2%	83.8%	69.7%	2.0%	1.5%	0.5%	3.0%	9.1%
	31-Day Pass	23.9%	76.1%	64.5%	1.3%	0.4%	0.0%	3.4%	7.3%
IAL	Day Pass	14.8%	85.2%	74.1%	0.0%	0.0%	0.0%	0.0%	11.1%
REGIONAL	7-Day Pass	30.8%	69.2%	53.8%	0.0%	7.7%	0.0%	0.0%	7.7%
REG	31-Day Pass	31.0%	69.0%	58.6%	0.0%	0.0%	0.0%	0.0%	10.3%
SS	Day Pass**	12.5%	87.5%	50.0%	0.0%	0.0%	0.0%	12.5%	25.0%
EXPRESS	7-Day Pass**	20.0%	80.0%	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%
â	31-Day Pass**	20.0%	80.0%	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	University Provided GoPass	39.5%	60.5%	35.5%	12.1%	0.0%	0.0%	6.5%	7.3%
OTHER	Other GoPass or Fare Type***	32.7%	67.3%	55.9%	4.3%	0.4%	0.0%	3.2%	4.6%
D	Senior, Youth, or Disability Fare	23.3%	76.7%	68.7%	0.8%	0.4%	0.0%	2.8%	4.4%
	Stored Value Card	42.9%	57.1%	47.6%	0.0%	0.0%	0.0%	0.0%	9.5%
	All Fare Types	20.0% 80.0% 65.7% 1.7% 0.6% 0.1% 2.7% 10.2							10.2%
			Higher pe	ercentage tha	n system a	average, at or	above 3% thr	eshold	
			Lower pe	ercentage that	n system a	verage, at or	above 3% thr	eshold	

#### Table 6: Method by Race and Ethnicity

\*Respondents could select Hispanic/Latino in addition to their race, but were not required to do so; thus, all ethnically Hispanic/Latino respondents are reflected with their ethnicity and not included with their race (when designated).

\*\*The percent of respondents selecting these fare types was limited, thus these categories are excluded from threshold review.

\*\*\*Other GoPass or Fare Type includes riders who use employer provided GoPasses or rode a fare free route.

Source: 2016 Wake County Transit Systems Customer Survey

African American riders and minority riders overall are using Local 7-Day and Regional Day passes at higher than average rates that exceed the disparate impact threshold. African American riders are also using Senior, Youth, or Disability fares at a higher than average rate in excess of the disparate impact threshold. Conversely, African American riders and minority riders overall are using Regional 7-Day Passes, Regional 31-Day Passes, University Provided GoPasses, Other GoPass or Fare Types, and Stored Value Cards at lower than average rates by amounts that exceed the disparate impact threshold. Hispanic / Latino riders are using Other GoPass or Fare Types and Senior, Youth, or Disability fares at lower rates at amounts that exceed the disparate impact threshold.

As with African American riders, minority riders overall are using University-provided GoPasses and Stored Value Cards at a lower than average rate by an amount that exceeds the disparate impact threshold. As with both African American riders and Hispanic / Latino riders, minority riders overall are using Other GoPass and fare types (including employer-provided GoPasses) at lower than average rates by amounts in excess of the disparate impact threshold. While African American ridership for Senior, Youth or Disability Fares was above average in excess of the disparate impact threshold, minority riders overall are using these fare types at a lower than average rate in excess of the threshold, driven predominantly by notably the lower usage among Hispanic / Latino riders. While no single racial or ethnic group exceeded the threshold for paying full one-way fares or Local Day Passes, minority riders overall are using one-way fares and Local Day Passes at higher rates than the disparate impact threshold.

While Asian, Native American and Other Race riders each exceed one local, regional or other pass category disparate impact threshold (University GoPass for Asian and Other Races; 7-Day Pass for Native American), riders in these categories represented very small percentages of GoRaleigh riders and thus these categories are not reviewed for disparate impacts. Survey response rates on GoRaleigh for express passes were extremely low (less than 1 percent of riders), and thus are also not considered for review for disparate impacts.

One-way fares and Day passes represent the lowest value options available for local, regional and express riders. In all cases, the 7-Day and 31-Day passes have a higher upfront cost than their corresponding Day pass but provide a greater price per day value than one-way fares and day passes. Local GoRaleigh passes provide increasing per day value in the order of Day Pass, 7-Day Pass, and 31-Day pass. In the case of regional and express passes, however, 7-Day passes provide a slightly better daily value than their 31-Day counterparts.

- Regional 7-Day pass: \$2.36 per day
- Regional 31-Day pass: \$2.47 per day
- Express 7-Day pass: \$3.14 per day
- Express 31-Day pass: \$3.29 per day

For local passes, African American riders and minority riders overall exceed the disparate impact threshold for the Local 7-Day Pass, however, this pass type offers the second-best value of basic local fare types. Minority riders overall also exceed the disparate impact threshold for paying full one-way fares and using Local Day Passes, driven by a combination of slightly higher than average percentages for both African American and Hispanic / Latino riders. The full one-way fare offers the lowest value and highest per ride cost of pass types and while the Local Day Pass offers a somewhat higher value that value is still lower than for Local 7 or 31 day passes, creating a potential cost burden for riders. The relatively lower use of the Local 31-Day Pass by minorities overall indicates that these riders are benefiting relatively less from the local pass with the best value.

For regional passes, greater disparities are indicated in use of fare types. For African American riders and overall minority riders the use of Regional Day Passes, which offers the highest cost and lowest value per regional ride, is highest among regional pass types and exceeds the disparate impact threshold, while

the rates of use of Regional 7-Day and 31-day passes are lower and fall well below the use of all GoRaleigh fare types by African Americans and minorities overall by amounts greater than the disparate impact thresholds. African-American riders and minority riders overall experience the benefits of lower pricing at proportions lower than do their non-minority counterparts. Even within the Regional 7-Day and the 31-Day Passes because of the reversed per ride value of these passes, African Americans (but not minorities overall) are purchasing Regional 31-Day Passes at a higher rate than Regional 7-Day Passes (5 percent greater), and thus incurring disproportionately higher per ride costs and lower values between these categories.

For all Other pass types except Senior, Youth or Disability, African American riders and minority riders overall are utilizing these pass types at much lower rates than these riders do for all fare types by amounts that fall well outside of the disparate impact thresholds for these fare types. For Other GoPass or Fare types, Hispanic / Latino riders also fall below their average use of all fare types by a greater amount than the disparate impact threshold. The "other" categories may offer substantial cost-savings, such as for university or employer provided GoPasses that may be offered for free or at a significant discount to these riders, or other benefits such as the combined discount and convenience of the Stored Value Card. Thus, the current programs represented by these categories have the potential to create disparate impacts for African American riders and minorities overall, with other GoPass or fare types having this potential effect for Hispanic / Latino riders as well. The GoPass is not provided directly from GoRaleigh to riders but is made available through programs at the discretion of the employer or educational institution and thus is a discount offered by these entities to the transit customer rather than by the transit agency.

The use of Senior, Youth, and Disability fares is greater by African American riders than their use of all fare types by an amount that exceeds the disparate impact threshold and lower for Hispanic / Latino riders and minorities overall than their overall usage of all fare types by amounts that exceed the threshold. African Americans appear to be represented in relatively higher proportions in these pass categories aimed to serve various vulnerable populations, while Hispanic / Latino Riders are relatively underrepresented. These categories offer free or discounted fares for qualifying riders. At the time of the survey, seniors and children 12 and under rode free while youth and persons with disabilities were eligible for half price fares. In 2018, GoRaleigh introduced a Youth GoPass program that offers free rides for youth ages 13-18.

_	Fare Type	Low-Income	Not Low-Income
	One-Way Fare	56.3%	43.7%
AL	Day Pass	54.0%	46.0%
LOCAL	7-Day	75.3%	24.7%
	31-Day Pass	54.4%	45.6%
۹L	Day Pass	56.5%	43.5%
REGIONAL	7-Day Pass*	53.8%	46.2%
RE	31-Day Pass	46.2%	53.8%
S	Day Pass*	rs* 100.0%	
EXPRESS	7-Day Pass*	75.0%	25.0%
â	31-Day Pass*	50.0%	50.0%
	University Provided GoPass	59.1%	40.9%
ER	Other GoPass or Fare Type**	62.1%	37.9%
OTHER	Senior, Youth, or Disability Fare	68.1%	31.9%
	Stored Value Card	45.0%	55.0%
	All Fare Types	57.8%	42.2%
		Higher percentage than system a	verage, exceeds 5% threshold
		Lower percentage than system as	verage, exceeds 5% threshold

#### Table 7: Fare Type and Payment Method by Income

\*The number of survey respondents providing information for these fare type categories was limited (see "Appendix C"). Findings in these categories are excluded from threshold review.

\*\*Other GoPass or Fare Type includes riders who use employer provided GoPasses or rode a fare free route. Source: 2016 Wake County Transit Systems Customer Survey

Based on 2016 data of the federal poverty level and the average family size in Raleigh, the threshold for low-income households is roughly \$27,000. This report categorizes households making \$25,000 or less as low-income; the values listed here are therefore slightly lower than the real-world percentages. Low-income riders are purchasing Local 7-Day Passes and using Senior, Youth, or Disability fares at higher rates than the disproportionate burden threshold. Conversely, low-income riders are purchasing Regional 31-Day Passes and Stored Value Cards at lower rates than the disproportionate burden threshold.

For local passes, low-income riders are making most relative use of the Local 7-Day Pass, which offers the second-best value of the basic local fare types. Local 7-Day Passes offer a greater per ride value than Local Day Passes and one-way fares, but Local 31-Day Passes offer the greatest per ride value out of all local pass types. Low-income riders make least relative use of the Regional 31-Day pass missing out on the substantial discount offered over the Regional Day Pass. The 31-Day local and regional passes represent the greatest upfront cost and potential timing-based burdens for low-income persons.

The relatively higher rate of use of Senior, Youth, or Disability fares by low-income persons relative to other pass types reflects the transit dependence of these vulnerable populations groups and the importance of the free and discounted fares offered.

Stored Value Cards may hold any one-way fare or day pass with approximately a 20% discount but a higher upfront cost. Three options are available for these cards: \$50.00 value at a cost of \$40.00, \$25.00 value at a cost of \$20.00, and \$13.50 value at a cost of \$12.00 (percentage discounts are 20%, 20%, and 11%, respectively). Similar to the pattern found with the Regional 31-Day Pass, low-income populations are relatively taking less advantage of Stored Value Cards and the associated savings, possibly reflecting that low-income riders are least able to pay the higher upfront cost of these cards.

	Fare Type	Under 18*	18-24	25-34	35-44	45-54	55-64	65+
	One-Way Fare	1.9%	23.8%	29.4%	19.0%	16.5%	8.2%	1.2%
AL	Day Pass	2.3%	17.9%	28.7%	21.2%	18.1%	10.2%	1.6%
LOCAL	7-Day	1.0%	21.3%	29.4%	21.3%	17.3%	9.1%	0.5%
	31-Day Pass	4.3%	24.8%	19.2%	20.1%	17.5%	13.7%	0.4%
AL	Day Pass	0.0%	18.5%	25.9%	29.6%	14.8%	7.4%	3.7%
REGIONAL	7-Day Pass	7.7%	7.7%	23.1%	38.5%	15.4%	7.7%	0.0%
REC	31-Day Pass	0.0%	24.1%	20.7%	10.3%	27.6%	17.2%	0.0%
SS	Day Pass**	0.0%	25.0%	25.0%	25.0%	0.0%	25.0%	0.0%
EXPRESS	7-Day Pass**	0.0%	20.0%	20.0%	40.0%	0.0%	20.0%	0.0%
EX	31-Day Pass**	0.0%	20.0%	30.0%	0.0%	30.0%	10.0%	10.0%
	University Provided GoPass	1.6%	57.3%	20.2%	8.1%	9.7%	3.2%	0.0%
OTHER	Other GoPass or Fare Type***	3.9%	24.2%	17.4%	16.7%	21.4%	12.1%	4.3%
ΟT	Senior, Youth, or Disability Fare	5.2%	2.0%	4.4%	4.4%	12.9%	12.4%	58.6%
	Stored Value Card	0.0%	19.0%	28.6%	23.8%	14.3%	14.3%	0.0%
	All Fare Types	2.5%	20.9%	25.2%	18.5%	17.1%	10.0%	5.6%

#### Table 8: Fare Type and Payment Method by Age

\*Different methodology was applied for approaching youth riders and thus this value should be considered with caution. Responses for this category were limited. These riders are excluded from review.

\*\*The number of survey respondents providing information for these fare type categories was limited (see "Appendix C").

\*\*\*Other GoPass or Fare Type includes riders who use employer provided GoPasses or rode a fare free route. Source: 2016 Wake County Transit Systems Customer Survey

Youth and seniors are widely considered transit-dependent riders, because they are too young to hold a driver's license (youth) or are subject to health-related ailments that negatively impact the ability to drive (seniors). Very few riders under the age of 18 responded to the survey, so these riders are not considered for review. Thus, this fare equity review discusses how GoRaleigh's fare structure impacts the "Under 18" and "65+" age categories.

Seniors receive free fares for GoRaleigh local routes and discounted fares for regional and express routes. GoRaleigh has historically offered free fares to youth riders (kids 12 and under ride free) and discounted fares to youth of ages 13-17; in 2018 GoRaleigh introduced a Youth GoPass program for riders aged 13-18, which provides unlimited free rides once the required application is completed. Youth and seniors generally do not experience negative disparate impacts or disproportionate burdens under GoRaleigh's current fare structure. There is potential for limited English proficiency, low literacy, low-income or other vulnerable populations to experience some differential in costs for these ridership categories if they are unaware of the programs or have any barriers to showing identification that would confirm their qualification for free fares.

#### GoCard Program

GoRaleigh implemented a smartcard program in 2017 known as GoCard. This program is separate from previously existing Stored Value Cards. These plastic GoCards can store any of the existing pass types and are usable only on GoRaleigh buses. GoCards are available for a \$2.00 charge at three Ticket Vending Machines (TVMs): GoRaleigh Station, GoRaleigh Operations Facility, and the Crabtree Valley Mall Bus Shelter Area. These TVMs accept cash, credit cards, and change cards (received instead of change from overpaying fare at the fare box). The findings of the GoRaleigh 2017 Smartcard Fare Equity Analysis found that all three TVMs are located at GoRaleigh hub locations (where multiple bus routes converge), making them accessible via bus, and two of the three TVM locations are situated in or adjacent to Title VI hotspots, making them accessible to Title VI populations living in the area around these hub locations. Thus, the location of TVMs and their acceptance of all payment methods maintains equitable access to this fare program for Title VI populations.

#### GoRaleigh Access Paratransit Program

The City of Raleigh's GoRaleigh Access program is an Americans with Disabilities Act (ADA) federallymandated service subject to the regulations found in 49 Code of Federal Regulations (CFR) Part 37, Subpart F, Paratransit as a Complement to Fixed Route Service. The CFR states, "...each public entity operating a fixed route system shall provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed route system." (49 CFR §37.131). FTA Title VI Circular 4702.1B notes that program "[plans] for minority populations may be part of efforts that extend more broadly to include other constituencies that are traditionally underserved, such as persons with disabilities." Therefore, this program has been briefly reviewed while reviewing GoRaleigh's fixed-route system fare structure.

GoRaleigh Access only provides a single fare option: one-way trip tickets at \$2.50 each (twice the cost of a regular one-way fare).

The City of Raleigh conducted a customer satisfaction survey for the Accessible Raleigh Transportation (ART) program, now known as GoRaleigh Access, in November 2015 (results were reported in early 2016), providing data for the following tables.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The ART Paratransit Survey and Wake County Customer Survey were conducted at different times and utilizing different methodologies.

	White	African American	Native American	Hispanic / Latino*	Other
Paratransit Riders	34.1%	59.8%	1.2%	4.9%	4.9%
Fixed-Route Riders	21.5%	65.7%	0.6%	10.2%	12.2%
City of Raleigh	59.6%	29.0%	0.3%	10.8%	11.1%
Wake County	67.1%	20.6%	0.3%	9.9%	12.0%

#### Table 9: Race / Ethnicity of Paratransit Riders

\*City and county census race categories total to 100% and reflect all ethnicities (Hispanic and non-Hispanic); Hispanic / Latino ethnicity is captured noted separately. Races for GoRaleigh riders surveyed total less than 100% because while respondents could select both a race and ethnicity they were not required to do so, and a number of respondents only selected ethnicity (Hispanic/Latino). Sources: 2016 Accessible Raleigh Transportation Customer Survey; 2016 Wake County Transit Systems Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

When comparing the ART Survey to the Wake County Transit Systems Customer Survey, the ART results show a higher proportion of White paratransit riders (34.1 percent versus 21.5 percent), a lower proportion, but still a majority of African American riders (59.8 percent versus 65.7 percent) and a lower proportion of Hispanic riders (4.9 percent versus 10.2 percent). The demographic differences in paratransit users versus traditional GoRaleigh riders could reflect differences in education and awareness, culture or other factors, but it is notable and should be considered in fare planning, education, and distribution programs.

	Less than \$15,000	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000+
Paratransit Riders	32.1%	33.3%	14.1%	7.7%	5.1%	7.7%
Fixed-Route Riders	30.6%	27.2%	18.2%	15.8%	4.6%	3.6%
City of Raleigh	9.6%	8.7%	10.0%	14.2%	18.9%	38.6%
Wake County	7.5%	7.0%	8.4%	12.4%	17.6%	36.5%

#### Table 10: Household Income of Paratransit Riders

Sources: 2016 Accessible Raleigh Transportation Customer Survey; 2016 Wake County Transit Systems Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

The majority (65.4 percent) of ART riders live in households making less than \$25,000 per year. This is a larger percentage than what is reported in the Wake County Transit Systems Customer Survey (57.8 percent) for fixed route riders. The data shows that paratransit riders are likely more transit dependent on average than fixed route riders and may be more sensitive to any proposed changes in the base one-way fare.

	Under 18	18-44	45-54	55-64	65 or older
Paratransit Riders	n/a	11.0%	18.3%	35.4%	35.4%
Fixed-Route Riders	2.5%	64.6%	17.1%	10.0%	5.6%
City of Raleigh	21.9%	46.5%	12.6%	9.5%	9.4%
Wake County	25.0%	39.6%	14.6%	10.8%	9.9%

#### Table 11: Age of Paratransit Riders

Source: 2016 Accessible Raleigh Transportation Customer Survey; 2016 Wake County Transit Systems Customer Survey; U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

The majority of ART Paratransit riders (70.8 percent) are 55 years old or older with approximately half of those riders and one third of total ART ridership surveyed (35.4 Percent) 65 years of age or older. These are much larger percentages than what is reported in the Wake County Transit Systems Customer Survey (15.6 percent and 5.6 percent, respectively) and reflect that these riders may have age and disability-related transit dependence and needs. These older riders may also be more sensitive to fare changes proposed for the base one-way fare, as many of these riders are low-income as well.

# Mitigation and Enhancement

GoRaleigh offers a variety of programs that provide mitigation to Title VI populations. The following section briefly mentions these efforts and notes opportunities for further mitigation and enhancement efforts for vulnerable populations.

#### Age, Disability, and Youth Discounts

In accordance with the 2014 FTA Circular 9070.1G, special accommodations are targeted at persons with disabilities and seniors. Persons with disabilities riding on GoRaleigh buses receive a 50 percent discount on all fixed-route fares, exceeding FTA requirements that require these discounts during non-peak hours by applying these discounts at all times. Seniors ride free on GoRaleigh buses at all times, exceeding the requirements for discounted rates for seniors during non-peak hours.

Children ages 12 and under also ride free on all GoRaleigh buses. Customers who are ages 13-17 receive a 50 percent discount if they provide identification when boarding. While this discount is still available, in 2018 GoRaleigh introduced a program so that riders who are ages 13-18 may receive a Youth GoPass allowing free rides if they complete the required application. An aim of the Youth GoPass program was to support affordable transit access to schools for middle and high school students.

To enhance these benefits, GoRaleigh might work with non-profits or community leaders for limited English proficiency and/or immigrant communities to ensure they are aware of the Youth GoPass program and that any concerns about application paperwork or documentation can be considered as the program moves forward.

#### **GoPass Program**

GoRaleigh and other regional transit partners provide a GoPass Program. The GoPass program allows employees of participating companies as well as students and employees at participating universities the opportunity to ride GoRaleigh and other regional and local systems for free or a substantially discounted rate. Still other companies in the region provide other employee discounted options for transit passes. The utilization of these programs shows that minority and low-income groups may have relatively lower access to these programs.

Opportunities exist for GoRaleigh to focus on coordinating with large employers and employment centers that employ service or low-wage workers to improve the equity of access to the GoPass program. There may also be opportunities to consider how the GoPass program can relate to outreach and programs coordinated with area non-profits.

#### Non-Profit and Bulk Discounts

GoRaleigh offers discounts on Local Day Pass fares for qualifying non-profit organizations as well as anyone purchasing Local Day Passes in bulk. Non-profits receive passes at a discount of 25 percent, while anyone purchasing 6 or more passes receives a 15 percent discount. These discount programs offer some mitigation to low-income and minority populations who may use Local Day Passes or even one-way or other fare types.

Opportunities exist for GoRaleigh to further evaluate these programs and enhance discounts, consider extending discounts to other pass types, and undertake campaigns to promote greater awareness among non-profits and community partners.

#### Targeted Education

GoRaleigh has taken efforts to hold relevant public meetings in minority and low-income neighborhoods for service planning, long range transit planning, fare proposals and ongoing transit operations.

As GoRaleigh continues transit engagement efforts in the future, included in these efforts should be education about available fare structure discounts to encourage more members of Title VI and vulnerable populations to take advantage of higher-value pass types. GoRaleigh can partner with community associations, churches, and other non-profits to bolster these efforts.

## **Public Outreach**

Extensive public outreach for the overall current fare structure was conducted from late 2013 to early 2014. This included numerous public meetings, community events and canvassing efforts, community group briefings held by community organizations and attended by transit staff, and transit agency briefings. Efforts were made to hold meetings in key areas of the city targeting Title VI populations. Information about these efforts was distributed via flyers, web-based communication, and traditional media such as newspapers, radio, and television. A series of public meetings was held in January 2018 to get public input on regional transit plans; as a part of this outreach, information was included on changes to eliminate youth fares and introduce a program for riders aged 13 to 18 to ride free (Youth GoPass).

## Conclusion

GoRaleigh has conducted this review of the agency's fare structure to ascertain the potential for existing disparate impacts based on race, ethnicity, or national origin or a disproportionate burden on low-income households as well as to inform future fare proposals and programs. Key findings in the review include:

- Minority riders show potential for experiencing differential effects from some existing fares. • Minority riders have proportionately higher use of one-way fares and Local Day and 7-Day passes, proportionately lower use of Local 31 Day Passes, and proportionately lower use of discounted passes such as Stored Value cards and GoPasses. Within regional pass types, minority riders use Day Passes at a proportionately higher rate and 7 and 31 Day passes at a proportionately lower rate. 7 and 31 Day passes offer a greater discount per day than single Day passes and one-way fares; by using multi-day passes at a lower rate than they use single day passes or one-way fares, these riders are missing out on these greater discounts at the regional level and on the 31-Day discount benefits at the local level. University GoPasses, Other GoPasses, and Stored Value Cards all also offer discounts and minority riders are participating at a relatively lower rate in these substantially discounted pass types. African American riders use free and discounted Senior, Youth, and Disability fares at proportionately higher rates, experiencing the positive effects of these fare types. On the other hand, Hispanic riders use these fare types at notably lower rates, showing potential differential effects for these riders.Low-income riders show potential for experiencing differential effects. Use of Local 7-Day Passes may or may not be evidence of a burden; these passes provide greater value than single Day Passes, but less value than 31-Day Passes. Low-income riders are using Stored Value cards at a lower rate than the threshold, missing out on this discounted option. One possible explanation is that these riders would prefer to use the higher value pass types but cannot afford the higher upfront costs.
- A greater proportion of low-income riders and a significantly higher proportion of riders aged 65 and over use the ART paratransit program, which reflects the ongoing importance of this program to transit dependent populations. However, minority riders utilize ART relatively less than GoRaleigh fixed route riders, which may reflect relatively lower awareness of the ART program, or cultural differences between different racial and ethnic groups.

GoRaleigh has several mitigation efforts in place to address equity for vulnerable populations. Free or discounted fares on virtually all fare types are available to seniors, youth, and people with disabilities. Bulk discounts on Local Day Passes are available to qualifying non-profits and anyone purchasing 6 or more passes. GoRaleigh has several opportunities to enhance mitigation to Title VI populations. These might include expanding outreach to limited English proficiency and other vulnerable populations regarding the Youth GoPass and fare free rides for seniors; coordinating with large employers, employment centers and non-profits to expand the GoPass program to more service and other lowwage workers; increasing or expanding the fare types to which non-profit and bulk discounts apply; and expanding efforts to engage and educate Title VI and vulnerable populations to encourage them to take advantage of higher value pass types. GoRaleigh can partner with community associations, churches, and other non-profits to bolster these efforts.

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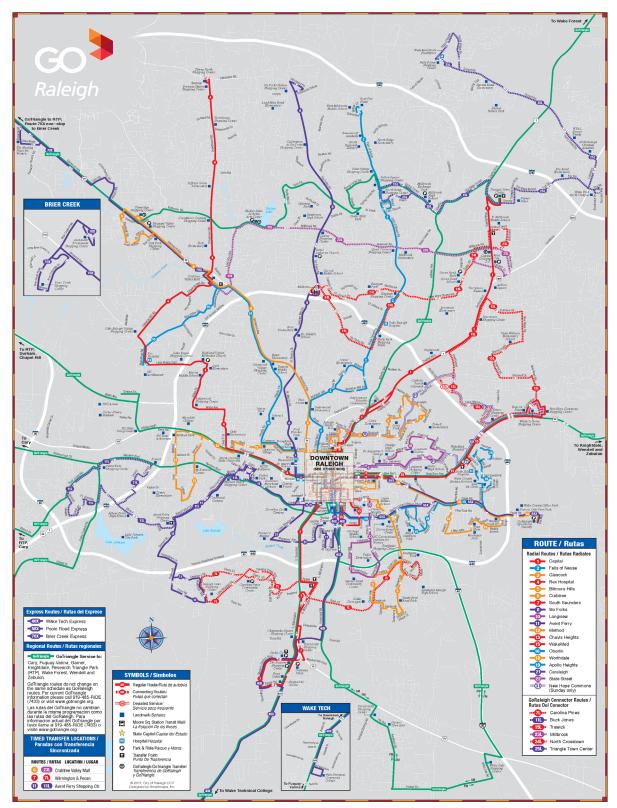
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# Appendix A – GoRaleigh System Map



# Appendix B – Survey Response Count: Race/Ethnicity by Fare Type

	Fare Type	White Non- Hispanic	Total Minority	African American	Asian	Native American	Native Hawaiian Pacific Islander	Other	Hispanic / Latino*	System wide
	Pay full fare (cash or other purchase method)	145	736	599	10	7	2	25	107	881
LOCAL	Local Day Pass	228	1145	937	12	7	1	30	165	1373
Ę	Local 7-Day / Weekly Pass	32	166	138	4	3	1	6	18	198
	Local 31-Day Pass	56	178	151	3	1		8	17	234
_	Regional Day Pass	4	23	20					3	27
REGIONAL	Regional 7-Day Pass	4	9	7		1			1	13
REC	Regional 31-Day Pass	9	20	17					3	29
S	Express Day Pass**	1	7	4				1	2	8
EXPRESS	Express 7-Day Pass**	1	4	4						5
ü	Express 31-Day Pass**	2	8	8						10
	University Provided GoPass	49	75	44	15			8	9	124
OTHER	Other GoPass or Fare Type**	92	189	157	12	1		9	13	281
цО	Senior, Youth, or Disability Pass**	58	191	171	2	1		7	11	249
	Stored Value Card	9	12	10					2	21
	All Fare Types	690	2763	2267	58	21	4	94	351	3453

\*Respondents may have selected Hispanic/Latino (an ethnicity) in addition to their race or may have selected Hispanic/Latino and not indicated race.

Source: 2016 Wake County Transit Systems Customer Survey

# Appendix C – Survey Response Count: Income Status by Fare Type

		Less than \$15,000	\$15,000 to \$19,999	\$20,000 to \$24,999	Low-Income Total	\$25,000 to \$29,999	\$30,000 to \$34,999	\$35,000 to \$39,999	\$40,000 - \$44,999	\$45,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,000	\$100,000 - \$149,999	\$150,000 or above	Not Low-Income Total	Total*
	Fare Type	Lov	v-Incom	e					Not L	ow-Inco	me					
L.	Pay full fare (cash or other purchase method)	224	106	101	431	83	67	52	35	36	30	19	8	4	334	765
LOCAL	Day Pass	300	185	149	634	142	109	92	70	55	49	16	5	1	539	1173
_	7-Day	70	50	20	140	13	10	8	6	4	4	1			46	186
	31-Day Pass	65	24	23	112	29	20	7	10	11	12	3	1	1	94	206
٩L	Day Pass	11	2		13	5	1	1	1				1	1	10	23
ION/	7-Day Pass	2	4	1	7		1	1		1	2	1			6	13
REGIONAL	31-Day Pass	6	3	3	12	1	1	2	3	1	2	1	2	1	14	26
SS	Day Pass**	4		1	5										0	5
EXPRESS	7-Day Pass**		2	1	3	1									1	4
EX	31-Day Pass**		2	2	4		1	1			2				4	8
	University Provided GoPass	38	17	10	65	5	4	5	7	8	11	4	1		45	110
Æ	Other GoPass	95	38	21	154	11	9	9	6	13	19	11	9	7	94	248
OTHER	Senior, Youth, Disability Pass	95	33	17	145	15	14	13	8	5	4	4	5		68	213
	Stored Value Card	8	1		9	4	1	1			3	1		1	11	20
	All Fare Types	918	467	349	1734	309	238	192	146	134	138	61	32	16	1266	3000

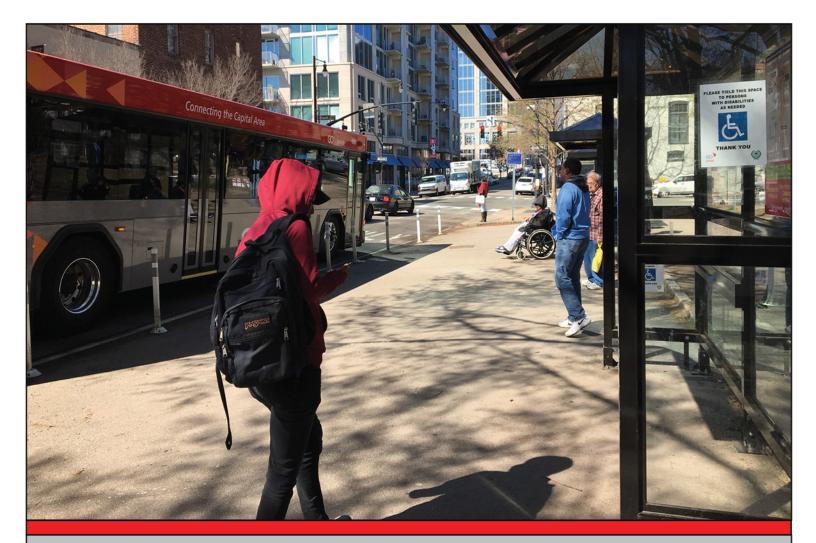
\*Approximately 13 percent of transit survey respondents chose not to provide information on household income, accounting for the lower number of responses.

Source: 2016 Wake County Transit Systems Customer Survey

# Appendix D – Survey Response Count: Age by Fare Type

-	Fare Type	Under 18	18-24	25-34	35-44	45-54	55-64	65+	Sum
LOCAL	Pay full fare (cash or other purchase method)	17	210	259	167	145	72	11	881
	Local Day Pass	32	246	394	291	248	140	22	1373
2	Local 7-Day / Weekly Pass	2	42	58	42	34	18	1	197
	Local 31-Day Pass	10	58	45	47	41	32	1	234
IAL	Regional Day Pass		5	7	8	4	2	1	27
REGIONAL	Regional 7-Day Pass	1	1	3	5	2	1		13
REC	Regional 31-Day Pass		7	6	3	8	5		29
SS	Express Day Pass*		2	2	2		2		8
EXPRESS	Express 7-Day Pass*		1	1	2		1		5
EX	Express 31-Day Pass*		2	3		3	1	1	10
	University Provided GoPass	2	71	25	10	12	4		124
OTHER	Other GoPass or Fare Type**	11	68	49	47	60	34	12	281
1 D	Senior, Youth, or Disability Pass**	13	5	11	11	32	31	146	249
	Stored Value Card		4	6	5	3	3		21
	All Fare Types	88	722	869	640	592	346	195	3452

Source: 2016 Wake County Transit Systems Customer Survey



# GoRaleigh 2018 Fare Equity Analysis of Free Youth GoPasses

May 2018

Endorsed by the Raleigh Transit Authority on May 10, 2018

Prepared for:



Prepared by:



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### Overview

GoRaleigh has conducted a Fare Equity Analysis under Title VI of the Civil Rights Act of 1964 to analyze if the agency's plans to implement a free Youth GoPass program for youth in the City of Raleigh (ages 13-18) will cause any disparate impacts on minority customers or create a disproportionate burden for lowincome customers. This report documents how the planned implementation of free fares for youth ridership who possess a Youth GoPass will impact Title VI populations served by GoRaleigh and whether any mitigation is required in accordance with Federal Transit Administration (FTA) guidelines for all proposed fare changes.

GoRaleigh provides transit services for the Cities of Raleigh, Wake Forest, and Zebulon in Wake County. Approximately 443,800 Wake County residents live within one-third mile of a GoRaleigh transit route and are considered part of the agency's service area. GoRaleigh operates 29 routes, serving approximately 24,365 passenger trips per weekday and logged approximately 5,201,970 passenger trips in FY 2016. Starting in July of 2018, GoRaleigh is planning to allow its youth ridership (ages 13-18) to ride free on all of its bus routes.

Equity evaluations are required for all fare changes proposed by GoRaleigh in accordance with FTA guidelines for Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of age, race, color, national origin, disability, sex (gender), or religion.

The FTA Circular 4702.1B *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* was published in 2012 by the FTA in order to comply with the law and fulfill the requirement for all transit agencies receiving Federal funds to develop and implement an agency-wide Title VI program. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" is a directive from the Federal government to prevent minority communities and low-income populations from being subject to disproportionately high and adverse environmental effects. The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes." Title VI protections address other population groups with respect to the potential for discrimination based on age, race, color, national origin, disability, sex (gender), or religion

As a recipient of financial assistance from the Federal Transit Administration (FTA), GoRaleigh is required to demonstrate compliance with the circular. In accordance with Chapter 4 of the circular, fixed route transit providers that operate 50 or more fixed route vehicles in the peak and are located in an urbanized area of a population of 200,000 or more are required to analyze the impacts of any fare system changes. GoRaleigh meets both thresholds and is thus required to analyze impacts of the proposed fare system changes.

GoRaleigh's definitions for minority and low-income populations can be found in Appendix B.

#### Methodology

This fare equity analysis focuses on evaluating three primary questions:

- 1) What effect does the free Youth GoPass have on all youth?
- 2) What effect does the free Youth GoPass have on youth living in low-income and minority households?
- 3) Will the Youth GoPass program cause youth living in non-minority, non-low-income households to "crowd out" transit dependent riders in Raleigh?

Demographic data for GoRaleigh's service area was compiled in order to provide regional context and comparison for the survey data provided by the transit agencies. Data on race/ethnicity, income, and age was compiled from the US Census. The "Race" US Census Bureau data table B02001 was used to identify the composition of minority and non-minority populations within City of Raleigh census block group (see Appendix B for the definition minority populations).

To evaluate youth living in low-income households, the "Household Income in the past 12 Months" U.S. Census Bureau data table B19001 was used. This dataset identifies the composition of single- and multiple-family households that earn incomes below 150 percent of the poverty level (see Appendix B for the definition of low-income populations).

Census Block Group data provides individuals in age clusters (i.e. 10-14, 15-17, and 18-19 years of age). This analysis was specifically evaluating youth (ages 13-18). To estimate the number of individuals that were ages 13-18, it was assumed there was an equal number of individuals for each age in any given Census age cluster. For example, in the age cluster 10-14 it was assumed the same proportion of individuals were ages 10, 11, 12, 13, and 14. By using this assumption, a step-down proportionality process could be used to estimate the number of youth (ages 13-18) who live in the City of Raleigh.

To determine age, income, and minority status for this analysis, another step-down process was used. The proportion of white alone and minority population City of Raleigh Census Block Groups was used to derive the proportion white alone and minority youth in these block groups. Similarly, the proportion of low-income households in each block group was used to estimate the proportion of low-income youth in these block groups.

In addition, survey data from the 2016 Wake County Transit Systems Customer Survey was compiled to review youth ridership characteristics. Data on minority status, income, and age was evaluated.

This analysis took into consideration that youth living in low-income households would likely experience a greater economic disadvantage than youth living in households that are not low-income. Low-income households are more likely to be transit-dependent, relying on GoRaleigh's services to reach daily destinations. Thus, the youth in low-income households are less likely to receive an automobile ride from a parent to daily destinations, and instead rely on GoRaleigh transit services. Similarly, minority households are more likely to be transit-dependent in Wake County.<sup>1</sup> Thus, youth living in minority households are also more likely to rely on GoRaleigh transit services. Youth living in low-income and minority households were evaluated as part of this Fare Equity analysis. Additionally, this analysis evaluated whether free Youth GoPasses extended to non-minority, non-low-income youth would result

<sup>&</sup>lt;sup>1</sup> In Wake County, approximately 32.4 percent of the population is comprised of individuals of minority status. Meanwhile, approximately 62 percent of GoRaleigh's ridership is comprised of individuals of minority status.

in overcrowding of bus services, potentially negatively impacting transit dependent riders in Wake County.

## Fare Equity Analysis

Across the United States, there has been increasing interest in identifying reliable, safe, and affordable transportation access so people can reach key destinations. This has included enabling students to get to school, health facilities, recreational areas, and other valuable locations. To advance affordable transit access to its youth riders in Wake County (ages 13-18), GoRaleigh is planning to permanently offer free Youth GoPasses to youth riders on all GoRaleigh bus routes.

The Wake County Public School System (WCPSS) supports the Youth GoPass program and provided the following statement to ABC 11: "Anytime somebody is offering something to our students and helping to improve our transportation infrastructure, it's always a good thing." A series of public hearings were held in January to get public input on the proposed fare changes.

#### Existing and Proposed Conditions

GoRaleigh currently offers its youth ridership discounted fares (approximately half price) for each of the fare types it provides for its local, regional, and express services (see table below). In July 2018, GoRaleigh plans to offer free GoPasses to youth in Wake County. GoRaleigh will provide bus passes that enable youth free access to all of its transit services.

	FARE TYPE	FULL FARE	DISCOUNTED FARE	PROPOSED YOUTH FARE	DESCRIPTION
	Local Cash Fare	\$1.25	\$0.60	Free	One-way fare on GoRaleigh buses
LOCAL	Local Day Pass	\$2.50	\$1.25	Free	Unlimited rides on GoRaleigh buses for 1 day
ΓΟC	Local 7- Day Pass	\$12.00	\$6.00	Free	Unlimited rides on GoRaleigh buses for 7 days
	Local 31- Day Pass	\$45.00	\$22.50	Free	Unlimited rides on GoRaleigh buses for 31 days
	Regional Day Pass	\$4.50	\$2.00	Free	Unlimited rides on regional + GoRaleigh buses for 1 day
REGIONAL	Regional 7- Day Pass	\$16.50	\$7.50	Free	Unlimited rides on regional + GoRaleigh buses for 7 days
REG	Regional 31-Day Pass	\$76.50	\$34.00	Free	Unlimited rides on regional + GoRaleigh buses for 31 days
	Express Day Pass	\$6.00	\$2.50	Free	Unlimited rides on express, regional, + GoRaleigh buses for 1 day
PRESS	Express 7- Day Pass	\$22.00	\$9.25	Free	Unlimited rides on express, regional, + GoRaleigh buses for 7 days
EXI	Express 31-Day Pass	\$102.00	\$42.50	Free	Unlimited rides on express, regional, + GoRaleigh buses for 31 days

#### Table 1: Existing and Proposed GoRaleigh Youth Fares

#### Free Youth GoPass Program's Effect on Youth Ridership

Approximately 34,210 of the 82,084 youth in Wake County (42 percent) live within one-third mile of a GoRaleigh transit route. The proposed free bus fares would benefit all youth within GoRaleigh's service area, including minority youth and youth living in low-income households.

Free Youth GoPass Program's Effect on Youth Ridership in Low-Income and Minority Households

It is estimated that 13,060 of the 34,210 youth in GoRaleigh's service area live in low-income households (19 percent). Figure 1 shows hotspot areas (indicated by shaded block groups) where the proportion of youth living low-income households is greater than two-standard deviations from the average. Low-income youth benefit to a greater degree from free service, as fares comprise a larger portion of their families' household incomes and they are more likely to be transit-dependent riders.

It is estimated that 13,060 of the 34,210 youth in GoRaleigh's service are of minority status (38 percent). Figure 1 shows hotspot areas (indicated by shaded block groups) where the proportion of youth living low-income households is greater than two-standard deviations from the average. Minority youth benefit to a greater extent from free service, as they comprise the largest share of GoRaleigh ridership and are thus more likely to be transit-dependent riders.

#### Free Youth GoPass's Effect on Overall Service Demand

Another question being evaluated in this fare equity analysis is whether the free Youth GoPass program will result in youth living in non-minority, non-low-income households to utilize GoRaleigh's transit services to the point where they "crowd out" transit dependent riders in the region. Census data provides meaningful insight. American Community Survey data shows that approximately 8 percent of the population is comprised of youth (ages 13-18). It is unlikely that even with a substantial behavior change that "crowding out" would occur on GoRaleigh's buses.

The Transit Cooperative Research Program Report "Transit Pricing and Fares: Travel Response to Transportation System Changes (TCRP Report 95)," which analyzed the impact of fare changes in more than 30 transit systems across the U.S., also provides some insight. TCRP Report 95 findings demonstrate that the price of a transit fare affects individuals' willingness to use that transit service. An increase in transit fares discourages transit ridership, while a decrease in fares encourages ridership. The extent to which this change in price results in a related change in ridership is known its fare elasticity.<sup>2</sup> The report analyzed various bus fare elasticities in the United States and found that rider responsiveness to fare changes depends on the population of the transit service area, the time of day, and the price point.<sup>3</sup>

In areas with high elasticities, or a high level of responsiveness to fare changes, fare increases heighten the differences between the daily peaks and valleys of transit usage, while fare decreases diminish the differences.<sup>4</sup> In other words, in areas where riders are highly responsive to price changes, they will be

<sup>&</sup>lt;sup>2</sup> If an incremental change fare price results in a small or negligible difference in fare purchasing behavior, the demand for bus services is considered to be inelastic. On the other hand, if an incremental change in fare prices results in a substantial difference in fare purchasing behavior, the demand for bus services is considered to be elastic.

<sup>&</sup>lt;sup>3</sup> Transit Pricing and Fares: Travel Response to Transportation System Changes. *Transit Cooperative Research Program*. Online: <u>http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\_rpt\_95c12.pdf</u>

<sup>&</sup>lt;sup>4</sup> A common explanation for the differences in rider responses in peak and off-peak periods is the concentration of work and school trips in peak periods. These trips are typically made every day, and are mostly non-discretionary. If travel alternatives are

more responsive during off-peak service hours. Riders living in urban areas with populations less than 500,000 are likely to be highly responsive to fare changes; while riders living in areas with populations from 500,000 to 1 million (most similar to GoRaleigh's ridership - population of Raleigh is approximately 450,000 and Wake County is approximately one million) are likely to moderately responsive to fare changes; and riders living in areas with over 1 million in population are likely to be only somewhat responsive to fare changes.<sup>5</sup>

TCRP Report 95 findings indicate that GoRaleigh's ridership is likely to be moderately responsive to fare changes, thus the free Youth GoPass program should bring a moderate increase in youth ridership. When spread across GoRaleigh's services, findings suggest that GoRaleigh may experience a slight increase in overall ridership with the most pronounced increases being felt during off-peak service.

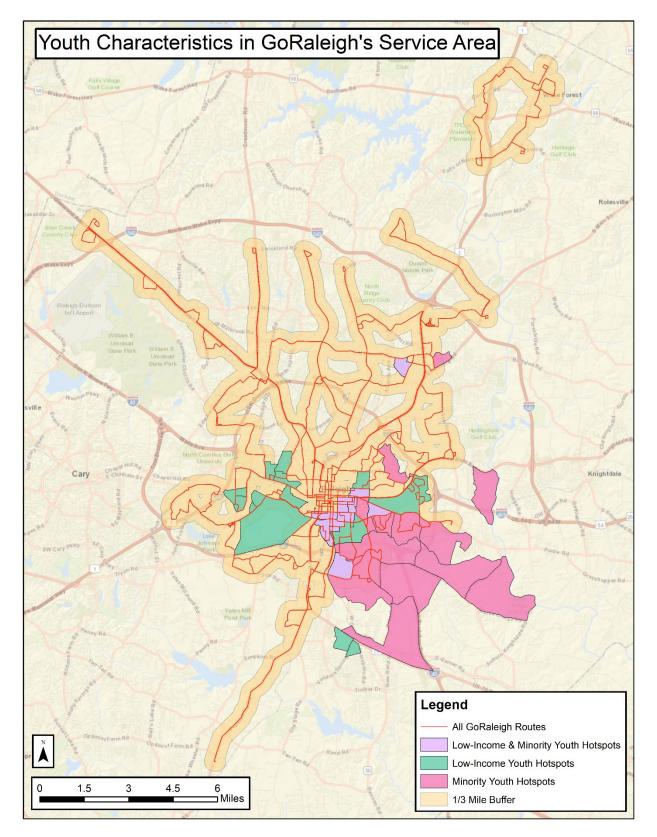
# Mitigation and Enhancement Opportunities

Free Youth GoPasses would create benefit to all youth in GoRaleigh's service area, including a higher magnitude of benefit to minority youth and youth living in low-income households that are currently transit dependent. Ensuring equal access youth passes, will enable this benefit to be realized.

The following enhancement opportunities are suggestions that would enable all youth, including minority youth and youth living in low-income households equitable access to youth passes:

- Distribute youth passes to middle and high schools in Wake County so that they are available for any student to use. Distribution to schools could be streamlined via online access for school administrators. Administrators could print passes and provide them to students who qualify. Additionally, promotional information about Youth GoPasses passes could undergo a coordinated distribution effort with information about free and reduced lunch programs.
- Distribute youth passes at all of GoRaleigh's vending locations, with special focus on youth minority and youth low-income hotspot locations.
- Distribute via key stakeholder networks, such as:
  - Non-profits working with disadvantaged youth (i.e. boys and girls clubs)
  - City of Raleigh Community Centers with a focus on those that are located in hotspot locations and have facilities with after school programs

unattractive or unavailable, riders making non-discretionary trips will accept fare increases with little change in their riding frequency. In contrast, off-peak trips often are made for other purposes such as shopping, medical, recreational, and personal business. These trips are more discretionary and can be postponed or combined when riders are faced with fare increases. <sup>5</sup> One possible explanation for this apparent relationship of higher fare elasticities in smaller cities is that the option of auto travel is most convenient and least expensive in such cities, or, conversely, the higher levels of transit service that can be sustained in larger cities better serve to retain riders.



#### Figure 1: GoRaleigh Service Area and Youth Populations

# Conclusion

GoRaleigh is planning to introduce a free Youth GoPass program, enabling youth who are pass-holders to use its system at no cost. All other GoRaleigh fares will be unaffected by this change.

In preparation for the implementation the Youth GoPass program, GoRaleigh has conducted a fare equity analysis in order to ensure that the proposed changes do not result in a disparate impact on the basis of race, ethnicity, or national origin or a disproportionate burden on low-income households. The findings of this fare equity analysis show that neither a disproportionate burden on low-income riders nor a disparate impact on minority riders will occur.

Approximately 34,210 youth live in GoRaleigh's service area. Of these youth, approximately 13,060 (38 percent of youth in service area) have minority status and 6,540 (19 percent of youth in service area) are living in low-income households. All youth using GoRaleigh's services will benefit from this change, and youth living in low-income and minority households will likely experience a higher magnitude of benefit. This is because transit fares comprise a higher proportion of the household incomes of youth living in low-income households. Additionally, youth living in low-income households and minority youth are more predisposed to be transit dependent, and likely to more frequently pay GoRaleigh bus fares than non-minority and non-low-income riders.

Fare elasticity data from other transit systems, when applied in the context of GoRaleigh, indicate that GoRaleigh's ridership is likely to be moderately responsive to fare changes, likely bringing a moderate increase in GoRaleigh's youth ridership. When spread across GoRaleigh's services, findings suggest that GoRaleigh may experience a slight increase in overall ridership with the most pronounced increases being felt during off-peak service. This increase in youth ridership is not likely to create crowding on buses, and will not negatively affect existing ridership.

# Appendix A – Census Data

*Title VI Fare Equity Analysis: GoRaleigh Free Youth GoPasses Endorsed by the Raleigh Transit Authority on May 10, 2018* 

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 501	3,575	155	42	66	27%	43%
Block Group 1, Census Tract 503	1,391	60	13	5	21%	8%
Block Group 2, Census Tract 503	1,236	0	0	0	0%	0%
Block Group 1, Census Tract 504	971	16	2	1	9%	4%
Block Group 2, Census Tract 504	800	150	65	61	43%	40%
Block Group 1, Census Tract 505	1,258	12	3	2	26%	19%
Block Group 2, Census Tract 505	1,581	73	22	36	30%	49%
Block Group 3, Census Tract 505	897	64	14	16	22%	25%
Block Group 1, Census Tract 506	2,022	430	194	309	45%	72%
Block Group 2, Census Tract 506	877	74	37	68	49%	92%
Block Group 3, Census Tract 506	1,049	41	14	19	35%	46%
Block Group 1, Census Tract 507	1,257	131	68	108	52%	82%
Block Group 2, Census Tract 507	916	49	26	38	54%	77%
Block Group 3, Census Tract 507	1,337	100	35	86	35%	86%
Block Group 1, Census Tract 508	995	108	79	97	73%	90%
Block Group 2, Census Tract 508	1,165	87	42	56	48%	64%
Block Group 3, Census Tract 508	2,368	37	18	20	48%	54%
Block Group 1, Census Tract 509	1,541	360	212	279	59%	77%
Block Group 2, Census Tract 509	835	11	9	9	79%	84%
Block Group 3, Census Tract 509	482	25	16	24	64%	95%
Block Group 1, Census Tract 510	1,299	29	10	8	35%	28%
Block Group 2, Census Tract 510	1,003	33	7	3	22%	10%
Block Group 1, Census Tract 511.01	3,622	1055	0	201	0%	19%
Block Group 2, Census Tract 511.01	1,478	30	13	20	43%	68%
Block Group 3, Census Tract 511.01	419	145	0	51	0%	35%
Block Group 1, Census Tract 511.02	402	120	0	35	0%	29%
Block Group 2, Census Tract 511.02	3,133	1106	0	245	0%	22%
Block Group 3, Census Tract 511.02	775	14	9	10	67%	68%
Block Group 1, Census Tract 512	1,024	14	3	0	20%	3%
Block Group 2, Census Tract 512	1,186	34	5	6	16%	18%
Block Group 3, Census Tract 512	1,685	146	81	23	55%	16%
Block Group 1, Census Tract 514	476	26	6	0	21%	0%
Block Group 2, Census Tract 514	1,118	100	49	10	49%	10%
Block Group 3, Census Tract 514	1,505	166	32	35	19%	21%
Block Group 4, Census Tract 514	913	106	36	14	34%	13%
Block Group 5, Census Tract 514	1,057	69	32	16	47%	23%
Block Group 1, Census Tract 515.01	1,308	85	13	2	15%	3%
Block Group 2, Census Tract 515.01	1,697	145	12	15	8%	10%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 515.02	873	34	10	17	31%	49%
Block Group 2, Census Tract 515.02	1,792	145	10	5	7%	4%
Block Group 1, Census Tract 516	888	73	3	2	4%	3%
Block Group 2, Census Tract 516	1,085	60	8	0	13%	0%
Block Group 3, Census Tract 516	1,070	38	4	1	11%	3%
Block Group 4, Census Tract 516	647	29	2	0	8%	0%
Block Group 5, Census Tract 516	1,039	74	4	4	6%	5%
Block Group 1, Census Tract 517	1,248	93	10	1	11%	1%
Block Group 2, Census Tract 517	1,137	114	7	4	6%	3%
Block Group 3, Census Tract 517	832	28	2	1	5%	3%
Block Group 1, Census Tract 518	1,090	54	13	4	24%	7%
Block Group 2, Census Tract 518	1,696	77	0	2	0%	3%
Block Group 3, Census Tract 518	1,979	73	12	24	16%	33%
Block Group 1, Census Tract 519	1,424	128	23	65	18%	51%
Block Group 2, Census Tract 519	2,232	151	59	111	39%	73%
Block Group 3, Census Tract 519	1,401	57	22	44	39%	77%
Block Group 1, Census Tract 520.01	2,681	114	53	61	47%	54%
Block Group 2, Census Tract 520.01	1,839	216	103	144	48%	67%
Block Group 1, Census Tract 520.02	1,027	82	28	77	34%	94%
Block Group 2, Census Tract 520.02	2,040	238	95	179	40%	75%
Block Group 3, Census Tract 520.02	1,386	190	56	187	30%	98%
Block Group 4, Census Tract 520.02	731	133	63	119	47%	90%
Block Group 1, Census Tract 521.01	3,922	284	78	225	28%	79%
Block Group 2, Census Tract 521.01	1,017	107	36	103	33%	96%
Block Group 3, Census Tract 521.01	1,344	126	74	111	59%	88%
Block Group 4, Census Tract 521.01	1,330	126	43	125	34%	99%
Block Group 1, Census Tract 521.02	4,532	454	127	392	28%	86%
Block Group 2, Census Tract 521.02	1,523	112	47	86	42%	77%
Block Group 1, Census Tract 523.01	1,348	44	8	8	19%	19%
Block Group 2, Census Tract 523.01	2,457	78	23	29	30%	38%
Block Group 3, Census Tract 523.01	2,666	120	39	41	33%	34%
Block Group 1, Census Tract 523.02	1,099	58	33	31	56%	53%
Block Group 2, Census Tract 523.02	2,968	136	53	23	39%	17%
Block Group 3, Census Tract 523.02	3,676	176	66	76	37%	43%
Block Group 1, Census Tract 524.01	3,121	88	17	26	19%	30%
Block Group 2, Census Tract 524.01	983	261	0	76	0%	29%
Block Group 1, Census Tract 524.04	2,196	192	29	26	15%	14%
Block Group 2, Census Tract 524.04	1,402	32	13	11	39%	35%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 3, Census Tract 524.04	968	60	6	23	10%	38%
Block Group 1, Census Tract 524.06	1,780	58	17	23	29%	40%
Block Group 2, Census Tract 524.06	2,413	137	54	73	40%	54%
Block Group 3, Census Tract 524.06	2,829	164	35	67	21%	41%
Block Group 1, Census Tract 524.07	1,865	83	36	28	43%	33%
Block Group 2, Census Tract 524.07	1,963	99	28	33	29%	33%
Block Group 1, Census Tract 524.08	1,250	54	30	30	55%	55%
Block Group 2, Census Tract 524.08	1,569	101	48	28	47%	28%
Block Group 1, Census Tract 524.09	526	6	3	4	53%	72%
Block Group 2, Census Tract 524.09	1,249	253	129	115	51%	45%
Block Group 3, Census Tract 524.09	2,548	91	32	39	35%	42%
Block Group 1, Census Tract 525.03	1,823	35	5	10	14%	30%
Block Group 2, Census Tract 525.03	3,179	97	4	13	4%	14%
Block Group 3, Census Tract 525.03	1,386	76	11	10	14%	13%
Block Group 1, Census Tract 525.04	2,760	189	60	29	32%	16%
Block Group 2, Census Tract 525.04	1,023	47	4	5	9%	10%
Block Group 3, Census Tract 525.04	1,752	95	10	11	11%	12%
Block Group 1, Census Tract 525.05	3,039	124	19	13	16%	11%
Block Group 2, Census Tract 525.05	2,438	219	31	102	14%	47%
Block Group 1, Census Tract 525.06	1,270	52	5	2	10%	5%
Block Group 2, Census Tract 525.06	678	32	9	8	28%	24%
Block Group 1, Census Tract 525.07	718	50	7	7	14%	14%
Block Group 2, Census Tract 525.07	2,421	71	13	19	18%	27%
Block Group 1, Census Tract 526.01	1,974	160	10	22	6%	14%
Block Group 2, Census Tract 526.01	1,005	90	7	6	7%	7%
Block Group 1, Census Tract 526.02	1,836	148	20	32	14%	22%
Block Group 2, Census Tract 526.02	967	63	5	3	9%	5%
Block Group 3, Census Tract 526.02	1,361	26	11	7	43%	26%
Block Group 1, Census Tract 526.03	1,464	74	7	10	9%	14%
Block Group 2, Census Tract 526.03	1,278	45	7	8	16%	19%
Block Group 1, Census Tract 527.01	2,391	188	34	53	18%	28%
Block Group 2, Census Tract 527.01	1,746	135	12	57	9%	42%
Block Group 3, Census Tract 527.01	1,610	173	68	122	39%	70%
Block Group 1, Census Tract 527.04	2,989	247	109	173	44%	70%
Block Group 2, Census Tract 527.04	2,093	234	119	198	51%	84%
Block Group 3, Census Tract 527.04	2,032	127	33	69	26%	54%
Block Group 1, Census Tract 527.05	1,626	147	27	60	18%	41%
Block Group 2, Census Tract 527.05	2,793	214	37	50	17%	24%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 527.06	1,791	204	30	105	15%	51%
Block Group 2, Census Tract 527.06	1,274	80	25	37	31%	47%
Block Group 3, Census Tract 527.06	1,357	93	7	30	7%	33%
Block Group 1, Census Tract 527.07	1,050	119	6	22	5%	19%
Block Group 2, Census Tract 527.07	1,407	93	19	32	20%	34%
Block Group 3, Census Tract 527.07	4,184	474	112	247	24%	52%
Block Group 1, Census Tract 528.01	1,579	220	7	44	3%	20%
Block Group 2, Census Tract 528.01	1,683	47	4	6	9%	12%
Block Group 3, Census Tract 528.01	2,442	190	7	99	4%	52%
Block Group 4, Census Tract 528.01	768	172	28	5	16%	3%
Block Group 5, Census Tract 528.01	545	72	40	27	56%	38%
Block Group 1, Census Tract 528.02	1,985	95	7	48	7%	50%
Block Group 2, Census Tract 528.02	1,275	115	59	75	52%	65%
Block Group 3, Census Tract 528.02	1,467	162	10	35	6%	22%
Block Group 4, Census Tract 528.02	1,723	86	10	25	12%	29%
Block Group 1, Census Tract 528.03	2,543	225	66	98	29%	44%
Block Group 2, Census Tract 528.03	2,097	201	50	170	25%	85%
Block Group 3, Census Tract 528.03	5,534	577	123	523	21%	91%
Block Group 1, Census Tract 528.06	578	55	6	46	12%	84%
Block Group 2, Census Tract 528.06	4,303	402	37	311	9%	77%
Block Group 3, Census Tract 528.06	4,879	296	64	155	22%	52%
Block Group 4, Census Tract 528.06	7,028	686	81	579	12%	84%
Block Group 1, Census Tract 528.07	2,406	226	15	96	7%	42%
Block Group 2, Census Tract 528.07	3,156	162	23	96	14%	59%
Block Group 1, Census Tract 528.08	1,269	39	5	9	13%	22%
Block Group 2, Census Tract 528.08	3,770	442	134	211	30%	48%
Block Group 3, Census Tract 528.08	1,775	100	4	18	4%	18%
Block Group 4, Census Tract 528.08	2,510	229	18	95	8%	42%
Block Group 1, Census Tract 528.09	1,125	73	11	23	15%	31%
Block Group 2, Census Tract 528.09	2,037	119	19	31	16%	26%
Block Group 1, Census Tract 529.01	2,345	181	27	23	15%	13%
Block Group 1, Census Tract 529.02	3,228	247	25	28	10%	11%
Block Group 2, Census Tract 529.02	2,495	213	26	53	12%	25%
Block Group 1, Census Tract 529.03	2,981	306	34	63	11%	20%
Block Group 1, Census Tract 529.04	2,850	193	19	41	10%	21%
Block Group 2, Census Tract 529.04	2,851	371	60	60	16%	16%
Block Group 3, Census Tract 529.04	1,778	108	4	16	4%	15%
Block Group 1, Census Tract 530.03	5,220	221	39	75	18%	34%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 2, Census Tract 530.03	1,324	202	0	31	0%	15%
Block Group 1, Census Tract 530.04	1,442	89	13	13	15%	14%
Block Group 2, Census Tract 530.04	1,215	88	2	18	3%	20%
Block Group 1, Census Tract 530.05	748	49	2	8	3%	17%
Block Group 2, Census Tract 530.05	2,055	156	8	14	5%	9%
Block Group 3, Census Tract 530.05	2,188	208	8	29	4%	14%
Block Group 1, Census Tract 530.06	3,014	288	22	20	8%	7%
Block Group 1, Census Tract 530.07	1,228	97	6	17	6%	17%
Block Group 2, Census Tract 530.07	1,860	214	5	8	2%	4%
Block Group 1, Census Tract 530.08	4,168	220	31	82	14%	37%
Block Group 2, Census Tract 530.08	1,834	94	10	34	11%	36%
Block Group 3, Census Tract 530.08	1,577	83	10	19	12%	23%
Block Group 4, Census Tract 530.08	897	37	0	0	0%	0%
Block Group 1, Census Tract 530.09	2,208	105	12	39	11%	37%
Block Group 2, Census Tract 530.09	3,442	292	64	67	22%	23%
Block Group 3, Census Tract 530.09	809	103	18	3	17%	3%
Block Group 4, Census Tract 530.09	1,615	146	26	35	18%	24%
Block Group 1, Census Tract 531.05	3,966	248	44	46	18%	18%
Block Group 1, Census Tract 531.06	3,637	386	77	178	20%	46%
Block Group 1, Census Tract 531.07	2,961	122	6	31	5%	26%
Block Group 2, Census Tract 531.07	3,662	362	105	106	29%	29%
Block Group 3, Census Tract 531.07	4,125	231	44	64	19%	28%
Block Group 1, Census Tract 531.08	2,063	139	20	10	15%	7%
Block Group 2, Census Tract 531.08	5,038	289	18	47	6%	16%
Block Group 1, Census Tract 531.09	6,349	596	53	102	9%	17%
Block Group 2, Census Tract 531.09	2,357	228	53	38	23%	16%
Block Group 1, Census Tract 531.10	2,270	264	35	63	13%	24%
Block Group 2, Census Tract 531.10	2,019	254	20	26	8%	10%
Block Group 3, Census Tract 531.10	1,300	133	20	8	15%	6%
Block Group 1, Census Tract 531.11	1,928	171	29	28	17%	17%
Block Group 2, Census Tract 531.11	2,095	205	16	39	8%	19%
Block Group 3, Census Tract 531.11	2,011	176	75	52	43%	30%
Block Group 1, Census Tract 532.01	6,883	597	7	102	1%	17%
Block Group 2, Census Tract 532.01	5,301	467	19	51	4%	11%
Block Group 1, Census Tract 532.02	2,432	343	7	41	2%	12%
Block Group 2, Census Tract 532.02	2,241	293	13	24	4%	8%
Block Group 1, Census Tract 532.03	3,741	234	13	74	6%	32%
Block Group 2, Census Tract 532.03	4,010	473	58	76	12%	16%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 532.04	2,576	151	20	41	13%	27%
Block Group 2, Census Tract 532.04	2,317	277	14	106	5%	38%
Block Group 1, Census Tract 532.05	1,944	215	32	37	15%	17%
Block Group 1, Census Tract 532.06	4,306	449	72	147	16%	33%
Block Group 1, Census Tract 532.07	2,451	173	16	19	9%	11%
Block Group 2, Census Tract 532.07	5,452	513	11	68	2%	13%
Block Group 1, Census Tract 534.05	1,343	179	4	28	2%	15%
Block Group 2, Census Tract 534.05	2,415	331	11	45	3%	13%
Block Group 3, Census Tract 534.05	1,049	63	6	9	10%	15%
Block Group 1, Census Tract 534.08	2,718	324	5	122	1%	38%
Block Group 2, Census Tract 534.08	1,727	247	12	28	5%	11%
Block Group 1, Census Tract 534.09	1,720	229	7	64	3%	28%
Block Group 2, Census Tract 534.09	2,773	269	10	45	4%	17%
Block Group 3, Census Tract 534.09	2,723	284	16	114	6%	40%
Block Group 1, Census Tract 534.10	5,315	645	22	270	3%	42%
Block Group 1, Census Tract 534.11	2,850	236	6	120	3%	51%
Block Group 2, Census Tract 534.11	4,382	578	10	94	2%	16%
Block Group 1, Census Tract 534.12	3,827	531	43	37	8%	7%
Block Group 2, Census Tract 534.12	543	7	0	1	0%	13%
Block Group 3, Census Tract 534.12	2,432	281	7	124	2%	44%
Block Group 1, Census Tract 534.13	4,631	600	61	99	10%	16%
Block Group 2, Census Tract 534.13	1,140	81	9	16	12%	20%
Block Group 1, Census Tract 534.14	4,563	479	37	24	8%	5%
Block Group 2, Census Tract 534.14	4,032	403	61	131	15%	33%
Block Group 1, Census Tract 534.15	3,450	362	16	93	4%	26%
Block Group 1, Census Tract 534.16	2,079	244	24	56	10%	23%
Block Group 2, Census Tract 534.16	3,261	300	24	83	8%	28%
Block Group 3, Census Tract 534.16	1,087	10	1	4	14%	39%
Block Group 1, Census Tract 534.17	2,995	196	35	72	18%	37%
Block Group 1, Census Tract 534.18	2,279	259	13	55	5%	21%
Block Group 2, Census Tract 534.18	1,479	37	11	9	30%	23%
Block Group 3, Census Tract 534.18	2,387	284	23	47	8%	17%
Block Group 1, Census Tract 534.19	1,148	61	0	4	0%	6%
Block Group 2, Census Tract 534.19	1,829	194	11	14	5%	7%
Block Group 1, Census Tract 534.20	1,941	108	16	20	15%	18%
Block Group 2, Census Tract 534.20	4,280	381	61	81	16%	21%
Block Group 1, Census Tract 534.21	5,350	538	38	102	7%	19%
Block Group 1, Census Tract 534.22	1,857	233	10	43	4%	18%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 2, Census Tract 534.22	659	49	0	3	0%	5%
Block Group 1, Census Tract 534.23	1,267	67	6	8	9%	12%
Block Group 2, Census Tract 534.23	808	68	7	5	10%	8%
Block Group 1, Census Tract 534.24	2,435	223	10	59	4%	26%
Block Group 2, Census Tract 534.24	2,144	216	6	59	3%	27%
Block Group 1, Census Tract 534.25	1,738	251	17	59	7%	24%
Block Group 2, Census Tract 534.25	1,179	131	15	94	11%	72%
Block Group 1, Census Tract 535.05	1,493	89	1	4	1%	4%
Block Group 2, Census Tract 535.05	1,050	109	6	23	6%	21%
Block Group 3, Census Tract 535.05	1,078	87	10	14	11%	16%
Block Group 1, Census Tract 535.06	699	47	13	1	28%	3%
Block Group 2, Census Tract 535.06	762	19	1	4	4%	21%
Block Group 3, Census Tract 535.06	1,503	49	4	3	8%	7%
Block Group 4, Census Tract 535.06	2,246	82	14	9	18%	11%
Block Group 1, Census Tract 535.07	654	17	4	2	21%	11%
Block Group 2, Census Tract 535.07	1,929	117	40	43	34%	37%
Block Group 3, Census Tract 535.07	1,507	157	11	25	7%	16%
Block Group 1, Census Tract 535.09	1,225	120	11	15	10%	12%
Block Group 2, Census Tract 535.09	2,035	241	12	35	5%	14%
Block Group 3, Census Tract 535.09	1,984	180	11	28	6%	15%
Block Group 1, Census Tract 535.12	3,387	411	29	137	7%	33%
Block Group 2, Census Tract 535.12	1,915	90	7	16	8%	18%
Block Group 3, Census Tract 535.12	759	6	2	1	32%	19%
Block Group 1, Census Tract 535.13	2,026	124	22	49	18%	40%
Block Group 2, Census Tract 535.13	2,100	116	32	34	27%	30%
Block Group 1, Census Tract 535.16	2,723	299	78	132	26%	44%
Block Group 2, Census Tract 535.16	1,311	143	7	52	5%	36%
Block Group 1, Census Tract 535.17	3,253	192	52	81	27%	42%
Block Group 2, Census Tract 535.17	684	51	10	9	19%	18%
Block Group 3, Census Tract 535.17	911	88	10	25	11%	28%
Block Group 4, Census Tract 535.17	502	5	1	2	18%	32%
Block Group 1, Census Tract 535.18	1,436	75	8	8	11%	11%
Block Group 2, Census Tract 535.18	1,491	48	4	1	9%	2%
Block Group 3, Census Tract 535.18	785	13	1	0	6%	3%
Block Group 1, Census Tract 535.19	1,592	92	10	26	11%	29%
Block Group 2, Census Tract 535.19	1,500	44	11	9	24%	21%
Block Group 3, Census Tract 535.19	1,604	79	29	48	36%	61%
Block Group 1, Census Tract 535.20	1,756	90	4	28	4%	31%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 2, Census Tract 535.20	2,608	110	31	47	28%	42%
Block Group 3, Census Tract 535.20	1,603	135	30	78	23%	58%
Block Group 1, Census Tract 535.21	2,255	102	3	24	3%	23%
Block Group 2, Census Tract 535.21	1,537	127	15	18	12%	14%
Block Group 1, Census Tract 535.22	2,092	230	24	58	11%	25%
Block Group 2, Census Tract 535.22	3,641	135	8	81	6%	60%
Block Group 1, Census Tract 535.23	2,544	248	13	75	5%	30%
Block Group 2, Census Tract 535.23	3,232	463	40	139	9%	30%
Block Group 1, Census Tract 535.24	1,528	47	12	9	25%	19%
Block Group 2, Census Tract 535.24	2,201	134	7	27	5%	20%
Block Group 1, Census Tract 535.25	902	89	6	16	6%	18%
Block Group 2, Census Tract 535.25	1,562	117	2	14	2%	12%
Block Group 1, Census Tract 536.01	3,513	261	28	154	11%	59%
Block Group 2, Census Tract 536.01	3,428	231	9	85	4%	37%
Block Group 3, Census Tract 536.01	2,012	131	9	63	7%	48%
Block Group 1, Census Tract 536.02	5,551	463	4	292	1%	63%
Block Group 1, Census Tract 536.03	4,287	336	28	100	8%	30%
Block Group 1, Census Tract 536.04	2,084	427	14	152	3%	36%
Block Group 2, Census Tract 536.04	2,382	254	23	67	9%	26%
Block Group 1, Census Tract 536.05	2,079	122	3	43	2%	35%
Block Group 1, Census Tract 536.06	1,772	37	4	16	12%	43%
Block Group 2, Census Tract 536.06	700	69	2	10	3%	14%
Block Group 1, Census Tract 536.07	8,714	583	51	337	9%	58%
Block Group 1, Census Tract 536.08	3,381	80	4	44	5%	55%
Block Group 1, Census Tract 536.09	706	6	1	3	9%	48%
Block Group 1, Census Tract 536.10	7,043	218	23	95	11%	44%
Block Group 2, Census Tract 536.10	2,798	67	3	16	5%	23%
Block Group 1, Census Tract 537.07	1,689	52	3	1	5%	2%
Block Group 2, Census Tract 537.07	2,358	124	18	36	14%	29%
Block Group 3, Census Tract 537.07	2,333	93	13	35	13%	38%
Block Group 1, Census Tract 537.09	1,577	106	7	40	7%	37%
Block Group 2, Census Tract 537.09	2,646	92	22	34	24%	37%
Block Group 3, Census Tract 537.09	2,842	122	8	25	7%	21%
Block Group 1, Census Tract 537.11	2,070	210	6	27	3%	13%
Block Group 2, Census Tract 537.11	1,798	92	9	8	10%	9%
Block Group 3, Census Tract 537.11	1,732	130	19	42	15%	33%
Block Group 1, Census Tract 537.12	1,590	161	8	39	5%	24%
Block Group 2, Census Tract 537.12	1,238	94	4	2	4%	2%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 537.13	2,276	210	37	76	18%	36%
Block Group 2, Census Tract 537.13	1,574	68	10	25	15%	36%
Block Group 1, Census Tract 537.14	1,562	119	19	8	16%	7%
Block Group 2, Census Tract 537.14	2,141	110	20	39	18%	35%
Block Group 3, Census Tract 537.14	893	61	9	18	15%	29%
Block Group 1, Census Tract 537.15	1,705	92	15	21	16%	23%
Block Group 2, Census Tract 537.15	1,746	113	6	16	5%	14%
Block Group 1, Census Tract 537.16	937	40	9	7	22%	18%
Block Group 2, Census Tract 537.16	1,088	9	1	2	8%	22%
Block Group 3, Census Tract 537.16	1,828	16	3	10	20%	62%
Block Group 1, Census Tract 537.17	2,591	166	10	52	6%	31%
Block Group 1, Census Tract 537.18	3,357	313	16	42	5%	13%
Block Group 1, Census Tract 537.19	2,019	168	16	18	10%	11%
Block Group 2, Census Tract 537.19	2,044	298	7	27	2%	9%
Block Group 1, Census Tract 537.20	1,139	108	8	11	8%	10%
Block Group 2, Census Tract 537.20	1,070	42	1	4	4%	10%
Block Group 3, Census Tract 537.20	1,916	210	12	36	6%	17%
Block Group 1, Census Tract 537.21	1,824	114	8	20	7%	18%
Block Group 2, Census Tract 537.21	1,561	121	3	5	3%	4%
Block Group 1, Census Tract 537.22	1,280	74	21	6	28%	8%
Block Group 2, Census Tract 537.22	1,688	102	19	16	19%	16%
Block Group 3, Census Tract 537.22	878	12	0	2	3%	13%
Block Group 4, Census Tract 537.22	761	12	1	1	11%	10%
Block Group 1, Census Tract 537.23	1,551	95	8	21	8%	23%
Block Group 2, Census Tract 537.23	1,837	66	5	11	7%	16%
Block Group 1, Census Tract 537.24	6,488	380	48	93	13%	25%
Block Group 1, Census Tract 537.25	2,411	127	12	24	9%	19%
Block Group 2, Census Tract 537.25	2,736	157	10	45	6%	28%
Block Group 1, Census Tract 537.26	2,527	207	45	111	22%	53%
Block Group 2, Census Tract 537.26	850	0	0	0	0%	0%
Block Group 1, Census Tract 538.03	2,425	354	35	24	10%	7%
Block Group 2, Census Tract 538.03	1,541	252	13	62	5%	25%
Block Group 1, Census Tract 538.04	3,510	426	16	38	4%	9%
Block Group 1, Census Tract 538.05	1,304	183	10	19	5%	11%
Block Group 2, Census Tract 538.05	678	76	6	1	7%	1%
Block Group 1, Census Tract 538.06	2,237	231	10	12	4%	5%
Block Group 2, Census Tract 538.06	985	91	2	8	3%	9%
Block Group 1, Census Tract 538.07	1,985	192	5	26	3%	14%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 2, Census Tract 538.07	1,871	148	5	10	4%	7%
Block Group 1, Census Tract 538.08	991	111	0	6	0%	6%
Block Group 2, Census Tract 538.08	1,324	161	3	15	2%	9%
Block Group 3, Census Tract 538.08	2,268	244	20	27	8%	11%
Block Group 4, Census Tract 538.08	680	82	3	19	3%	23%
Block Group 1, Census Tract 539	923	109	10	10	9%	9%
Block Group 2, Census Tract 539	2,427	365	24	20	7%	5%
Block Group 3, Census Tract 539	1,567	189	58	21	31%	11%
Block Group 4, Census Tract 539	3,313	390	13	38	3%	10%
Block Group 1, Census Tract 540.01	1,618	31	4	3	12%	10%
Block Group 2, Census Tract 540.01	1,785	127	17	34	13%	27%
Block Group 3, Census Tract 540.01	1,743	115	49	64	43%	55%
Block Group 1, Census Tract 540.04	1,471	125	16	11	13%	9%
Block Group 2, Census Tract 540.04	1,139	12	4	4	33%	36%
Block Group 3, Census Tract 540.04	1,229	12	1	7	10%	55%
Block Group 4, Census Tract 540.04	1,563	145	34	61	23%	42%
Block Group 1, Census Tract 540.06	2,367	154	50	67	33%	44%
Block Group 2, Census Tract 540.06	1,019	45	1	2	3%	5%
Block Group 1, Census Tract 540.07	1,935	65	9	18	14%	28%
Block Group 2, Census Tract 540.07	2,024	165	20	46	12%	28%
Block Group 1, Census Tract 540.08	1,121	99	4	49	5%	49%
Block Group 2, Census Tract 540.08	3,138	235	66	154	28%	66%
Block Group 3, Census Tract 540.08	1,293	108	33	81	30%	75%
Block Group 4, Census Tract 540.08	1,298	83	33	50	40%	61%
Block Group 1, Census Tract 540.11	1,669	117	12	12	11%	11%
Block Group 2, Census Tract 540.11	1,240	84	5	14	5%	16%
Block Group 1, Census Tract 540.12	1,587	83	7	17	8%	21%
Block Group 2, Census Tract 540.12	1,123	128	5	21	4%	16%
Block Group 3, Census Tract 540.12	1,238	143	0	25	0%	17%
Block Group 1, Census Tract 540.13	5,844	649	33	128	5%	20%
Block Group 2, Census Tract 540.13	2,405	224	11	37	5%	17%
Block Group 3, Census Tract 540.13	1,354	110	9	30	9%	28%
Block Group 4, Census Tract 540.13	3,718	315	34	47	11%	15%
Block Group 1, Census Tract 540.14	8,548	633	93	361	15%	57%
Block Group 2, Census Tract 540.14	2,443	309	80	173	26%	56%
Block Group 3, Census Tract 540.14	2,724	343	122	136	36%	40%
Block Group 1, Census Tract 540.15	2,501	225	24	100	10%	45%
Block Group 1, Census Tract 540.16	985	75	6	19	8%	26%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 2, Census Tract 540.16	2,401	167	22	46	13%	27%
Block Group 3, Census Tract 540.16	2,368	198	10	10	5%	5%
Block Group 1, Census Tract 540.17	3,052	181	33	67	18%	37%
Block Group 1, Census Tract 540.18	1,397	70	26	48	38%	68%
Block Group 2, Census Tract 540.18	2,276	156	54	110	35%	71%
Block Group 1, Census Tract 541.04	1,700	107	15	51	14%	48%
Block Group 2, Census Tract 541.04	2,485	196	41	64	21%	33%
Block Group 3, Census Tract 541.04	5,032	586	63	424	11%	72%
Block Group 4, Census Tract 541.04	1,642	217	14	120	6%	55%
Block Group 1, Census Tract 541.05	2,899	206	15	129	7%	63%
Block Group 2, Census Tract 541.05	2,831	162	9	63	5%	39%
Block Group 3, Census Tract 541.05	3,276	188	21	73	11%	39%
Block Group 4, Census Tract 541.05	2,853	341	65	139	19%	41%
Block Group 5, Census Tract 541.05	747	118	0	63	0%	53%
Block Group 1, Census Tract 541.06	1,559	91	18	58	19%	64%
Block Group 2, Census Tract 541.06	1,890	273	60	154	22%	57%
Block Group 3, Census Tract 541.06	4,725	419	40	324	9%	77%
Block Group 1, Census Tract 541.08	2,241	289	58	149	20%	52%
Block Group 2, Census Tract 541.08	3,229	321	24	175	7%	55%
Block Group 3, Census Tract 541.08	1,338	200	43	107	21%	54%
Block Group 1, Census Tract 541.09	2,065	119	3	52	3%	44%
Block Group 2, Census Tract 541.09	1,782	192	37	50	19%	26%
Block Group 1, Census Tract 541.10	2,236	115	0	57	0%	50%
Block Group 2, Census Tract 541.10	4,759	532	54	204	10%	38%
Block Group 3, Census Tract 541.10	2,229	273	11	97	4%	36%
Block Group 1, Census Tract 541.11	1,994	142	22	42	15%	30%
Block Group 1, Census Tract 541.12	3,957	486	84	242	17%	50%
Block Group 1, Census Tract 541.13	1,084	129	23	42	18%	33%
Block Group 2, Census Tract 541.13	1,491	57	5	23	8%	40%
Block Group 1, Census Tract 541.14	2,652	241	7	84	3%	35%
Block Group 2, Census Tract 541.14	2,278	189	27	82	14%	43%
Block Group 1, Census Tract 541.15	1,483	155	0	24	0%	15%
Block Group 2, Census Tract 541.15	2,616	255	36	124	14%	49%
Block Group 3, Census Tract 541.15	2,560	334	31	186	9%	56%
Block Group 4, Census Tract 541.15	1,444	132	16	45	12%	34%
Block Group 1, Census Tract 542.03	3,672	253	11	30	5%	12%
Block Group 1, Census Tract 542.04	2,631	465	74	80	16%	17%
Block Group 2, Census Tract 542.04	2,179	233	42	56	18%	24%

Geography	Total Pop.	Youth Total (13-18 yr)	Youth in Low- Income Households	Youth in Minority Households	Low Income Youth %	Minority Youth %
Block Group 1, Census Tract 542.05	2,622	192	51	57	27%	30%
Block Group 2, Census Tract 542.05	2,285	187	60	54	32%	29%
Block Group 1, Census Tract 542.06	5,095	549	106	70	19%	13%
Block Group 2, Census Tract 542.06	796	88	11	13	13%	15%
Block Group 1, Census Tract 542.07	8,766	1292	75	325	6%	25%
Block Group 1, Census Tract 542.08	7,078	634	102	102	16%	16%
Block Group 1, Census Tract 542.09	5,098	377	28	190	7%	50%
Block Group 2, Census Tract 542.09	4,762	490	5	125	1%	25%
Block Group 1, Census Tract 542.10	2,131	134	30	13	22%	10%
Block Group 2, Census Tract 542.10	3,889	276	30	87	11%	32%
Block Group 3, Census Tract 542.10	3,658	210	7	41	3%	19%
Block Group 1, Census Tract 542.11	1,715	139	26	6	19%	4%
Block Group 2, Census Tract 542.11	9,070	958	53	174	6%	18%
Block Group 1, Census Tract 543.01	1,386	55	8	34	15%	62%
Block Group 2, Census Tract 543.01	1,354	182	56	10	31%	6%
Block Group 3, Census Tract 543.01	1,934	203	26	46	13%	23%
Block Group 4, Census Tract 543.01	1,128	142	19	32	13%	23%
Block Group 1, Census Tract 543.02	1,155	107	26	57	24%	54%
Block Group 2, Census Tract 543.02	899	60	8	18	13%	30%
Block Group 3, Census Tract 543.02	2,100	270	24	103	9%	38%
Block Group 4, Census Tract 543.02	1,680	252	89	82	35%	32%
Block Group 5, Census Tract 543.02	786	21	3	6	14%	27%
Block Group 1, Census Tract 544.02	1,391	171	25	45	15%	26%
Block Group 2, Census Tract 544.02	2,424	306	87	85	29%	28%
Block Group 3, Census Tract 544.02	1,805	153	19	13	13%	8%
Block Group 1, Census Tract 544.03	1,097	81	21	43	26%	53%
Block Group 2, Census Tract 544.03	1,070	87	10	16	11%	19%
Block Group 3, Census Tract 544.03	1,482	114	22	18	19%	16%
Block Group 1, Census Tract 544.04	2,645	360	30	98	8%	27%
Block Group 2, Census Tract 544.04	1,541	123	4	89	3%	73%
Block Group 3, Census Tract 544.04	1,558	113	37	50	33%	44%
Block Group 1, Census Tract 545	1,910	96	25	30	26%	31%
Block Group 2, Census Tract 545	2,235	59	15	32	25%	55%
Block Group 3, Census Tract 545	2,827	191	50	56	26%	29%
Block Group 4, Census Tract 545	1,940	75	28	36	37%	48%
Block Group 1, Census Tract 9801	28	0	0	0	0%	0%
Block Group 1, Census Tract 9802	101	0	0	0	0%	0%

# Appendix B – GoRaleigh Population Definitions

#### **Population Definitions**

#### **Minority Persons and Populations**

According to FTA Circular 4702.1B, a minority person is defined as an individual identifying as: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Minority populations are defined by FTA as any readily identifiable group of minority persons who live in geographic proximity, or who may be geographically dispersed, but who may be similarly affected by a proposed action.

#### Low-Income Persons and Populations

According to the FTA circular, "Low-income" means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or within a locally developed income threshold that is at least as inclusive as these guidelines. For these policies, persons with household incomes below 150 percent of the federal poverty level for a regionally average household size are determined to be low-income. Low-income population is defined by FTA as any readily identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action.

#### GoRaleigh Fare Equity Policy Thresholds

#### **Disparate Impact Policy**

The GoRaleigh disparate impact policy establishes a **3 percent** threshold for determining when adverse impacts of fare changes are borne disproportionately by minority populations. The threshold applies to the difference in the impacts of the proposed fare change on minority populations compared to the impacts on non-minority populations. This was measured by analyzing data from the 2016 Wake County Transit Systems ridership survey as to whether minority riders are more or less likely to use a given payment type or payment media.

#### Disproportionate Burden Policy

The GoRaleigh disproportionate burden policy establishes a **5 percent** threshold for determining when adverse impacts of fare changes are disproportionately borne by low-income populations. The threshold applies to the difference in the impacts of the proposed fare change on low-income populations compared to the impacts on other populations. This was measured by analyzing data from the 2016 Wake County Transit Systems ridership survey as to whether minority riders are more or less likely to use a given payment type or payment media.

### Log of Board Minutes and Resolutions for Service and Fare Equity Analyses

Program Element (Study or Document)	Date of Board Approval (MM/YYYY)
GoRaleigh 2017 Smartcard Fare Equity Analysis	05/2017
GoRaleigh 2017 Service Changes Service Equity Analysis	06/2017
GoRaleigh 2018 Fare Equity Analysis of Free Youth GoPasses	05/2018
GoRaleigh 2018 Title VI Fare Structure Equity Review	02/2019
GoRaleigh FY 2020 Service Changes Title VI Service Equity Analysis	10/2019
GoRaleigh R-Line Service Changes Service Equity Analysis	02/2020
Title VI Service Equity Analysis for Garner Route 20 and Caraleigh Route 21	06/2020

## [Placeholder All Supporting Documents for Board Approvals]