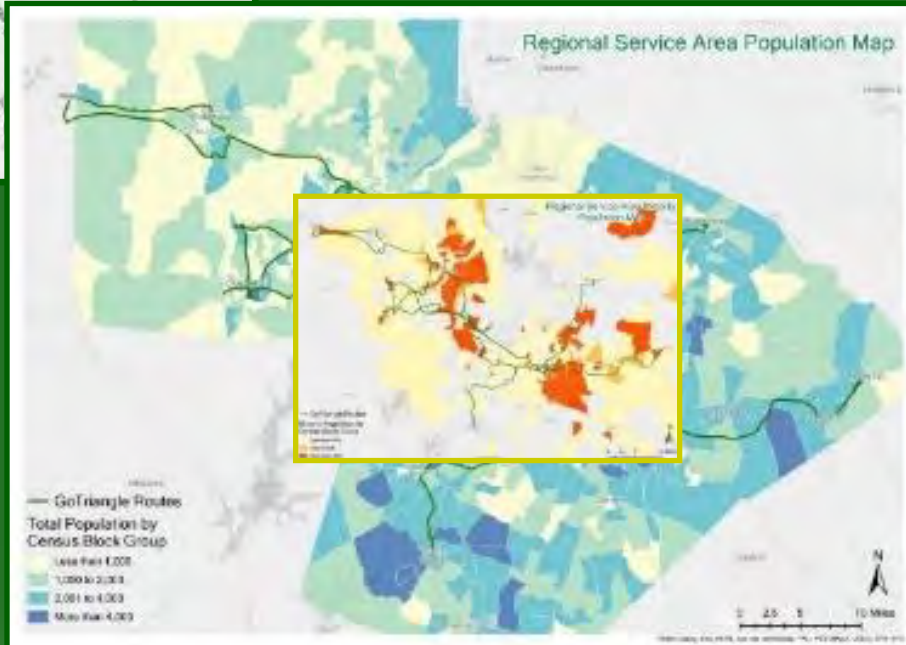




Triangle

Connecting all points of the Triangle



TITLE VI PROGRAM UPDATE

SEPTEMBER 1, 2023



270

EMPLOYEES

1,464,724

PASSENGER TRIPS (FY22)

13,013,351

PASSENGER MILES TRAVELED

7 DAYS

PER WEEK

78

BUSES

29

PARATRANSIT VEHICLES

13

REGIONAL ROUTES

6

WEEKDAY EXPRESS ROUTES

ABOUT US

Since the North Carolina General Assembly established our agency as Research Triangle Regional Public Transportation Authority in 1989 to serve Durham, Orange and Wake counties, we have worked to connect the region. We embrace our role as the regional transportation agency by leading the effort for bus and rail improvements. GoTriangle is governed by a 13-member Board of Trustees, which by law is authorized to make decisions and enact policy for the agency.

Our mission— improve our region's quality of life by connecting people and places through safe, reliable and easy-to-use travel choices— continues to guide the agency to:

- Improve mobility in the region.
- Assure high-quality customer service.
- Encourage sound growth patterns.

As the tax district administrator for Durham, Wake and Orange counties, GoTriangle oversees the administration of funds in the county transit plans and works with county partners to implement the region's transit priorities. Large capital projects funded by the county transit plans include building a new state-of-the art bus transfer facility in downtown Raleigh, developing bus rapid transit corridors and studying the feasibility of a commuter rail service.

In addition to planning, design and construction, GoTriangle provides bus and paratransit services, ridematching, vanpools, commuter resources, trip planning and an emergency ride home program for the region.

Fixed Route Service

- Apex
- Cary
- Chapel Hill
- Durham
- Efland
- Fuquay-Varina
- Hillsborough
- Holly Springs
- Mebane
- RDU Airport
- Raleigh
- RTP
- Wendell
- Wake Forest
- Zebulon



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INTRODUCTION

GoTriangle is a recipient of Federal financial assistance from the U.S. Department of Transportation Federal Transit Administration (FTA). As a primary recipient of federal funds, GoTriangle is required to develop policies, programs, and practices that ensure federal and state transit dollars are used in a manner that is nondiscriminatory.

In accordance with the FTA Circular, 4702.1B, GoTriangle, as a recipient of federal assistance, is required to submit a Title VI Program Plan update once every three years or as otherwise directed by FTA. The Title VI Program Plan details the nondiscrimination policies, and practices administered by GoTriangle, and will be updated periodically to incorporate changes and additional responsibilities as they are made. This document is a compilation of sub plans, policies, surveys and service area maps, demonstrating GoTriangle's commitment to carry out Title VI regulations, 49 CFR part 21. The FTA requires that GoTriangle's Title VI program be approved by the Board of Trustees prior to submission.

WHAT IS TITLE VI?

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" (42 U.S.C. Section 2000d).

TITLE VI PROGRAM RESPONSIBILITIES

GoTriangle's Director of Equal Opportunity and Compliance (EOC) is responsible for ensuring implementation of the agency's Title VI Program. The Director is responsible for oversight of the implementation, monitoring and reporting of GoTriangle's compliance with Title VI regulations, including:

- Periodically reviewing and updating the agency's Title VI Program to assess if administrative procedures are effective, staffing is appropriate, and adequate resources are available to ensure compliance;
- Meeting with staff periodically to monitor and discuss progress, implementation, and compliance issues;
- Promptly resolving areas of deficiency to ensure compliance with Title VI nondiscrimination requirements;
- Providing technical assistance and training to officials and internal staff to ensure they are fully aware of the agency's obligations to comply with Title VI;

- Ensuring that the agency is disseminating Title VI information internally and to the public, including in languages other than English.
- Processing Title VI complaints in accordance with the agency’s Nondiscrimination Complaint Procedures;
- Identifying, investigating, and eliminating discrimination when found to exist.

General Record-Keeping and Notification

GoTriangle must:

- Provide a notice to the public and beneficiaries of the service provided of their rights under Title VI;
- Develop Title VI-related complaint procedures and forms;
- Maintain a log of all Title VI related complaints, investigations, and lawsuits;
- Develop and maintain a record of the membership of the system’s non-elected committees and councils, and how the system encourages the participation of minorities on such committees;
- Maintain a log of all major service and fare changes; and
- Obtain Board approval of all Title VI-related procedures.

Data Collection and Analysis

- Collecting and maintaining demographic data about ridership, including demographics and service profile maps and charts;
- Collecting demographic ridership and travel patterns through surveys.

Policy and Program Development

- Develop service standards and policies;
- Develop a public engagement process for setting the major service change policy;
- Develop a Public Participation Plan;
- Develop a Language Assistance Plan;
- Evaluate Service and Fair Equity; and
- Develop a plan for managing sub-recipients.

GOTRIANGLE’S COMMITMENT TO TITLE VI

GoTriangle is committed to enforcing the provisions of Title VI and protecting the rights and opportunities of all persons associated with GoTriangle or affected by its programs.

GoTriangle’s commitment includes enforcing all applicable laws and regulations that affect GoTriangle and those organizations, both public and private, which participate and benefit through our programs.

GOTRIANGLE’S TITLE VI POLICY STATEMENT

It is the policy of GoTriangle to ensure that no person on the grounds of race, color, national origin, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (PL 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, whether those programs and activities are federally funded or not. Additionally, GoTriangle shall provide meaningful access to its programs and services to Limited English Proficient (LEP) individuals.

ANNUAL NONDISCRIMINATION ASSURANCE

GoTriangle agrees to comply with all provisions prohibiting discrimination on the basis of race, color, or national origin of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 200d *et seq.*, and with 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.

GoTriangle assures that no person shall, as provided by Federal and State civil rights laws, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity. GoTriangle further ensures every effort will be made to ensure non-discrimination in all programs and activities, whether those programs and activities are federally funded or not.

GoTriangle meets the objectives of the FTA Master Agreement which governs all entities applying for FTA funding, including GoTriangle, its transit partners and all third-party contractors by promoting actions that:

- A. Ensure that the level and quality of transportation service is provided without regard to race, color, or national origin.
- B. Identify and address, as appropriate, disproportionately high and adverse effects of programs and activities on minority populations and low-income populations.
- C. Promote the full and fair participation of all affected Title VI populations in transportation decision making.
- D. Prevent the denial, reduction, or delay in benefits related to programs and activities that benefit minority populations or low-income populations.
- E. Ensure meaningful access to programs and activities by persons with Limited English Proficiency (LEP).

GOTRIANGLE'S NOTICE TO BENEFICIARIES OF TITLE VI

GoTriangle provides the following Title VI notice to its beneficiaries in English and Spanish.

NOTICE TO BENEFICIARIES OF PROTECTION UNDER TITLE VI

This notice is provided in compliance with 49 CFR Part 21.9(d).

Non-Discrimination Notice

GoTriangle provides services and operates programs without regard to race, color, and national origin in compliance with Title VI of the Civil Rights Act of 1964.

Request for Information:

To request additional information about GoTriangle's non-discrimination obligations, send your written request to: Director of Equal Opportunity and Compliance, GoTriangle, 4600 Emperor Blvd, Durham NC 27703.

Complaint Process:

As a member of the general public, if you desire to file a discrimination complaint under Title VI, the following procedure must be followed:

- Any person who believes they have been subjected to unlawful discrimination may file a complaint with GoTriangle's Director of Equal Opportunity and Compliance. A complaint form is available from the Director or from GoTriangle's website, <https://gotriangle.org/title-vi>
- The form must be completed and signed with as many details as possible and sent to:

Director, Equal Opportunity and Compliance
GoTriangle
600 Emperor Blvd.
Durham, NC 27703

Or emailed to: titlevi@gotriangle.org

- FTA encourages individuals to file a complaint directly with their transit provider to give the transit provider an opportunity to resolve the situation. However, a complaint may be filed directly with the Federal Transit Administration at the following link <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/file-complaint-fta>.

Or contact FTA directly at:

Office of Civil Rights
Federal Transit Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

FTA toll-free civil rights hotline at (888) 446-4511

**NOTIFICACIÓN A LOS BENEFICIARIOS DE LA PROTECCIÓN PREVISTA BAJO LA LEY NACIONAL
TÍTULO VI**

Esta notificación se ofrece de conformidad con el título 49 CFR Parte 21.9(d).

Notificación de no discriminación

GoTriangle presta servicios y ofrece programas sin distinción de raza, color u origen nacional, de conformidad con el Título VI de la Ley de Derechos Civiles de 1964.

Solicitud de información:

Para solicitar información más detallada sobre las responsabilidades de GoTriangle en relación con la no discriminación, envíe su solicitud por escrito a Director of Equal Opportunity and Compliance, GoTriangle, 4600 Emperor Blvd, Durham NC 27703

Procedimiento para presentar una denuncia:

Como miembro del público en general, si desea presentar una denuncia por discriminación en virtud del Título VI, deberá seguir el siguiente procedimiento:

- Cualquier persona que considere que ha sido objeto de discriminación ilegal puede presentar una denuncia ante el director de igualdad de oportunidades y regulación de GoTriangle. Se puede obtener un formulario de denuncia dirigiéndose al director o en el sitio web de GoTriangle, <https://gotriangle.org/title-vi>
- El formulario debe completarse y firmarse con tanta información como sea posible y enviarse a:

Director, Equal Opportunity and Compliance
GoTriangle
4600 Emperor Blvd.
Durham, NC 27703

O por correo electrónico a:
titlevi@gotriangle.org

- La Administración Federal de Tránsito (FTA, por sus siglas en inglés) recomienda a las personas que primero presenten una denuncia directamente a la empresa que brinda el servicio de transporte para que ésta tenga la oportunidad de resolver la situación. No obstante, se puede presentar una denuncia directamente ante la Administración Federal de Tránsito en el siguiente enlace: <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/file-complaint-fta>.

O comuníquese directamente con la FTA en

Office of Civil Rights
Federal Transit Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Línea telefónica gratuita de la FTA sobre los derechos civiles: (888) 446-4511

TITLE VI COMPLAINT PROCEDURES

The complaint procedures apply to beneficiaries of GoTriangle’s programs, activities, and services.

RIGHT TO FILE A COMPLAINT: Any person who believes they have been discriminated against on the basis of race, color, or national origin by GoTriangle may file a Title VI complaint by completing and submitting the agency’s Title VI Complaint Form. Title VI complaints must be received in writing within 180 calendar days of the alleged discriminatory incident.

HOW TO FILE A COMPLAINT: Information on how to file a Title VI complaint is available on our agency’s website, and in public areas of our agency.

You may download GoTriangle’s Title VI Complaint Form at gotriangle.org/office-equal-opportunity-and-compliance, or request a copy by writing GoTriangle, 4600 Emperor Blvd., Durham, NC 27703. Information on how to file a Title VI complaint may also be obtained by calling Jamila Ormond at (919) 485-7518.

You may file a signed, dated complaint no more than 180 calendar days from the date of the alleged incident. The complaint should include:

- Your name, address and telephone number.
- Specific, detailed information (how, why and when) about the alleged act of discrimination.
- Any other relevant information, including the names of any persons, if known, the agency should contact for clarity of the allegations.

Please submit your complaint form to:

Director, Director of Equal Opportunity and Compliance
GoTriangle
4600 Emperor Blvd.
Durham, NC 27703
Or email: titlevi@gotriangle.org

COMPLIANT ACCEPTANCE: GoTriangle will process the completed Title VI Complaint Form once it has been received. GoTriangle will review it to determine if GoTriangle has jurisdiction. The complainant will receive an acknowledgement letter informing them whether or not GoTriangle will investigate the complaint.

INVESTIGATIONS: GoTriangle will generally complete an investigation within 90 calendar days from receipt of a completed complaint form. If more information is needed to resolve the case, GoTriangle may contact the complainant. Unless a longer period is specified by GoTriangle, the complainant will have ten (10) calendar days from the date of the letter to send the requested information to the complaint investigator assigned to the case.

If the requested information is not received within that timeframe the case will be closed. Also, a case can be administratively closed if the complainant no longer wishes to pursue the case.

LETTERS OF CLOSURE OR FINDING: After the complaint investigator reviews the complaint, the investigator will issue one of two letters to the complainant: a closure letter or letter of finding (LOF).

- A closure letter summarizes the allegations and states that there was not a Title VI violation and that the case is closed.
- A Letter of Finding (LOF) summarizes the allegations and provides an explanation of the corrective action taken.

If the complainant disagrees with GoTriangle's determination, the complainant may request reconsideration by submitting the request in writing to the Director of Equal Opportunity and Compliance within seven (7) calendar days after the date of the closure letter or letter of finding, stating with specificity the basis for the reconsideration. GoTriangle will notify the complainant of the decision to accept or reject the request for reconsideration within ten (10) calendar days. In cases where reconsideration is granted, GoTriangle will issue a determination letter to the complainant upon completion of the reconsideration review.

A person may also file a complaint directly with the Federal Transit Administration, at the FTA Office of Civil Rights, 1200 New Jersey Avenue SE, Washington, DC 20590.

If information is needed in another language, contact: Director of Equal Opportunity and Compliance, GoTriangle, 4600 Emperor Blvd., Durham, NC 27703, or at (919) 485-7518.

See Appendix A for a copy of GoTriangle's Title VI Complaint Form in English and Spanish.

Procedimientos para presentar una queja conforme con el Título VI

Los procedimientos de queja están destinados a los beneficiarios de los programas, actividades y servicios de GoTriangle.

DERECHO A PRESENTAR UNA QUEJA: cualquier persona que crea que ha sido objeto de discriminación por motivos de raza, color u origen nacional por GoTriangle puede presentar una queja de Título VI completando y enviando el Formulario del Título VI para presentar una queja de la agencia. Las quejas relacionadas con el Título VI se deben recibir por escrito en un plazo de 180 días calendario contados a partir de la presunta queja de discriminación.

CÓMO PRESENTAR UNA QUEJA: la información sobre cómo presentar una queja relacionada con el Título VI está disponible en el sitio web y en las áreas públicas de nuestra agencia.

Puede descargar el Formulario del Título VI para presentar una queja de GoTriangle en gotriangle.org/office-equal-opportunity-and-compliance, o puede solicitar una copia escribiendo al GoTriangle, 4600 Emperor Blvd., Durham, NC 27703. También se puede obtener información sobre cómo presentar una queja relacionada con el Título VI llamando a la señora Jamila Ormond al (919) 485-7518.

Puede presentar una queja firmada y fechada en un plazo máximo de 180 días calendario contados a partir de la fecha del presunto incidente.

La queja debe incluir la siguiente información:

- Su nombre, dirección y número de teléfono.
- Información específica y detallada (cómo, por qué y cuándo) sobre el presunto acto de discriminación.

Cualquier otra información pertinente, incluyendo los nombres de las personas, si se conocen, con las que la agencia deba comunicarse para aclarar las acusaciones.

Envíe su formulario de queja a: of Equal Opportunity and Compliance, GoTriangle, 4600 Emperor Blvd., Durham, NC 27703, Or email: titlevi@gotriangle.org

ACEPTACIÓN DE LA QUEJA: GoTriangle procesará el Formulario del Título VI para presentar una queja que se completó una vez que lo haya recibido. GoTriangle lo revisará para establecer si GoTriangle tiene jurisdicción. El denunciante recibirá una carta de confirmación informándole si GoTriangle investigará o no la queja.

INVESTIGACIONES: por lo general, GoTriangle realizará una investigación en un plazo de 90 días calendario contados a partir de la fecha en que se recibió el formulario de queja debidamente completado. Si se necesita más información para resolver el caso, GoTriangle podrá comunicarse con el denunciante. A menos que GoTriangle especifique un período más amplio, el denunciante dispondrá de diez (10) días calendario contados a partir de la fecha de la carta para enviar la información solicitada al investigador de quejas que se le asignó al caso. Si la información solicitada no se recibe en ese plazo, el caso se cerrará. Además, un caso puede cerrarse de forma administrativa si el denunciante ya no desea continuar con el caso.

CARTAS DE CIERRE O DE CONCLUSIONES DEL CASO: una vez que el investigador haya examinado la queja, le enviará al denunciante una de las dos cartas siguientes: una carta de cierre del caso o una carta de conclusiones (LOF, por sus siglas en inglés).

- En una carta de cierre se resumen las acusaciones y se declara que no ha habido un incumplimiento del Título VI y que el caso está cerrado.
- En una carta de conclusiones (LOF) se resumen las acusaciones y se explican las medidas correctivas adoptadas.

Si el denunciante no está de acuerdo con la resolución de GoTriangle, podrá solicitar una reconsideración presentando la solicitud por escrito al Director of Equal Opportunity, Diversity (Director de Igualdad de Oportunidades, Diversidad e Inclusión) en un plazo de siete (7) días calendario contados a partir de la fecha de la carta de cierre o de la carta de conclusiones, indicando con exactitud los motivos que justifican la reconsideración. GoTriangle notificará al demandante la decisión de aceptar o rechazar la solicitud de reconsideración en un plazo de diez (10) días calendario. En caso de que se conceda la reconsideración, GoTriangle le enviará al denunciante una carta de resolución una vez finalizada la revisión de la reconsideración.

La persona también puede presentar una queja directamente ante la Federal Transit Administration (Administración Federal de Tránsito), en la Oficina de Derechos Civiles de la FTA, 1200 New Jersey Avenue SE, Washington, DC 20590.

Si necesita información en otro idioma, comuníquese con:
Director of Equal Opportunity and Compliance
GoTriangle
4600 Emperor Blvd., Durham, NC 27703 or at (919) 485-7518

ACTIVE TITLE VI COMPLAINTS, INVESTIGATIONS AND LAWSUITS

There were no Title VI complaints filed against GoTriangle between July 1, 2020 and June 30, 2023.

PROMOTING INCLUSIVE PUBLIC PARTICIPATION

GoTriangle developed a public engagement process to ensure that no one is excluded from participating in GoTriangle’s service planning and development process. The Public Participation Plan (PPP) is the roadmap to ensure the public has sufficient access to information and can provide meaningful input into decisions made regarding the future of transit services in the region. The PPP discusses the strategies used to attain feedback on service, planning or other activities in which public participation is critical to a successful outcome. The PPP is designed to engage minority, low-income, and limited English proficient populations in GoTriangle’s service area. A public comment process applies when:

- A fare change of any type is proposed;
- A major service change of any type is proposed; and
- Major Planning Programs (capital projects) are proposed, to include public meetings and public comment periods.

For minor schedule and service changes not rising to the level of a major service change, GoTriangle will post service change notices on-line, in advance of the change date. GoTriangle’s Public Participation Plan is included at Appendix B.

LANGUAGE ASSISTANCE PLAN

A Language Assistance Plan (LAP) based on a Four Factor Analysis is included in the Title VI Program update to satisfy Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency,” the intent of which is to ensure that persons with limited English proficiency (LEP) are accorded equal treatment by agencies receiving federal funding.

The plan details procedures on how to identify a person who may need language assistance, the ways in which assistance may be provided, the manner in which staff should be trained, how to notify LEP persons that assistance is available, and monitoring and updating future plan updates. The Language Assistance Plan is included at Appendix C.

GOTRIANGLE BOARD MEMBERSHIP

A 13-member Board of Trustees governs GoTriangle. The region’s principal municipalities and counties of Durham, Orange Wake, appoint ten trustees. The North Carolina Department of Transportation appoints three ex-officio non-voting members. All counties share ownership of the regional transit system. GoTriangle itself does not select any members of the Board of Trustees. As of June 30, 2023 there is one board vacancy.

Exhibit 1

GoTriangle’s Board of Trustee’s by Race

GoTriangle Board of Trustees		African American	American Indian/Alaska Native		Asian	Hawaiian/Pacific Islander	White	No Response	Total Members
	#	5	0		0	0	7	0	12
	%	41.7	0		0	0	58.3	0	100%

SUBRECIPIENT ASSISTANCE & MONITORING

As the primary recipient of federal assistance, GoTriangle is responsible for ensuring its sub-recipients are in compliance with Title VI. The guidance at Chapter III, Section 11 of Circular 4702.1B states that,

“Primary recipients should assist their sub-recipients in complying with DOT’s Title VI regulations, including the general reporting requirements. Assistance shall be provided to the sub-recipient as necessary and appropriate by the primary recipient. Primary recipients should provide the following information to sub-recipients; such information, forms, and data may be kept in a central repository and available for all sub-recipients.”

GoTriangle did not have any sub-recipients during this reporting period therefore no assistance was provided. However, any sub-recipients will be required to submit a copy of their Title VI program to GoTriangle prior to the start of work and no less than every three years in accordance with FTA’s reporting requirements should that sub-recipient remain active. Below is a sample of measures taken to ensure that technical assistance is provided to any sub-recipients of GoTriangle and that adequate compliance monitoring is done.

- Conduct an initial meeting with all sub-recipients to discuss their responsibilities related to Title VI and inform sub-recipients of the requirement to maintain compliance with 4702.1B.

- Provide sample notices to the public informing beneficiaries of their rights under DOT’s Title VI regulations, procedures on how to file a Title VI complaint, and Title VI complaint forms.
- Provide sample procedures for tracking and investigating Title VI complaints filed with a sub-recipient, and when the primary recipient expects the sub-recipient to notify the primary recipient of complaints received by the sub-recipient.
- Review Demographic information on the race and English proficiency of residents served by the sub-recipient. This information will assist the sub-recipient in assessing the level and quality of service it provides to communities within its service area and in assessing the need for language assistance.
- Review additional recipient-generated or obtained data, such as travel patterns and Surveys that will assist sub-recipients in complying with Title VI.
- Conduct periodic compliance monitoring with sub-recipients across the life of any project to include a:
 - Title VI Program review
 - Documentation of public notices
 - Analysis of current service levels and their equitable distribution
 - Discussion of any recent outreach to LEP populations
 - Review of any complaints received to date
 - Results of any investigations completed to date

EQUITY ANALYSIS OF FACILITIES

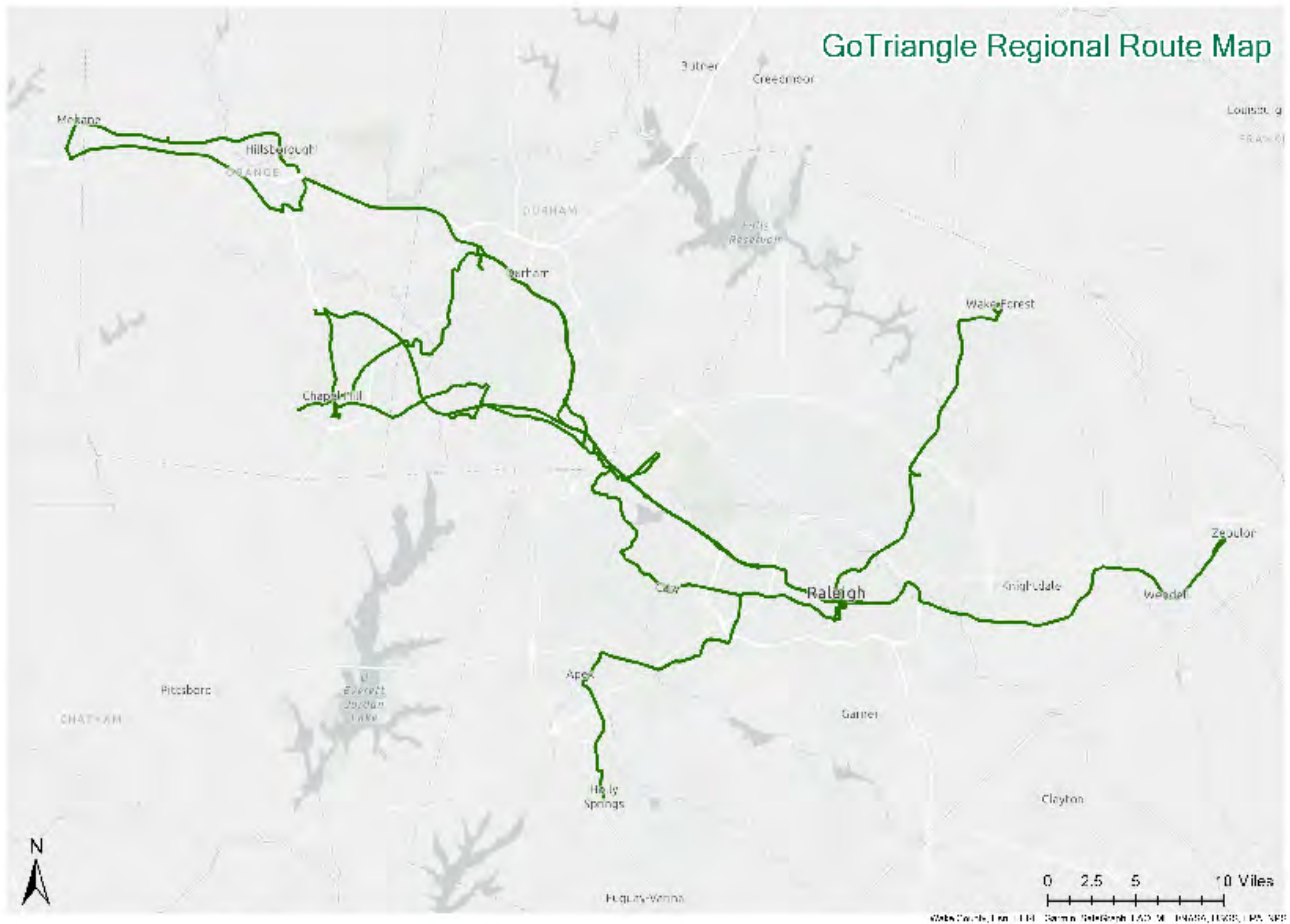
GoTriangle has not constructed any storage facilities, maintenance facilities, or operations centers in the last three years.

GOTRIANGLE’S REGIONAL SERVICE AREA GEOGRAPHY AND DEMOGRAPHICS

GoTriangle’s regional service area includes Durham, Orange and Wake Counties. The level of transit service offered within these areas varies, and is based on factors including population and/or job density, ridership levels, historical service areas, popular destinations, and funding availability from three county transit plans.

GoTriangle operates thirteen (13) regional bus routes, and six (6) weekday express routes seven (7) days per week.

Exhibit 2



DEMOGRAPHIC DATA COLLECTION AND ANALYSIS

As an operator of more than 50 fixed route vehicles during peak service time, located in a Metropolitan Statistical Area of more than 200,000 people, GoTriangle is required to develop demographic and service profile maps and charts as part of the Title VI Program Plan update. GoTriangle evaluates demographic information as part of any proposed service or fare change, as required by the FTA. Additionally, GoTriangle conducts onboard customer surveys. The most recent 2023 onboard customer survey is included at Appendix A of GoTriangle’s Public Participation Plan.

SYSTEM-WIDE SERVICE STANDARDS AND POLICIES

GoTriangle monitors its level and quality of service on an ongoing basis in order to ensure equity in access to public transit services. Level of service refers to the amount of transit offered, and can be measured in a variety of ways. GoTriangle uses the following five indicators, which the FTA considers to be significant measures of level of service:

- 1) **Vehicle load** – the ratio of passengers to the total number of seats on a vehicle;
- 2) **Vehicle assignment** – the process by which transit vehicles are placed into service in depots and on routes throughout the transit provider’s system (which bus goes where);
- 3) **Vehicle headways** – the amount of time between two vehicles traveling in the same direction on a given line or combination of lines. A shorter headway corresponds to more frequent service;
- 4) **Distribution of transit amenities** – items of comfort, convenience, and safety that are available to the general riding public (benches, shelters, trash cans); and
- 5) **Service access/availability** – a general measure of the distribution of routes within a transit provider’s service area.

GoTriangle also monitors the quality of service through a large-scale customer satisfaction and origins/destinations survey at least once every three years. The indicators used include:

- Bus cleanliness & Travel Comfort;
- On-time Adherence
- Schedule (convenience)
- Driver Courteous/Professionalism
- Customer Service Representative Courteous/Professionalism
- Customer Service Prompt Response
- Cost of Fares

Vehicle Load

As a predominately commuter bus operation, the average daily load factor for a GoTriangle route shall not exceed the seated capacity of it vehicles, yielding a 1.0 vehicle load.

Exhibit 3
Average Vehicle Load (Fiscal Year 2023) by Route

Route	Service Type	Minority Ridership 10% Greater Than System Average	Vehicle Load Factor
100 Raleigh-Airport-RTC	Local	Yes	.28
300 RTC-Cary-Raleigh	Local	Yes	.18
305 Lake Pine-Cary-Raleigh	Commuter	Yes	.07
310 - Cary - Wake Tech RTP - RTC	Commuter	Yes	.09
400 Durham-Chapel Hill	Local	Yes	.18
405 Durham-Chapel Hill-Carrboro	Commuter	Yes	.20
420 Hillsborough-Chapel Hill	Commuter	Yes	.00
700 Durham-RTC	Local	Yes	.22
800 Chapel Hill-Southpoint-RTC	Local	No	.14
805 Chapel Hill-Woodcroft-RTC	Commuter	No	.11
CRX Chapel Hill-Raleigh Express	Express	No	.09
DRX Durham-Raleigh Express	Express	No	.16
ODX Orange-Durham Express	Express	No	.07
RDU Airport Shuttle	Express	No	.08
WRX Wake Forest-Raleigh Express	Express	No	.03
ZWX Zebulon-Wendell-Raleigh Express	Express	No	.11

Vehicle Assignments

GoTriangle operates fixed-route and express service throughout the region, and assigns vehicles based upon ridership demand and type of service. GoTriangle does not assign particular vehicles to individual routes, but assigns vehicles to drivers as they are available each morning and evening. An exception to this standard applies to the 40-foot Orion vehicles. The 40-foot Orion vehicles are designed with one door for boarding and alighting and are not ideal for usage on routes with high frequency stops. Therefore these vehicles are assigned to express routes and will only be used on non-express routes under extreme circumstances.

Vehicle Headway

GoTriangle does not have a vehicle headway policy but rather matches headways with ridership demand. Vehicle headways range from 15 minutes to 60 minutes on GoTriangle routes during peak periods. Peak period service in major travel corridors is provided every 15 minutes.

Distribution of Amenities

Transit Amenities: GoTriangle has established the following criteria for installing a shelter or a bench at a bus stop: 20 daily boardings for a shelter and ten daily boardings for a bench. In 2020, the organization conducted a system-wide field inventory, assessing the conditions and amenities available at each bus stop. This inventory will be updated again in summer 2022. Based on the inventory, bus stop amenities are prioritized for improvements, considering current amenities, ADA accessibility, street crossings, connecting sidewalks, and lighting. When selecting bus stops for improvements, GoTriangle considers ridership, access to destinations for youth, seniors, and persons with disabilities, surrounding community demographics, safety, and customer feedback.

As a regional transit agency, it's worth noting that GoTriangle heavily relies on local transit agencies, municipalities, and major employment centers to provide passenger amenities along our routes. Most high-boarding stops along GoTriangle's routes are shared with other agencies. These agencies have high-quality amenities such as shelters, benches, canopies, and public restrooms, which are provided and maintained by the respective local transit agency or municipality.

Amenities Standards: GoTriangle manages and plans Durham's local transit agency, GoDurham. The agency is finalizing a consistent set of standards for bus stop amenities and details for GoTriangle and GoDurham.

Service Availability

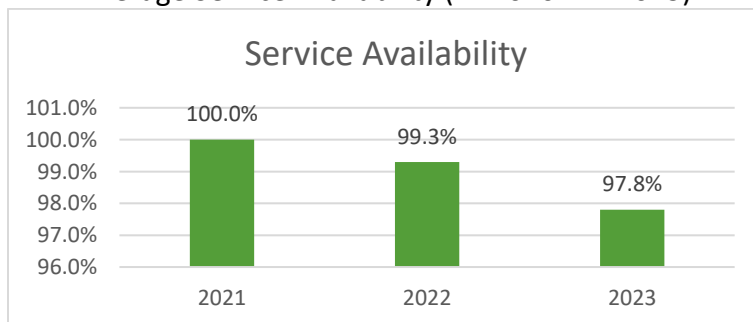
GoTriangle services shall be provided within the GoTriangle service jurisdiction in an equitable manner regardless of race, ethnicity or income. The GoTriangle service jurisdiction is defined as Durham, Orange and Wake counties. The population within the GoTriangle service area shall reflect the population of the service jurisdiction.

GoTriangle defines its service differently according to the route design:

- Commuter routes – operate weekdays during peak hours only and serves a limited number of stops at the beginning and end of a route with a long portion of the route operating as express service
 - 3 miles around park and ride stops
 - ½ mile around other stops
- Core routes – operates at all times and serves stops along the entire length of the route
 - ½ mile around route line
- Regional routes – operates weekdays during peak hours only and serves stops along the entire length of the route; however some portions of the route may operate as express service
 - Core segments- ½ mile buffer around route line
 - Commuter segments – 3 miles around park and ride stops, ½ mile around other stops

Exhibit 4

Average Service Availability (FY 2020 – FY2023)



On-time Performance

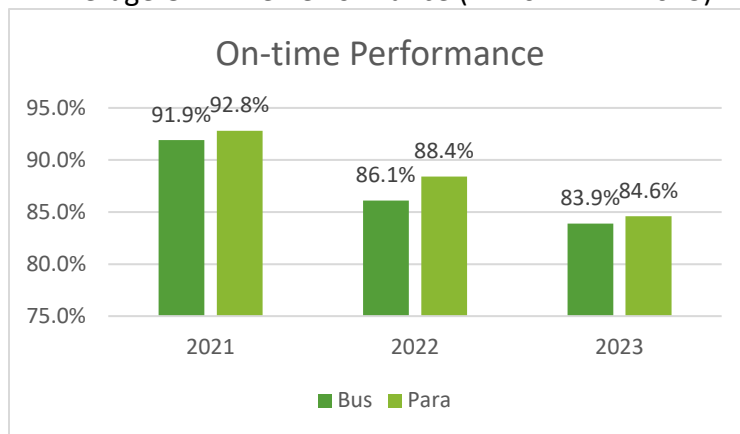
Departing between one minute early and five minutes late is considered on-time. Drop-off only points are evaluated as either on time or late.

While GoTriangle does not have a specific standard for one-time performance at each time point, this information is vital to making specific schedule change recommendations. It also addresses buses departing early or late from key points along the route.

In each fiscal quarter, it is required that at least 85% of the trips provided for each route are completed within 5 minutes of the scheduled time at the final time point. The Automatic Passenger Counter (APC) system measures the percentage of on-time trips and is analyzed every fiscal quarter. It will be evaluated if a particular route is not running on time 85% of the time during a quarter. Based on the evaluation, necessary adjustments to the route or schedule adjustments will be made to address the on-time performance issues.

In addition to measuring the percentage of on-time trips, GoTriangle tracks the punctuality of each route at every stop quarterly.

Exhibit 5
Average On-Time Performance (FY 2021 – FY 2023)



SERVICE AND EQUITY ANALYSIS

The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. GoTriangle has adopted a Disparate Impact Policy and Disproportionate Burden Policy to aid in assessing whether or not changes made to service and/or fares disproportionately impact minority and low-income populations.

Disparate Impact Policy

The FTA circular identifies disparate impacts as 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.”

These disparate impact policies establish thresholds for determining when impacts of major service changes disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy

Disproportionate burden addresses impacts to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

Major Fare Changes

On March 23, 2020, GoTriangle suspended all fare collection due to the Covid-19 Pandemic. Fares have remained suspended since that time.

GoTriangle's policy requires evaluation of impacts to Title VI and low-income populations for all proposed fare changes regardless of the amount of increase or decrease. GoTriangle is currently evaluating the potential to return to collecting fares after a multi-year period of fare suspension associated with the COVID-19.

A Title VI fare equity analysis was conducted in March 2023 to evaluate the proposed change at GoTriangle from the current zero fare to the fare structure that the GoTriangle Board of Trustees adopted in May 2019 for implementation along with mobile ticketing and fare capping, technology that automatically applies multi-ride discounts for frequent riders rather than requiring riders to purchase multi-ride passes ahead of time. The Title VI Fare Equity Analysis is included at Appendix F.

Major Service Changes

A "major service change" is defined as:

- The addition or elimination of a route within GoTriangle's transit system;
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours;
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Exhibit 6

Major Service Changes (FY 2020 – FY 2023)

Date of Change	Jurisdiction	Route	Type of Change(s)
June 18, 2020	Wake County	305	Expansion
June 18, 2020	Wake County	310	Expansion
June 18, 2020	Wake County	300	Realignment
June 18, 2020	Wake/Durham County	800/800s	Realignment
February 24, 2021	Wake County	NRX	Suspension
February 24, 2021	Wake County	311	Suspension
November 17, 2021	Wake County	RDU Shuttle	Route Installation
November 17, 2021	Wake County	105	Suspension
November 17, 2021	Wake County	100	Realignment
June 2, 2022	Wake County	300	Reduced Service
June 2, 2022	Wake County	301	Suspension
June 2, 2022	Wake County	305	Schedule Change
June 2, 2022	Wake County	310	Schedule Change
June 2, 2022	Orange/ Durham County	800/800s	Schedule Change
June 2, 2022	Wake/Durham County	805	Service Reduction
June 2, 2022	Orange/Wake County	CRX	Service Reduction
June 2, 2022	Wake/Durham County	DRX	Service Reduction
June 1,2023	Wake County	100	Service Restoration
June 1,2023	Orange/ Durham County	400	Service Restoration
June 1,2023	Durham County	700	Service Restoration
June 1,2023	Orange/ Durham County	800	Service Restoration
June 1,2023	Wake/ Durham County	DRX	Service Restoration
June 1,2023	Wake County	RDU Shuttle	Schedule Change
June 1,2023	Wake County	805	Service Restoration

APPENDICES

Appendix – A

Title VI Complaint Form (English)
Title VI Complaint Form (Spanish)

GOTRIANGLE TITLE VI COMPLAINT FORM

“No person in the United States shall, on the basis 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.”

If you feel that you have been discriminated against in the provision of transportation services, please provide the following information to assist us in processing your complaint. Should you require any assistance in completing this form or need information in alternate formats, please let us know.

Please mail or return this form to:

Director Equal Opportunity and Compliance
GoTriangle
P.O. Box 13787, Durham, NC 27709
titlevi@gotriangle.org

PLEASE PRINT LEGIBLY

1. Complainant's Name:		
Address:		
City:	State:	Zip Code:
Telephone (include area code): Home ()		Cell ()
Work ()		
Electronic mail (e-mail) address:		
Do you prefer to be contacted by this e-mail address? () YES () NO		
2. Accessible Format of Form Needed? () YES specify: _____ () NO		
3. Are you filing this complaint on your own behalf? () YES If YES, please go to question 7. () NO If no, please go to question 4		
4. If you answered NO to question 3 above, please provide your name and address. Name of Person Filing Complaint:		
Address:		
City:	State:	Zip Code:
Telephone (include area code): Home ()		Cell ()
Work ()		
Electronic mail (e-mail) address:		
Do you prefer to be contacted by this e-mail address? () YES () NO		
5. What is your relationship to the person for whom you are filing the complaint?		
6. Please confirm that you have obtained the permission of the aggrieved party if you are filing on behalf of a third party. () YES, I have permission. () NO, I do not have permission.		
7. I believe that the discrimination I experienced was based on (check all that apply): () Race () Color () National Origin (classes protected by Title VI) () Disability (classes protected by ADA) () Other (please specify): _____		

continued

GOTRIANGLE TITLE VI COMPLAINT FORM (continued)

8. Date of Alleged Discrimination (Month, Day, Year):
9. Where did the Alleged Discrimination take place?
10. Explain as clearly as possible what happened and why you believe that you were discriminated against. Describe all of the persons that were involved. Include the name and contact information of the person(s) who discriminated against you (if known). <i>Use the back of this form or separate pages if additional space is required.</i>
11. Please list any and all witnesses' names and phone numbers/contact information. <i>Use the back of this form or separate pages if additional space is required.</i>
12. What type of corrective action would you like to see taken?
13. Have you filed a complaint with any other Federal, State, or local agency, or with any Federal or State court? () YES If yes, check all that apply. () NO a. () Federal Agency (List agency's name) b. () Federal Court (Please provide location) c. () State Court d. () State Agency (Specify Agency) e. () County Court (Specify Court and County) f. () Local Agency (Specify Agency)
14. If YES to question 13 above, please provide information about a contact person at the agency/court where the complaint was filed.
Name: _____ Title: _____
Agency: _____ Telephone: () _____
Address: _____
City: _____ State: _____ Zip Code: _____

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

Signature and date is required:

Signature Date

If you completed Questions 4, 5 and 6, your signature and date is required:

Signature Date

FORMULARIO DEL TÍTULO VI PARA PRESENTAR UNA QUEJA DE GoTriangle

"En los Estados Unidos ninguna persona podrá, por motivos de raza, color u origen nacional, ser excluida de la participación en, negársele los beneficios de, o ser objeto de discriminación en virtud de cualquier programa o actividad que reciba asistencia financiera del gobierno federal".

Si usted cree que ha sido objeto de discriminación en la prestación de servicios de transporte, proporcione la siguiente información para ayudarnos a procesar su queja. Si necesita ayuda para rellenar este formulario o precisa la información en otro formato, háganoslo saber.

Envíe este formulario por correo o remítalo a la siguiente dirección:

Director Equal Opportunity and Compliance
GoTriangle
P.O. Box 13787, Durham, NC 27709
titlevi@gotriangle.org

POR FAVOR, ESCRIBA CON LETRA CLARA

1. Nombre de la persona que presenta la queja:
Dirección:
Ciudad: Estado: Código postal:
Teléfono (incluya el prefijo) Casa () Móvil () Trabajo ()
Dirección de correo electrónico (e-mail):
¿Prefiere que nos comuniquemos con usted a través de esta dirección de correo electrónico? () SÍ () NO
2. ¿Necesita el formulario en un formato que le permita acceder a él? () SÍ especifique: _____ () NO
3. ¿Está presentando esta queja en su propio nombre? () SÍ Si responde que SÍ, vaya a la pregunta 7. () NO Si responde que NO, vaya a la pregunta 4.
4. Si ha respondido NO a la pregunta 3, indique su nombre y dirección. Nombre de la persona que presenta la queja:
Dirección:
Ciudad: Estado: Código postal:
Teléfono (incluya el prefijo) Casa () Móvil () Trabajo ()
Dirección de correo electrónico (e-mail):
¿Prefiere que nos comuniquemos con usted a través de esta dirección de correo electrónico? () SÍ () NO
5. ¿Cuál es su parentesco con la persona en cuyo nombre presenta la queja?
6. Confirme que ha obtenido la autorización de la persona afectada si presenta la queja en nombre de otra persona. () SÍ, tengo la autorización. () NO, no tengo la autorización.

continúa

FORMULARIO DEL TÍTULO VI PARA PRESENTAR UNA QUEJA DE GoTriangle (continuación)

<p>7. Creo que la discriminación que he sido objeto se basó en (marque todo lo que corresponda): <input type="checkbox"/> Raza <input type="checkbox"/> Color <input type="checkbox"/> Origen nacional (clases protegidas por el Título VI) <input type="checkbox"/> Discapacidad (clases protegidas por la ADA) <input type="checkbox"/> Otro (especifique): _____</p>
<p>8. Fecha de la presunta discriminación (mes, día, año):</p>
<p>9. ¿Dónde tuvo lugar la presunta discriminación?</p>
<p>10. Explique lo más claramente posible lo sucedido y por qué cree que ha sido objeto de discriminación. Describa a todas las personas que participaron. Incluya el nombre y la información de contacto de la(s) persona(s) que cometieron el acto de discriminación contra usted (si la(s) conoce). <i>Si necesita más espacio, puede usar el reverso de este formulario o páginas separadas.</i></p>
<p>11. Brinde los nombres y números de teléfono o información de contacto de todos y cada uno de los testigos. <i>Si necesita más espacio, puede usar el reverso de este formulario o páginas separadas.</i></p>
<p>12. ¿Qué tipo de medidas de rectificación le gustaría que se adoptaran?</p>
<p>13. ¿Ha presentado alguna queja ante otro organismo federal, estatal o local, o ante algún tribunal federal o estatal? <input type="checkbox"/> SÍ Si la respuesta es SÍ, marque todas las que correspondan. <input type="checkbox"/> NO</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> Agencia Federal (brinde el nombre de la agencia) b. <input type="checkbox"/> Tribunal Federal (brinde la ubicación) c. <input type="checkbox"/> Tribunal del Estado d. <input type="checkbox"/> Agencia Estatal (especifique la agencia) e. <input type="checkbox"/> Tribunal del Condado (especifique el tribunal y el condado) f. <input type="checkbox"/> Agencia Local (especifique la agencia)</p>
<p>14. Si responde SÍ a la pregunta 14, proporcione la información de una persona a la que se pueda contactar en la agencia/tribunal en donde se presentó la denuncia.</p> <p>Nombre y apellidos: _____ Cargo: _____</p>
<p>Agencia: _____ Teléfono: () _____</p>
<p>Dirección: _____</p>
<p>Ciudad: _____ Estado: _____ Código postal: _____</p>

Puede adjuntar cualquier material por escrito u otra información que considere pertinente para su queja.

La fecha y firma son obligatorias:

Firma

Fecha

Si ha rellenado las preguntas 4, 5 y 6, su firma y fecha son obligatorias:

Firma

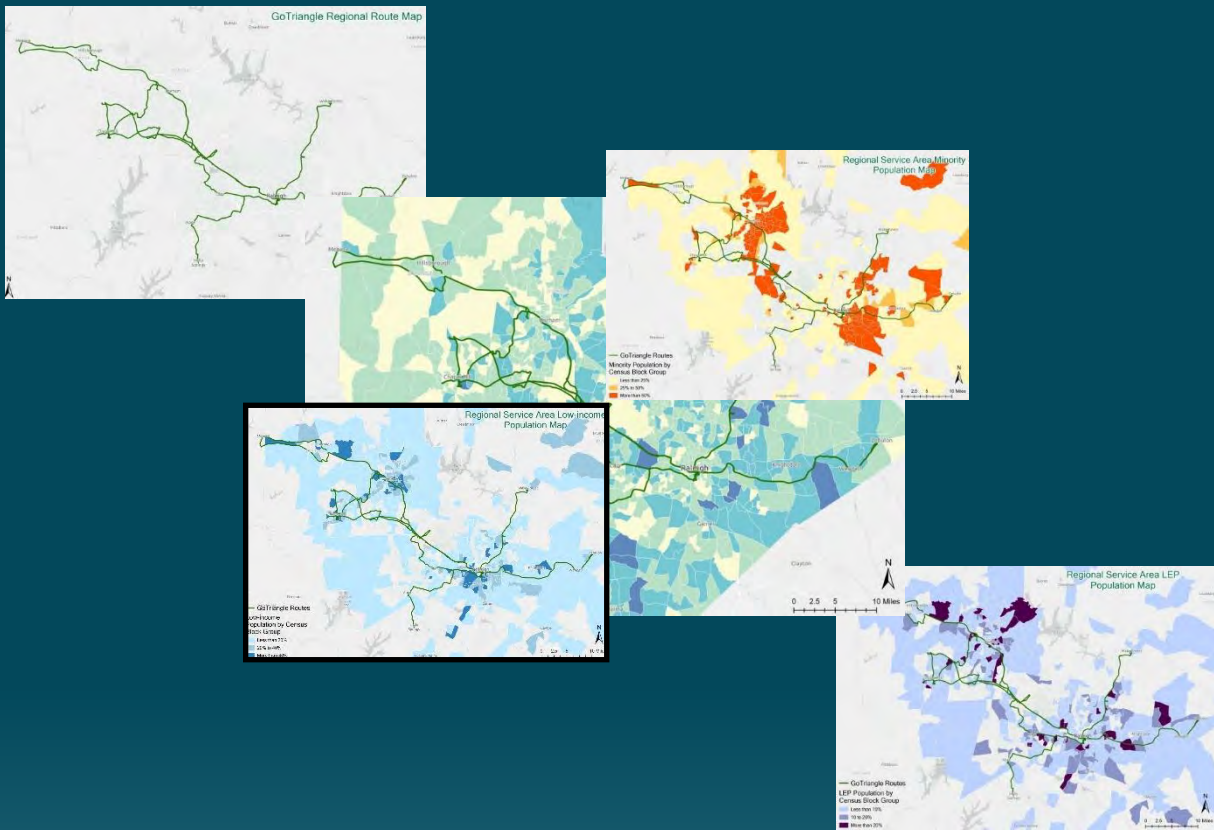
Fecha

Appendix – B

Public Participation Plan



Connecting all Points of the Triangle



PUBLIC PARTICIPATION PLAN

SEPTEMBER 1, 2023

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INTRODUCTION

Since the North Carolina General Assembly established our agency as Research Triangle Regional Public Transportation Authority “GoTriangle” in 1989 to serve Durham, Orange, and Wake counties, we continue to work to connect the region we serve. We embrace our role as the regional transportation agency by leading the effort for bus and rail improvements.

GoTriangle provides public transportation in a region experiencing rapid growth and demographic change. GoTriangle operates regional bus and shuttle service, paratransit services, ride-matching, vanpools, commuter resources, trip planning, and an emergency ride-home program for the region.

GoTriangle’s mission is to improve our region’s quality of life by connecting people and places through safe, reliable, and easy-to-use travel choices – it continues to guide the agency to:

1. Improve mobility in the region.
2. Assure high-quality customer service.
3. Encourage sound growth patterns.

PUBLIC PARTICIPATION PLAN PURPOSE

Public participation is the process through which stakeholders and community members can partake directly in agency decision-making and express their concerns, desires, and values. GoTriangle’s planning process and this Public Participation Plan (PPP) serve as a roadmap to ensure the public has sufficient access to information and can provide meaningful input into decisions made regarding the future of transit services in the region.

GoTriangle receives Federal Transit Administration (FTA) funds and establishes this Public Participation Plan to comply with Title VI of the Civil Rights Act of 1964, as required by FTA Circular 4702.1B. The PPP document discusses the strategies used to attain feedback on service planning or other activities in which public participation is critical to a successful outcome. The PPP is designed to engage minority, low-income, and limited English proficient populations in GoTriangle’s service area. It includes a detailed public participation process, clear goals, and a variety of public participation methods to provide information and invite the public to give input throughout decision-making processes, performance measures, and objectives.

The goal of the PPP is to have ongoing public involvement by all identified audiences in the public participation process for significant agency outreach efforts. GoTriangle's Public Participation Plan explicitly describes the proactive strategies, procedures, and desired outcomes that underpin our agency's public participation activities. The objectives of the Public Participation Plan are:

- To improve service outcomes based on public input;
- To inform the public about regional transit issues and planning processes;
- To establish the process through which the public can express concerns, desires, and values;
- To reach a wide range of communities and stakeholders, increase the participation of under-represented and historically marginalized populations, and
- To convey information in various formats to reach all key stakeholder groups.

TITLE VI

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance.

Title VI addresses a crucial concern regarding the language barrier that people with limited English proficiency (LEP) face when accessing information about and utilizing transit services. Transit agencies must ensure that this group has sufficient access to the agency's programs and activities. It is also essential that agencies make public participation opportunities accessible to individuals with a limited understanding of spoken or written English.

POPULATIONS SERVED

GoTriangle is a regional public transportation agency serving Durham, Orange, and Wake Counties in central North Carolina. Exhibits 1-4 are maps that represent the regional area minority, low-income, and LEP population percentages by block groups that intersect within a 10-mile radius of regional bus routes.

Exhibit 1

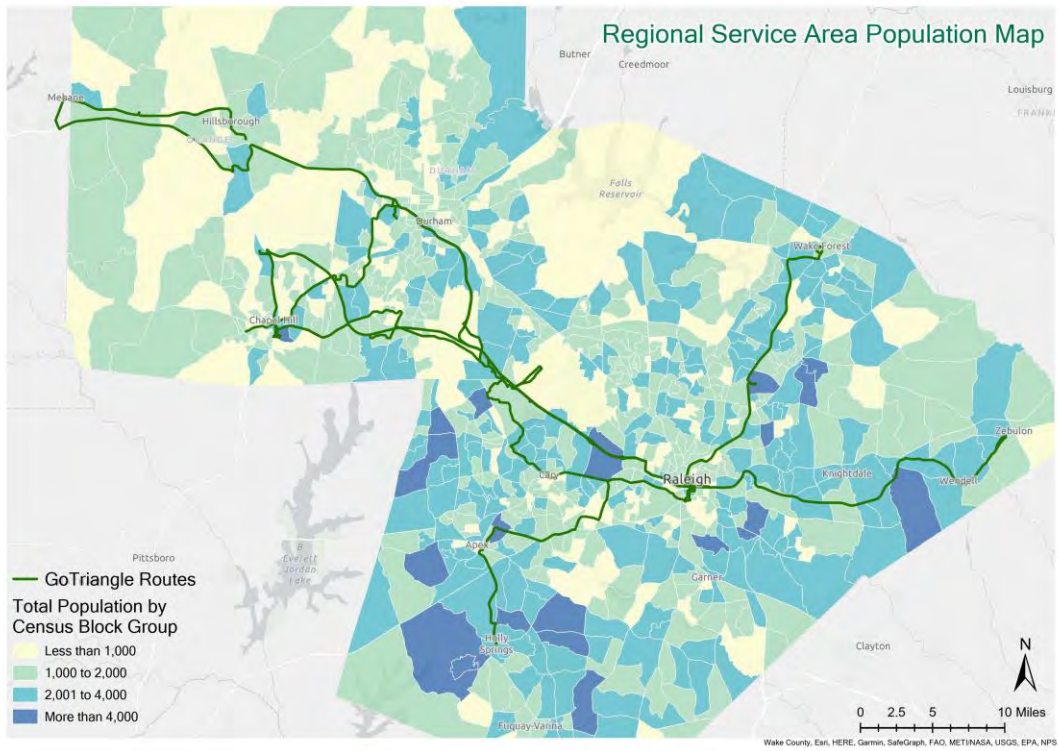


Exhibit 2

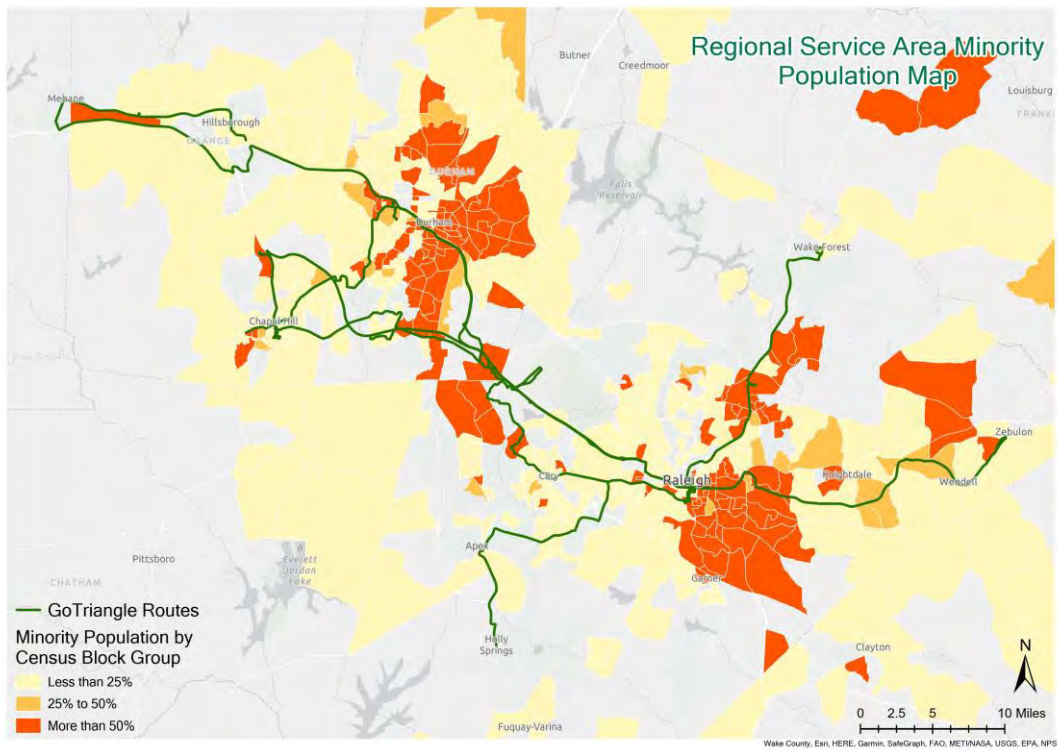


Exhibit 3

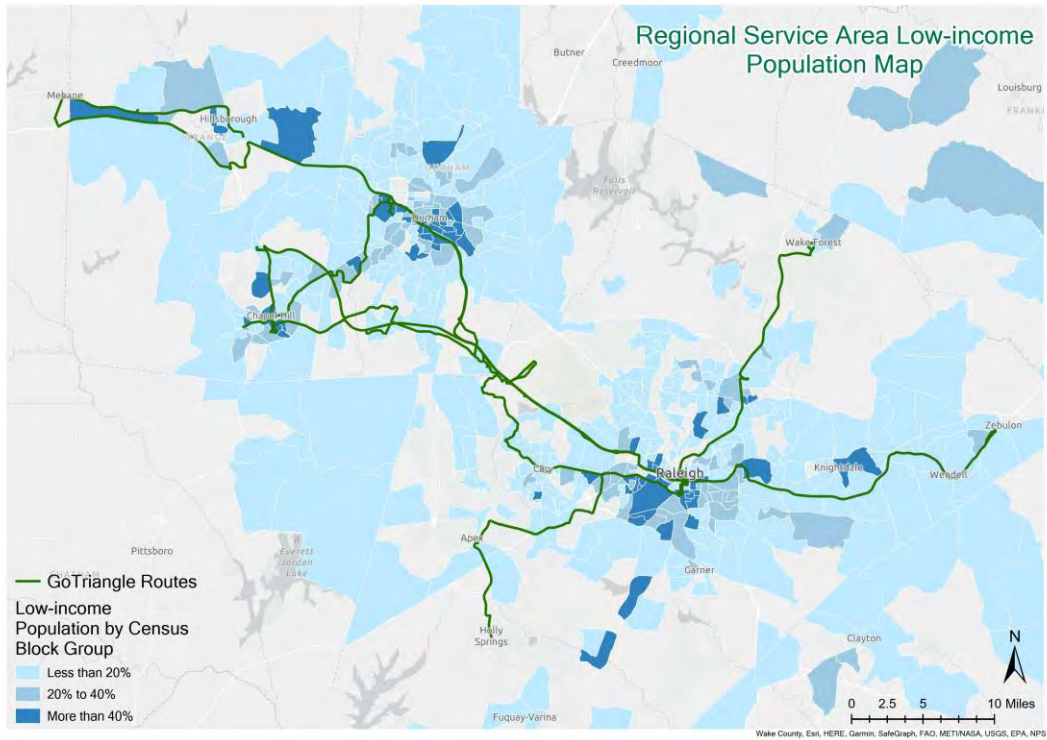
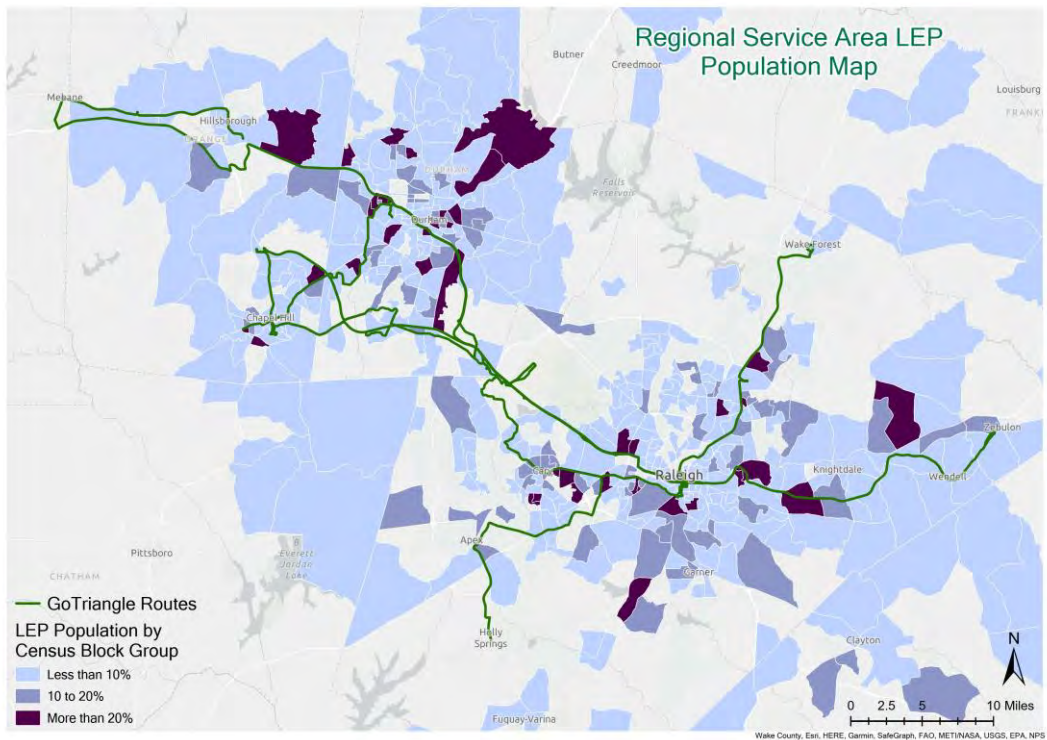


Exhibit 4



Since each county has unique demographics and transit needs, GoTriangle regularly assesses the effectiveness of its outreach to minority and LEP populations. To do this, GoTriangle compares the outcomes to the population and demographics of the three counties it serves. Exhibits 5-7 below show the racial demographics of each county (Durham, Orange, and Wake) in GoTriangle's regional service area based on data from the 2019, 2020, and 2021 American Community Survey 5-Year Estimates.

Exhibit 5

Durham County, North Carolina ACS - 5-year Data Profiles - (Table DP05)						
Label	2019 Estimate	Percent of Total Population	2020 Estimate	Percent of Total Population	2021 Estimate	Percent of Total Population
Total population	311,848		317,665		320,146	
Hispanic or Latino (of any race)	42,079	13.5%	43,051	13.6%	43,873	13.7%
Mexican	19,097	6.1%	20,708	6.5%	21,621	6.8%
Puerto Rican	3,457	1.1%	3,072	1.0%	2,907	0.9%
Cuban	709	0.2%	957	0.3%	941	0.3%
Other Hispanic or Latino	18,816	6.0%	18,314	5.8%	18,404	5.7%
Not Hispanic or Latino	269,769	86.5%	274,614	86.4%	276,273	86.3%
White alone	132,449	42.5%	135,354	42.6%	136,269	42.6%
Black or African American alone	111,903	35.9%	111,729	35.2%	111,492	34.8%
American Indian and Alaska Native alone	661	0.2%	590	0.2%	720	0.2%
Asian alone	15,192	4.9%	15,664	4.9%	15,778	4.9%
Native Hawaiian and Other Pacific Islander alone	129	0.0%	168	0.1%	178	0.1%
Some other race alone	881	0.3%	900	0.3%	939	0.3%
Two or more races	8,554	2.7%	10,209	3.2%	10,897	3.4%

American Community Survey 5-Year Estimates

Exhibit 6

Orange County, North Carolina ACS - 5-year Data Profiles - (Table DP05)						
Label	2019 Estimate	Percent of Total Population	2020 Estimate	Percent Total Population	2021 Estimate	Percent of Total Population
Total population	144,836		146,354		147,376	
Hispanic or Latino (of any race)	12,236	8.4%	12,373	8.5%	12,675	8.6%
Mexican	6,618	4.6%	5,722	3.9%	6,384	4.3%
Puerto Rican	1,053	0.7%	976	0.7%	996	0.7%
Cuban	418	0.3%	563	0.4%	479	0.3%
Other Hispanic or Latino	4,147	2.9%	5,112	3.5%	4,816	3.3%
Not Hispanic or Latino	132,600	91.6%	133,981	91.5%	134,701	91.4%
White alone	100,490	69.4%	101,525	69.4%	101,543	68.9%
Black or African American alone	16,186	11.2%	16,003	10.9%	15,833	10.7%
American Indian and Alaska Native alone	723	0.5%	520	0.4%	424	0.3%
Asian alone	11,223	7.7%	11,303	7.7%	11,464	7.8%
Native Hawaiian and Other Pacific Islander alone	9	0.0%	1	0.0%	14	0.0%
Some other race alone	374	0.3%	344	0.2%	571	0.4%
Two or more races	3,595	2.5%	4,285	2.9%	4,852	3.3%

American Community Survey 5-Year Estimates

Exhibit 7

Wake County, North Carolina ACS - 5-year Data Profiles (Table DP05)						
Label	2019 Estimate	Percent of Population	2020 Estimate	Percent of Population	2021 Estimate	Percent of Population
Total population	1,069,079		1,091,662		1,112,883	
Hispanic or Latino (of any race)	108,379	10.1%	110,961	10.2%	114,749	10.3%
Mexican	51,952	4.9%	53,189	4.9%	53,832	4.8%
Puerto Rican	13,834	1.3%	16,015	1.5%	15,840	1.4%
Cuban	4,604	0.4%	4,085	0.4%	4,078	0.4%
Other Hispanic or Latino	37,989	3.6%	37,672	3.5%	40,999	3.7%
Not Hispanic or Latino	960,700	89.9%	980,701	89.8%	998,134	89.7%
White alone	641,723	60.0%	647,265	59.3%	654,410	58.8%
Black or African American alone	212,353	19.9%	214,636	19.7%	216,279	19.4%
American Indian and Alaska Native alone	2,726	0.3%	2,532	0.2%	2,336	0.2%
Asian alone	74,111	6.9%	79,871	7.3%	83,427	7.5%
Native Hawaiian and Other Pacific Islander alone	403	0.0%	431	0.0%	397	0.0%
Some other race alone	3,214	0.3%	6,130	0.6%	5,389	0.5%
Two or more races	26,170	2.4%	29,836	2.7%	35,896	3.2%

American Community Survey 5-Year Estimates

Regional Profile

The GoTriangle community and rider demographics and characteristics are examined to provide a better understanding of outreach and engagement techniques. Although this section of the PPP utilizes profiles of demographics based on the Title VI program, other underserved groups like youth, seniors, or single-vehicle households may also be considered for targeted engagement. A comprehensive description containing statistics and recommendations regarding the needs of LEP individuals is included in GoTriangle's Language Assistance Plan.

Race and Ethnicity in the Region

The GoTriangle service area is diverse, with almost 43% of the population identifying as persons of color. Exhibit 8 provides a racial and ethnic breakdown of the service area population in GoTriangle's region based on data from the American Community Survey (ACS) 2021 5-Year Estimate.

Exhibit 8:

Race and Ethnicity in the Region

Race/Ethnicity	Total
POPULATION	1,580,405
White	56%
Black/African American	22%
Hispanic/Latino	11%
Asian	7%
Two or More Races	3%
Some other race alone	.44%
American Indian/Alaska Native	.22%
Native Hawaiian/Pacific Islander	.04%

Table DP05 ACS 5 Year Estimate 2021 (Wake, Durham, Orange Counties)

The GoTriangle ridership is also diverse. Exhibit 9 shows ridership demographic data from the 2023 GoTriangle Onboard Customer Survey (Appendix A). The Onboard Customer Survey is conducted every three years. Based on the data from the survey, it is apparent that the majority of GoTriangle ridership is African American/Black and Caucasian/White persons. Asian persons are the third-highest percentage of riders. The percentage of riders identifying as African American/Black riders is almost double that of the region population.

Exhibit 9

Race and Ethnicity of Ridership

Race/Ethnicity	# of Riders	Percentage
African American/Black	665,106	42%
Caucasian/White	475,076	30%
Asian	237,538	15%
Hispanic	110,851	7%
Other	79,179	5%
Native American Indian	15,836	1%

GoTriangle Onboard Customer Survey, 2023

Income and Economic Characteristics

GoTriangle’s disproportionate burden policy defines low-income populations as “persons with household incomes below 150 percent of the poverty level for a regionally average household size.” The average household size in each of the three counties in GoTriangle’s service area is between two and three persons. According to data from the US Census Bureau, the average size households in the GoTriangle area is as follow: 2.3 in Durham County, 2.47 in Orange County, and 2.59 in Wake County.

The 2023 HHS poverty level for a two-person household is \$19,720 (x150% = \$29,580) and for a three-person household is \$24,860 (x150% = \$37,290). Exhibit 10 below represents ridership households' income in GoTriangle's service area.

Exhibit 10

Income	Percentage
Less Than \$10,000	20%
\$10,000 to \$14,999	7%
\$15,000 to \$19,999	4%
\$20,000 to \$24,999	10%
\$25,000 to \$34,999	10%
\$35,000 to \$49,999	8%
\$50,000 to \$74,999	11%
\$75,000 to \$100,000	6%
More than \$100,000	9%
No response	15%
Total	100%

GoTriangle Onboard Community Survey, 2023

PUBLIC PARTICIPATION PROCESS

Before starting a public engagement process, GoTriangle staff carefully develops a strategy and plan that considers various factors such as the target audience, the complexity of the issues, the range of potential outcomes, and the possible positive or adverse effects. To ensure that everyone is reached, GoTriangle’s Language Assistance Plan is in place to assist the limited English proficiency population. Additionally, engagement approaches are developed for service changes and fare equity analysis (Appendix B).

Every project involves a unique combination of participating agencies, departments, and stakeholders. Smaller projects may require the involvement of one or two entities, whereas larger projects may require the involvement of multiple internal departments, agencies, and various stakeholders from the community.

At the beginning of the public participation process, it is essential to establish precise project goals and objectives. This process helps to assess the necessary outreach, evaluate potential impacts, and engage the relevant stakeholders. Defining project goals and objectives early on in this process is crucial, as it determines the necessary outreach efforts, potential impacts, and appropriate stakeholders who need to be involved. Depending on the size and scope of the project, the outreach required to inform the affected populations may vary. GoTriangle has identified stakeholders as those directly or indirectly affected by an outreach effort, system, or

service plan or recommendations of that plan. GoTriangle's stakeholders include but are not limited to the following:

- Transit customers and prospective transit customers
- Individuals or groups affected by a transit/transportation project or action
- Traditionally under-served and under-represented communities
- Minority and low-income populations, including limited English proficient persons
- Local jurisdictions and organizations
- Private business community and organizations
- Community-based organizations and civic groups
- Employers and business organizations
- Colleges, universities, and school districts
- Historically Black Colleges and Universities
- Government agencies
- Regional partner agencies

In addition to the above, GoTriangle's public engagement staff works collaboratively with Wake Transit partners to implement the Wake Transit Community Engagement Policy (Appendix C). The policy aims to develop and maintain a comprehensive set of principles for creating community engagement strategies that optimize communication with the public and other stakeholders regarding investments funded through the Wake Transit program. These strategies are based on a thorough community analysis, including identifying key audiences, engagement methods, tools, messaging, and analytics to measure effectiveness.

PUBLIC PARTICIPATION STRATEGIES

GoTriangle established its Public Participation Plan (PPP), which includes an outreach plan to engage minority, low-income, and limited English proficient (LEP) populations. The following strategies are implemented to ensure the public has access to the information it needs to participate in future GoTriangle planning and policy development efforts. In designing outreach and public strategies, GoTriangle uses traditional and social media and other tools identified below. These strategies may change to reflect the changing needs in our region.

GoTriangle's preferred strategies are community-centered—meeting community members and populations in their environment. To engage the diverse range of community members, flexibility is critical to tailor an approach to the audience.

Depending on the project's scope, various public participation tools and strategies may be necessary. GoTriangle considers several factors when choosing strategies and tools, such as:

- The number and type of stakeholders
- The geographic region of the project
- Jurisdictional requirements
- Available budget and resources
- Communication and language requirements
- Ethnic or specialized media available for targeted groups
- Interpretation and translation needs
- Non-language-based options such as graphic or sound-based communication
- Desired outcome and results of outreach
- Effectiveness of the outreach
- Issues or concerns stakeholders will consider most pertinent

1. Public Notice

- a. Official notification of intent to provide opportunity for members of the general public to participate in public engagement plan development, including participation in open Board and advisory committee meetings.
- b. Public notice is communicated through various means:
 - i. Social media sites (Facebook, Twitter)
 - ii. Press releases to media outlets
 - iii. News releases to minority and Spanish media outlets
 - iv. Public service announcements
 - v. Posting flyers in strategic locations (Transit Centers, Buses, etc.)
 - vi. Agency website and community website postings
 - vii. Media releases via newspapers, radio, and television broadcast stations
 - viii. Discusses changes with Transit Advisory Committee

2. Public Participation Process/Outreach Efforts:

- a. Public meetings
- b. Open houses
- c. Rider forums
- d. Rider outreach
- e. Public hearings
- f. Community Events and Focus Groups
- g. Surveys, Questionnaires, Comment forms
- h. Services for the Disabled (Notices of opportunities for public involvement include contact information for people needing these or other special accommodations.)

- i. Events such as public meetings and/or open houses held at schools, churches, libraries and other non-profit locations easily accessible to public transit and compliant with the Americans with Disabilities Act.

3. Public Comment

- a. Formal public comment periods are used to solicit comments on major public involvement efforts around an agency service or system change.
- b. Comments are accepted through various means:
 - i. Dedicated email address
 - ii. Website
 - iii. Regular mail
 - iv. Forms using survey tool for compilation
 - v. Videotaping
 - vi. Phone calls to Customer Service Center [phone]

4. Public Comment Process

- a. GoTriangle created a public comment process to ensure that no one is excluded from participating in GoTriangle's service planning and development process. GoTriangle's public comment process applies when:
 - i. A fare change of any type is proposed;
 - ii. A major service change of any type is proposed; and
 - iii. Major planning programs (capital projects) are proposed, to include public meetings and public comment periods.
- b. For minor schedule and service changes not rising to the level of a major service change, GoTriangle will post service change notifications on-line, in advance of the change date.

5. Response to Public Input

- a. All public comments are provided to the Board of Trustees prior to decision-making. A publicly available summary report is compiled, including all individual comments.
- b. All GoTriangle's Board of Trustee meetings are open to the public to provide comments.

PUBLIC PARTICIPATION METHODS

As an organization, GoTriangle ensures that all its outreach strategies, communications, and public involvement efforts adhere to Title VI regulations. To proactively engage the public, GoTriangle has developed its PPP that reaches out to individuals of all social, economic, and ethnic backgrounds. Along with these efforts, GoTriangle offers the following:

1. Public notices published in non-English publications (if available)
2. Title VI non-discrimination notice on the agency's website.
3. Agency communication materials in languages other than English (subject to Safe Harbor parameters).
4. Provide services for Limited English Proficient persons. Upon advance notice, translators may be provided.
5. Special events that promote, announce, or kick off a specific program or project, service, or activity.
6. Targeted focus groups are made up of targeted participants with an unbiased facilitator. The focus groups can provide in-depth information about the potential impacts of a likely program or project or a fare or service change on a specific group or geographic region. The benefit of a focus group is that it can be conducted in a particular language, allowing participants to express their opinions and concerns directly.
7. Pop-ups allow for deeper conversations with people in less formal settings. Pop-ups are helpful when trying to reach people who may have yet to have the opportunity to attend formal meetings. GoTriangle engages riders and non-riders in areas where pedestrian foot traffic, such as transit hubs, school campuses, or shopping centers throughout the region. These pop-ups allow staff to interact with a diverse segment of the population within their community. Pop-ups are held at major festivals, local fairs, and other community events to distribute information.
8. Surveys are useful for gathering specific information or feedback regarding a project, plan, or engagement efforts. GoTriangle conducts a full-scope onboard passenger survey every three years. These full-scope surveys are translated into English and Spanish. Project-specific surveys can be undertaken in circumstances such as part of the outreach process for a planning project.
9. Ambassador Program – GoTriangle has an Ambassador program to promote GoTriangle services and improve the customer experience. Ambassadors are key outreach staff.
10. Transit Advisory Committee (TAC) – GoTriangle established a TAC to involve the community and bring diverse opinions and experiences. Citizens from the Triangle communities in Durham, Orange, and Wake Counties are members of the TAC.

FUTURE PUBLIC PARTICIPATION PROCESSES AND TECHNIQUES

GoTriangle uses many outreach tools to encourage engagement in the decision-making process. In addition, tools are used to ensure inclusion of low-income, LEP, disabled, and minority populations. Based on survey data and outreach efforts, some new ideas to consider when implementing/updating the PPP will include:

- Expanding outreach efforts to include social media and traditional media in various languages to achieve higher participation in outreach events. Placing traditional media at bus stops and on buses may be especially critical for outreach participation.
- Improving communication with targeted organizations to ensure that more LEP individuals participate in outreach efforts, including community-based organizations and faith-based groups.
- Providing a short survey regarding LEP needs on buses in various languages for LEP individuals who do not attend outreach meetings.
- Discussing new ways to reach communities with key stakeholder representatives.
- Defining and developing success metrics for various engagement and communication strategies.

Specific Strategies Used to Better Engage Underserved Populations

- Work closely with county commissioners, partners, and agencies to identify ethnic and community-based organizations.
- Leverage relationships with community-based organizations and government agencies by holding workshops and events in community spaces.
- Build mutually beneficial relationships with new community-based organizations primarily serving low-income and historically marginalized communities.
- Create accessible online and in-person events that conform to GoTriangle’s language access plan.

GoTriangle will conduct a public participation process for the 2023-2026 Title VI Program and program updates afterward. This process will include various outreach efforts to seek input, provide education, and highlight critical components of the Title VI Plan. Materials will be created to explain Title VI policies and provide education on how they relate to minority, low-income, and LEP populations. GoTriangle will provide a 30-day public comment period to provide opportunities for feedback as the Title VI Program Plan is updated.

PUBLIC PARTICIPATION OUTCOMES

GoTriangle tracks public outreach data, including date, outreach method, organization/event, location (city or exact address), county, time, purpose/materials shared, if the audience is a Title VI or LEP population, and the number of people engaged. Exhibit 11 shows the percentage of outreach events conducted throughout the region that reach Title VI and LEP populations.

Exhibit 11

June – July	Title VI Outreach Events	%Title VI Events	LEP Outreach Events	% LEP Events	Total Outreach Events	Total # People Engaged
2020-2021	55	22.45%	15	6.12%	245	3,103
2021-2022	82	15.8%	30	5.8%	518	7,500
2022-2023	48	63%	15	20%	76	2,802
Totals	185	22%	60	7.1%	839	13,405

SUMMARY OF PUBLIC OUTREACH EFFORTS

GoTriangle promotes using PPP for its public participation activities to ensure participation from minority, low-income, and LEP populations. Since the last Title VI submission, GoTriangle’s public outreach efforts have used various tools to engage community stakeholders to address their specific needs. Methods utilized to conduct public outreach to GoTriangle’s stakeholders include but are not limited to listserv email blasts, social media posts on Twitter, Facebook, and Instagram; holding public meetings; conducting surveys to gather information on project plans; pop-ups at festivals, local fairs, and community events, and offering materials in multiple languages.

In the past three years, GoTriangle has consciously tried to reach underserved communities, including low-income, minority, and limited English proficiency populations. To ensure effective communication, GoTriangle translated mailers and notifications into various languages as needed. GoTriangle offered interpreter services for public meetings and over the phone through their language assistance hotline. Meetings were held after regular work hours and on weekends in low-income and minority communities. GoTriangle collaborated with community-based organizations to offer more in-depth information and translated brochures and fact sheets. GoTriangle also collaborated with partners to coordinate outreach activities. As part of its public engagement strategy, GoTriangle informed the public of trade-offs between fare reliability and collected feedback on the possibility of returning to fares through a robust comment period that reached transit riders.

GoTriangle engaged over 13,000 Title VI and LEP people during July 2020 through June 2023 and held over 800 community events to promote service changes, new bus routes, free fares

for seniors, return to fares, the Youth GoPass program, and the commuter rail study. Below is a summary of which GoTriangle conducted public outreach to solicit input and disseminate information in the past three years.

- Created a video series “Zooming into Transit” and corresponding materials that reached more than 5,000 regional listserv subscribers. Videos were available in Spanish.
- Distributed materials at a COVID-19 testing site that led to 2,700 respondents and 5,000 comments on the Greater Triangle Commuter Rail Project.
- Launched a ReadyforRailNC.com website that garnered 35,000 views and 2,000 registrations to receive project updates.
- Hired its first bilingual public engagement specialist to increase its communication with Spanish speaking populations.
- Conducted a 45-day public comment period to receive public input on Phase II Feasibility Study for the Greater Triangle Commuter Rail project. Over 6,034 completed a survey during the comment period.
- Public outreach efforts resulted in reaching over 6,900 Triangle residents who provided survey comments on commuter rail and microtransit.
- Conducted a 30-day comment period for the return to fares. More than 1,000 people provided input across a range of demographic categories. An engagement report was created that provide detailed information about the outreach efforts located in Appendix B.

APPENDICES

Appendix – A

GoTriangle OnBoard Customer Survey, 2023



An Onboard Survey of GoTriangle Customers

2023

A study conducted by:



In Conjunction with:



Project conducted by:

- Bethany Whitaker, Project Manager
- Hugh M. Clark, Ph.D. Project Director
- Deanna Byrd, Data Collection Manager

An Onboard Survey of GoTriangle Customers

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Executive Summary

Introduction

In May 2023, CJI Research, in cooperation with Nelson/Nygaard, conducted an onboard survey of GoTriangle customers. The GoTriangle survey includes 1,013 responses. Data are weighted to represent the proportion of total ridership accounted for by each route. A random sample of this size has a margin of error of +/-2.9% at the 95% level of confidence. This means that the results shown in this report are 95% likely to accurately represent the GoTriangle ridership within a margin of 2.9%. For example, if the survey shows that 53% of riders are employed full time, the actual percentage is 95% likely to be within a range of 50.1% to 55.9%.

The 2023 survey provides an update to earlier GoTriangle surveys conducted in 2018 and 2019.

Findings

- Travel characteristics
 - The share of riders who use GoTriangle five or more days a week has declined from 67% in 2018 to 63% in 2018 to 56% in 2023. (Figure 1)
 - Nearly half (45%) of riders said they had not been regular GoTriangle customers either before or during the COVID Pandemic, an indication of the turnover in ridership (Figure 3).
 - Overall, 39% of riders said they are using GoTriangle the same number of days per week as they did pre-pandemic, while 55% said they are riding more often now. Only 4% said they ride less often. (Figure 4)
 - Most people use GoTriangle to travel to work (65%). Other reasons for using GoTriangle include going to school/college (15%) and shopping (7%). (Figure 6)
 - GoTriangle customers are, as expected, more likely (75%) to use GoTriangle each week than the other transit services (Figure 7). However, many GoTriangle riders also use GoRaleigh (41%), GoDurham (42%), Chapel Hill Transit (29%) or GoCary (18%) on a regular basis.
 - There is a clear long-term increase in use of transit in the Triangle as a regional system rather than as several very local systems. GoTriangle riders have continually increased their use of the other six systems in the region since 2018. For example, in 2018 24% of GoTriangle riders also used GoDurham. This increased to 32% in 2019 and then to 41% in 2023. Similar increases occurred with the other major systems in the region.(Figure 7)
- Mobile Communication
 - Just over half (53%) of GoTriangle customers have a transit app on their cellphone. This is lower than in 2019 (57%) and 2018 (61%). TransLoc is used by more riders than any other transit app. Many riders expressed dissatisfaction with the apps. (Figure 8 and Figure 10)
- Alternatives to GoTriangle
 - 60% of GoTriangle riders reported that they do not have a vehicle available for their use, approximately twice as many without access to a car in 2018 (34%) or 2019 (31%) (Figure 11)
 - 45% of GoTriangle riders said they had used Uber or Lyft in the past 45 days to replace a trip that they would have otherwise made on GoTriangle. This is a significant increase from 2018 (21%) and 2019 (25%) (Figure 12).

- Demographics
 - Most (53%) GoTriangle customers are employed full time, 17% are employed part time, and 28% are students. Unemployed persons accounted for 12% of GoTriangle’s ridership, a significant increase from 2018 (4%) and 2019 (3%). (Figure 13)
 - Of employed persons and students, 63% work or attend school onsite only, while 8% are remote only and 29% have hybrid schedules (Figure 14).
 - GoTriangle customers have low household incomes. In 2023, 32% reported incomes of less than \$15,000, nearly double from 2019 (18%). Also, 32% report household incomes of \$50,000 or more, a significant decrease from 45% in 2019. (Figure 17)
 - In 2023, GoTriangle’s ridership was 41% female and 56% male; this is a change from 2019 when ridership was 50% female and 48% male. Those identifying as non-binary or preferring not to state a gender-identity increased from 2% to 4%.
 - Of all GoTriangle customers, 42% identify as African American, while 30% identify as Caucasian/White, 7% Hispanic, 15% Asian, and 1% Native American. (Figure 18)
 - GoTriangle riders are young, with 49% aged 35 or less. This is less than in 2018 and 2019, when people aged 35 or less comprised 53% and 54% of riders, respectively (Figure 19)

PERCEPTION OF SERVICE QUALITY

- The survey asked riders to rate (or score) GoTriangle service according to 18 service elements. Riders used a seven-point scale, whereby a score of 1 meant very poor, and 7 meant excellent. 22% of the riders rated service overall as excellent. Another 28% rated the service as 6 or very good. Combined, 50% rated GoTriangle as excellent or very good, a decrease from 2019 (61%) (Figure 25 & Figure 26)
- Overall, customer service ratings are lower (less positive) as compared with 2019. While still positive overall, riders consistently gave GoTriangle services a lower score. The analysis tested possible demographic explanations for the change. The percentages of low income and African-American riders increased since 2019. If low income and African-American riders consistently gave lower scores, that would help explain the change. However, they did not consistently give lower scores.(Figure 27 & Figure 28)
- While this could not be tested in this survey, lower ratings may be at least partially attributed to a larger cultural shift that includes more negative attitudes toward the national economy and satisfaction with institutions. (Figure 29 & Figure 30)

When asked to prioritize service elements that needed to either be improved or maintained, riders said:

- "Buses running on time" is the most frequently cited aspect of service to improve. Nearly half (46%) of riders listed it as their first, second, or third priority for service improvement (Figure 31)
- However, more riders cited “buses running on time” as their priority for service improvements in 2018 and 2019 with 54% and 55%, respectively.
- Service coverage defined as “Service to all locations you want to go to” was the next highest priority with 24% of riders listing it as one of their top three concerns, statistically the same as 25% in 2019.
- Frequency of service on weekdays was third, with 24% listing it among their top three. A higher percentage (38%) listed frequency as a priority in 2019. .
- “Sense of personal safety from others on the bus” ranked fourth with 23% of riders listing it in the top three. This is almost double (11%) from 2019.

Introduction and Methodology

Background

As part of a regional customer satisfaction measurement program, CJI Research, LLC, in collaboration with Nelson/Nygaard, conducted a survey of customers onboard GoTriangle buses from May 5 through May 11 2023, Similar surveys were conducted with customers of GoCary in the following week (May 12 through May 16), with GoRaleigh customers in the prior week (April 28 through May 4), and with GoDurham customers during November 2022.

The questionnaire used in the survey was initially developed by Hugh Clark of CJI Research, LLC and refined in cooperation with GoTriangle staff.

Methods: How the Survey Was Conducted

SAMPLE

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

Survey data collection occurred onboard the buses. Survey staff were instructed to approach all customers who boarded except for customers who appeared younger than sixteen. These customers were not approached, both for reasons of propriety and because children are typically unable to provide meaningful answers to several of the questions.

Asking all customers to participate in the survey eliminates selection bias and improves the quality of the sample. 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 GoTriangle survey collected 1,013 responses 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 margin of sample error for a given sample size decreases somewhat.

DATA COLLECTION

Temporary workers from the Greer Group Inc., of 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. The uniform helps customers understand visually why an interviewer would be approaching them and increases the rate of cooperation. Survey personnel met the bus operators at the GoTriangle Morrisville garage at the beginning of their shifts and stayed on the buses through the drivers' shifts.

The questionnaire was self-administered. Survey personnel handed a questionnaire and a pen to each customer, asked that they complete the survey, and return it to the surveyor before exiting the bus. At the end of each sampled trip, the survey personnel placed the completed surveys in an envelope pre-labeled with the route, run, time, day, and date. At the end of the surveyors' shifts they returned all of their trip-log envelopes with completed questionnaires inside to the survey supervisors who completed a form with a further summary of the shift. A total of 256 bus trips were sampled and recorded in this manner.

PARTICIPATION RATES

Completion Rates on GoTriangle Onboard Survey, 2023

A total of 2,700 persons were riding during the surveyed trips and had a chance to participate if of age and able to speak English or Spanish			
Of those on the bus during the surveyed trips:	38	appeared to be younger than 16 and were not asked to participate	1%
and	69	customers spoke a language other than English or Spanish	3%
and	967	refused outright	36%
and	508	said they had already completed the survey (possibly on another system)	19%
and	1,219	accepted the survey form with the apparent intention of completing it	45%
Thus, 1,219 customers represent, the total "effective distribution," i.e., the raw sample			% of the effective distribution
Of the effective distribution	206	Ultimately failed to return the survey they had accepted	17%
and	998	Completed the survey on the GoTriangle bus	82%
and	15	completed the survey and returned it by mail or to an operator on another bus	1.2%
Thus, finally	1,013	Completed the survey and constitute the final sample	83%
Key summary statistics		Of all persons on board the sampled trips, this represents:	38%
		Of all English or Spanish speaking adults riding on a surveyed vehicle, this represents:	45%
		Of all the customers on sampled trips who accepted a questionnaire, this represents:	83%

In the analysis, those who did not respond to a question are eliminated from the computations 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

A copy of the questionnaire is included in Appendix A.

The questionnaires were numbered so that records could be kept for the route and day of the week on which the questionnaire was completed.

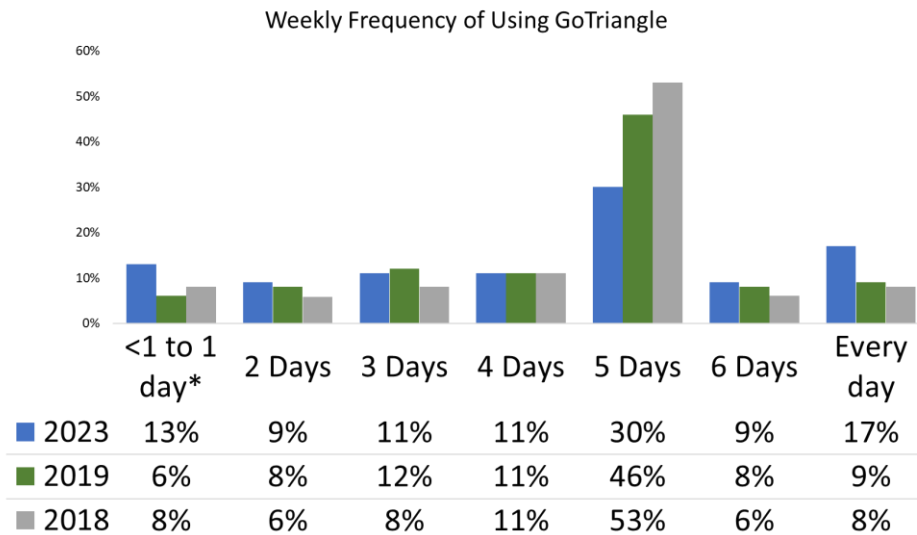
ANALYSIS

The analysis consists primarily of crosstabulations and frequency distributions. Tables were prepared in SPSS, version 29, and charts in Excel for Office 365. The GoTriangle 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

Figure 1 How Many Days a Week Do You Use GoTriangle?



* The response "Less than one day" was introduced in 2023. Prior to 2023 the respondents in this situation appear to have answered "One day" as the closest approximation.

Weekly Frequency of Using GoTriangle

Riders were asked the number of days in a typical week they use GoTriangle. Data shows patterns have changed since 2019.

- The number of riders who use GoTriangle five days per week has decreased steadily since 2018.
- In 2023, 30% reported using GoTriangle five days per week. This compares with 53% of riders in 2018 and 46% in 2019

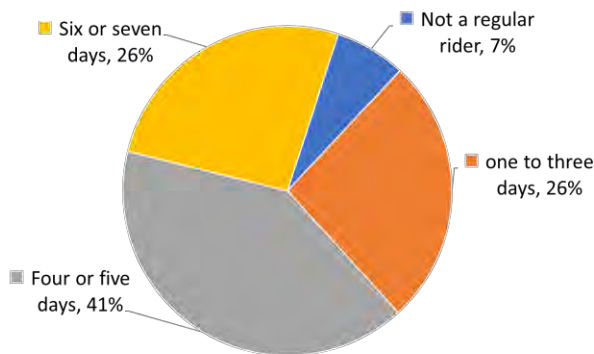
reporting they used GoTriangle 5 days per week.

- The number of daily riders continued to decline between 2019 and 2023. This change appears to reflect the fact that, post-pandemic, many office workers work remotely at least some of the time (see Figure 14). However, the pre-pandemic decline in five-day riders from 2018 to 2019 suggests that this may be a trend that pre-dates the pandemic.
- On the other hand, a greater percentage of riders are using the system six or seven days per week now (26%) than in either 2018 (14%) or 2019 (17%). To some extent this change may result from fares having been suspended and/or the expanded service levels. Anecdotally, survey staff reported that a substantial number of riders stated that they were simply riding for the sake of riding because from their point of view, the suspended fare made it “free,” and they had nothing else to do. This is

consistent with the survey data which show that 24% of the riders who are unemployed in 2023 say they use GoTriangle 7 days a week.

Figure 2 Frequency of Using GoTriangle

Weekly Frequency of Using GoTriangle, 2023

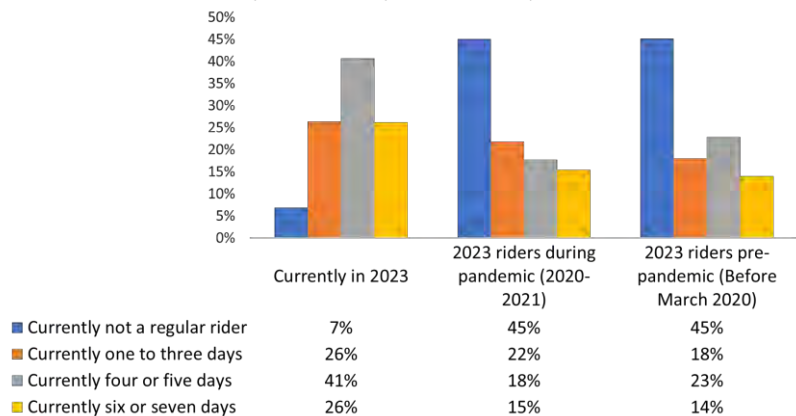


For purposes of further analysis, the customers are grouped into four sets depending upon how frequently they use GoTriangle:

- Those who are not regular riders (7%)
- Those who ride one to three-days a week (26%)
- Those who use GoTriangle four or five-days a week (41%)
- Those who use GoTriangle six or seven-days a week (26%)

Figure 3 The Pandemic and Use of GoTriangle

How often did current GoTriangle customers ride during and before the pandemic, compared to currently?



six or seven days a week in 2018 (14%) and 2019 (15%).

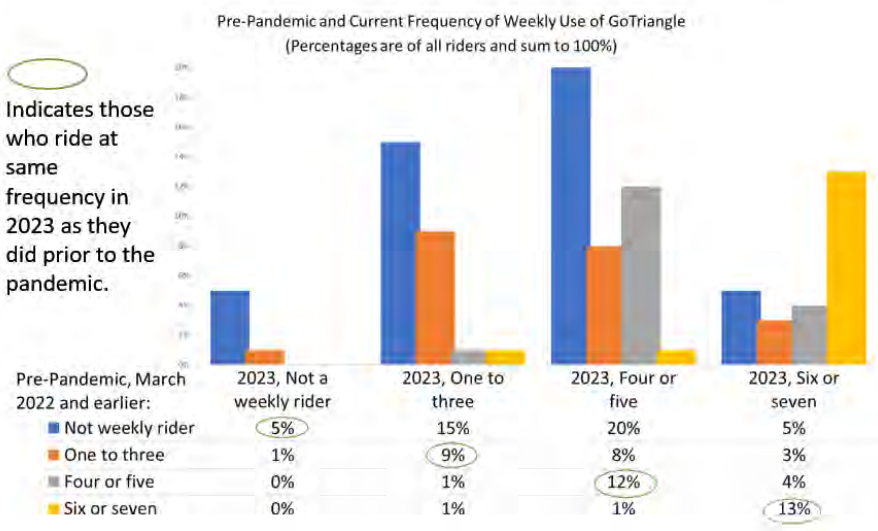
- There was some change in the one to three day and four to five day riders. However, the basic rider frequency profile remained rather constant before and during the pandemic if rider memories are correct.
- However, post-pandemic in 2023, the four to five day riders more than doubled from 18% to 41%
- The six to seven day riders almost doubled from 15% to 26%.

Change in Frequency of Riding Pre-Pandemic, during the Pandemic, and Currently.

Current GoTriangle riders’ usage patterns during the pandemic did not differ greatly from pre-pandemic levels. (Obviously a rider survey cannot account for those who stopped riding.)

- 45% of the current riders say they were not regular riders either during or before the pandemic.
- Of current riders, the statistically identical percentage rode GoTriangle

Figure 4 Riding GoTriangle before Pandemic and Currently



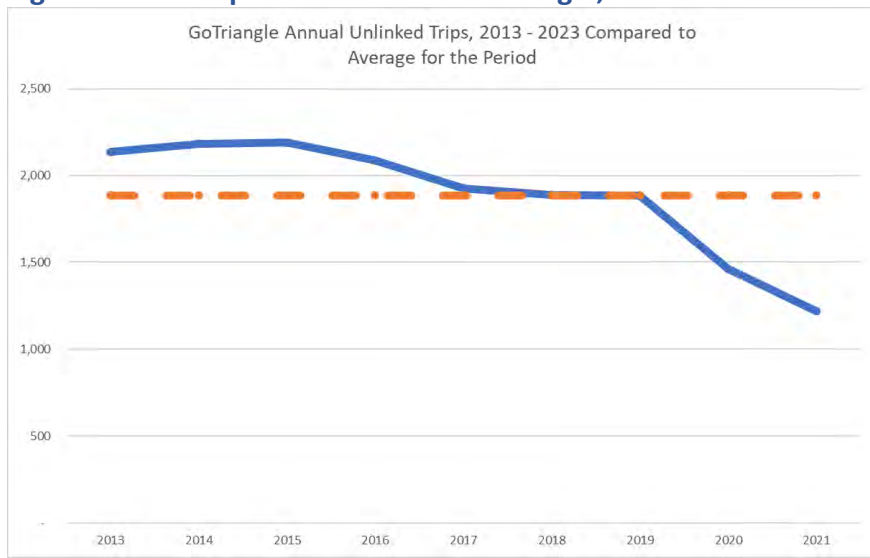
Another way to think about these pre and post pandemic riding tendencies is to consider the ridership as a whole rather than looking at current, pandemic and pre-pandemic riders separately. Figure 4 displays how often riders use GoTriangle now and how often they used it pre-pandemic.

The percentages on the diagonal and circled in green indicate consistent frequency pre and post pandemic. All other percentages indicate riders who are using

GoTriangle either more often (above the diagonal) or less often (below the diagonal).

A total of 39% of all current riders say they now use GoTriangle the same number of days per week they did pre-pandemic, while 4% say they are riding on fewer days and 55% on more days per week. These figures pertain, of course, only to the period when fares remain suspended.

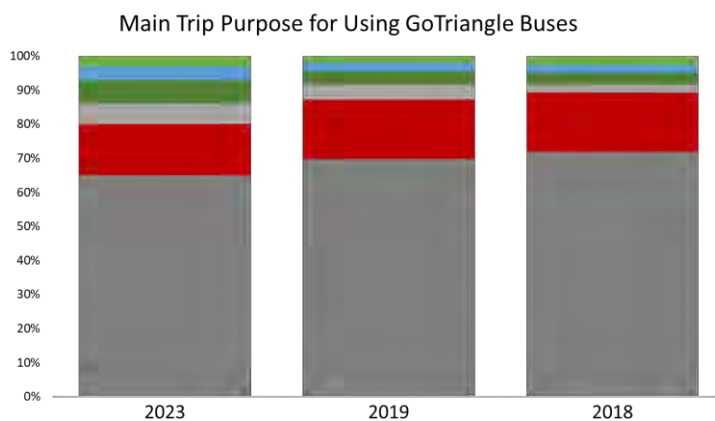
Figure 5 Ridership Statistics from GoTriangle, 2012 – 2021



Ridership Trends

To provide perspective on the changing ridership, Figure 5 provides total annual GoTriangle ridership figures since 2013. GoTriangle ridership saw a long decline from 2015 to 2017 followed by a plateau from 2017 to 2019. Like all bus systems in the United States, ridership declined during the pandemic years of 2020 and 2021.

Figure 6 Trip Purpose



Trip Purpose

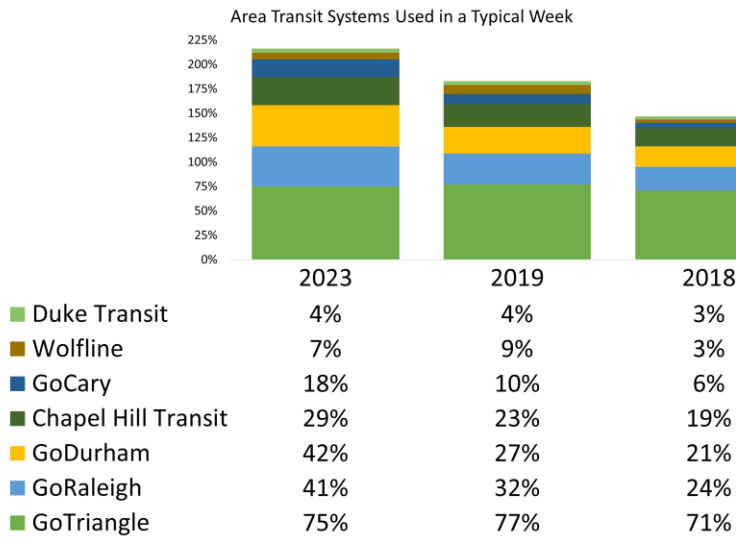
Customers were asked about their primary trip purpose.

- Getting to or from work is the primary trip-purpose, with 65% of customers citing work as their primary trip purpose in 2023. The portion of people using GoTriangle to get to work declined from 72% in 2018 and 70% in 2019.
- School and college trips make up another 15% of trips, a percentage that has changed very little since 2018. Thus, GoTriangle is carrying a large proportion of its customers (80%) for either work or school

trips, an indication of its economic impact through the labor force.

- Another 7% of the customers indicate that they use GoTriangle to make shopping trips. Shopping has shown a gradual increase from 3% in 2018 to 4% in 2019, to 7% in 2023.
- Medical trips account for 3% and recreational trips for 4%.

Figure 7 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. Because many people use multiple systems, the sums of the percentages exceed 100% in Figure 7.

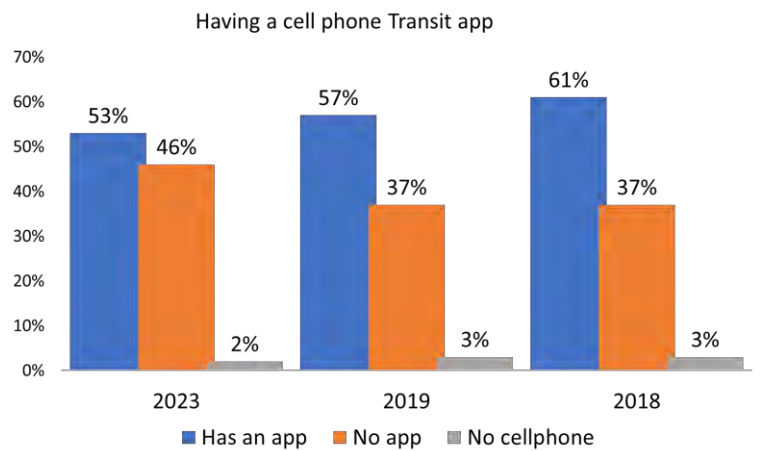
As expected, most GoTriangle riders (75%) said they use GoTriangle in a typical week. Conversely, this suggests that about 25% do not use GoTriangle in a typical week and were encountered during the survey on one of their multi-system trips, or else they use GoTriangle only

occasionally, and not in a “typical week.” Use of multiple systems in the Triangle has been increasing since the initial survey in 2018. Specifically:

- In 2023 GoTriangle customers use GoRaleigh more than any other local system (41%). This percentage has been increasing, going from 24% in 2018 to 32% in 2019 to 41% in 2023.
- Use of GoDurham has also increased, going from 21% in 2018 to 27% in 2019 to 42% in 2023.
- Use of Chapel Hill Transit went from 19% in 2018 to 23% in 2019 to 29% in 2023.
- Use of GoCary also increased steadily since 2018, going from 6% in 2018 to 10% in 2019 and to 18% in 2023.

The pattern shown in Figure 7 suggests a picture of growing regional travel with GoTriangle expanding its role as a regional service provider. This pattern of more and more GoTriangle customers using the other systems in the Triangle on a weekly basis has increased continually from 2018 to 2023.

Figure 8 Use of Cell Phones and the Transit App



Use of a Transit App

Fifty-three percent (53%) of customers have a transit app installed on their phones, down substantially from 61% in 2018, and 57% in 2019.

The data does not explain the decline. Some of the change from 2019 to 2023 is likely due in part to the fact that the GoTriangle ridership has become somewhat older, and age is negatively associated with use of a transit app (see Figure 9). However, that does not explain the decline in usage from 2018 to 2019,

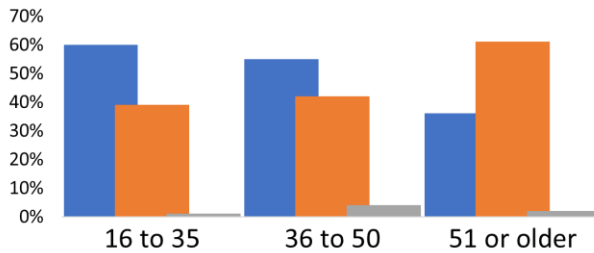
because the age of GoTriangle riders was unchanged in that one-year time frame. Also, the change from 2019 to 2023 in usage of an app is greater than would be accounted for by the age difference. Something else the survey cannot measure must be causing this change. Given some of the comments about dissatisfaction with some of the apps, the decline may have to do with the reliability of the apps themselves.

AGE AND THE USE OF A TRANSIT APP.

Figure 9 demonstrates that through the age of 50, a majority of GoTriangle riders use a transit app. Among those 51 or older, however, only 36% use such an app. The relationship of age to use of this technology is not surprising. What seems surprising is that 39% of the youngest riders do not use a transit app.

Figure 9 Age and Use of a Cellphone Transit App

Age and Use of a Cellphone Transit App



	16 to 35	36 to 50	51 or older
■ Uses transit app	60%	55%	36%
■ Does not use transit app	39%	42%	61%
■ No cell phone	1%	4%	2%

Among the 51% of GoTriangle riders who use a transit app, TransLoc, either alone or in combination with a second app, is by far the most widely used (total of 55%) of those who use an app (or 26% of all GoTriangle riders).

Although TransLoc is the dominant app by far, some riders had reservations about it. When asked about the app they use, several riders said things such as, “Transloc-But hasn't been working,” or “Transloc or Moovit (both not reliable)”, or “Transloc (when it worked),” or “Transloc (when working).” Or “I have used TransLoc before frequently, but it has become sadly unreliable in recent years,” or “I try to use TransLoc, but app is not working.”

These represent a minority of the app users, but their concerns were explicit, and suggest a perceived reliability challenge with trip planning apps.

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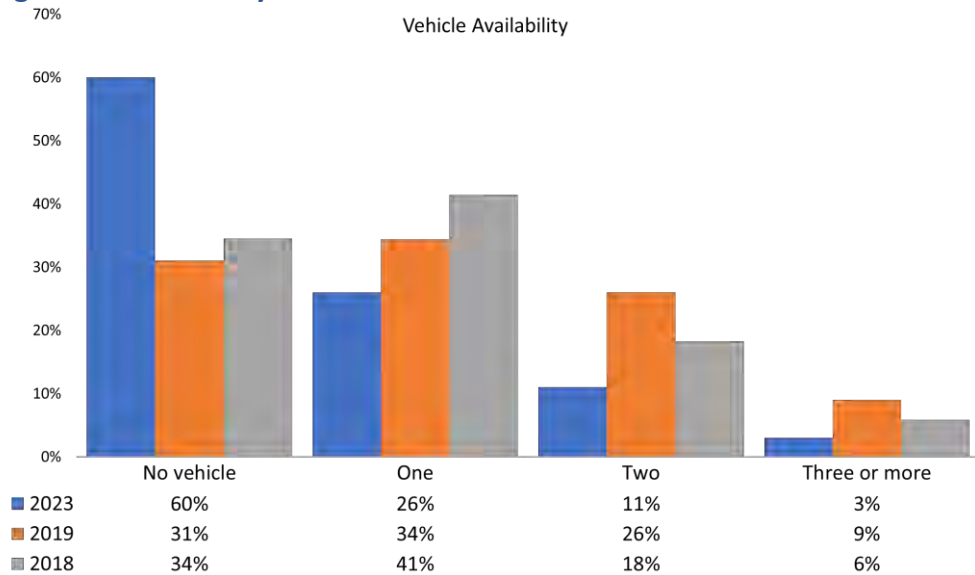
Figure 10 Which Transit App?

TransLoc	45%
Google Maps	10%
TransLoc plus other	8%
Transit	7%
Moovit	4%
Uber/Lyft	4%
Apple Maps	2%
Other	20%

Alternatives to Using GoTriangle for Local Travel

Having a vehicle of one's own or being able and willing to use ride-hailing provide alternatives to many GoTriangle riders.

Figure 11 Availability of a Vehicle



AVAILABILITY OF A VEHICLE

Availability of at least one vehicle to GoTriangle riders changed since 2018 and 2019. In 2018, only 34%, and in 2019 only 31% reported that they lacked access to a vehicle. By 2023 that percentage had almost doubled to 60% of riders reporting they did not have access to a vehicle.

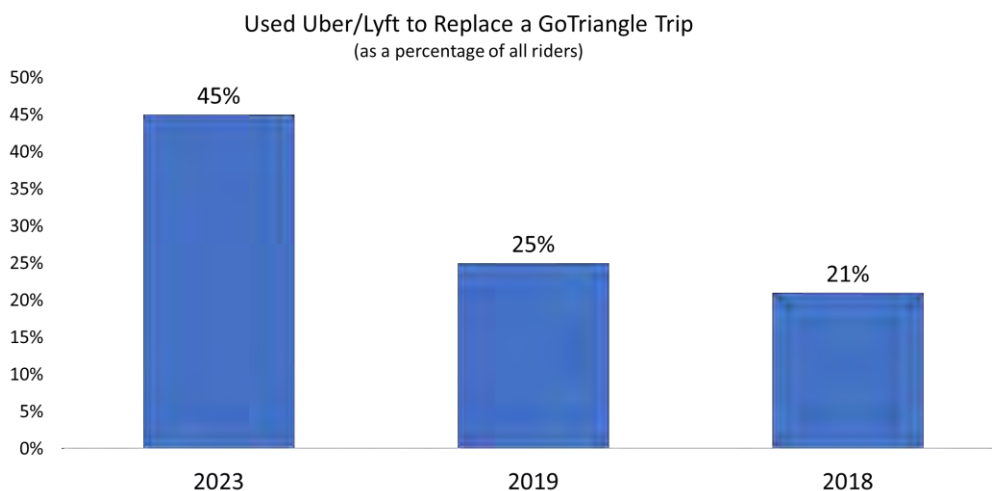
The change between 2019 and 2023 is due

at least in part to change in household income and employment. Both are closely related to vehicle availability. For example, 49% of riders who are employed full time have access to a vehicle, but only 30% of those not employed full time have such access. Similarly, 58% of riders reporting household incomes of \$25,000 or more have access to a vehicle, but only 19% of those reporting incomes of less than \$25,000 have such access.

Ride-Hailing: Use of Uber and/or Lyft to Replace a Trip on GoTriangle

Ridership has declined for various reasons since 2019. One potential question is if ride-hailing replaced

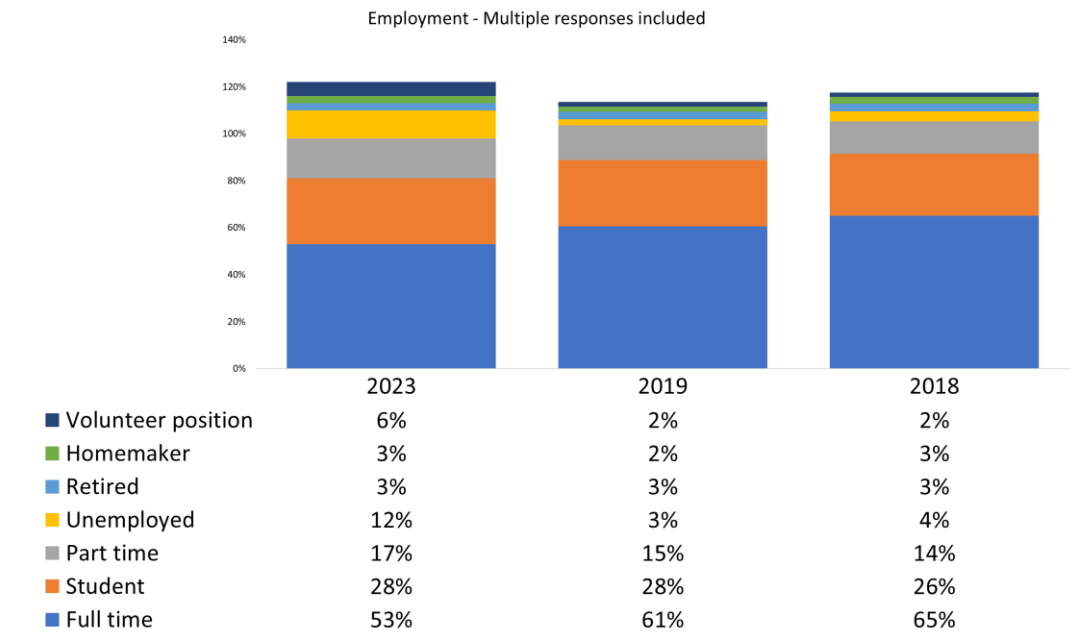
Figure 12 Use of Ride-Hailing to Replace a GoTriangle Trip in the Past 30 Days



some GoTriangle trips. Of all GoTriangle riders, 45%, say they have used ride-hailing in place of a GoTriangle trip. This represents a major increase from 21% in 2018 and 25% in 2019.

Demographics

Figure 13 Employment



Employment

The employment profile of GoTriangle customers changed significantly between 2019 and 2023. There had been relatively minor changes in the employment profile from 2018 to 2019. In 2018, a total of 65% of GoTriangle customers reported being employed full time¹. In 2019 that percentage decreased to 61%. There was greater change between 2019 and 2023. Specifically:

- The percentage of riders who said they were employed full time declined from 61% in 2019 to 53% in 2023.
- The percentage of riders who said they were unemployed increased from 3% to 12% although the unemployment rate in March for Wake County just prior to the survey was only 2.7%².
- It seems likely that the increase in the percentage of riders who are unemployed is in part a by-product of fare suspension. Evidence is anecdotal but, on many trips, the survey staff reported that some people said they were riding only because the fare, from their perspective, was “free,” and they had “nothing else to do.”
- The percentage of students remained constant at 28%.
- Part-time workers increased only slightly from 15% to 17%.
- Retirees were unchanged at 3%.

¹ In the chart above, multiple responses were allowed for those with multiple roles. Therefore, the sum of the percentages exceeds 100% when many riders have more than one job or role.

² Federal Reserve Bank <https://fred.stlouisfed.org/series/NCWAKE3URN>

Figure 14 Remote & Onsite Employment/School

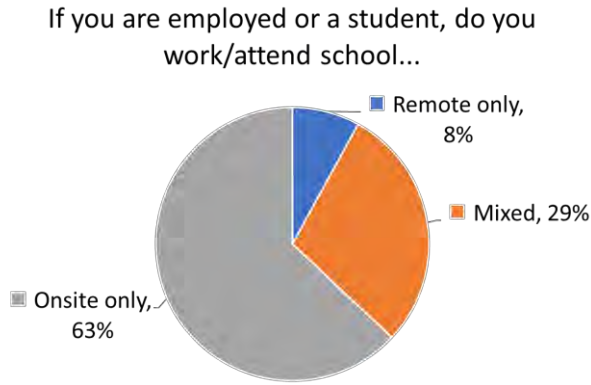
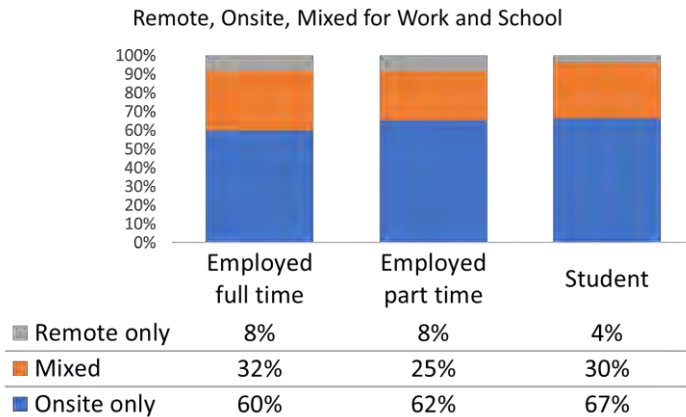


Figure 15 Remote v Onsite Work/School



Remote Work/School

In May 2023, the early post-pandemic period when the GoTriangle survey was conducted, 63% of employed or student riders said they worked or attended school only on-site. Another 8% said they worked or attended school only remotely and 29% said they followed a mixed remote/onsite pattern.

In the 2018 and 2019 surveys, prior to the pandemic, there was no reason to ask this question and therefore we cannot make comparisons. However, it is well-known that during the pandemic there was a major increase in full time and hybrid work schedules. This contributed greatly to ridership decline nationally and probably continues to restrain ridership recovery.

The remote/onsite experience differs between students and employed persons. Only 4% of student riders say that they attend classes remotely. This compares with 8% of those who have hybrid schedules for full or part-time work.

It is interesting to put these findings into a national context using information from WFHR Research and the PEW Research Center. The remote/onsite workplace

percentages for GoTriangle riders follow a pattern reasonably similar to national statistics developed by WFHR Research as cited by Forbes Advisor³. While the percentages of remote-only and hybrid remote/onsite differ from the GoTriangle percentages, they are in the same general range. The percentage of onsite-only among GoTriangle riders (60%) is statistically the same as found by WFHR for the public (59.1%). These figures of working onsite only are also consistent with the PEW Research finding that 60% of US jobs cannot be done remotely.

According WFHR surveys:

“Currently, 12.7% of full-time employees work from home, illustrating the rapid normalization of remote work environments. Simultaneously, a significant 28.2% of employees have adapted to a hybrid work model.... Despite the steady rise in remote work, the majority of the workforce (59.1%) still work in-office. This percentage underscores the fact that while remote work is on an upswing, traditional in-office work is far from obsolete.”

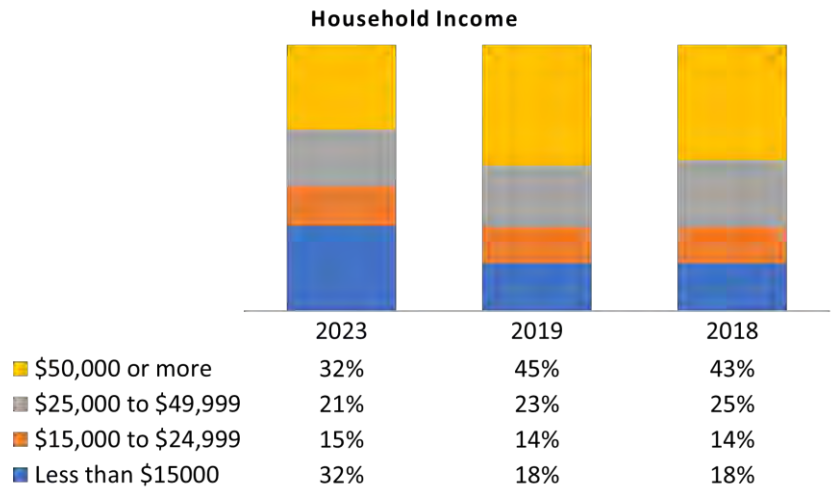
According to the PEW Research Center surveys⁴:

The majority of U.S. workers overall (61%) do not have jobs that can be done from home. Workers with lower incomes and those without a four-year college degree are more likely to fall into this category. Among those who do have teleworkable jobs, Hispanic adults and those without a college degree are among the most likely to say they rarely or never work from home. When looking at all employed adults ages 18 and older in the United States, Pew Research Center estimates that about 14% – or roughly 22 million people – are currently working from home all the time.

³ <https://www.forbes.com/advisor/business/remote-work-statistics/>

⁴ <https://www.pewresearch.org/short-reads/2023/03/30/about-a-third-of-us-workers-who-can-work-from-home-do-so-all-the-time/#:~:text=The%20majority%20of%20U.S.%20workers,to%20fall%20into%20this%20category.>

Figure 17 Income of Rider Households



Income of Rider Households

Riders’ reports of their household incomes were stable between 2018 and 2019 but changed substantially from 2019 to 2023. The largest proportion of riders reported household incomes of less than \$15,000 (32%) in 2023, but only 18% in both 2018 and 2019. The percentages in the mid-level incomes from \$15,000 to \$49,999 were reasonably constant, but the percentages in income levels of \$50,000 or more

saw a major decline from 45% in 2019 to only 32% in 2023.

Gender

GoTriangle customers more often identify as male (56%) than female (41%). Also, 4% identify as non-binary or prefer not to state a gender identity.

The male/female GoTriangle gender split is roughly the reverse of the national figures cited in the 2015 CJI report for APTA “Who Rides Public Transportation” which shows that among bus customers nationally,

56% have tended to be women and only 44% men. The GoTriangle gender split has not been consistent among the three GoTriangle surveys. Until 2023, the gender split was close to 50:50. The post-COVID GoTriangle rider population is clearly more male than female.

Figure 16 Gender

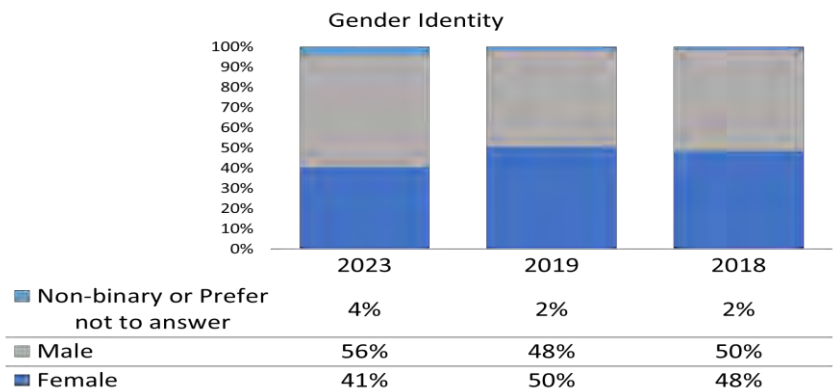
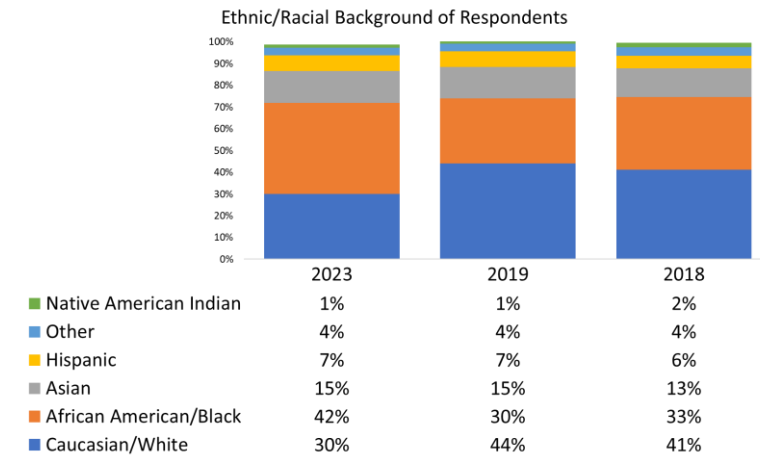


Figure 18 Race and Ethnicity of Customers

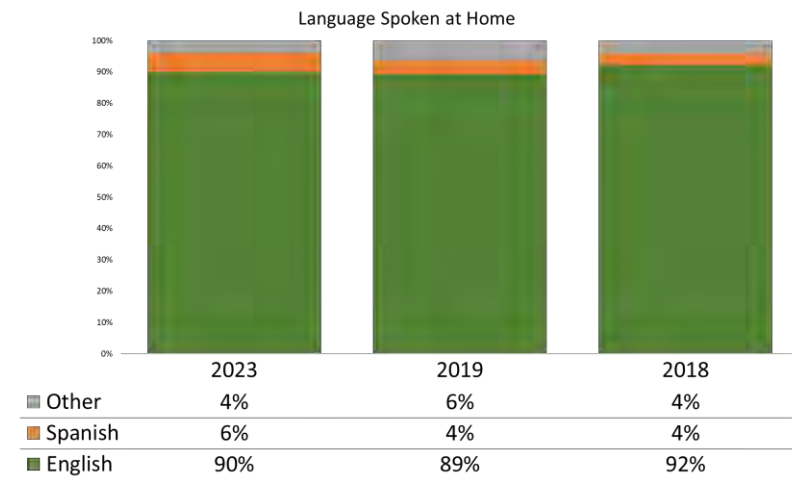


Race and Ethnicity of Customers

There has been a significant change in the racial composition of the GoTriangle ridership since 2019. The relative percentages of riders identifying as African American/Black or Caucasian/ White reversed in that period. In 2019, 44% identified as Caucasian/White and 30% as African American/Black. In 2023, that essentially reversed to 42% African American/Black and 30% Caucasian/White.

This is a significant change in a short period. Other than that major shift, however, there was little change. Those identifying as Asian continue to make up 15% as they did in 2019, and Hispanic riders continue to comprise 7% of the ridership. The Native American and other categories were similarly unchanged.

Figure 19 Language Most Often Spoken at Home

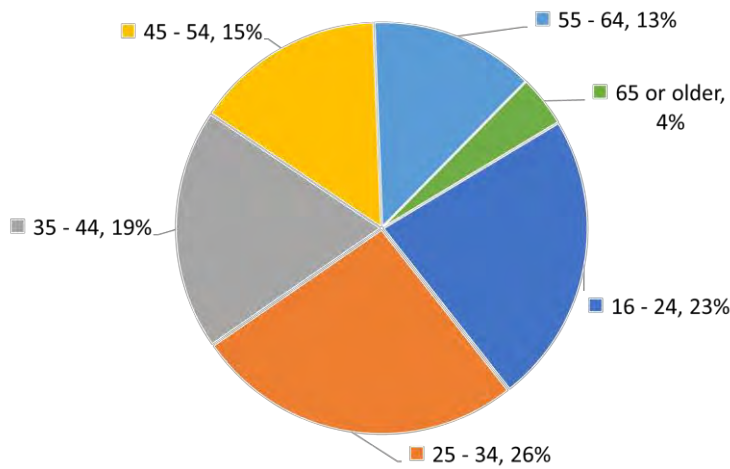


Language Spoken Most Often at Home

The overwhelming majority (90%) of GoTriangle customers most often speak English at home. Only 6% speak Spanish at home. Small numbers of riders speak other languages. The largest group among the other languages is Chinese, which (including Mandarin) is spoken by 2.1% of the GoTriangle riders.

Other languages			
Amharic	0.1%	Japanese	0.1%
Arabic	0.3%	Kinyarwanda	0.1%
Bahasa Indonesia	0.1%	Korean	0.1%
Bengali	0.3%	Lingala	0.1%
Chinese	1.7%	Mandarin	0.3%
Chinese / Mandarin	0.1%	Marathi	0.1%
Ebonics	0.1%	Persian (Farsi)	0.1%
Farsi	0.1%	Portuguese	0.1%
French	0.2%	Russian	0.1%
German	0.8%	Swedish	0.1%
Gertian	0.3%	Telugu	0.4%
Gujarati	0.1%	Thai	0.1%
Hebrew	0.1%	Tigrinya	0.1%
Hindi	0.1%	Ukrainian	0.1%
Igbo	0.3%	Urdu	0.0%
Indonesia	0.2%	Vietnamese	0.3%

Figure 20 Age of GoTriangle Riders, 2023



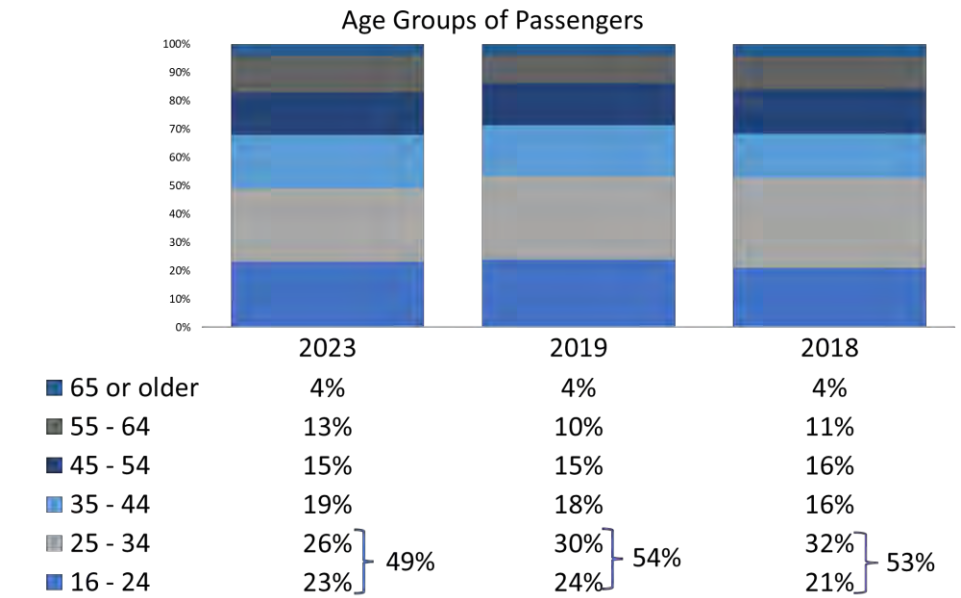
Age of Customers

Like most bus transit systems in the United States, GoTriangle has a young ridership. However, its riders as a whole are somewhat older now than in 2018 or 2019. Of all GoTriangle riders in 2023, 23% are between 16 and 34 and 26% are between 25 and 34 for a total of 49% who are younger than 35⁵. In 2018 and 2019, slightly larger percentages of the riders (53% and 54%, respectively) were that young.

While the youngest riders shrank somewhat as a group, there was an increase in the percentage of those 35 to

64. They increased from a total of 43% in 2019 to 47% in 2023. In short, the ridership is becoming somewhat less youthful and somewhat more middle-aged.

Figure 21 Changing Age Distribution of GoTriangle Riders



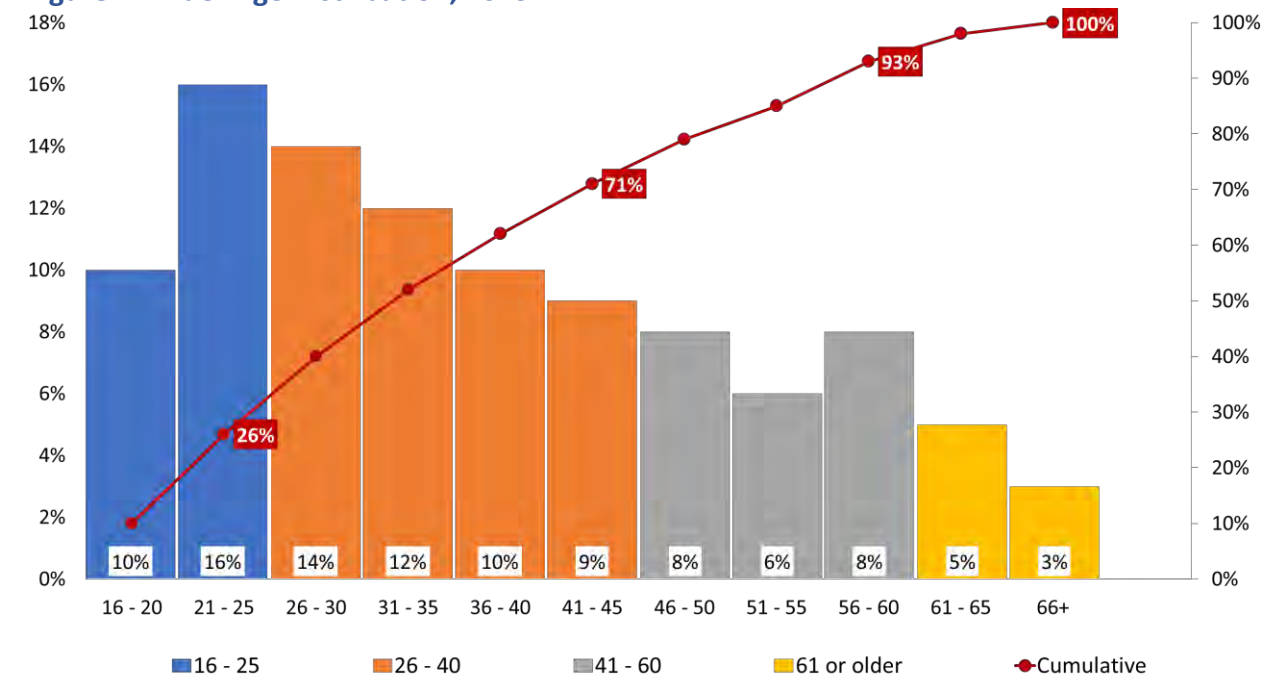
⁵ This percentage actually underestimates the youth somewhat because for reasons of data validity and ethical practice, we did not attempt to survey anyone who appeared to be younger than sixteen.

Figure 22 below, groups riders into five-year age cohorts to provide another way to visualize the GoTriangle riders' age profile.

Notice in the chart, that the youngest age groups dominate the ridership. More than one-fourth (26%) of all GoTriangle riders in 2023 are under the age of 25, and 71% are forty-five or younger. Those aged 21 to 25 form a peak of 16% after which (with one exception) each five year age span provides a slightly smaller and smaller percentage of the total ridership. This age distribution is typical of most bus transit systems in the United States.

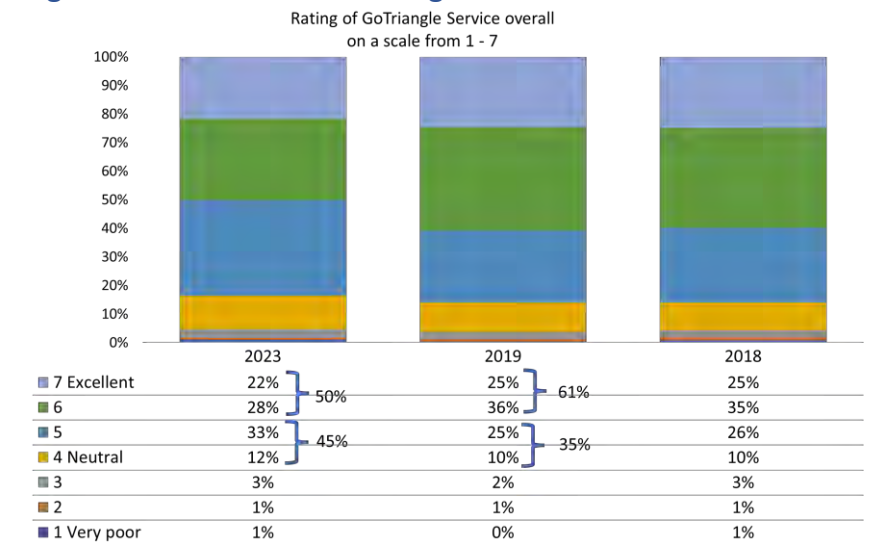
Many young people use transit as they get started as adult earners. As they earn more money, they often purchase a vehicle and relocate beyond the reach of urban bus transit. The percentage of riders in each age group from 26 to 45 decreases from 14% to 9%, then settles between 6% and 8% between the ages of 46 and 60 before falling to 5%, then 3%, as many riders retire in their sixties.

Figure 22 Rider Age Distribution, 2023



Customer Satisfaction

Figure 23 Overall Service Rating



Overall System Rating Score

Customers were asked to rate eighteen aspects of GoTriangle 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).

CHANGE IN THE OVERALL SCORE

In 2023, 22% rate service overall as 7 or “Excellent” and another 28% as 6 or “Very good” for a

total of 50% in the top two categories. This score represents a decline from 2019 when 25% rated service overall as excellent and 36% as very good for a total of 61%. The change does not, however, indicate a movement from positive to negative scores. Instead, it indicates a movement from more positive to fewer positive scores. What occurred was an increase in the percent rating service as “neutral” or “good” rather than “Very good” or “excellent.”

Scores on Individual Elements of Service

The charts that follow differentiate among three elements of service. First are the operational services. These involve basic aspects of service inherent in the operation of a transit system and therefore used by all riders. These include elements such as route structure, schedule adherence and other aspects of service used by all. A second set of services involves those elements such as Sunday service or transfers that a substantial number of customers use only occasionally if at all. The third type of service involves elements that set the general environment in which the customer experiences GoTriangle services. For example, “Quality of Wi-Fi,” “Availability of shelters” and “Courtesy and helpfulness of bus operators” are among several service elements that help define customer experience.

Scores of "Excellent" in 2023 on Individual Components of GoTriangle Service

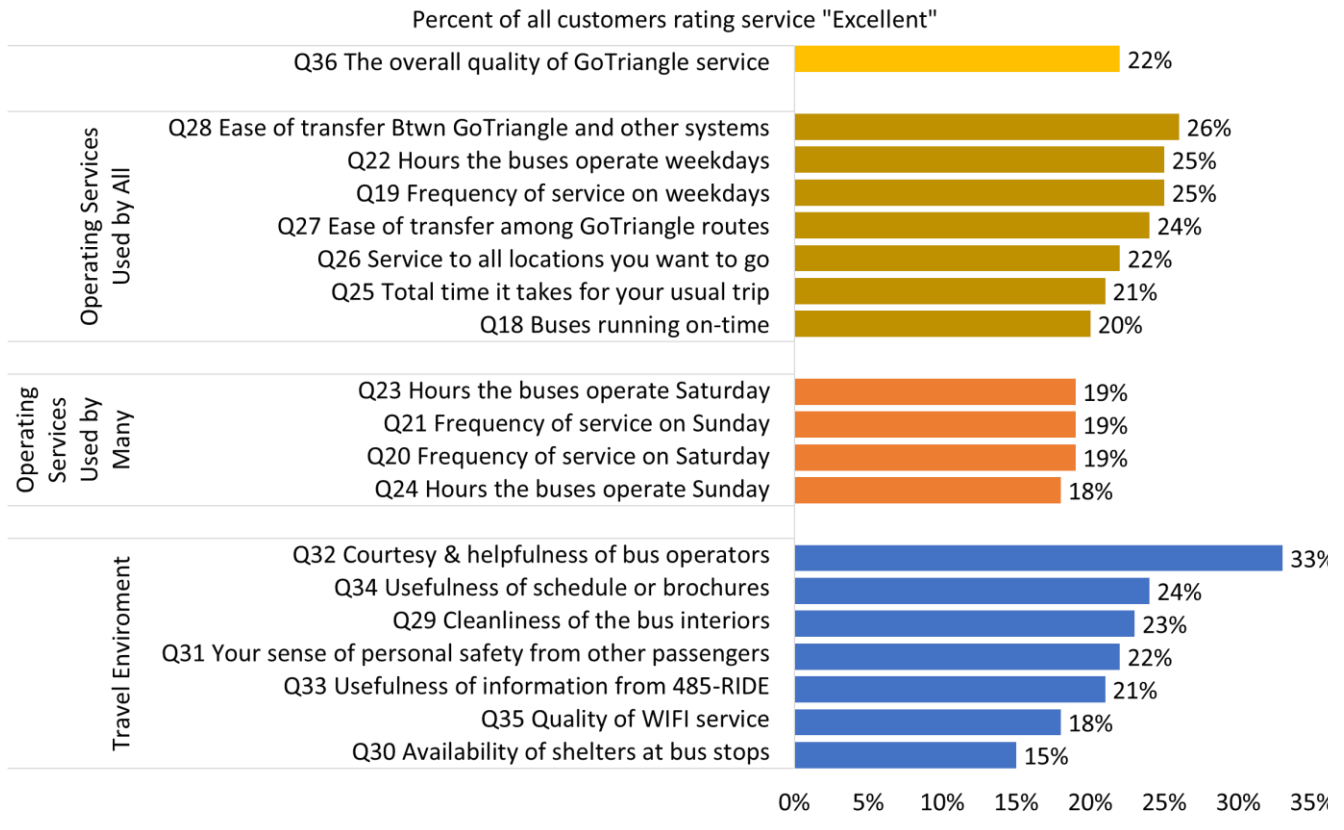
Figure 24 on the following page presents a first look at customer rating scores for individual elements of service. This chart includes only the top score of seven, or “Excellent,” on the seven-point scale⁶. The chart is organized by the type of service being rated. At the top of the chart are the seven operational services which are fundamental to all or almost all GoTriangle customers. All of these find between 20% and 26% scoring the service as excellent.

The second set in the chart includes operational services on weekends. These tend to be used by many but not all riders. All have scores of 18% or 19% “excellent”.

The third set of services involves the environment in which GoTriangle customers travel. The top percentage in this set, 33%, is for the helpfulness of bus operators. This positive view of bus operators is typical of such surveys. The lowest single score among all eighteen service elements is for availability of shelter at bus stops which are rated as excellent by only 15%.

⁶ 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 not falsely reduced by inclusion of those who answered “not applicable” in the denominator.

Figure 24 Scores on Individual Components of GoTriangle Service



Service Rating Distributions

Figure 24 above, displays only the top (“Excellent”) 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. This is displayed in Figure 25 on the following page.

To simplify the chart showing the distributions, the scores of 1 to 7 in Figure 25 have been combined into three levels. 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 “very good” scores.

RESULTS TEND TO BE POSITIVE

As is true of similar surveys for other transit systems, GoTriangle’s service ratings differ primarily within the positive end of the rating scale, not in stark differences between positive and negative. For example, the combined score of “Very Good” or “Excellent” for the ease of transferring between GoTriangle and other transit systems in the region, is 49%, and the mid-level score is 48%. The combined score of “Poor” or “Very poor” score is only 8%. All the scores follow this pattern.

There are significant negatives, however. For GoTriangle, the negative ratings tend to be below 20% with two exceptions: frequency of Sunday service (20%) and availability of shelter at bus stops (22%).

Figure 25 Distribution of Grouped Service Rating Scores

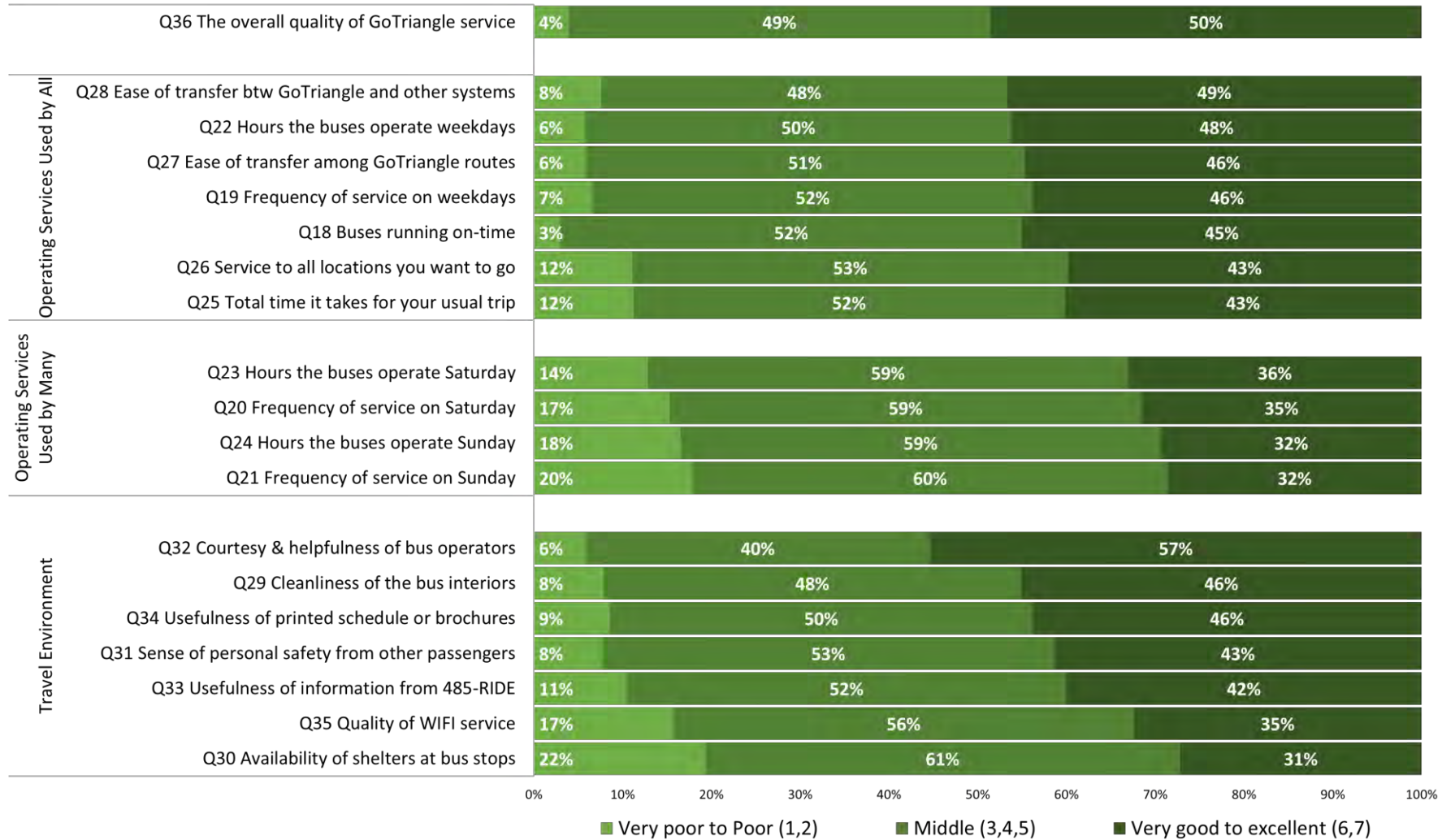
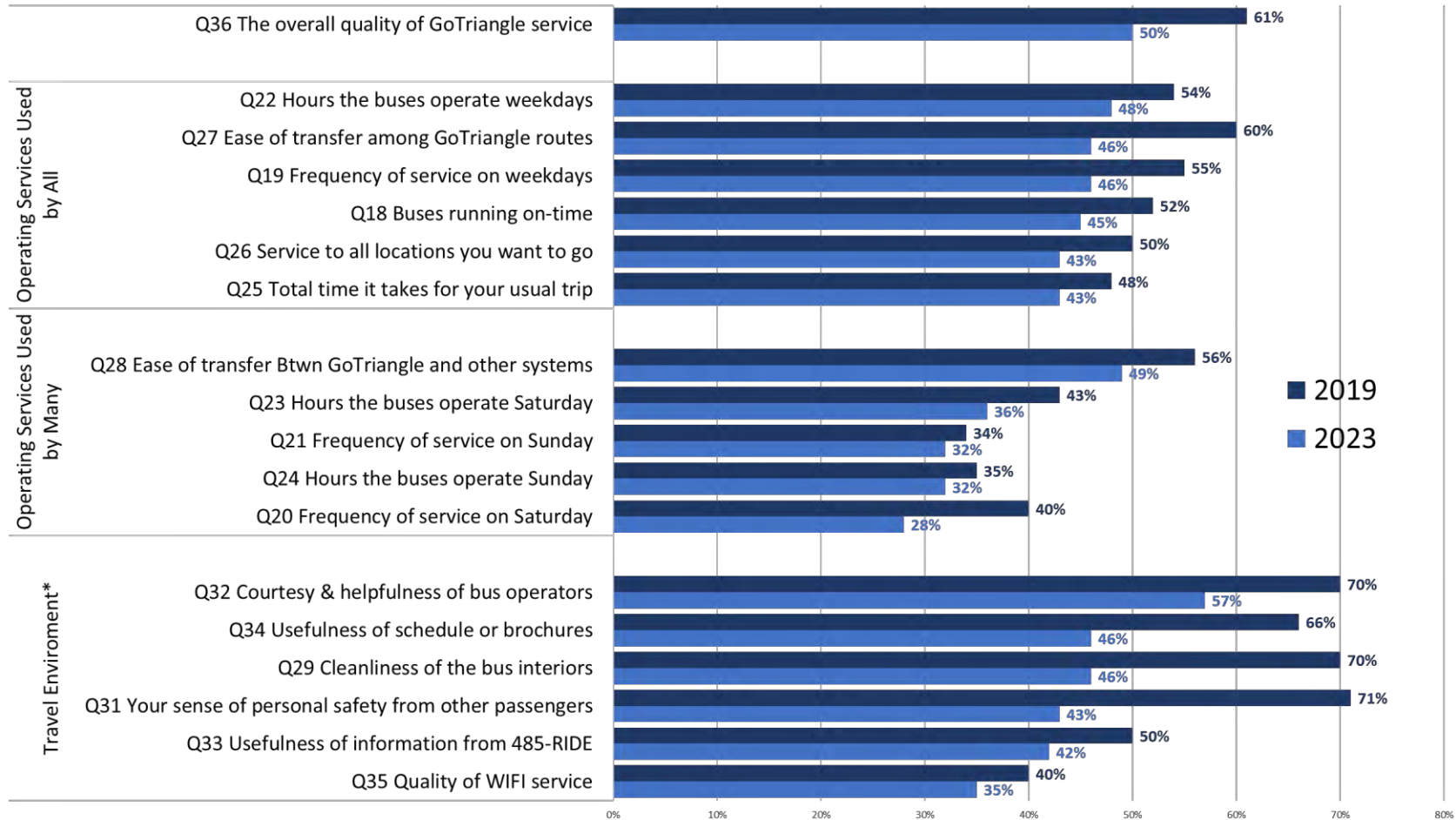


Figure 26 Change in Ratings 2019-2023

Percentage of Riders Giving Scores of 6 or 7 on the 7 Point Scale Where 7 Means "Excellent" and 6 "Very Good"



*Availability of shelters was not asked in 2019 and thus the 2023 percentage of 6 and 7 scores (30%) is excluded from this inter-year comparison chart.

Change in Ratings Since 2019

Figure 26 demonstrates how the positive ratings (“Very good” or “Excellent”) have changed since 2019. As has been pointed out, the changes were not from positive to negative, but changed only in the degree of positive ratings. Positive ratings of all elements of GoTriangle service decreased from 2019 to 2023. This finding appears odd in several respects. Why would *all* aspects of service show a decline? For example, why would the perceived courtesy and helpfulness of the bus operators have declined along with apparently unrelated items like the hours of weekday operations or usefulness of printed schedules? Can all of these be real changes or are they simply changes in perception? And why would they occur across the several systems with different managements, different route structures, and other differences? It seems to make no sense.

The rating of service overall went from 61% very positive to 50%. The largest single change in the top scores is for “Your sense of personal safety from other passengers,” which went from 71% to 43%. In addition, survey managers heard anecdotally from surveyors on the buses that at some hours they did not feel safe interacting with some passengers. They also reported that both passengers and operators said that passenger behavior had become a problem.

Another major change was in the rating of cleanliness of bus interiors which declined from 70% to 46%. Changes in the sense of personal safety and perception of cleanliness of the buses are statistically related ($r=.68$). Cleanliness of bus interiors is perceived to be a problem in at least two of the other systems surveyed as well (GoDurham and GoRaleigh). The cleanliness problem appears to be associated with safety concerns because it is an indicator of system attentiveness to passenger behavior and the riding experience the system provides for passengers.

Not all changes were so substantial. Ratings of two aspects of service changed only slightly. Ratings of Sunday hours and frequency of service changed only minimally with Sunday hours changing only from 35% positive to 32% positive and frequency of Sunday service from 34% to 32%.

All of the ratings of the basic operational aspects of service declined somewhat, mostly between 6% to 9%. The one service element with greater change was for ease of transfer among GoTriangle routes, which declined from 60% positive.

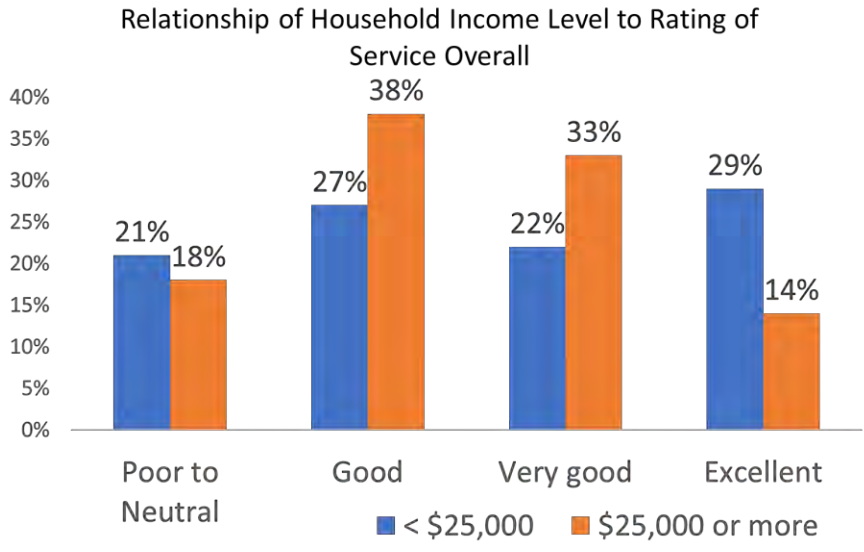
What Might Explain the General Negative Direction of the Changes?

The fact that all changes were in a negative direction, even among unrelated aspects of service, suggests that the changes in scores are unlikely to reflect an actual simultaneous decline in all aspects of service quality.

Potential explanations for the change include that ridership has changed. Many riders surveyed in 2019 stopped using GoTriangle. Perhaps they were simply more positive in their ratings. If so, their loss would have brought down the scores across the board.

Another possibility is that service reductions during the pandemic are having a residual effect, although by the time of the 2023 survey, most services had been restored. Also, it is widely known that consumers tend to judge quality based in part on price. Could the pandemic period suspension of fares have had the paradoxical effect of reducing perceptions of service value and quality? Any of these things is possible but none can be measured by a survey of current riders. Yet the fact that the changes in rating scores are all in the negative direction suggests that something systematic is causing the change

Figure 27 Relationship of Household Income to Overall Service Rating



INCOME AND SERVICE RATINGS

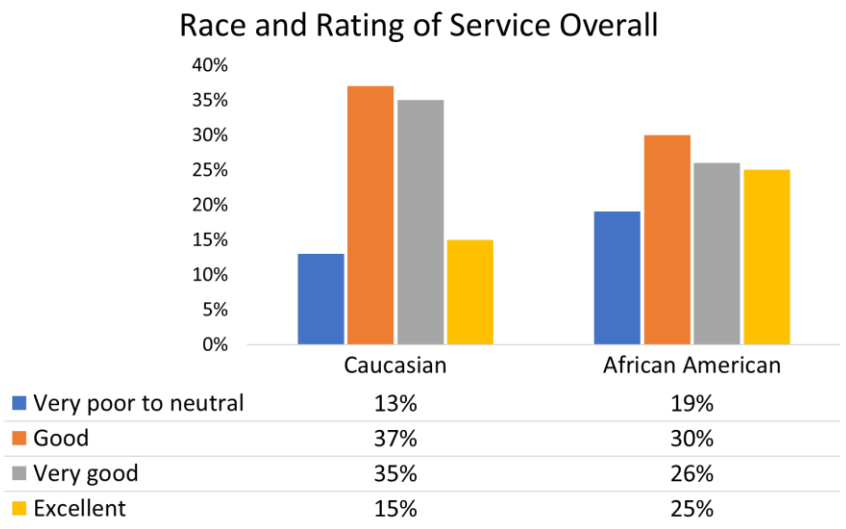
The survey documents that the percentage of low-income riders increased from 2019 to 2023, perhaps in response to the suspension of fares. Could it be that an increase in the proportion of lower income riders might lead to lower ratings systemwide? That could happen if the survey data showed a positive relationship between income and ratings of service, i.e., the lower the income, the lower the service score (and *vice versa*). Is that what occurred? No. Figure 27 shows the opposite. Lower income riders were twice as likely as somewhat higher income riders to

give a score of excellent. In short, the hypothesis that the increase in the percentage of low income riders would lead to an overall score reduction is false.

RACE AND SERVICE RATINGS

The survey documents the fact that the percentage of riders who identify as African American increased substantially since 2019 while the percentage of those identifying as Caucasian declined (Figure 18). African-

Figure 28 Race and Service Rating



American customers are more likely than their fellow riders who identify as Caucasian to give negative to neutral scores, but they are also more likely to give scores of excellent. Riders identifying as Caucasian are more likely to give middle scores of good or very good. In other words, the changing racial composition of the ridership is related to the changing ratings, but it does not provide a simple explanation for the across-the-board decline in scores.

The fact that ratings of every aspect of service declined and that this has occurred across three of the four systems surveyed suggests that something beyond demographic changes among the riders may be having an effect on these perceptions.

Do Changes in the Local Passenger Satisfaction Data Reflect Trends at the National Level?

Figure 29 Consumer Confidence Index, 2007 to 2023
(Source: The Conference Board)

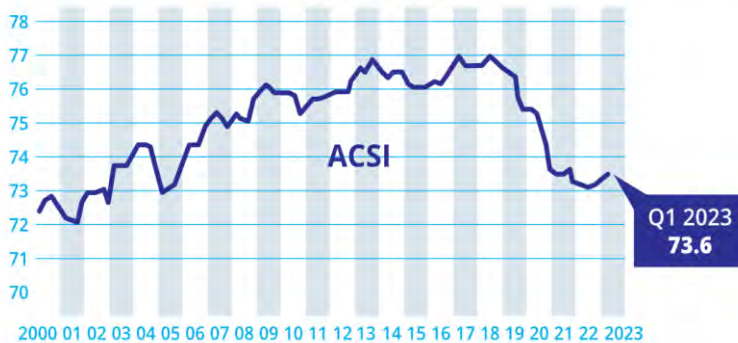


It is widely reported in the press that the “national mood” has been trending negative. It is speculative but interesting to observe parallels between national and local trends. For example, the Consumer Confidence Index published by the business organization, The Conference Board, report of May 2023 shows that after the financial collapse of 2008 confidence hit a high point in 2019. Then, because of the pandemic, confidence declined precipitously until the end of 2021. It then reversed and gained until it had almost regained its 2019 peak when it dropped again through the first quarter of 2023 when the GoTriangle rider survey was conducted. The Index subsequently began to rise again.

Figure 30 The American Customer Satisfaction Index, 2000-2023
(Source, ACSI)

ANN ARBOR, Mich., (May 9, 2023) — Customer satisfaction in the United States improves for a third consecutive quarter, edging up 0.3% to 73.6 (on a 100-point scale) in the first quarter of 2023. The gain extends a positive streak in the *American Customer Satisfaction Index (ACSI®)* that reverses the trend of several years of declining customer satisfaction.

The American Customer Satisfaction Index (ACSI)
2000 - 2023



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Other national survey data also reflect this increasing negativity of “national mood” in the period between the 2019 and 2023 rider surveys. For example, the American Customer Satisfaction Index (CSI) conducts surveys with consumers in virtually all sectors of the economy (including the public sector) and publishes an index of overall consumer satisfaction. Like the Consumer Confidence Index, it demonstrates the pre-pandemic rise and then pandemic fall of satisfaction in the overall economy. Local transportation cannot be exempt from this national mood swing.

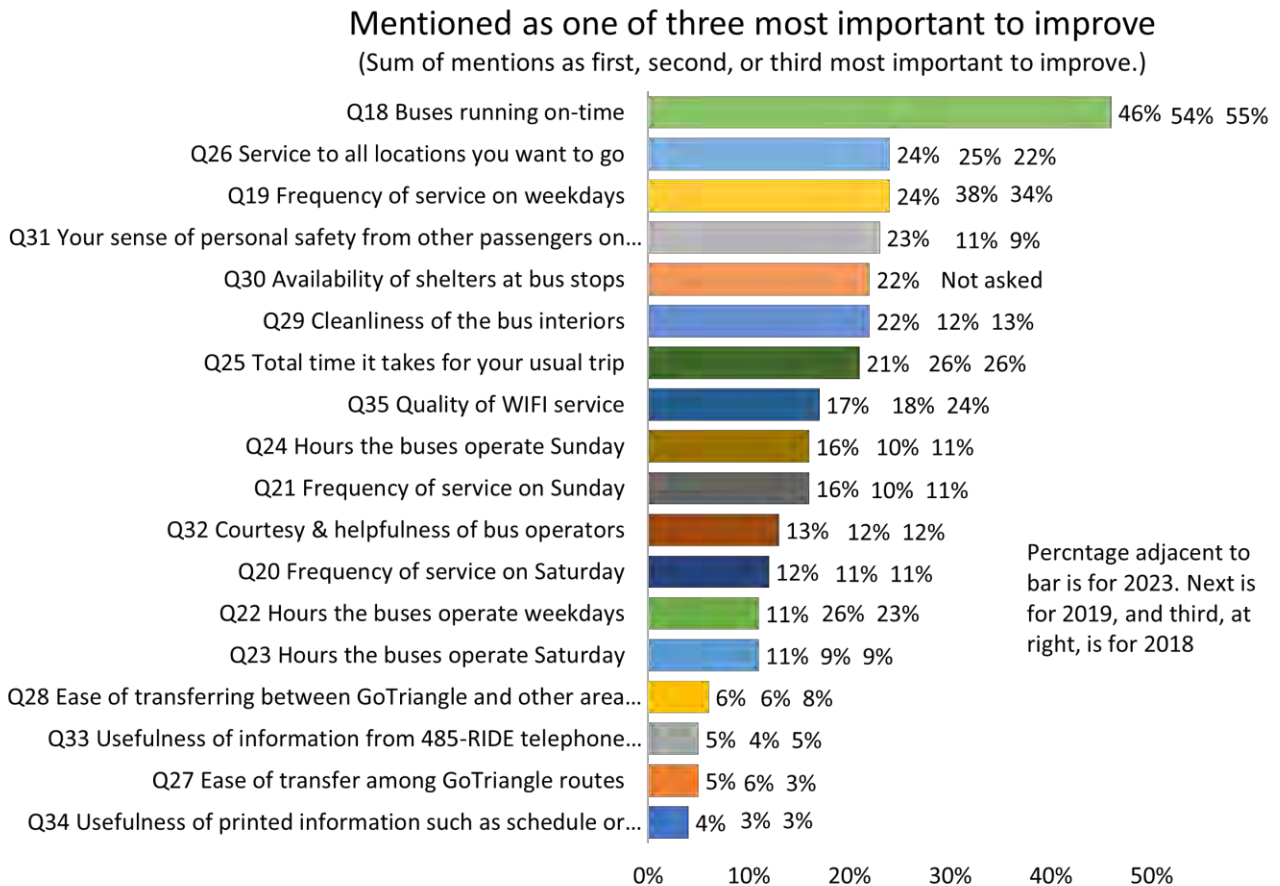
Possibly the tilt toward negative perceptions in the 2023 GoTriangle survey

results has as much to do with the “national mood” as it does with the performance and changing demographics of the several Triangle Region transit systems.

Customers' Priorities

In the GoTriangle Onboard Survey, respondents were asked, "Of the services in questions 18 through 35 above, please list the three most important to improve, or, if service is already very good or excellent, to maintain?" The percentage naming each service as one of the top three is shown in Figure 31.

Figure 31 Most Important Element to Improve (2018-2023)



Forty-six percent (46%) of GoTriangle customers indicate that having the buses run on-time is one of their top three priorities for improving or maintaining a service. In surveys of bus riders, on-time performance is always rated as the most important of the top three as it is here.

At GoTriangle, 45% give on-time performance a very good or excellent rating, and only 3% give it a poor rating. Yet it appears at the top of the improvement priority list. The reason for this is that for the passenger, 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.

The top three services to improve are all operational: On-time performance (46%), coverage, described in the question as service to all locations you want to get to (24%), and weekday service frequency (24%). The next three, however, are all aspects of the travel environment, specifically, the sense of personal safety from others on the bus (23%), availability of shelters at bus stops (22%), and cleanliness of the bus interiors (22%).

The percentage of riders citing each element of service as a top priority changed very little over the course of the three surveys. However, there were three important changes.

- In 2019 38% cited weekday frequency as a top priority, but in 2023, that had decreased to 24%.
- In 2019 only 11% cited their sense of personal safety as needing attention, while in 2023 that had more than doubled to 23%.
- In 2019, only 12% said that the interior cleanliness of the buses was a top priority for them, but in 2023, that had increased to 22%.

The ratings for sense of personal safety and cleanliness of bus interiors are closely related, and both are closely related to the overall rating of service. All the correlations are statistically significant.

- The correlation coefficient between the rating of sense of personal safety and cleanliness of the bus interiors is 0.68.
- The correlation coefficient between the rating of sense of personal safety and the rating of service overall is 0.64.
- The correlation coefficient between rating cleanliness of the bus interiors and the rating of service overall is 0.63.

All of the ratings for the eighteen aspects of service are significantly related to each other and to the overall rating. However, sense of safety and bus interior cleanliness are the only two that increased dramatically since 2019 in mentions as among the top three to target for improvement. The relationship between them suggests the possibility that improving the actual physical cleanliness of the bus interiors might have some impact on the perception of safety.

Appendix A: Questionnaire



1. Did you participate in a GoPass program (by obtaining a transit pass through your school or employer) before GoTriangle suspended fares?

- 1 Yes, I had an active GoPass in 2020
- 2 I have used a GoPass previously but not in 2020
- 3 I have never participated in a GoPass program

2. If employed, who is your current employer? (Knowing where our riders work helps us plan to better serve your needs.) _____

3. In a **typical week** on how many days do you currently use GoTriangle? (Circle only one)

- 0 (None) 1 2 3 4 5 6 7

4. Before the pandemic which began in March 2020, on how many days a week did you typically use GoTriangle? 0 (None) 1 2 3 4 5 6 7

5. During the pandemic in 2020 and 2021, on how many days a week did you typically use GoTriangle? 0 (None) 1 2 3 4 5 6 7

6. What is the ONE main purpose for which you **most often** use the GoTriangle bus? Is it to go to or from

- 1 Work
- 2 School/college
- 3 Shopping
- 4 Medical/dental
- 5 Recreation/event
- 6 Other _____

7. Please mark **all** of the following that apply to you. Are you...

- 1 Employed full time
- 2 Employed part time
- 3 Unemployed
- 4 Homemaker
- 5 Student
- 6 Retired
- 7 Volunteer position

8. If you are employed or a student, do you work/attend school...

- 1 Remote only
- 2 Remote some days; onsite other days
- 3 Onsite only

9. How old are you? _____ Years old

10. Do you identify as... 1 Male 2 Female 3 Non-binary 4 Prefer not to answer

11. Do you consider yourself to be... (Please check all that apply to you)

- 1 African American/Black
- 2 Asian
- 3 Caucasian/White
- 4 Hispanic
- 5 Native American Indian
- 6 Other: _____

12. What language do you most often speak at home? (Check only one)

- 1 English
- 2 Spanish
- 3 Other: _____

13. Please check **all** Triangle Region bus systems you use in a **typical week**

- 1 GoRaleigh
- 2 GoTriangle
- 3 GoDurham
- 4 GoCary
- 5 Chapel Hill Transit
- 6 Duke Transit
- 7 Wolfline
- 8 None of these

14. What is your total annual household income? (Check only one)

- 1 Less than \$10,000
- 2 \$10,000 to \$14,999
- 3 \$15,000 to \$19,999
- 4 \$20,000 to \$24,999
- 5 \$25,000 to \$34,999
- 6 \$35,000 to \$49,999
- 7 \$50,000 to \$74,999
- 8 \$75,000 to \$100,000
- 9 More than \$100,000

15. How many cars or other vehicles are available for your use? 0 None 1 2 3 4 or more

16. In the past thirty days, did you use Uber/Lyft instead of GoTriangle for a trip you otherwise would have made on GoTriangle 1 Yes 2 No

17. Do you use a transit app on your cell phone? 1 Yes 2 No 3 No cell phone
If you use a transit app, which one? _____

In the past 30 days, how would you rate GoTriangle on the following services?

	Excellent	Very Good	Good	Neutral	Poor	Very Poor	Extremely poor	Does not apply
18. Buses running on-time	7	6	5	4	3	2	1	<input type="checkbox"/>
19. Frequency of service on weekdays	7	6	5	4	3	2	1	<input type="checkbox"/>
20. Frequency of service on Saturday	7	6	5	4	3	2	1	<input type="checkbox"/>
21. Frequency of service on Sunday	7	6	5	4	3	2	1	<input type="checkbox"/>
22. Hours the buses operate weekdays	7	6	5	4	3	2	1	<input type="checkbox"/>
23. Hours the buses operate Saturday	7	6	5	4	3	2	1	<input type="checkbox"/>
24. Hours the buses operate Sunday	7	6	5	4	3	2	1	<input type="checkbox"/>
25. Total time it takes for your usual trip	7	6	5	4	3	2	1	<input type="checkbox"/>
26. Service to all locations you want to go	7	6	5	4	3	2	1	<input type="checkbox"/>
27. Ease of transfer among GoTriangle routes	7	6	5	4	3	2	1	<input type="checkbox"/>
28. Ease of transferring between GoTriangle and other area bus transit systems	7	6	5	4	3	2	1	<input type="checkbox"/>
29. Cleanliness of the bus interiors	7	6	5	4	3	2	1	<input type="checkbox"/>
30. Availability of shelters at bus stops	7	6	5	4	3	2	1	<input type="checkbox"/>
31. Your sense of personal safety from other passengers on the buses	7	6	5	4	3	2	1	<input type="checkbox"/>
32. Courtesy & helpfulness of bus operators	7	6	5	4	3	2	1	<input type="checkbox"/>
33. Usefulness of information from 485-RIDE telephone operators	7	6	5	4	3	2	1	<input type="checkbox"/>
34. Usefulness of printed information such as schedule or brochures	7	6	5	4	3	2	1	<input type="checkbox"/>
35. Quality of <i>WIFI</i> service	7	6	5	4	3	2	1	<input type="checkbox"/>
36. The overall quality of GoTriangle service	7	6	5	4	3	2	1	<input type="checkbox"/>

35. Of the services in questions 18 to 35 above, please list the three most important to improve?
Most important _____ 2nd most _____ 3rd most _____

Comments: _____

ENCUESTA DE PASAJEROS — Cuéntenos cómo usa GoTriangle



- ¿Participó en un programa GoPass (obteniendo un pase de tránsito a través de su escuela o empleador) antes de que GoTriangle suspendiera las tarifas?
 - Sí, tenía un GoPass activo en 2020
 - He usado un GoPass antes pero no en 2020
 - Nunca he participado en un programa GoPass
- Si está empleado, ¿quién es su empleador actual? (Sabiendo dónde trabajan nuestros pasajeros nos ayuda a planificar mejor sus necesidades) _____
- En una semana típica, ¿cuántos días utiliza actualmente GoTriangle? (Circule solo uno)

0 (Ninguno)	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---
- Antes de la pandemia que comenzó en marzo de 2020, ¿cuántos días a la semana solía usar GoTriangle?

0 (Ninguno)	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---
- Durante la pandemia en 2020 y 2021, ¿cuántos días a la semana solía usar GoTriangle?

0 (Ninguno)	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---
- ¿Cuál es el ÚNICO objetivo que utiliza con frecuencia el autobús GoTriangle? es para ir hacia o desde
 - Trabajo
 - Escuela/colegio
 - Compras
 - Médico/dental
 - Recreación/evento
 - Otro: _____
- Por favor marque todos los siguientes que se aplican a usted. Eres...
 - Empleado de tiempo completo
 - Empleado medio tiempo
 - Desempleado
 - Amaño de casa
 - Estudiante
 - Jubilado
 - Puesto de voluntario
- Si está empleado o es estudiante, ¿trabaja/asiste a la escuela...?
 - Solo remoto
 - Remoto algunos días; presencial otros días
 - Solo en el sitio
- ¿Cuántos años tiene? _____ Años
- ¿Te identificas como...
 - Masculino
 - Femenino
 - No binario
 - Prefiero no responder
- ¿Te consideras a ti mismo... (Por favor marque todo lo que se aplica a usted)
 - Afroamericano/Negro
 - Asiático
 - Caucásico/Blanco
 - Hispano
 - Indio Nativo Americano
 - Otro: _____
- ¿Qué idioma habla con más frecuencia en casa? (Marque solo uno)
 - Inglés
 - Español
 - Otro: _____
- Marque los sistemas de autobuses de la región de Triangle que utiliza en una semana normal
 - GoRaleigh
 - GoTriangle
 - GoDurham
 - GoCary
 - Chapel Hill Transit
 - Duke Transit
 - Wolfline
 - Ninguno de estos
- ¿Cuál es el ingreso total anual de su hogar? (Marque solo uno)
 - Menos de \$10,000
 - \$10,000 a \$14,999
 - \$15,000 a \$19,999
 - \$20,000 a \$24,999
 - \$25,000 a \$34,999
 - \$35,000 a \$49,999
 - \$50,000 a \$74,999
 - \$75,000 a \$100,000
 - Más de \$100,000
- ¿Cuántos autos u otros vehículos están disponibles para su uso? 0 Ninguno 1 2 3 4 o más

16. En los últimos treinta días, ¿usó Uber/Lyft en lugar de GoTriangle para un viaje que de otro modo habría hecho en GoTriangle? Sí No

17. ¿Utiliza una aplicación de tránsito en su teléfono celular? Sí No Sin celular
Si usa una aplicación de tránsito, ¿cuál? _____

En los últimos 30 días, ¿cómo calificar a GoTriangle en los siguientes servicios?

	Excelente	Muy bien	Bien	Neutral	Mal	Muy mal	Extremadamente mal	No aplica
18. Autobuses funcionando a tiempo	7	6	5	4	3	2	1	<input type="checkbox"/>
19. Frecuencia de servicio entre semana	7	6	5	4	3	2	1	<input type="checkbox"/>
20. Frecuencia de servicio el sábado	7	6	5	4	3	2	1	<input type="checkbox"/>
21. Frecuencia de servicio el domingo	7	6	5	4	3	2	1	<input type="checkbox"/>
22. Horas de operación entre semana	7	6	5	4	3	2	1	<input type="checkbox"/>
23. Horas de operación el sábado	7	6	5	4	3	2	1	<input type="checkbox"/>
24. Horas de operación el domingo	7	6	5	4	3	2	1	<input type="checkbox"/>
25. Tiempo total que tarda su viaje habitual	7	6	5	4	3	2	1	<input type="checkbox"/>
26. Servicio a todos los lugares que quieras ir	7	6	5	4	3	2	1	<input type="checkbox"/>
27. Facilidad de transferir rutas de GoTriangle	7	6	5	4	3	2	1	<input type="checkbox"/>
28. Facilidad de transferir entre GoTriangle y otros sistemas de autobuses del área	7	6	5	4	3	2	1	<input type="checkbox"/>
29. Limpieza en interiores de los autobuses	7	6	5	4	3	2	1	<input type="checkbox"/>
30. Disponibilidad de paradas techadas	7	6	5	4	3	2	1	<input type="checkbox"/>
31. Su sentido de seguridad personal de otros pasajeros en los autobuses	7	6	5	4	3	2	1	<input type="checkbox"/>
32. Cortesía y amabilidad de los operadores	7	6	5	4	3	2	1	<input type="checkbox"/>
33. Utilidad de la información del 485-RIDE operadores telefónicos	7	6	5	4	3	2	1	<input type="checkbox"/>
34. Utilidad de la información impresa como horario o folletos	7	6	5	4	3	2	1	<input type="checkbox"/>
35. Calidad del servicio WIFI	7	6	5	4	3	2	1	<input type="checkbox"/>
36. Calidad general del servicio de GoTriangle	7	6	5	4	3	2	1	<input type="checkbox"/>

37. De los servicios en las preguntas 18 a 35 anteriores, enumere los tres más importantes para mejorar.

Lo más importante: _____ 2do más _____ 3ro más _____

Comentarios: _____

Appendix B: Rider Comments

The following list of comments is mostly unedited. Handwriting on the moving vehicle is often difficult to read. The key entry operators do their best to record what they see written even when that seems not to make sense. Here are the comments:

Route Comments

- 100 Wifi terrible, Buses stink or dirty/nasty and buses pass people due to the stops can't see people.
- 100 WiFi could use for some updating's & some consistency.
- 100 Very thank full for this system!!!
- 100 Very helpful for airport travel-stands out among other cities
- 100 Very Good!
- 100 Update which buses aren't running
- 100 Total time it takes for usual trip on weekends.
- 100 Today I'm late. most of the time i m on time
- 100 Time arrivals/Frequency/Courtesy
- 100 This happened more than once: Sometimes at approx 10:00 am the 800 never comes to Falconbridge hwy 54 towards RTC Bus driver goes on break or something
- 100 They don't need to let homeless people on the bus. 2. Stop picking so many people up. 3. Pay attention when someone ring the bell.
- 100 The attitude of some drivers, The consideration of offers transferring or catching the bus.
- 100 Thanks!
- 100 Thanks very much for the free transit
- 100 Thank You!! Their script to improve out. I appreciate you all!
- 100 Thank you!
- 100 Start it good service to the bus fee back been late work because of homeless people just riding taken a up space.
- 100 Several stops do not have shelters or if they do no working lights at night, brush nearby is over grown a lot of trash
- 100 Sentido de seguridad personal mejorari
- 100 Senior service is very good. According to resources & cheque
- 100 Roiling from eir post
- 100 Questions 7,8,10,12 and 14 are offensive inquires.
- 100 Please Improve Cleanliness Of Bus Interior.
- 100 Overall good, if we have more frequency that will be more helpful. So use public transport
- 100 Occasionally, Drivers Arrive At Their Stops Too Early, Standing Drivers.
- 100 None they are all great
- 100 Needs to stop pornography on a phone during bus routes.
- 100 Need more direct connections from Durham to Raleigh via TWL Alexander Dr
- 100 Need Light Camera & Benches And Bus Driver Who is Respectful
- 100 More times needed more routes needed more drivers needed. In order for this to happen.

- 100 Mejorar - wifi
- 100 Make Sure Wifi Always Work 100%!
- 100 Main issue for me is connections with GoRaleigh not GoTriangle itself
- 100 Learn from other transit systems. Thanks for your service. Stop Redlining areas where black/brown folks live. Help provide access not facilitate caste system!
- 100 Keeping the bus cost free for commuters really makes me appreciate having this service available.
- 100 It's Good To Have People To help People.
- 100 It would be great if the frequency of service during peak morning and evening hours is increased.
- 100 It should still be free.
- 100 I Work Evening/Night Shift So The Route Ending Service At 11 Narrows Which Hours I Can Work.
- 100 I think the system is very good.
- 100 I prefer GoTriangle to Uber
- 100 I often travel between Raleigh and Durham and find the time of the last departure to be for early.
- 100 I Love its free.
- 100 I just want to have bus route for GoTriangle.
- 100 I just move downtown, plan to use bus more can't really commented yet.
- 100 I hope it stays fare free for all the public transit!
- 100 I Have Benefitted From The 100 Route! If I Ran a Little Later on Sunday That Might be Good
- 100 I enjoy riding the bus.
- 100 I do wish the buses ran every 30 mins on the weekend. It take me two hours and three buses to go to home. At least have two express buses run in the evening.
- 100 I Am grateful For the Service. The Senior Drivers Are The Best. There Are Some new Drivers That Are Rude.
- 100 Hours On Sundays & Hours It Takes To Get From One Location to Another.
- 100 High school students should be using buses, Make that happen.
- 100 Have a great Summer.
- 100 Have a good day.
- 100 Great Service Saves on Gas Parking & It's Free.
- 100 Gracias por el servicio es de mucha ayuda.
- 100 Good
- 100 Go triangle is good
- 100 Frequency & hours are the most important
- 100 Excellent Service. Dr. Joe Wakemed
- 100 Crowdedness- Particularly GoRaleigh + Triangle, bring back bus fees 25
- 100 Comparison to Germany
- 100 Cleanliness, Safety. on time buses
- 100 Cleanliness, driver customer service and passenger control.
- 100 Cleaning Seats on Buses

- 100 Can accept what offerings you have. Please advise us when we must pay again.
- 100 Buses on time, Later hours operating bus service, Kinder bus drivers.
- 100 Bus start / Routes at fair grounds all fooled up
- 100 Bus routes need more drivers to improve in these areas of bus routes being needed the secondly once drivers are in place times area can be re adjusted for those areas needed. Thank you to all drivers and bus operators for what you do I understand for some dealing with some riders is not that easy But I thank you for keeping us safe. I appreciate you all.
- 100 Bus Home From Airport is a Nightmare. Bus Home From Weekend Events is Impossible
- 100 Bus drivers are rude if you are running for bus they will pass you buy, Bus drivers have jobs because of passengers stop being rude
- 100 Bus drivers are rude if they see you running for the bus they just pass you by
- 100 Awesome
- 100 All good
- 100 Add a bus stop in Eastown Community
- 100 75% Weekend Connection to Bus #8 is Missed By 5Mins. If The RTC Would Ask The Drivers of the 700 to Call the 100 If It Were Late On Weekend Riders Would Not Have to Wait An Additional Hour For The Next 100
- 300 Your survey was excellent!!
- 300 When someone is 7 minute late they should open the doors back open instead of driving off.(Rupe)
- 300 Time of the trip if possible,
- 300 The times the bus leaves GoCary & Raleigh stations causes my trip an extra 45 minutes. If they left on the hour and half hour like the rest it would be much easier.
- 300 The bus used to stop near the building Where I work, but not any more now. Used to get 40 mins to get to work now takes 1 1/2 hours because i have to take 2 buses
- 300 The bus service in our region is excellent. I have even seen an improvement since the pandemic. Keep up the Good work!
- 300 Thanks in this great service
- 300 Thank you for improving
- 300 State fair-TTA detour their stops at the state fair. One of the state prominent economy stimulators.
- 300 Please extend bus #300 service to government building area as it was before pandemic.
- 300 Please arrange bus no 6 route to go through Bacarru lane 27606.
- 300 Ontime, Frequency, Safety
- 300 Need more systems for direct feedback
- 300 Need more stops! on bus 300 western blvd Newark Rd!!
- 300 Most buses I ride lack wifi and outlets to charge phones
- 300 Keep up the good work
- 300 I would love to have buses operate more often/earlier/later and travel to places further away.
- 300 I rarely ever catch the 300ct the time it is suppose to be making me miss my next bus and late for work.
- 300 I like the service. I hope they add more routes if they can

- 300 I feel like it depends on who is driving the bus that day.
- 300 GoTriangle has been generally helpful to the achievement of my career with minimal cost expenses.
- 300 Good work
- 300 Get to and from on the bus. The passengers, People that have to use belts
- 300 Extend the 300 until 11pm mon-sat and bring back 301
- 300 Excelente servicio y trato de los operadores
- 300 Es un buen servicio de jan gracias pov lel buen servicio
- 300 Could Use USB Port On Go Transloc & GoCary More Time Frames For 305
- 300 Could do better with having shelters for bus stops especially on rainy or cold days. 1: On Nc 54 in fronts of circle k gas station and 2:NC 54 in front of UNC eye center. THank you. Please make public bus services free.This is the best way to conserve energy reduce co and cool down the earth.
- 300 Can be more quicker, more stops can be made
- 300 Buses - Need to be cleaned more inside-Some passengers use the bathroom on the bus. have sit down in urine seats-some you cant tell its wet, more deodorant sprays for stinky people
- 300 Bus Schedule should be consistent all day long, Switching hours midday is confusing (i.e. route 300 weekday hours)
- 300 Bus needs to be on Time! Use alternate route from Construction! Supervisors are invisibles when on site! 300 route
- 300 Bus drivers are courteous, and thoughtful, Buses are great for traffic, calming and efficient reserve utilization, GoCary, Need a route an trinity rd!! By the PNC!!! Work w/city of Raleigh please!
- 300 All are important to me
- 300 A lot of the bus stops could use more shelter. The bus hours also end a little early for people who work closing shifts.
- 300 5/10/2023 is my first time using GoTriangle and planning to use 2-3 times a week.
- 300 300 needs to depart downtown Raleigh as earlier many times I have missed my conx at the Cary Station
- 305 The Triangle deserves world-class public transportation system. Improvements need to be made to complete with large metro areas.
- 305 Over all its good
- 305 Need a bus that goes down Louisburg rd in Raleigh , All the way down
- 305 Live tracking on Mobile app needs to improvement please.
- 305 I don't own a car and buses are my main mode of transportation. But there are merely buses (such as late at night >10 PM) where no buses opertaing and therefore limiting where/what I can do
- 305 Hand sanitizers need to be available at all times. A lot buses don't have them gloves for passengers should be a option as well.
- 305 Great
- 305 EN (illegible "GOUBZAL") MUY BIEN
- 305 305 Stop on Wilmington do not feel safe waiting for bus.

- 310 The overall services from GoTriangle and other bus systems are good and quite accessible from my home and work place.
- 310 Telephone operators and some bus drivers are absolutely horrible people
- 310 I would like for the 310 bus to run on Saturdays & Sundays, its frustrating having to ride all the way to Raleigh and then go to Cary from there
- 310 I have only used the bus for 4 weeks & found that some routes run every 30 while others every hour, extending wait times & making the bus a less attractive option (1.5hr commute to work vs 20-25 drive).Also nearest stop 2 miles from my house.
- 310 GoCary should want for 310
- 310 Excellent Services
- 310 Every thing's are perfect
- 310 Changed my mind in doing the survey it was too many questions.
- 400 Wifi, on time, waiting time
- 400 Wfi, Shelter, 4&5 Ride. They are wonderful drivers and very hospility
- 400 We need an express bus from Roxboro/Horton to major stops in N Durham & then to UNC
- 400 waiting area
- 400 Very much appreciate GoTriangle!
- 400 very few evening buses on route 400 would like to have one later bus -eg 11pm for after evenings
- 400 They all run good.
- 400 The YOD seems too never be on time, when it's time to connect w/ the NS, and other buses at the Durham station; and downtown franklin/Columbia.
- 400 The buses should start running at earlier times considering that everyone doesn't have late naps.
- 400 The bus needs to run until 12am Sunday - Saturday
- 400 The Air unit 15 too too cold on buses 400, 405
- 400 Thanks!
- 400 Thank You!
- 400 Thank you for your efforts to improve public transport.
- 400 Thank you for providing this service for sure over the last years.
- 400 Thank you
- 400 They really stepped up their service
- 400 Sundays, Ferriable
- 400 Sunday
- 400 Sometimes a bus doesn't show up when the bus change route and on the weekend have to wait a hour for the next one.
- 400 Some buses run off schedule comes before the time!
- 400 Should increase the frequency of 11A, 11B hourly to half hourly
- 400 Shelters at bus stops are important because we can't control the weather.

- 400 Shelters are always very important! Would be great if buses ran later at night on weekdays and weekends, especially Saturday. In Chapel Hill you cannot afford many evening events and get time on the bus - because they shifted timings
- 400 Shelters
- 400 Service is great
- 400 Put charging outlets on bus and no complaints
- 400 Please train the drivers later in the day, even on weekends. There's less of a penalty being late going home than getting to work. Please all the Xoo ling to the Mystop app. The app is currently terrible and borders on unusable.
- 400 Please provide Sunday service and late evening/night service. Buses need to run every 15 minutes.
- 400 Please improve quality of service. One GoTriangle Driver cuts route early routinely He's young, white Tatoos route 800 Weekdays couldn't get through Phone system to report it.
- 400 Please have some service from Durham to Cary directly please increase frequency of buses to every 20 minutes instead of 30, I've had instances of reaching home after dark because i missed a bus and the next doesn't come until 30 minutes after
- 400 People love GoTriangle
- 400 Overall, Good service.
- 400 Overall very good service by GoTriangle.
- 400 On the weekends, needs port of the morning to be rescheduled weekly into the afternoon into every hour other bus need cleaning
- 400 No - everything is 100.00 percent good to me
- 400 No complaint
- 400 Need to be able to sit down at all bus stops.
- 400 Need more bus service during late hours. People don't get off till 11pm at night
- 400 Need better hours on weekend
- 400 Most of 3rd are mostly due due to people (lack of) not applying to be of bus driver. Maybe time of electric Auto-run buses? 2nd is only important and bitter survival times the wifi has been on the buses ride.
- 400 more observation to customers safety at times with customers who have really no destination. Thank you very much! You have a wonderful thorough asset for the public to get places
- 400 More bus benches please
- 400 Love your bus drivers ! Very Polite!
- 400 Kudos to GoTriangle for near Excellent public service & responsibility.
- 400 It would be wonderful to have a stop close to lower or at last fast I-40 into Chapel Hill. Also coordination between the CL and GoTriangle. Thank you!
- 400 It will be better if the one bus running at Saturday night on Chapel Hill.
- 400 in 2020 you started adding bike racks that hold 3 bikes, but than stopped Will this initiative resume I hope Thank you!
- 400 I'm using the bus to travel and the area from the airport, but the current location is hard to find.

400 I'm a student @UNC and use bus in Chapel Hill only

400 I travel between Cary & Chapel Hill (310 _ 800) and the 310 has limited hours (last bust from RTC at 8:30 pm) and doesn't run on weekends.

400 I like it bus free for all to ride.

400 I know you all are doing your best and I thank you for what you do

400 I have seen people doing drugs and stopping in the bus. Please stop this, as it is not a safe place to travel

400 I have only used GoTriangle 3 times in the past 30 days, So i don't think i can really rate these but my experiences have been positive.

400 I had to finish a trip with Uber earlier this week because the bus only runs during "peak" times. One of my coworkers was talking the bus but stopped for this reason. frequency coverage though always. Thank you for receiving feedback!

400 Hope to have more stops, Walk a lot

400 Hope the telephone app will work, so that we can track the bus realtime. Thank You.

400 Great Service. Please think about adding more buses on Sundays.

400 GoTriangle

400 Drivers are good

400 Cleanliness, Courtesy Quality

400 Cleanliness

400 Buses are usually labeled incorrectly, apps to track buses are not reliable and buses usually late in the afternoon/evenings @ certain times

400 Bus to be on time

400 Bus comes late so we are late to job, bus should come in time its a request.

400 Buen Service

400 Brown (illegible: "Fges") must go. Next time we gone fight she disrespected.

400 Attitude, less talk, please put the foot on the gas a little

400 At lane the bus service is (Illegible), but as a college student at UNC. We expect more for-our funds.

400 311 There was one passenger who told me "This isn't Russia" and slapped the back of my seat who frequently makes other passengers uncomfortable and yells but the driver did kick her off the bus.

400 30: none of the bus stops / frequent have any seating or shelter. 18: Buses are usually late by about 10 minutes.

400 29 Enforcing Rules of respect between drivers and passengers A public share personal hygiene enforce

400 Sometimes I feel unsafe when I'm waiting at the bus shelters. 2) I take bus to work every day but sometimes the bus didn't come and I took uber. (I usually wait at bus stop 10 min ahead.)

405 We need to get the real time bus app working. Buses needs to get the correct bus numbers on the display.

405 The buses need to be cleaned.

405 Thank You!

- 405 Intend to participate in GoPass when/if available
- 405 I hope to have some designated parking system at gate, shopping mall for commuters.
- 405 Everything is good.
- 405 Buses never on time to work or terminal
- 405 Bus drivers have always been polite and helpful.
- 58 CRX There is No Use Having a Phone Line For Help If They Can't See More Than I do on Apps. They Don't Know How Late a Bus is Running. Also. With Timed Stop & Departures, You Should Not Have a 5 Minute Window to Leave Early. Trains Don't Do That Neither Should You.
- 58 CRX The Busses With The Seats Turned Sideways (In The Rear & Front) Should Not Be Used On Express Routes
- 58 CRX Thank You!
- 58 CRX Please Keep The Service!
- 58 CRX I Waited Really 40 Minutes For The Bus That Was Supposed to Arrive at 4:49. The Bus Never Comes at or Around the Time it's Supposed to.
- 58 CRX GoTriangle Buses Don't Show Up On Transloc At All Anymore-Please Fix. Also The Wifi Doesn't Work At least Half The Time On CRX Buses- Please Fix.
- 59 DRX Transloc is great when it saves! Driving on weekend saves time! Thanks!
- 59 DRX Transfers need to Improve. Enforce ear phones!!
- 59 DRX The service durham station to Raleigh station is excelent. Thanks!
- 59 DRX Thank you!
- 59 DRX Some drivers won't delay a moment to allow a stranger to board. I a m drx regular. They know me overall I'm very satisfied.(over)
- 59 DRX Please Bypass Durham station go straight to Duke
- 59 DRX More frequent service would make using buses much easier and i think it would increase riders. Also, please improve reliability of the transit app.
- 59 DRX Make sure buses leave the stops at the listed not before
- 59 DRX It would be good to get Eno Back !! Very happy to have a Dex back!
- 59 DRX I would like a return to the pre-pandemic level of service for the drx , though i know ridership is down.
- 59 DRX Everything is ok
- 59 DRX Bus always late for afternoon pickup and shelter at downtown stop
- 59 DRX Also most important to me is that buses are able to be tracked on the transit app (too often they don't appear on the app)
- 700 Todo Bien
- 700 The drivers leave folks.
- 700 The biggest improvement would be accurate information about how soon the next bus will arrive.
- 700 ThankYou for the service.
- 700 Some bus stops need shelters
- 700 Need to keep buses clean.
- 700 Missed a route transfer from the 4 to the 100 to get from Raleigh to Durham, the driver was fast the time driven and passed night by me and could use routes that nw later.

- 700 I personally love all Go transits, It helped me work and transition to carry from Greensboro!
- 700 Good service so far, Thank you so much.
- 700 Give new routes.
- 700 Friendliness and helpfulness of drivers. Weekend schedule.
- 700 Bus driver getting us to work on time
- 800 Would love more evening service than 1-hour intervals for 800, and later 805, late work nights are rough.
- 800 would like to see an app on the phone for all bus companies
- 800 Wish the CRX bus can operate on some weekends.
- 800 Very good service overall
- 800 UNC Hospitals shelter is poorly maintained, used by un-housed folks. Drivers vary in terms of courtesy and customer service. I am unhappy with the ability of help at the RTG e.g. Bus arrived for a starting crews
- 800 Tracking app no longer working, tracking on website is much better than before
- 800 Tracking app is not working currently.
- 800 Timetable updates should be improve. (More info on the bus stop!!!
- 800 This is my first time on the bus
- 800 This is a great service do what you must to pay staff and drivers good wages to expand and sustain service
- 800 There is something about 800 after 4:00 PM where it gets unreliable. There are times when it is exceptionally late or simply does not show up. This is particularly true of the 4:50 pm bus.
- 800 The app doesn't track buses in real time anymore
- 800 The 805 bus is more convenient to my home but I typically take 800 bus because it runs more often (805 bus time frequency dropped in 2021)
- 800 thanks for all you do !
- 800 Thank you for all that you do
- 800 Public transport should improve on weekends.
- 800 Por el anominto gacias per mi es buen servicio
- 800 Please make sure the bus on time and app will give correct information.
- 800 Please improve on time performance for the 800 from Chapel Hill to RTC!
- 800 Please get GPS up and running again
- 800 Please construct shelters at 2 bus stops
- 800 Please bring back NRX
- 800 Please add more stops in apex, Holly Springs , and Frquay Varina
- 800 On 5/6/2023 a route 5 bus driver allowed three passengers to board the bus before I got off at a stop on Fayetteville St. He then smashed me in the door as I was exiting the bus.
- 800 Occasional bud, profane conversations that are aggressive. Overheard.
- 800 Need better freq. in weekends.
- 800 Need a better app

800 My concerns loitering constantly on buses
800 Muy Buen Servicio Gracias
800 More frequent bus & more routes please
800 Manage bus service on weekends
800 Lately we had trouble bus not going to the mall – bus driver passed exit and took us to transit center – it happened second times.

800 Late night service would be great
800 Late bus, Dirty bus, disrespectful drivers
800 Just started taking bus, new job assignment. I have enjoyed the past week bus on time and safe clean environment. Pleasant drivers too. Thank you
800 Jonathan small-I have been riding GoDurham Transit bus since 2006 & I have been riding GoTriangle bus since 2010
800 It's free! that is amazing.
800 It's fantastic free service
800 Improving the morning time on time
800 Improve the frequency of the buses on the weekend. Please extend the bus hours at night to 12:00 PM
800 Improve Maths people pay 2;00
800 If 800 could be made express(without stopping at Southpoint) and 800 s could ne made seamy Southpoint, my commute would be much better. Thank you for your service!
800 I wish all stops had seats & shelters from the rain
800 I wan't aware there was WiFi service
800 I really enjoy GoTriangle, however I wish there was a live location view of the 800 bus on Transloc!
800 I lived in the Triangle prior 2020 currently live out of the town. Only visiting today
800 I don't ride enough to request more improvements great service in my opinion
800 I didn't know there was wifi on the bus
800 I am grateful about all your services The only problem is about #300 that its not on time. Thank you
800 From my being of Things all is Good/Excellent
800 Frequency, on time, connection shown on bus screen, sometimes I miss bus because it shows incorrect route number
800 Frequency on weekends hours on weekends service to all locations. Extending the frequency of buses & service to more location would be great!

800 For CRX route, make sure that all scheduled routes are running and running on time
800 Expanded 805 hours during midday would be nice
800 Early Sat-morn.
800 Driver ethics needs work I have been left wet & cold by drivers refusing to stop more times then I care to count.
800 Dispatch providing the right information about times the buses are running
800 Clean buses keep the free fare shelter

- 800 Bus location tracking on Transloc app has been non-functional for many months on routes 800 & 805. Very dissatisfied about that. That should have been on of the services 1st and above
- 800 Buen Servicio
- 800 All of the transit services in the Research Triangle area have helped me out wonderful!
- 800 After noon time
- 800 After 4:40 pm the reliability of the 800 route significantly declines.
- 800 A lot of times bus drivers are not on the bus
- 800 A bus route from Chapel Hill - Raleigh on weekends would help.
- 800 805 on the weekends
- 800 2 feel safe with most riders. Once in a while people make me feel uncomfortable.
- 800 1. More frequent pick up times (e.g. every 15 or 20 min) 2. updates on app more consistent with real time 1900 doesn't 3. be on time-often late or doesn't show up on app any times
- 805 Moved into city last year, no comments on pandemic therefore some early issues with signs, Eventually fixed
- 805 I work at a plant M the triangle hours 6-2:30 I need service to start 5 am to get to work on time
- 805 I wish Transloc still worked, and the app displayed route worker was accurate all the times.
- 805 Drivers like to chill at Rtc be y2 late for work post pkp
- 805 Did not live in region until 2021, Did not move to a place where dolanded GoTriangle until 2022
- 805 A live app for tracking that allows into receive notifications about cancelled trips and broken down busses is needed. Lack of live tracking is a major problem! Otherwise its great
- 805 3:25 from chapel hill to wood croft did not show for 3 days - dispatchers could not find bus
- 910 I'm thankful I found out about this service, during daily was become so stressful. Now I get to read to work.
- 910 Every half hour on Saturday.

Appendix – B

Return to Fare Public Comment Period

GoTriangle

Project Name: *Return to Fare Public Comment Period*

Project Sponsor: *GoTriangle*

Project Start Date: *3/8/2023*

Prepared by: Liz Raskopf, Public Engagement

Manager Date: 4/10/2023



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Executive Summary

GoTriangle suspended fare collection at the beginning of the COVID-19 pandemic, and has committed to continue the fare suspension through at least June 30, 2023.

At its January 2023 meeting, the Board of Trustees voted to instruct staff to begin the process to perform a fare equity analysis and public engagement to inform a future decision by the board on whether or not to reinstate fare collection for FY24.

Staff presented the results of the equity analysis at the March O&F meeting and conducted a 30-day public engagement period between March 8 and April 6. Summaries of the equity analysis and public engagement results are provided below.

- The equity analysis found that while there are differences in usage rates of discount programs by minority and low-income customers compared to non-minority and non-low-income customers, there is no disparate impact and no disproportionate burden identified according to GoTriangle’s board-adopted policy definitions.
- Even though no disparate impacts or disproportionate burdens were identified, voluntary mitigation strategies are proposed to maximize access to discount fare programs for minority and low-income customers.
- GoTriangle utilized a combination of online and in-person engagement strategies to obtain input from riders and the general public about the potential to return to fare collection.
- More than 1,000 people provided input to the survey, across a range of demographic categories.
- More than one third of respondents indicated that they ride GoTriangle daily, and another one third indicated that they ride GoTriangle several times per week.
- More than 90% of respondents indicated that reliable transit service is very important to them.
- More than 75% of respondents indicated that they would be willing to pay fares.
- In response to a question about balancing a desire to remain fare free with the need for reliable transit service, nearly two thirds of respondents (59%) expressed support for creating a reduced fare option for low income riders.

Financial Impact

Implementing fares, reinstating and updating the GoPass program, and implementing a GoPass low-income pilot would have a positive financial impact for GoTriangle.

Prior to the pandemic-related fare suspension, GoTriangle received around \$1,000,000 in revenue annually from the GoPass institutional/employer discount fare program, around \$800,000 in revenue from cash fares and passes purchased directly by fixed-route bus riders,

and around \$600,000 from paratransit fares. After a period of transition, GoTriangle would seek to meet or exceed pre-pandemic revenues from fares and GoPass.

Engagement Approach

Purpose

GoTriangle conducted public engagement to share information about trade-offs between fares and reliability with the public and collect feedback on a possible return to fares.

The comment period took place from March 8-April 6, 2023 and focused on reaching current transit riders through online, print and in-person approaches.

Materials

Materials advertising the engagement period emphasized the opportunity to provide input on how GoTriangle should balance fares and reliability. The message and corresponding questions, including demographic questions, were shared via the following materials.

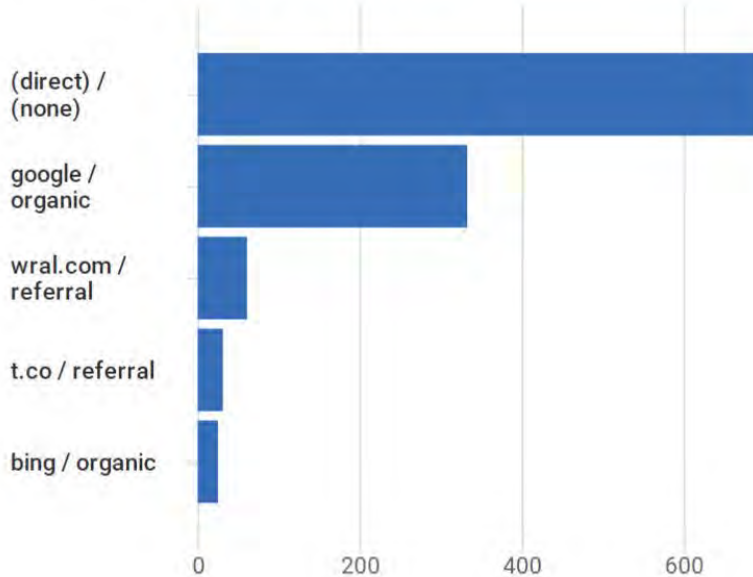
- Website
- Print Survey
- Rider Alerts
- On Bus Announcements
- Social Media

Promotion

Promotion of the survey opportunity focused on current transit riders and was also available to the general public. Digital media included a WRAL segment and article. Riders heard announcements on the bus and interacted with public engagement staff at high ridership stops. Information was also advertised through social media platforms.

All materials pointed people to the website gotriangle.org/faresurvey where they could learn more and complete the survey. The website garnered a total of 1,600 views, including 796 new users. The path that users took to reach the site is as follows, demonstrating that a majority of respondents reached the site through a direct link.

Users by Session source / medium



In addition to website traffic, a number of social media posts on multiple platforms garnered engagement with the topic and access to the survey, as shown below.

Platform	#Posts	Impressions	Engagements
Facebook	6	895	32
Instagram	6	750	16
Twitter	6	2065	95

Events and Activities

The first two weeks of outreach for the return to fare survey was focused on riders who would receive information via rider alerts, on bus announcements and social media. Halfway through the comment period, an analysis was conducted to determine in-person outreach needs.

Based on the response rates at the mid-point, the public engagement team conducted four separate tabling events at high ridership stops. This included:

Location	Date
Regional Transit Center	3/31/2023
Durham Station	4/3/2023
UNC Hospital	4/4/2023

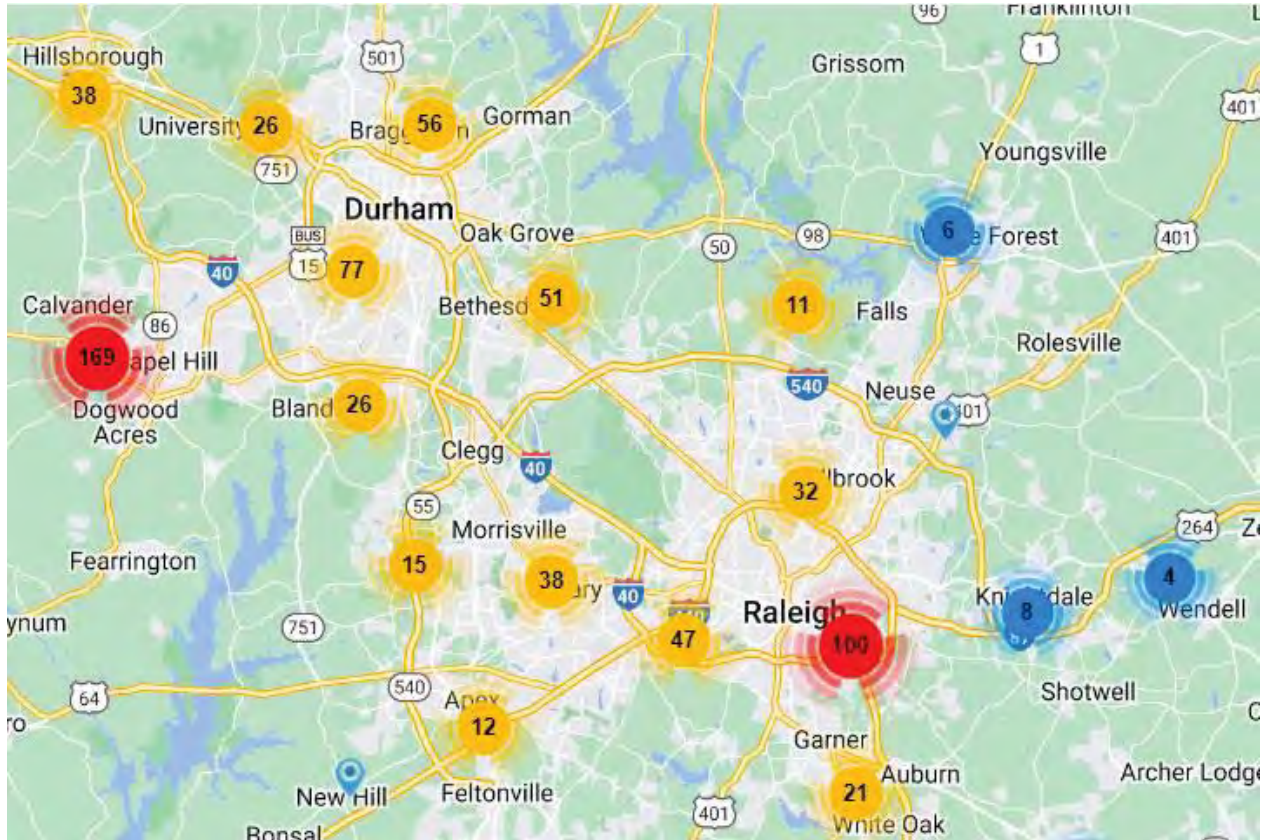
Durham Station

4/5/2023

Riders who interacted with staff at tabling sessions had the opportunity to complete paper surveys and speak directly with staff regarding their opinions. A total of 28 survey responses were collected on paper.

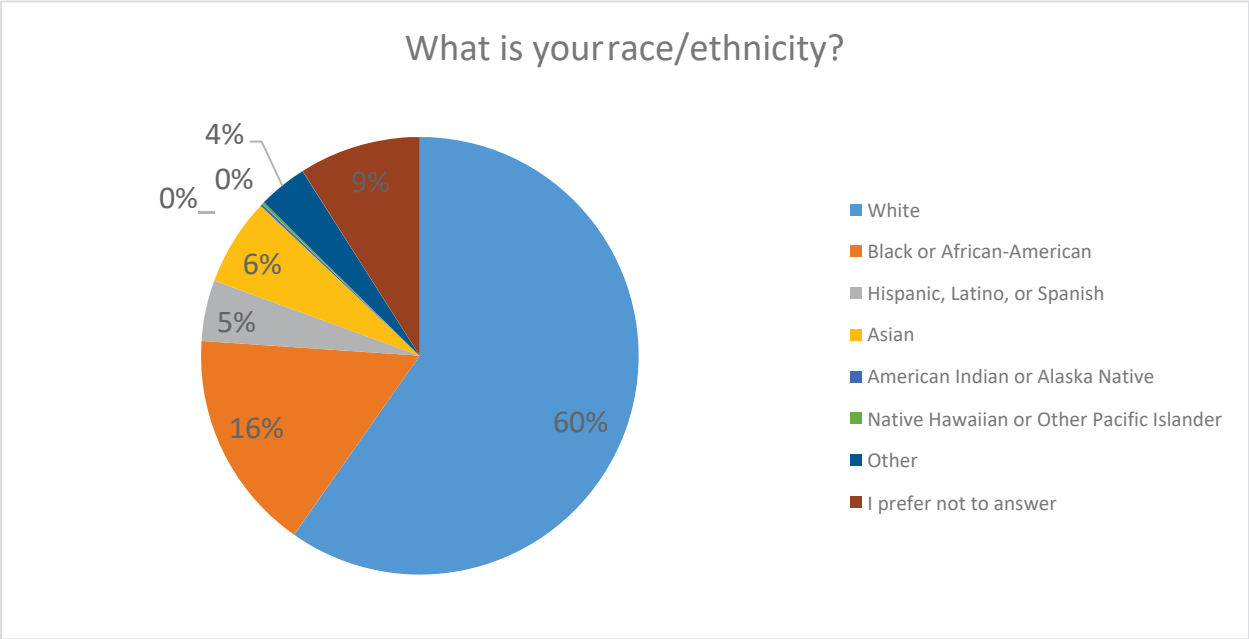
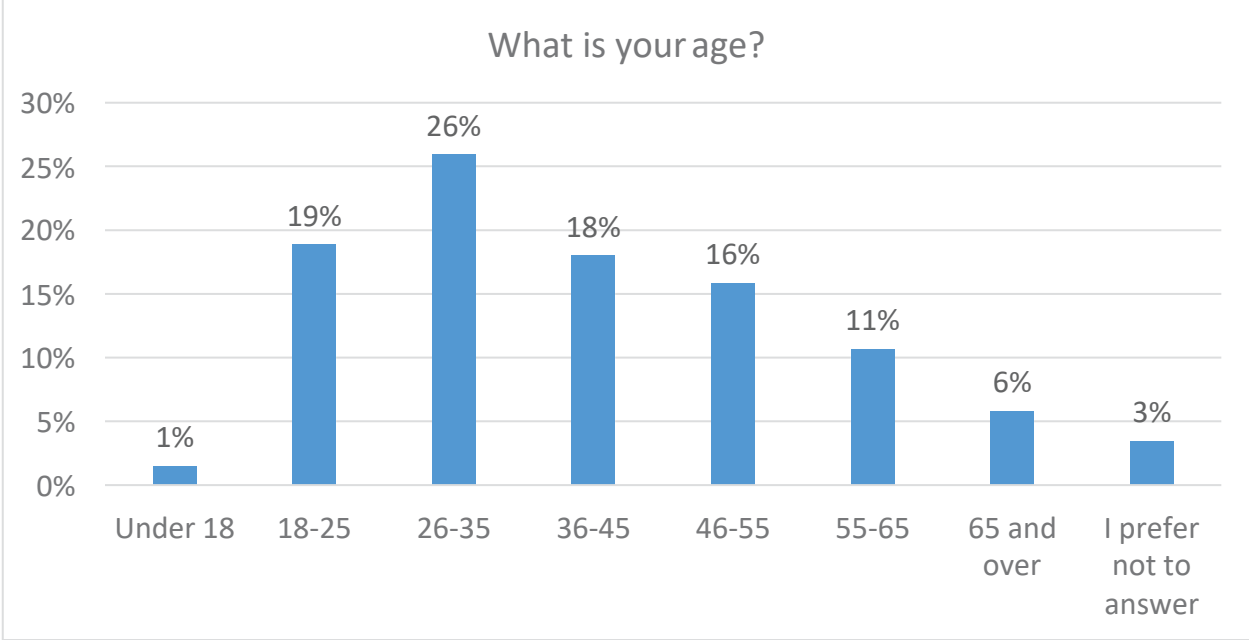
Engagement Results

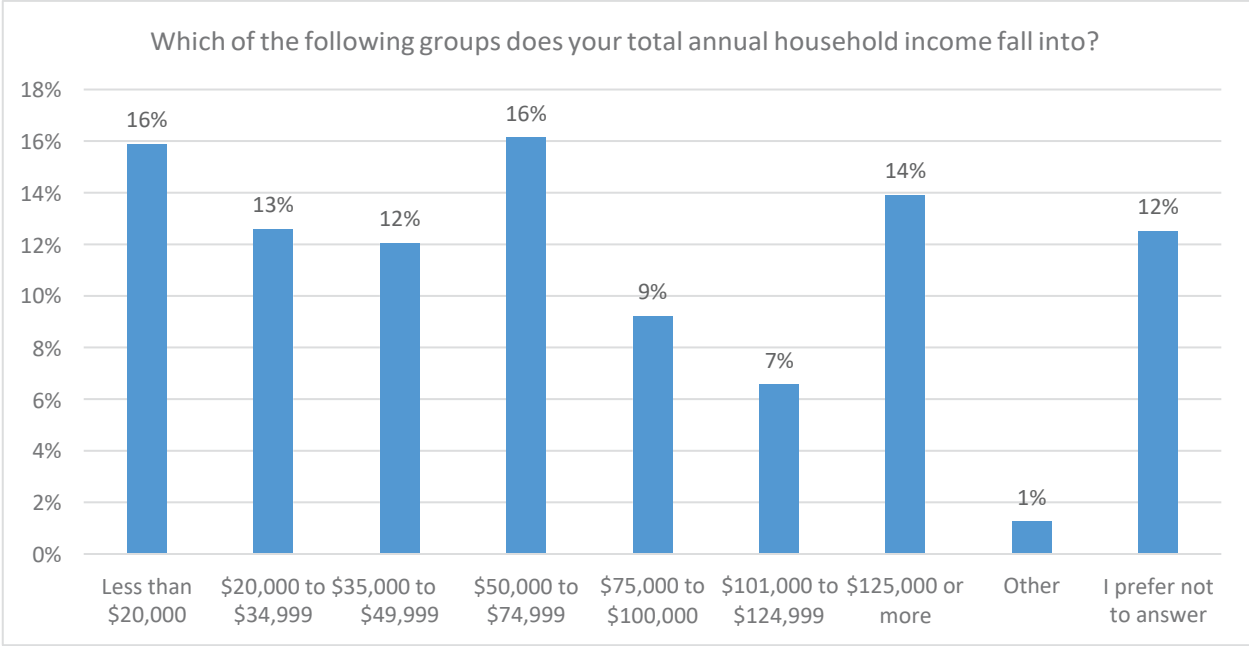
In total, the return to fare public engagement period resulted in 1,149 survey participants from across GoTriangle's service area. The map below shows the spread of survey responses by IP address or self-reported location.



Participant Demographics

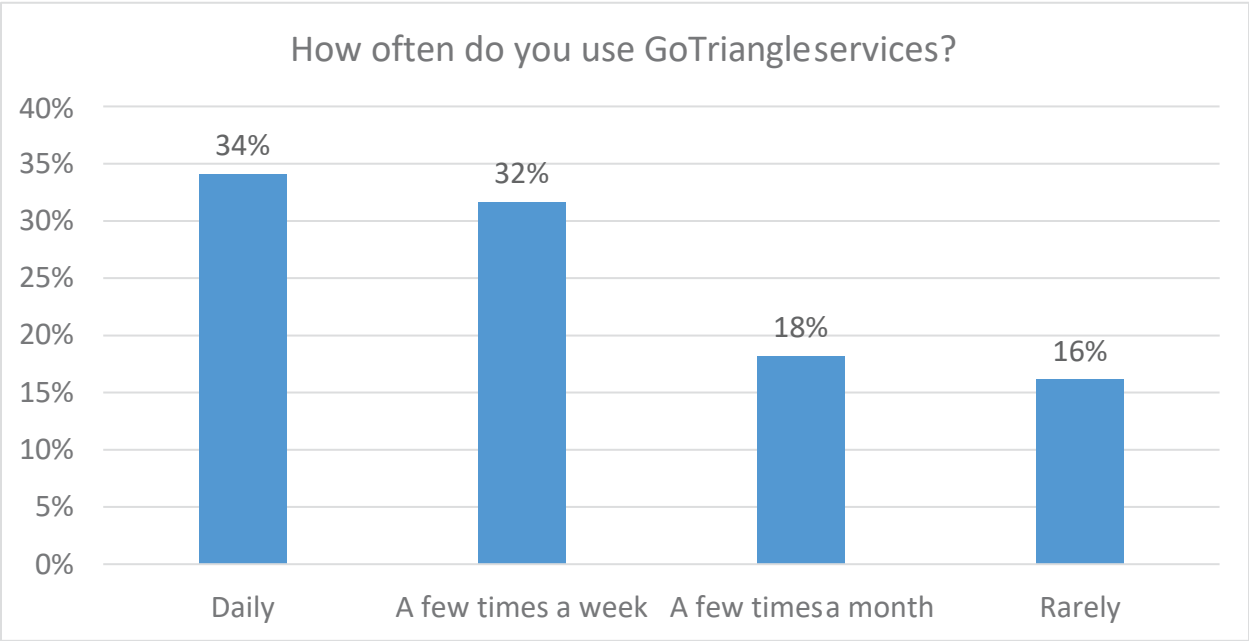
Participants had the opportunity to answer optional demographic questions at the start of the survey, resulting in the following response rates.



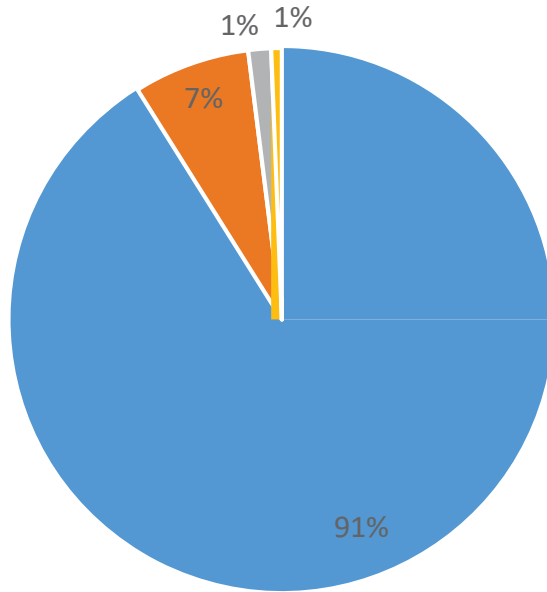


Comment Themes

Following the demographic questions, the survey asked 5 project-related questions. Response rates are indicated below.

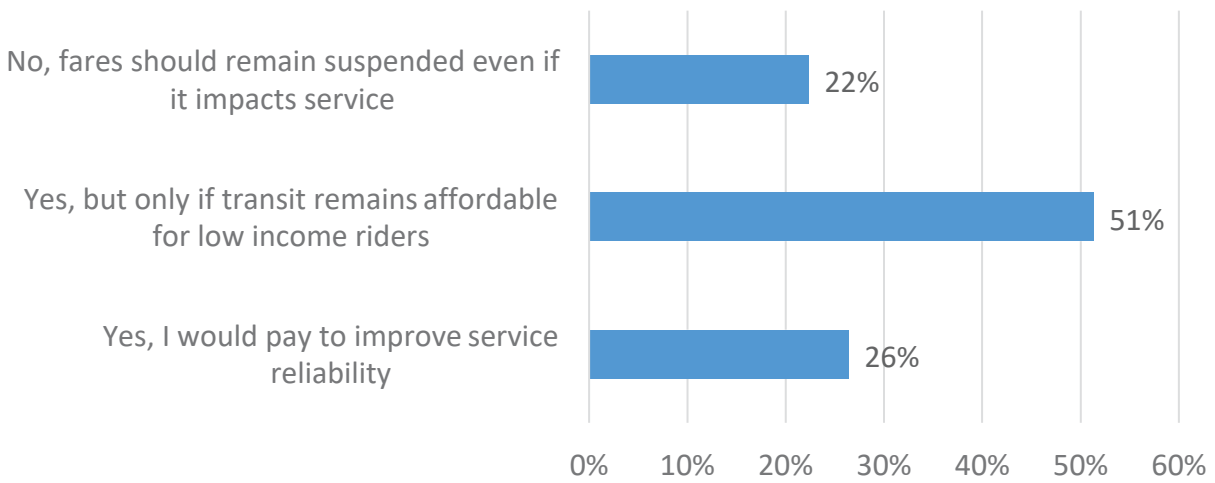


How important is reliable transit service to you?

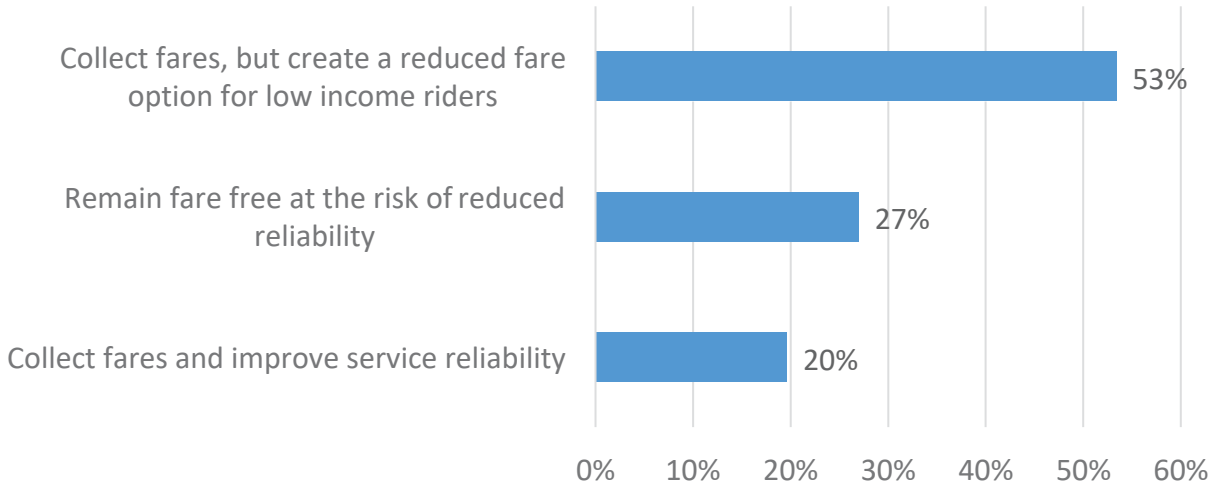


■ Very important ■ Somewhat important
■ Not very important ■ Not important at all

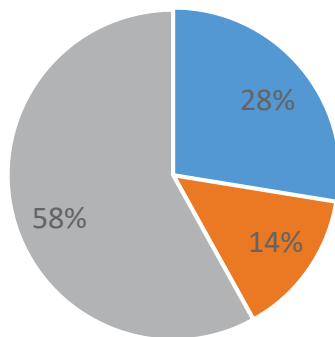
Would you be willing to pay fares for GoTriangle service if it would result in increased transit reliability?



How do you think GoTriangle should balance a desire to remain fare free with the need for reliable transit service?



Did you participate in a GoPass program (by obtaining a transit pass through your school or employer) before GoTriangle suspended fares?



- Yes, I had an active GoPass in 2020
- I have used a GoPass previously but not in 2020
- I have never participated in a GoPass program

The following table shows the specific employers indicated, by recurrence of response rates from highest to lowest. At the bottom of the table are counts for employers that had two or

fewer responses or did not result in identifying a specific employer, including “Not employed”, “Retired”, “Unemployed”, “Self-employed”, “Remote” and “N/A”.

Employer	Count
UNC (University, Hospital)	291
NC State University	66
Duke (University, Hospital)	61
State of North Carolina (Budget, DOT, DEQ, DHHS)	24
Wake County (Gov’t., Library Administration, Public Schools, Wake Tech)	13
Located in city of Raleigh	15
RTP	9
Durham County (Gov’t., Library, Human Services, Public Schools, Durham Tech)	8
City of Raleigh	8
Charter Communications	7
Student (unspecified)	6
VA	6
Red Hat	4
Located in Cary	4
RTI	3
North Hills	3
<i>2 or fewer responses</i>	<i>146</i>
<i>Not employed</i>	<i>14</i>
<i>Retired</i>	<i>12</i>
<i>Unemployed</i>	<i>7</i>
<i>Self-employed</i>	<i>5</i>
<i>Remote</i>	<i>4</i>

Next Steps

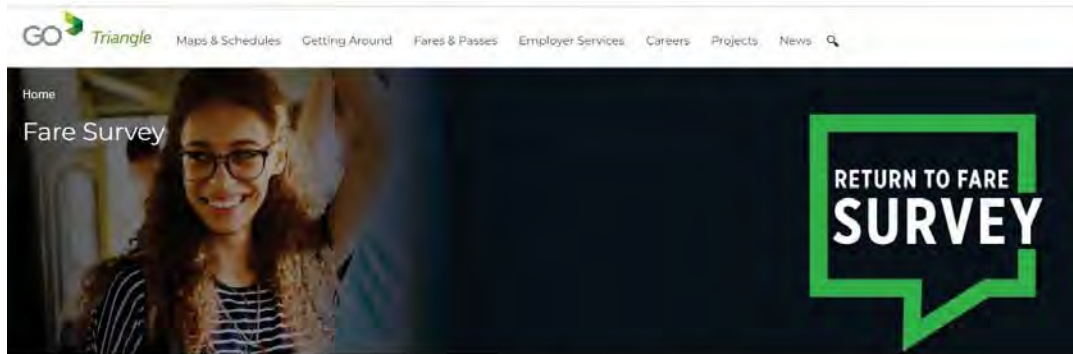
Based on the results of the equity analysis, public engagement, and engagement with GoPass stakeholders and MPO and county funding partners, staff recommends the following framework for reinstatement of fares for use in the event that the Board of Trustees decides to reinstate fare collection in FY24, which will be considered at the April 19th budget work session:

- Implement the proposed fare structure adopted by the Board of Trustees in 2019 for implementation with mobile ticketing, including daily, weekly, and monthly caps on fares paid by each rider
- Update GoPass program goals to include reducing barriers to access; responding to all-day travel demand, hybrid work, and varied commute patterns; and providing stable revenue for long-term GoTriangle bus service reliability, restoration, and expansion
- Seek funding from the Durham, Orange, and Wake transit work plans to implement a multi-year GoPass pilot program for low-income riders
- Defer implementation of fare restoration to January 1, 2024, to provide adequate time to secure funding and implement the GoPass low-income pilot, ensure seamless restoration of GoPass for pre-pandemic partners, and communicate with riders

Appendices

Materials

Website



Return-to-Fare Rider Engagement Survey |

GoTriangle temporarily suspended fares during the COVID-19 pandemic to support the community. Despite our desire to keep supporting the community with free transportation, we know that fare collection provides important funding for the transit system to maintain reliable service. As a regional public transportation authority, GoTriangle does not have the statutory authority to raise taxes, without legislative approval, to increase revenue as do city-run transit agencies.

If GoTriangle does not return to charging fares, the agency could lose over \$10 million over the next five years. Without fare collection, GoTriangle may have to reduce services and staffing, resulting in longer wait times, increased crowding and reduced route frequencies. As we prepare to make an informed decision about whether to resume collecting fares, your feedback is critical.

Print Survey

Return to Fare Engagement

Filling out the following demographic questions is OPTIONAL, but they will be extremely helpful in ensuring the FAIRNESS and EQUITY of our engagement. The questions are not listed in any particular order.

What is your age?

- Under 18
- 18-25
- 26-35
- 36-45
- 46-55
- 55-65
- 65 and over
- I prefer not to answer

What is your race/ethnicity?

- White
- Black or African-American
- Hispanic, Latino, or Spanish
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Other
- I prefer not to answer

Which of the following groups does your total annual household income fall into?

- Less than \$20,000
- \$20,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$100,000
- \$101,000 to \$124,999
- \$125,000 or more
- Other
- I prefer not to answer

1. How often do you use GoTriangle services?

- a. Daily
- b. A few times a week
- c. A few times a month
- d. Rarely

2. How important is reliable transit service to you?

- a. Very important
- b. Somewhat important
- c. Not very important
- d. Not important at all

3. Would you be willing to pay fares for GoTriangle service if it would result in increased transit reliability?

- a. Yes, I would pay to improve service reliability
- b. Yes, but only if transit remains affordable for low income riders
- c. No, fares should remain suspended even if it impacts service

4. How do you think GoTriangle should balance a desire to remain fare free with the need for reliable transit service?

- a. Collect fares and improve service reliability
- b. Remain fare free at the risk of reduced reliability
- c. Collect fares, but create a reduced fare option for low income riders

5. Did you participate in a GoPass program (by obtaining a transit pass through your school or employer) before GoTriangle suspended fares?

- a. Yes, I had an active GoPass in 2020
- b. I have used a GoPass previously but not in 2020
- c. I have never participated in a GoPass program

6. If employed, who is your current employer? (Knowing where our riders work helps us plan to better serve your needs.)

Name _____
Email _____
Address _____



Social Media

 **GoTriangle**  @GoTriangle · Apr 6 ...

Hear from #GoTriangle President and CEO Charles Lattuca about the impact of being fare-free and the public survey about bringing fares back. Read the @WRAL interview 

 wral.com
GoTriangle considers whether to resume bus fares
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Appendix – C

Wake Transit Community Engagement Policy

GO FORWARD

A COMMUNITY INVESTMENT IN TRANSIT

WAKE TRANSIT COMMUNITY ENGAGEMENT POLICY

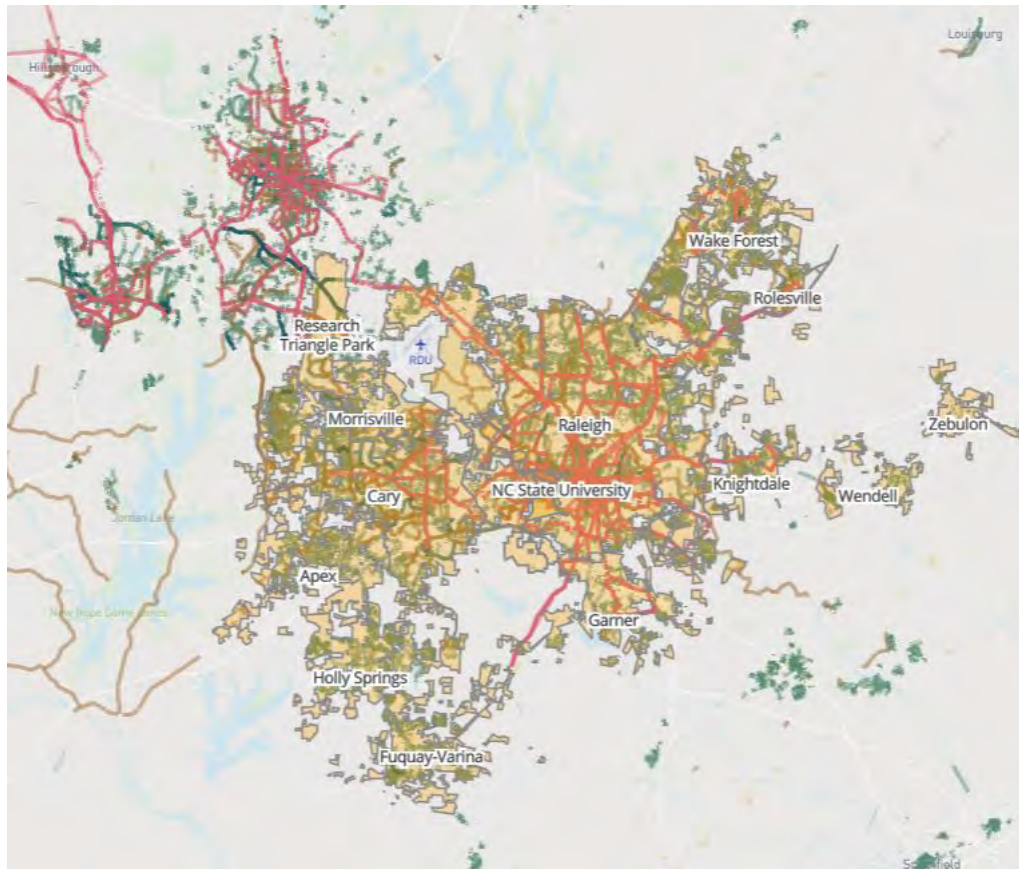


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1.0 Purpose & Context

- 1.1** On November 8, 2016, Wake County voters approved a transit-dedicated, half-cent sales tax investment to expand and better connect the public transportation network throughout Wake County. This policy acknowledges the fact that community input is a crucial element in planning for effective transit, as well as the prioritization and implementation of public transportation services that meet the needs of residents and the community.
- 1.2** The Wake Transit Master Participation Agreement established designated partnership roles for implementing specific programs and projects in order to serve the best interests and the greater good of all community members. That agreement indicates that Implementation Elements, Implementation Agreements, and Operating Agreements tied to capital investment shall at a minimum include public involvement and engagement expectations (WT MPA, Article II).
- 1.3** The purpose of the Wake Transit Community Engagement Policy is to build upon, develop, and maintain a thoughtful set of guiding principles to apply to the development of community engagement strategies designed to maximize communications with the public and other stakeholders related to the investments funded through the Wake Transit program. This policy applies to project sponsors to serve as a guide for engagement practices when delivering program-level and/or project-level services in the area.
- 1.4** This policy seeks to improve Wake Transit's engagement processes and outcomes by encouraging a consistent, transparent approach, and continual learning through evaluation and expanding the range of engagement methods.
- 1.5** Project sponsors are committed to engaging the community in planning and decision-making through the use of appropriate and effective practices.
- 1.6** This Community Engagement Policy document does not supersede federal, state, or local regulations or guidance governing agencies or organizations responsible for the planning or management of any Wake Transit-funded investment. These regulations, among others, are referenced in Appendix 1.

2.0 What is Community Engagement?

- 2.1** Community engagement is a strategic process that involves working with the public on decisions affecting the well-being and quality of life of their communities.
- 2.2** Community engagement focuses on gaining meaningful public input and feedback to inform the development of a Wake Transit-funded investment including any associated outreach, promotion, marketing, advertising, public relations, relationship building, or communications activities.
- 2.3** The goal of engagement is to consult with and acquire feedback from all sectors of the community in order to identify the transit needs and priorities that ensure transportation plans are fair across all levels of society. Public input helps planning staff increase their awareness of potential adverse effects and implement efforts to mitigate the costs in favor of benefits that serve the greater good.
- 2.4** Community engagement provides a strong foundation for understanding and working with our community to establish a system of shared responsibility for decisions and develop trust in the decision-making process.
- 2.5** Engagement delivers opportunities for our community to participate in Wake Transit's decision-making process, ensuring outcomes that benefit the greater good of the community by reflecting the opinions expressed through the gathering of meaningful input.

3.0 Why is Community Engagement Important?

- 3.1** Community input remains as vital as ever to the mission of improving the quality of life of residents by connecting people and places through safe, reliable, and easy-to-use travel choices.
- 3.2** Input from the communities impacted by transit plans and activities allows Wake Transit to serve their needs and plan effectively for the future.
- 3.3** Community engagement allows Wake Transit to create transit solutions by drawing upon and implementing local knowledge provided by diverse groups, thereby creating solutions that are practical and effective.

4.0 Guiding Principles

- 4.1** Accountability: Wake Transit community engagement efforts include advising the Transit Planning Advisory Committee (TPAC) members of planned engagement efforts, requesting support, and providing updates on efforts; explaining how community input influenced the decision-making process; sharing outcomes of engagement and planning activities with the community; and, conducting performance assessments to ensure future engagement efforts meet objectives.
- 4.2** Inclusivity: Wake Transit community engagement efforts will identify affected and interested community members and provide equitable access and opportunities to contribute meaningful input into the decision-making process.
- 4.3** Transparency: Wake Transit community engagement efforts will build trust and prove integrity through authentic interactions; the distribution of timely information that provides clarity of purpose, intent, and relevance of the engagement effort; clarity on the community's role in the decision-making process; and, keeping TPAC members informed of past, current, and future engagement efforts and results.

5.0 Policy Statement

- 5.1** Wake Transit partners are committed to ensuring all Wake County community members have meaningful opportunities to participate in the decision-making process for Wake Transit investments through continuous, cooperative, transparent, and comprehensive engagement.
- 5.2** The community can expect Wake Transit partners to evaluate and select the most appropriate engagement methods to meet their specific needs, based on project requirements, audience factors, and proposed impacts.
- 5.3** An effective engagement strategy will establish timelines and strategic plans for proactive outreach to impacted Wake County communities regarding Wake Transit program investments and goals.
- 5.4** Plans will facilitate the development of efforts that realize the meaningful implementation of community input in the Wake Transit decision-making process
- 5.5** Engagement strategies will develop specific opportunities for community members to provide input and share ideas with governing boards and planning staff.
- 5.6** Resources are available, upon request, to assist Wake Transit partners responsible for engagement activities in support of implementation elements, programs, projects, and planning efforts.

- 5.7** Engagement strategies will focus on the identified community and the creation of a situational evaluation, which includes the strategic analysis of audiences, engagement methods and tools, key messaging, and analytics designed to measure the effectiveness of efforts.
- 5.8** This policy encourages meaningful collaboration among Wake Transit partners on community engagement implementation activities to incorporate the concerns of the community and apply a thoughtful prioritization of programs, projects, and planning efforts.
- 5.9** Wake Transit partners are encouraged to support the community engagement activities of each other by representing a unified and consistent approach when possible and appropriate. This may include the sharing of engagement strategies and materials and/or co-developing, promoting, and attending the events of partners.

6.0 Community Engagement Framework

- 6.1** When developing community engagement work plans, project sponsors should consult all available references and resources. The approved Wake Transit Community Engagement Strategy and Wake Transit Community Engagement Summary Report templates are available as part of the Wake Transit Communications Plan. These documents are examples of appropriate sources that contain valuable resources that can guide project sponsors as they develop engagement frameworks. Project sponsors should also consult with lead agency personnel for additional insights and resources. Project sponsors should then develop clear engagement frameworks that include objectives, priorities, action steps, timelines, strategies, recommended activities, and communications tools.
- 6.2** Community engagement frameworks match the investment with its impact on the audience through a customized approach. Targeted community engagement tools, strategies, and materials educate audiences about the Wake Transit program by presenting accurate information in a narrative form designed to optimize engagement.
- 6.3** Each engagement effort should include measurable goals. Relevant analytical feedback should be gathered and included as part of the Wake Transit Community Engagement Summary report. Evaluating and reviewing engagement activities allows project sponsors to optimize their efforts. The Wake Transit Communications Plan includes information related to measuring objectives.

7.0 Standards and Requirements

- 7.1** Operating and capital projects that create forward progress on transit opportunities by meeting the goals outlined in the Wake Transit Plan receive funding through the annual Wake Transit Work Plan.
- 7.2** Programs, projects, plans, and policies are implemented by Wake Transit lead agencies and partners, also known as Project Sponsors, as either program-level investments, which apply to the Wake Transit program as a whole, or as project-level investments, which apply to individual projects carried out by municipal, institutional, and agency TPAC members.
- 7.3** Each level of investment involves different requirements to meet Wake Transit Community Engagement Policy standards. The tables included in this policy document outline the requirements for both program and project-level investments. They are located in the Wake Transit Community Engagement Development Guide on the following page.

Wake Transit Community Engagement Development Guide

	Wake Transit Plan Update	Wake Bus Plan Update	Annual Wake Transit Work Plan
Description	The Wake Transit Plan is the multi-year vision for public transportation investments in Wake County. It spans a 10-year planning period. The overarching goals of the plan are referred to as the "Four Big Moves."	The Wake Bus Plan provides a year-by-year listing of planned infrastructure and service investments by type and provider. It defines the order in which service expansion will occur to meet the goals of the Wake Transit Plan.	The Work Plan details the specific operating and capital investments scheduled to receive funding in the upcoming fiscal year. It also outlines anticipated investments in the remaining years of the 10-year Wake Transit planning period.
Document Span	10 fiscal years (July to June)	10 fiscal years (July to June)	1 fiscal year (July to June)
Update Cycle	Updated every 4 years	Updated every 4 years	Developed each year
Adoption Authority	Governing Boards	Governing Boards	Governing Boards
Adoption Date	Adopted in April 2021	Adopted in February 2019	Adopted in June annually
Project Lead	CAMPO	GoTriangle	CAMPO
Engagement Lead	CAMPO	GoTriangle	GoTriangle
Required Strategy	Project specific engagement strategy	Project specific engagement strategy	Project specific engagement strategy
CE Subcommittee Role	Review & recommend the draft strategy to TPAC; support engagement and communications activities; participate in after-action review process	Review & recommend the draft strategy to TPAC; support engagement and communications activities; participate in after-action review process	Review & recommend the draft strategy to TPAC; support engagement and communications activities; participate in after-action review process
TPAC Role	Receive engagement strategy as information; release draft plan for public review; receive engagement report as information; incorporate feedback in the recommended plan; recommend Governing Board adoption	Receive engagement strategy as information; release draft plan for public review; receive engagement report as information; incorporate feedback into the recommended plan; recommend Governing Board adoption	Receive engagement strategy as information; release draft plan for public review; receive engagement report as information; incorporate feedback, release recommended plan for public review; receive second engagement report; recommend Governing Board adoption
CAMPO Role	Lead development; advertise, and attend public hearing and review period; TCC reviews draft and recommends final plan; Executive Board reviews and adopts the final plan	Advertise and attend public hearing; advertise public review period; TCC reviews draft and recommends final plan; Executive Board reviews and adopts the final plan	Lead development; advertise and attend public hearing and review period; TCC reviews draft and recommends plan; Executive Board reviews and adopts the final plan
GoTriangle Role	Advertise and attend public hearing; implement draft public review period; Board of Trustees reviews and adopts the final plan	Lead development and advertise public hearing & review period; incorporate feedback; Board of Trustees reviews and adopts the final plan	Advertise and attend public hearing; implement draft review period; Board of Trustees review and adoption of the final Work Plan
Partner Role	Support dissemination efforts for planned engagement activities	Support dissemination efforts for planned engagement activities	Support dissemination efforts for planned engagement activities
Public Hearing	Joint: CAMPO and GoTriangle (14-day notice)	CAMPO (14-day notice)	CAMPO (14-day notice)
Public Review Period*	30-days for the recommended plan update	30-days for recommended plan update	30-days for draft, 14-days for recommended
Reporting	Engagement Lead provides engagement report to CE and TPAC as information and Governing Boards prior to consideration of adoption	Engagement Lead provides engagement report to CE and TPAC as information and Governing Boards prior to consideration of adoption	Engagement Lead provides engagement report to CE and TPAC as information and Governing Boards prior to consideration of adoption
After-Action Review	Annual after-action performance review	Annual after-action performance review	Annual after-action performance review
If you have questions about the Wake Transit Community Engagement Development Guide, or how it applies to an agency, please contact Wake Transit Communications Coordinator info@goforwardnc.org			

Wake Transit Community Engagement Development Guide

	Community Engagement Policy	Other Program-Level Plans, Policies, and Deliverables	Project-Level Plans, Policies, and Deliverables
Description	The CE Policy is a framework for meeting community engagement requirements for applicable Wake Transit planning, programming, and project development efforts. It is a resource for all partner agencies.	Plans, policies, guidelines, and processes that apply to the Wake Transit program as a whole or components thereof AND must be adopted by the TPAC or Wake Transit governing boards require a public review and engagement.	Wake Transit planning and project efforts being led by partner agencies that require engagement, as identified in the project presentation schedule, are subject to the guidance provided in this policy. Engagement strategies will be unique and scoped for each individual project.
Document Span	Continuous until updated	Varies by project size, scope & type	Varies by project size, scope & type
Draft Cycle	Updated as needed	As needed	As needed
Adoption Authority	Governing Boards	TPAC and/or Governing Boards	Varies by project, may not require adoption
Adoption Date	Adopted as needed	Adopted as needed	Adopted as needed
Project Lead	GoTriangle	CAMPO/GoTriangle/Other Designee	Project sponsor
Engagement Lead	GoTriangle	GoTriangle	Project sponsor or designee
Required Strategy	Project specific engagement strategy	Project specific engagement strategy	Project specific engagement strategy
CE Subcommittee Role	Review & recommend the draft strategy to TPAC; support engagement and communications activities; participate in after-action review process	Review draft strategy as applicable; support engagement and communication activities	Receive presentation of engagement strategy as information; support engagement and communication activities
TPAC Role	Receive engagement strategy as information; release draft policy for public review; receive engagement report as information; incorporate feedback into the recommended plan; recommend Governing Board adoption	Review all program-level deliverables, and take appropriate action	Varies by project
CAMPO Role	Advertise public hearing and review period; TCC reviews draft and recommends policy; Executive Board reviews and adopts the final policy	Review and adopt applicable plans, policies, and materials	Varies by project
GoTriangle Role	Lead development; advertise public hearing & review period; incorporate feedback; Executive Board reviews and adopts the final policy	Review and adopt applicable plans, policies, and materials	Varies by project
Partner Role	Support dissemination efforts for planned engagement activities	Support dissemination efforts for planned engagement activities	Support engagement efforts, as appropriate
Public Hearing	CAMPO (14-day notice)	Determined during project development	Determined during project development
Public Review Period*	30-days for recommended policy	14-day or 30-day public review period determined during project development phase	Varies by project
Reporting	Engagement Lead provides engagement report to CE and TPAC as information and Governing Boards prior to consideration of adoption	Determined during project development (engagement summary report recommended)	Determined during project development (engagement summary report recommended)
After-Action Review	Annual after-action performance review	Optional to include in annual or separate after-action review	After-action review recommended, led by project sponsor

If you have questions about the Wake Transit Community Engagement Development Guide, or how it applies to an agency, please contact the Wake Transit Communications Coordinator at info@goforwardnc.org

Appendix 1: Regulations

Minimum requirements for public participation are based on a number of federal and state laws and regulations that speak to the inclusion of all individuals. The following federal and state rules guide public participation for all projects receiving Wake Transit funding.

Law/Regulation/Rule	Description
Section 508 of the Rehabilitation Act	Establishes requirements for electronic and information technology to be accessible to people with disabilities, including employees and members of the public.
Title VI of the Civil Rights Act of 1964	Prohibits discrimination based on race, color, or national origin
Civil Rights Restoration Act of 1987	Broadened the scope of Title VI to include programs whether federally assisted or not
Age Discrimination Act of 1975	Prohibits discrimination based on age
Rehabilitation Act of 1973, Section 504	Prohibits discrimination based on physical or mental handicap
Americans with Disabilities Act of 1990	Prohibits discrimination against people with disabilities
1973 Federal-aid Highway Act	Prohibits discrimination on the basis of sex
Executive Order 13166	Provides guidance on access for services for Limited English Proficiency persons
Executive Order 12898	Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
49 CFR Part 21	US DOT regulation on implementing Title VI of the Civil Rights Act of 1964
49 CFR Part 27	US DOT regulation on implementing Section 504 of the Rehabilitation Act of 1973
23 USC §128	Requires public meetings to be held at convenient and accessible locations and times
N.C. Gen Stat. §143-318.10(b)	North Carolina Open Meetings Law

Appendix 2: Glossary of Terms

- **Community:** A defined group of individuals, businesses, and organizations potentially affected by a planned Wake Transit investment as identified by geographic boundaries, special interests, specific characteristics, or other situations.
- **Community Engagement:** A strategic process that involves working collaboratively with and through identified groups of people connected by geographic proximity, special interest, or other affiliation to discuss issues affecting their well-being and quality of life.
- **Community Engagement Policy:** The Wake Transit community engagement policy provides overarching guidance for how partners will communicate, involve, and include community members in the Wake Transit decision-making process.
- **Community Engagement/Public Participation Plan:** Each partner agency's participation plan that provides details about how Wake Transit, state, federal, and local engagement requirements will be met.
- **Community Engagement Strategy:** An engagement strategy identifies the project manager, specific tactics, measures, methods, timeline, budget, and additional deliverables and activities needed to accomplish the goals of a planned engagement effort.
- **Implementation Agreements:** Shall mean regular and annual agreements that outline the details of how projects in the Wake County Transit Annual Work Plan shall be implemented. These agreements shall be designated as Operating Agreements or Capital Funding Agreements and will clearly outline implementation standards. The expected amount of funds associated with each Implementation Agreement will be clearly defined in the Wake Transit Work Plan.
- **Implementation Element:** Shall mean a discrete project, operation or study, or a discrete logical grouping of projects, operations, or studies tracked separately by the Wake County Transit Work Plan.
- **The Four Big Moves:** The adopted goals of the Wake Transit Plan are the "Four Big Moves," which are as follows: 1) Connect the region; 2) Connect all Wake County communities; 3) Provide frequent, reliable urban mobility; and, 4) Enhance access to transit.
- **Master Participation Agreement:** An agreement between the Wake Transit Governance Interlocal Agreement (ILA) parties (Capital Area MPO, GoTriangle and Wake County) and the other eligible partner agencies.
- **Material Concern:** A concern raised about core components of a project or plan's draft engagement strategy, scope, budget, potential for conflict of interest, missing partners from the process, performance targets, a need for additional approvals, and other possible concerns.

- **Meaningful Input:** Feedback from all sectors of the community that helps to identify transit needs and priorities so that transportation plans are fair across all levels of society. Meaningful input helps planning staff become aware of the potential adverse effects of a project and balance the benefits of a project against its potential adverse effects.
- **Partner Agency:** Agencies and organizations that are eligible to receive Wake Transit funds include Apex, Capital Area Metropolitan Planning Organization, Cary, Fuquay-Varina, Garner, GoTriangle, Holly Springs, Knightdale, Morrisville, North Carolina State University, Raleigh, Research Triangle Park Foundation, Rolesville, Wake County, Wake Forest, and Zebulon. Partner agencies responsible for carrying out a specific project are designated as a “Project Sponsor” in relevant Wake Transit documents.
- **Program-Level Investments:** Program-level investments apply to more than one project, require approval by the TPAC and/or Governing Boards, and are most often the responsibility of a lead agency, CAMPO or GoTriangle, to execute.
- **Project-Level Investments:** Project-level investments apply only to one project, do not necessarily require approval by the Governing Boards, and are most often the responsibility of a Project Sponsor to execute.
- **Public Review Period:** The lead agency, project manager or other staff responsible for developing the engagement strategy for the deliverable must determine whether a 14-day or 30-day comment period will be required based on a set of criteria. In general, deliverables subject to the 30-day comment period requirement are major planning efforts including those that could directly impact community members. Deliverables that are subject to the 14-day comment period requirement are those that are more administrative in nature, act as guidance for staff and partners managing and/or participating in Wake Transit Plan implementation, and do not establish or change set requirements for communicating or engaging with the public.
- **Community Engagement (CE) Subcommittee:** A designated subcommittee of the TPAC tasked with oversight and support of Wake Transit program-level engagement and communication activities, as well as providing promotional support for Wake Transit project-level engagement efforts.
- **Significant Change:** Wake Transit Partners and staff collect community comments on draft Wake Transit planning documents. Following the review and consideration of comments, if there have been no significant changes to the draft, then a recommended version is released for consideration of approval or adoption.

Unless specifically outlined in an engagement strategy, a second public review and comment period is not required for a recommended plan that is materially the same as the draft previously presented for community review. However, if significant changes are made between the draft and recommended versions of a plan, policy or project document, the revised draft will be made available for an additional 7-day minimum public review and comment period to allow interested

community members the opportunity to review and comment on the changes made prior to a vote for adoption.

Significant changes to a draft are those in which the scope of a plan is adjusted, funding sources are changed, funding amounts are adjusted for more than minor modifications or calculation corrections, the addition or deletion of project(s) or other plan elements, and other edits that would qualify as major amendments to an existing document. Minor changes include a shift in allocation year, rewording plan components for clarity or for correctness, the division of a project funding amounts into phases, and other adjustments deemed minor in the approved Wake Transit amendment policy. Minor changes between a draft and recommended planning document do not require an additional public comment period.

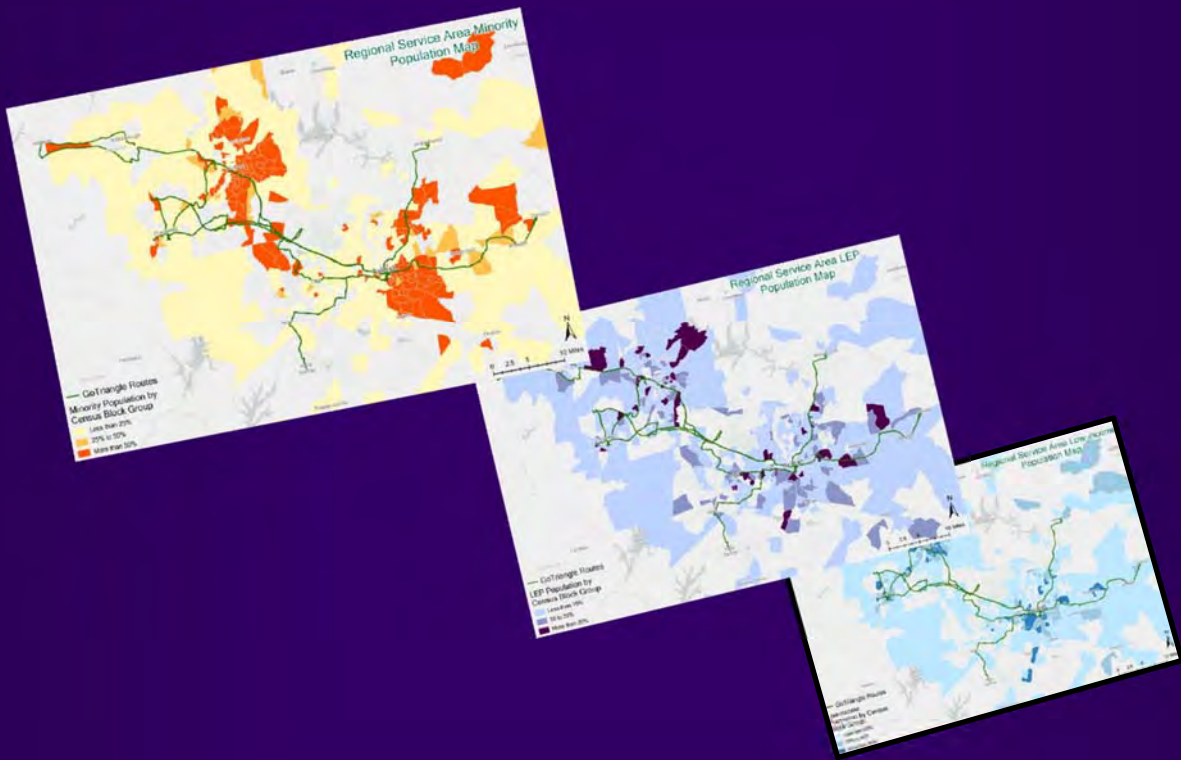
- **Wake County Transit Planning Advisory Committee (TPAC):** The TPAC is a staff-level advisory committee comprised of representatives from agencies and local governments with jurisdiction in Wake County charged with coordinating planning and implementation aspects of the Wake Transit Plan. The TPAC serves in a structured advisory role to the CAMPO Executive Board and the GoTriangle Board of Trustees.

Appendix – C

Language Assistance Plan



Connecting all Points of the Triangle



LANGUAGE ASSISTANCE PLAN

SEPTEMBER 1, 2023

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INTRODUCTION

Since the North Carolina General Assembly established our agency as Research Triangle Regional Public Transportation Authority “GoTriangle” in 1989 to serve Durham, Orange, and Wake counties, we continue to work to connect the region we serve. We embrace our role as the regional transportation agency by leading the effort for bus and rail improvements.

GoTriangle provides public transportation in a region experiencing rapid growth and demographic change. GoTriangle operates regional bus and shuttle service, paratransit services, ride-matching, vanpools, commuter resources, trip planning, and an emergency ride-home program for the region.

GoTriangle’s mission is to improve our region’s quality of life by connecting people and places through safe, reliable, and easy-to-use travel choices – it continues to guide the agency to:

1. Improve mobility in the region.
2. Assure high-quality customer service.
3. Encourage sound growth patterns.

OVERVIEW

GoTriangle must offer language assistance due to the diversity of its regional population and ridership. The Language Assistance Plan (LAP) aims to fulfill GoTriangle's responsibilities as a recipient of federal financial aid by addressing the needs of individuals with limited language skills.

The LAP's first section explains its purpose. In contrast, the second section provides the four-factor limited English proficiency (LEP) analysis used to determine LEP needs and assistance measures outlined by the Department of Transportation (DOT).

The third and final section outlines the implementation of the LAP, including methodologies for identifying LEP individuals, providing services, establishing policies, monitoring the LAP, and recommendations for future implementation.

PURPOSE OF THE LANGUAGE ASSISTANCE PLAN

GoTriangle has developed this LAP to help identify reasonable steps for providing language assistance to persons with limited English proficiency who wish to access services provided by the Agency. This plan outlines how to identify a person who may need language assistance and how assistance may be provided. The plan has been prepared per the below federal provisions and guidance.

[Title VI of the Civil Rights Act of 1964](#) prohibits discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance. One critical concern addressed by Title VI is the language barrier that limited English proficiency (LEP) persons face with respect to accessing information about and using transit service. Transit agencies must ensure that this group has sufficient access to the agency's programs and activities. It is also essential that agencies make public participation opportunities accessible to individuals with a limited understanding of spoken or written English.

[Executive Order 13166](#) – titled “**Improving Access to Services for Persons with Limited English Proficiency.**” Limited English Proficiency persons are those who do not speak English as their primary language and have limited ability to read, speak, write or understand English.

[FTA Circular 4702.1B](#) was developed by the Federal Transit Administration (FTA) and details the administrative and reporting requirements for recipients of FTA financial assistance to comply with Title VI and related executive orders including LEP.

[The United States Department of Transportation](#) published guidance that directed its recipients to ensure meaningful access to the benefits, services, information, and other important portions of their programs and activities for LEP customers.

FOUR-FACTOR ANALYSIS

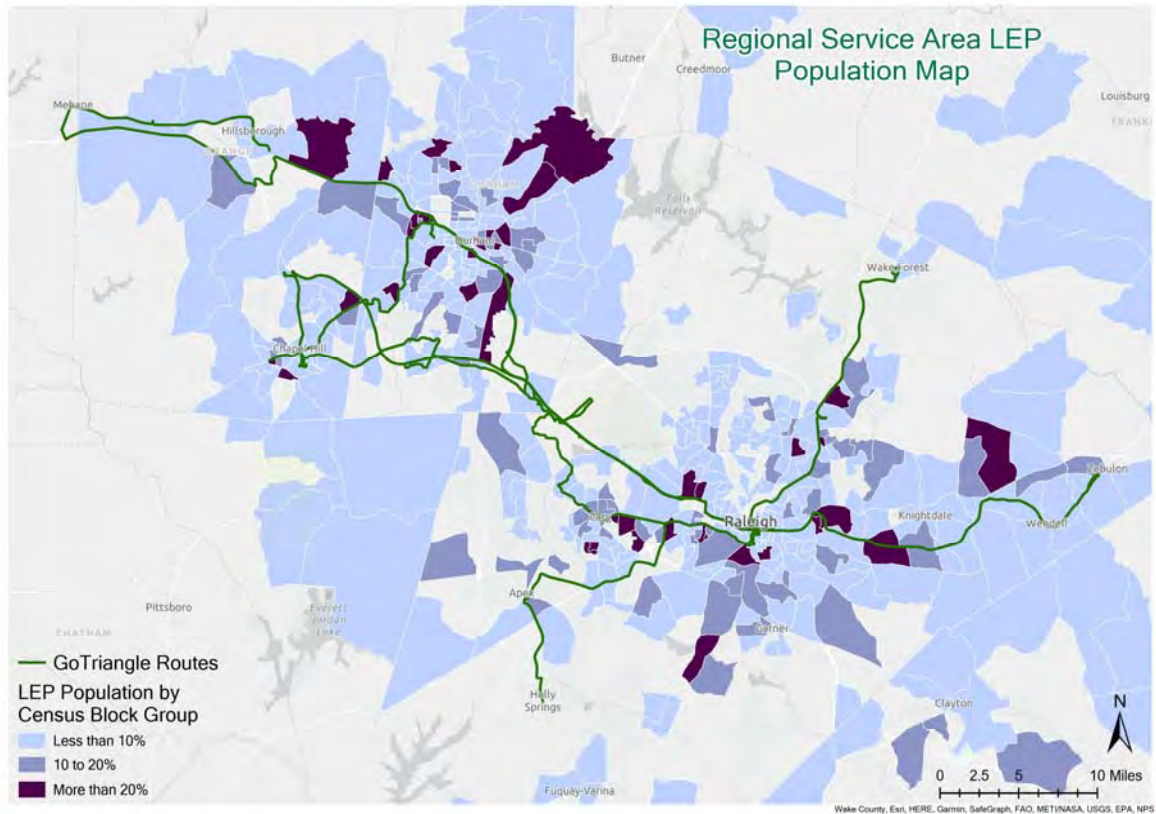
In order to prepare this plan, GoTriangle undertook the four-factor LEP analysis, which considers the following factors:

Factor 1:

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

In developing the LAP, the first step was determining the number of people in the service area who require English fluency and would benefit from it. GoTriangle considers riders and non-riders in the region as the eligible service population. Exhibit 1 illustrates GoTriangle's regional service area map for LEP populations.

Exhibit 1



Data Sources

The below data sources were analyzed to determine which languages were most prevalent in the service area and would benefit from language assistance.

- American Community Survey 2021 5-year sample of languages of people that speak English less than very well: Table C16001: Languages Spoken at Home for the Population of 5 Years and Over, conducted by the United States Census Bureau, Exhibit 2
- North Carolina Public School System Demographic Data for Durham, Orange, and Wake Counties, Exhibits 3, 4, and 5.
- GoTriangle’s Onboard Customer Survey, 2023 included at Appendix B of GoTriangle’s Public Participation Plan.

Overall, the GoTriangle service area is diverse, with many languages. Spanish is the most prevalent of the LEP speakers language, followed by Indo-European and Chinese speakers in GoTriangle’s region. The public school systems of Durham, Orange, and Wake Counties have an 11% average of limited English proficient (LEP) students.

Exhibit 2

LEP Speakers in Durham, Orange, Wake Counties

Language	Total Speakers	LEP Speakers	% of Total LEP Population
Total Population 5 and older	1,487,709		0%
Spanish		52,066	3.50%
French, Haitian, or Cajun		2,179	0.15%
German		419	0.03%
Russian		1,301	0.09%
Other Indo-European		6,912	0.46%
Korean		1,670	0.11%
Chinese (incl. Mandarin, Cantonese)		6,543	0.44%
Vietnamese		3,582	0.24%
Tagalog (incl. Filipino)		890	0.06%
Other Asian and Pacific Island		5,902	0.40%
Arabic		3,425	0.23%
Other Unspecified Language		2,461	0.17%

2021 American Community Survey – Table C16001

Exhibit 3

Race/Ethnic	# Students	% of Students
White	68,133	43%
Black/African Americans	34,862	22%
Hispanic	30,707	19%
Asians	18,411	12%
2 or more races	6,386	4%
American Indian	349	.20%
Pacific Islanders	179	.10%
Total # of Students	159,027	
Total # of LEP Students	16,283	10%

Wake County Public School System Data (2022-2023)

Exhibit 4

Race/Ethnic	# Students	% of Students
Black/African Americans	11,990	39%
Hispanic	10,687	34%
White	6,034	19%
2 or more races	1,700	6%
Asians	649	2%
American Indian	42	.1%
Pacific Islanders	22	.01%
Total # of Students	31,124	
Total # of English Language Learners	5,152	.17%

Durham County Public School System Data (2022-2023)

Exhibit 5

Race/Ethnic	# Students	% of Students
Black/African Americans	1,005	14%
Hispanic	1,825	26%
White	3,664	52%
2 or more races	467	7%
Asians or Pacific Islanders	106	2%
American Indian	14	.2%
Total # of Students	7,074	
Total # of English Language Learners	714	10%

Orange County Public School System Data (2022-2023)

Analysis of Census Data

To determine the concentrations of limited English proficient (LEP) populations within GoTriangle's fixed-route service area, staff conducted an analysis using the American Community Survey (ACS) 2020 5-year Estimates data. Exhibit 6 provides a clear breakdown, based on language, of the estimated number of residents in Durham, Orange, and Wake counties who speak English "very well" or less than "very well." For this analysis, staff focused on residents who indicated they spoke English less than "very well." The results showed that about 1,487,709 residents in these counties speak English less than "very well," representing 6% of the total population served.

Exhibit 6

Language	Durham County - "less than very well"	Orange County - "less than very well"	Wake County - "less than very well"	Service Area Totals	% of Population 5 Years and Older
Total Populations 5 and older	300,274	141,045	1,046,390	1,487,709	
Spanish	16,804	2,820	32,442	52,066	3.50%
French, Haitian, or Cajun	567	208	1,404	2,179	0.15%
German	77	65	277	419	0.03%
Russian	91	47	1,163	1,301	0.09%
Indo-European	597	454	5,861	6,912	0.46%
Korean	240	379	1,051	1,670	0.11%
Chinese (incl. Mandarin, Cantonese)	1,092	1,436	4,015	6,543	0.44%
Vietnamese	424	90	3,068	3,582	0.24%
Tagalog (incl. Filipino)	227	20	643	890	0.06%
Other Asian and Pacific Island	878	738	4,286	5,902	0.40%
Arabic	577	285	2,563	3,425	0.23%
Other Unspecified Language	482	96	1,883	2,461	0.17%

2021 American Community Survey – Table C16001

Safe Harbor

In developing the Language Assistance Plan, GoTriangle has paid particular attention to the federal Department of Justice (DOJ) guidelines regarding the “Safe Harbor Provision” for translating written materials. Further, the FTA Circular 4702.1B states the following concerning Safe Harbor Provision:

The Safe Harbor Provision stipulates that, if a recipient provides written translation of vital documents for each eligible LEP language group that constitutes five percent (5%) or 1,000 persons, whichever is less, of the total population of persons eligible to be served or likely to be affected or encountered, then such action will be considered strong evidence of compliance with the recipient’s written translation obligations. Translation of non-vital documents, if needed, can be provided orally. If there are fewer than 50 persons in a language group that reaches the five percent (5%) trigger, the recipient is not required to translate vital written materials but should provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost.

These safe harbor provisions apply to the translation of written documents only. While it does not apply to oral interpretation, GoTriangle aims to provide meaningful access through competent oral interpreters where oral language services are needed and are reasonable. GoTriangle may determine, based on the Four Factor Analysis, that even though a language group meets the threshold specified by the Safe Harbor Provision, written translation may not be an effective means to provide language assistance measures. For example, GoTriangle may determine that many persons in that language group have low literacy skills in their native language and, therefore, require oral interpretation. In such cases, background documentation will be provided to the FTA upon request.

Based on this guideline, seven (7) language groups have more than 1,000 persons in GoTriangle’s region who speak English less than “very well” and thus require translation of vital documents. These language groups are Spanish, French, Russian, Korean, Chinese, Vietnamese, and Arabic. While some of these groups represent a modest percentage of the region’s population, they do constitute a count of at least 1,000 persons and thus qualify based on the Safe Harbor Provision. It is GoTriangle’s responsibility to ensure these groups have access to vital documents translated into their language so they can participate in a meaningful way in the Agency’s decision-making process and stay informed regarding the Agency’s business activities. “Vital” written documents include:

- Complaint forms.
- Written notices of necessary legal rights.
- Documents critical for obtaining services and benefits.

- Documents identifying upcoming fares and service changes.
- Notices advising LEP individuals of free language assistance.

These documents must be translated into the recognized languages from Factor 1 in the provision section and Factor 2 for Title VI compliance.

Analysis of Customer Survey Data

GoTriangle conducts a comprehensive survey of its customers on every route in the system once every three years. The most recent survey was conducted in May 2023 and received responses from 1,013 customers. According to the survey, 90% of GoTriangle's customers mainly speak English at home, while only 6% speak Spanish at home. The remaining 4% of GoTriangle riders speak other languages at home. It's important to note that the triennial survey conducted by GoTriangle focuses solely on its customers. At the same time, the American Community Survey carried out by the U.S. Census Bureau tracks all county residents. The GoTriangle Onboard Customer Survey, 2023 is included at Appendix A of GoTriangle's Public Participation Plan.

Exhibit 7

Languages Spoken at Home

Languages Spoken	2023	2019	2018
Other	4%	6%	4%
Spanish	6%	4%	4%
English	90%	89%	92%

GoTriangle Onboard Customer Survey, 2023

Factor 2:

The frequency with which LEP persons come in contact with GoTriangle programs activities, or services

Factor 2 of the LEP plan enables GoTriangle to determine how often riders and non-riders interact with the Agency. The Agency can identify which riders require language services by evaluating the frequency at which LEP populations come in contact with GoTriangle, its activities, and its services. The strategies used to assist LEP individuals on a one-time basis will differ significantly from those served daily. To estimate the frequency of contact with LEP individuals, GoTriangle has reviewed its programs and services and analyzed data from the following sources:

- GoTriangle Onboard Customer Survey, 2023
- GoTriangle Apps
- Calls to Customer Service

2023 Onboard Customer Survey

Based on Factor 1, it can be concluded that English-speaking riders make up around 90% of GoTriangle's ridership, while Spanish-speaking riders make up about 6% of the total ridership. A small number of riders speak other languages apart from these two languages. Among these languages, Chinese, including Mandarin, is the most commonly spoken language, representing 2.1% of the total GoTriangle ridership.

GoTriangle is a regional transportation service provider in Durham, Orange, and Wake counties. Before the COVID-19 pandemic, GoTriangle offered 14 regional routes that covered the entire region. In 2022, GoTriangle operated its services seven days a week with 78 buses, 11 regional routes, and six-weekday express routes to better serve the communities. In 2022, GoTriangle's fixed-route ridership was 1,464,724.

According to the GoTriangle Onboard Customer Survey, 2023, the ridership of GoTriangle comprised 42% African American and 30% Caucasian/White. Asian riders remained at 15%, the same as in 2019, while Hispanic riders accounted for 7% of the total ridership. Native American riders made up only 1% of the riders.

GoTriangle's riders were asked about the frequency of their service use during a typical week. The data, in Exhibit 8, obtained from the survey indicated that there has been a change in usage patterns since 2019. The number of riders who use GoTriangle's services 4-6 days per week has decreased since 2019. In 2023, only 50% of the riders reported using GoTriangle services 4-5 days per week, compared to 65% in 2019.

Exhibit 8

Frequency of GoTriangle Riders

Frequency	<1 to 1 day	2-3 days	4-6 days	Everyday
Percentage 2019	6%	20%	65%	9%
Percentage 2023	13%	20%	50%	17%

CJI – GoTriangle Onboard Customer Survey, 2023

App Data

GoTriangle has invested in two apps to assist our riders in tracking their trips in real time. GoTriangle, GoRaleigh, GoCary, and GoDurham initially contracted UMO to provide a full-service mobile ticketing app with real-time transit tracking. Due to the COVID-19 pandemic, accepting fares was placed on hold, and the app's rollout was placed on hold. We moved

forward with launching the real-time tracking portion of the app. Our customers can use this app to track all transit agencies' buses in the Triangle, which benefits anyone who uses more than one transit system.

MyRide is the second real-time tracking app and came as part of our CAD AVL package that operations began transitioning to in 2022. In 2023, MyRide was launched for GoTriangle riders to only track their rides on GoTriangle buses. As of August 2023, we averaged approximately 70 UMO downloads a day after the launch. About 71% of our existing riders have downloaded and are using the UMO app, while 29% are utilizing the MyRide.

The 2023 Onboard Customer Survey indicated that fifty-three percent (53%) of GoTriangle customers have a transit app installed on their phones down from 57% in 2019.

Customer Service and Language Link

Based on Exhibit 2, Spanish is the most commonly spoken language among bilingual community members in our service area. Between July 1, 2020, and June 30, 2023, the customer service team of GoTriangle helped 3,408 Spanish-speaking customers. To provide better service to the Spanish-speaking community, GoTriangle has hired three full-time team members who are fluent in Spanish to work in the Regional Information Call Center.

Factor 3:

The nature and importance of programs, activities, and services provided by GoTriangle to the LEP population

Currently, GoTriangle disseminates all information in English and provides surveys and brochures in Spanish. Onboard announcements are made in English, with some announcements translated into Spanish for the benefit of patrons. GoTriangle's customer service personnel all speak English, with some speaking Spanish. The following represent the most essential venues or information types for purposes of ensuring language use is not a barrier to access:

- Customer Service Call Center
- Wayfinding Signage
- Service and Fare Change Information
- Public meetings and public hearings
- Notice to Beneficiaries of Title VI
- Title VI Complaint Procedures and Form
- Riders Guide to access non-fixed route services
- Forms to apply for passes and access to paratransit and on-demand services.

As GoTriangle's Public Participation Plan outlines, the outreach efforts consist of public meetings and community events at schools and non-profit locations. These events specifically focus on reaching out to LEP individuals to understand better their needs and how they can be addressed. GoTriangle conducted 60 LEP outreach events between July 2020 and June 2023.

Exhibit 9
Title VI and LEP Outreach Events

June – July	Title VI Outreach Events	%Title VI Events	LEP Outreach Events	Total Outreach Events	Total # People Engaged
2020-2021	55	22.45%	15	245	3,103
2021-2022	82	16.8%	30	518	7,500
2022-2023	48	63%	15	76	2,802
Totals	185	22%	60	839	13,405

GoTriangle offers fixed-route, vanpool, and paratransit services that are crucial for providing access to work, medical appointments, employment opportunities, shopping, and other quality-of-life events. These services are available to limited English proficient (LEP) individuals. GoTriangle has bilingual bus operators and customer call center staff to serve our LEP customers better. Our bilingual call center representatives have assisted over 3,000 Spanish-speaking customers with their transit needs. GoTriangle did not receive any requests from any other LEP customers.

According to the 2023 Onboard Customer Survey, 65% of our customers reported using our services to travel for work. The results mark a decline from the 70% of customers who used GoTriangle services for work purposes in 2019. Meanwhile, 15% of trips are attributed to school and college. This means that GoTriangle is responsible for transporting a significant portion of its customers (80%) for either work or education, highlighting its contribution to the local economy through the labor force. Another 7% of GoTriangle’s customers indicated using the service for shopping trips. Shopping gradually increased from 4% in 2019 to 7% in 2023, while medical trips only accounted for 3% and recreational trips 4%.

Exhibit 10

Main Trip Purpose for Using GoTriangle Buses

Trip Purpose	2023	2019	2018
Work	65%	70%	72%
School/College	15%	18%	17%
Other	6%	4%	2%
Shopping	7%	4%	3%
Recreational Event	4%	3%	2%
Medical/Dental	3%	2%	3%

GoTriangle’s Onboard Customer Survey, 2023

Factor 4:

The resources available to GoTriangle and overall cost to provide LEP assistance

GoTriangle is committed to ensuring language proficiency does not hinder accessing its services and programs. The transportation service currently offers a variety of translations and interpretations to its customers. GoTriangle translates several documents, including brochures, ad cards, and materials related to fare increases and service changes, into Spanish - the predominant language in the service area. Additionally, GoTriangle is continuously improving public noticing, the website, mobile applications, and supporting project translation and interpretation in languages identified by the community.

GoTriangle utilizes bilingual staff to provide translation review, onsite outreach, and assistance with interpretation at specific outreach events.

GoTriangle's operating budget does not have a specific line item for providing language access and outreach; instead, costs for translators and outsourced translation are split among several different departments, depending on which department is responsible for the outreach project being undertaken.

Translated documents include ad cards, direct mailers, station kiosk signs, customer take-ones, meeting notices, brochures, PowerPoint presentations, and other customer outreach materials. Additional language assistance costs include expenditures for Language Line usage. GoTriangle's translation is in Spanish, which covers our limited English proficiency customer base. GoTriangle will include other "Safe Harbor" languages in translation processes per Federal guidance to translate vital documents. However, GoTriangle reserves the right to translate documents into additional languages as resources allow and circumstances dictate.

The Communications and Public Affairs Department sets aside funds annually to translate signage, rider guides, and notices and provide public meeting interpretation. These expenses are typically associated with large-scale projects undertaken by the Region. GoTriangle also offer a website that allows for translations based on the user's browser setting.

Strategies for engaging individuals with limited English proficiency include:

1. Upon advance notice, translators will be provided;
2. Language identification flashcards;
3. Written translation of vital documents (identified by safe harbor provision);
4. One-on-one assistance through outreach efforts;
5. Increase visibility of website information; and
6. To the extent feasible, continue to assign bilingual staff for community events, public hearings, and on customer service lines.

Item 3 above: GoTriangle has determined language groups in its service area that require written translations of "vital documents" based on demographic analysis and Safe Harbor criteria.

Notice to LEP Persons about Availability of Language Assistance

According to federal guidelines, "vital" written documents are those that are crucial for accessing services and benefits, as well as for understanding one's legal rights. These documents may include complaint forms, notifications of upcoming fare and service changes, and notices regarding reductions in benefits or services. It is also required to provide free language assistance to individuals with limited English proficiency (LEP) by providing exact translations or summaries of essential contents.

To ensure LEP persons are aware of language assistance opportunities, GoTriangle will continue or begin to:

- Post notices of availability of language assistance in safe harbor languages on vital documents, when necessary.
- Insert language assistance notification on GoTriangle's website (free of charge), and promotional materials.
- Include "Free Language Assistance" and translated equivalents on all appropriate materials including public hearing notices, fare and service change information notices, and outreach materials.
- Include taglines offering oral interpretation in the safe harbor languages on printed vital documents where only primarily languages are available.
 - Ex: For Free Language Assistance, Please Call

- Use an automated telephone voice mail attendant or menu system in common languages encountered, with Spanish as the first priority.
- Train staff on best practices when working with interpreters and translators.

Staff LEP Training

GoTriangle is dedicated to providing excellent customer service to all of its passengers. This includes recognizing and accommodating the unique needs of riders with limited English proficiency (LEP). To achieve this, GoTriangle is committed to training its front-line and other employees on accessing language assistance measures within the organization. Additional or refresher training will also be provided as needed.

Furthermore, GoTriangle is considering several training activities that could quickly expand its ability to ensure access for LEP individuals. These activities will focus on improving employees' language skills and cultural competency to serve the diverse community of riders better.

- Providing information on GoTriangle's Title VI procedures and LEP responsibilities to all employees.
- Inform employees of the language assistance services offered to the public.
- Ensure all employees are aware and have access to the use of language identification flashcards or "I Speak Cards."
- Establishing an agency-wide list of bilingual employees and their skill levels to assist in outreach, translation, interpretation or review of materials.
- Survey other transit agencies on models for utilizing employees' non-English skills and compensating them for it.
- Expand the agency ambassador program by adding non-English language skills as a desired qualification in recruitment efforts.
- Provide pins for bus drives that identify the language they speak for passengers.
- Train staff on working with interpreters and bilingual staff at outreach events to improve efficiency and lessen the intimidation of working with multilingual communities.
- Provide checklist for interpretation to ensure that terminology is responsive and accurate for communities.

Monitoring

According to Section VII-5 of DOT LEP Guidance, recipients are advised to have an ongoing process for determining whether new documents, programs, services, and activities must be made accessible for LEP individuals. It may also be helpful to provide notice of any changes in services to the LEP public and employees.

GoTriangle will continuously monitor activities and information that require LEP accessibility. This includes various methods of monitoring and updates outlined below.

1. On a triennial basis, GoTriangle reviews and updates Census and other data and updates its LAP plan as appropriate.
2. GoTriangle staff will review the language access plan for ideas and additions.
3. GoTriangle will review its survey questions to ask specifically about LEP ridership experience.
4. Analyze data from ridership survey every three years.
5. Review annually the current LEP population in the service area
6. Determine how the needs of LEP persons have been addressed.
7. Determine as to whether the need for, and/or extent of, translation services has changed.
8. Assess new customer information documents prior to production to determine whether the document is “vital” and what level of translation is needed.
9. Determine whether GoTriangle’s financial resources are sufficient to fund language assistance resources as needed.
10. Determine whether GoTriangle has fully complied with the goals of the LAP.
11. Review annually the accessibility of GoTriangle’s vital documents and other documents. New documents will be translated and posted to the website.

RECOMMENDATIONS FOR LAP IMPLEMENTATION

GoTriangle recognizes the importance of providing accessibility for LEP customers to GoTriangle's services and information. While GoTriangle has outlined the requirements to comply with Title VI, more can be done to ensure that LEP populations are engaged.

With the increased use of mobile phones, an improved website accessible by QR codes could be helpful for passengers looking for written information or are uncomfortable calling.

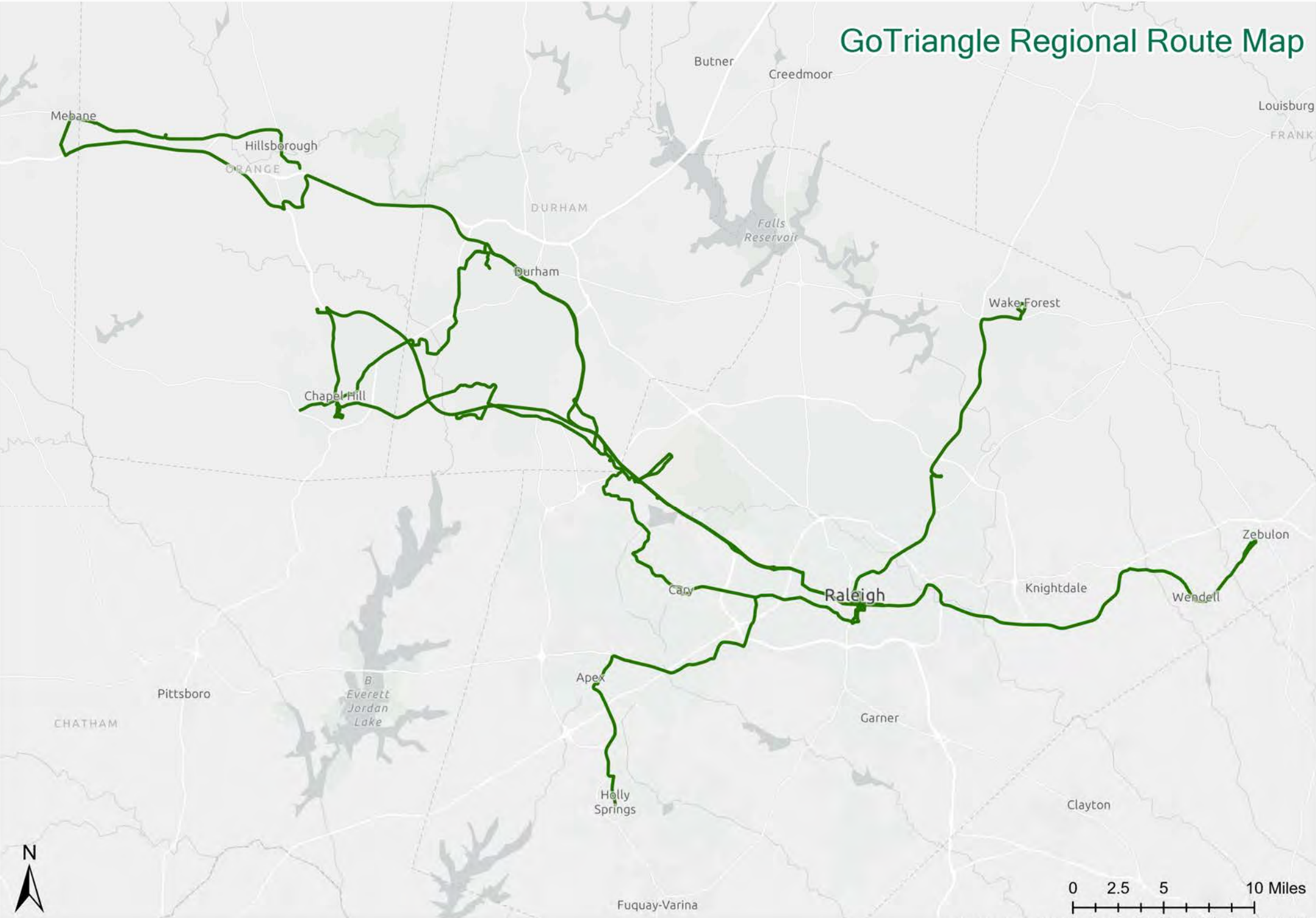
GoTriangle's agreement with Language Link ended in 2020. As a result, we need to evaluate our interpretation service requirements for non-English-speaking communities. These services may include, but are not limited to, video or telephone interpretations, American Sign Language (ASL), and written translation services. We strive to make these services accessible to limited English proficiency (LEP) customers and community members.

As we progress, we must improve the coordination between different departments to ensure that the outreach methods used to target Limited English Proficient (LEP) populations are appropriately conducted. We need to work with translation services to enhance the translation of GoTriangle's website, and we should increase the use of symbols, pictograms, and other non-written forms of communication to disseminate critical information to LEP individuals. Additionally, we need to ensure that the surveying questions accurately capture the LEP populations' of our ridership.

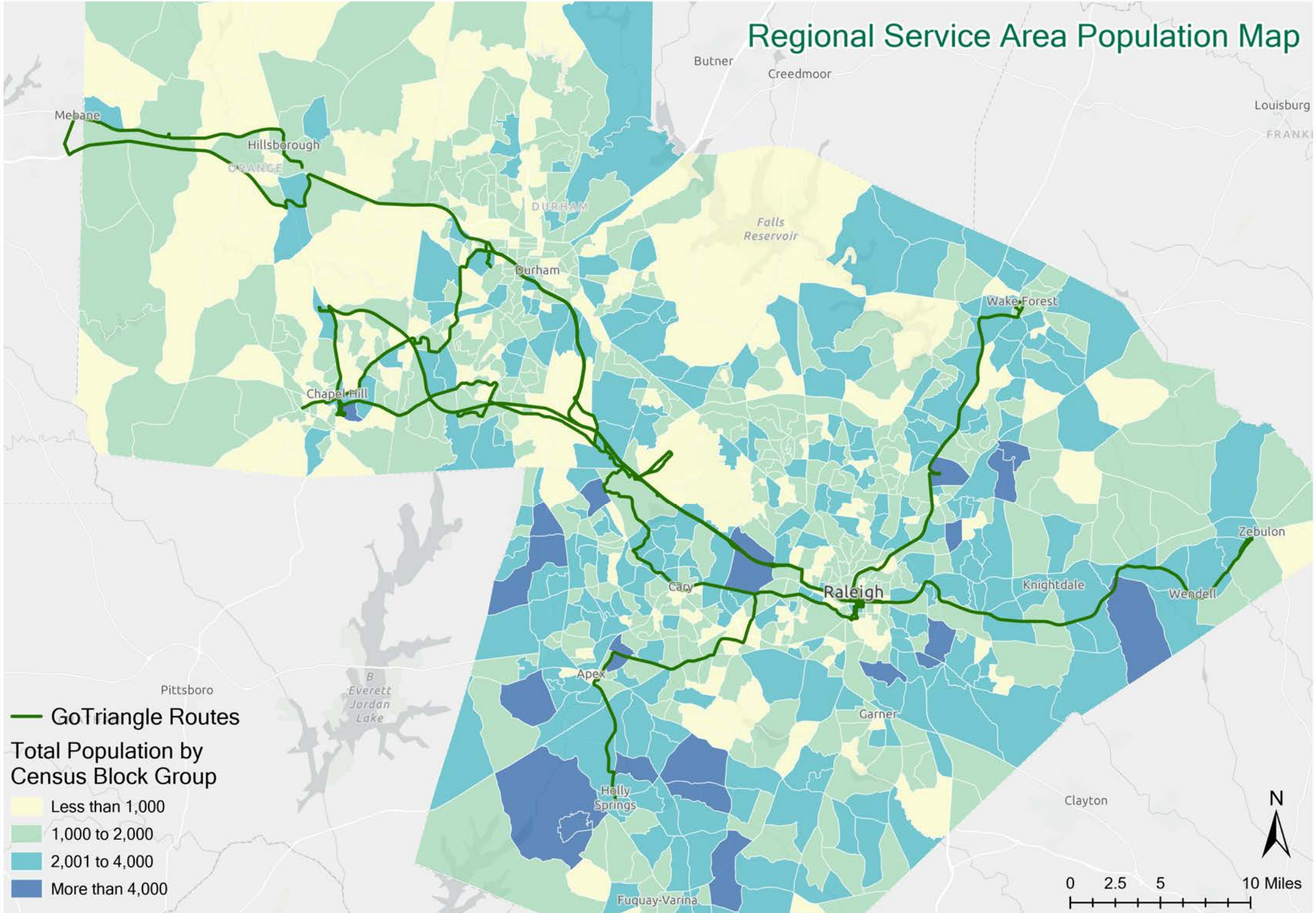
Appendix – D

Demographic and Service Profile Maps

GoTriangle Regional Route Map



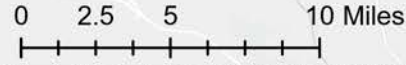
Regional Service Area Population Map



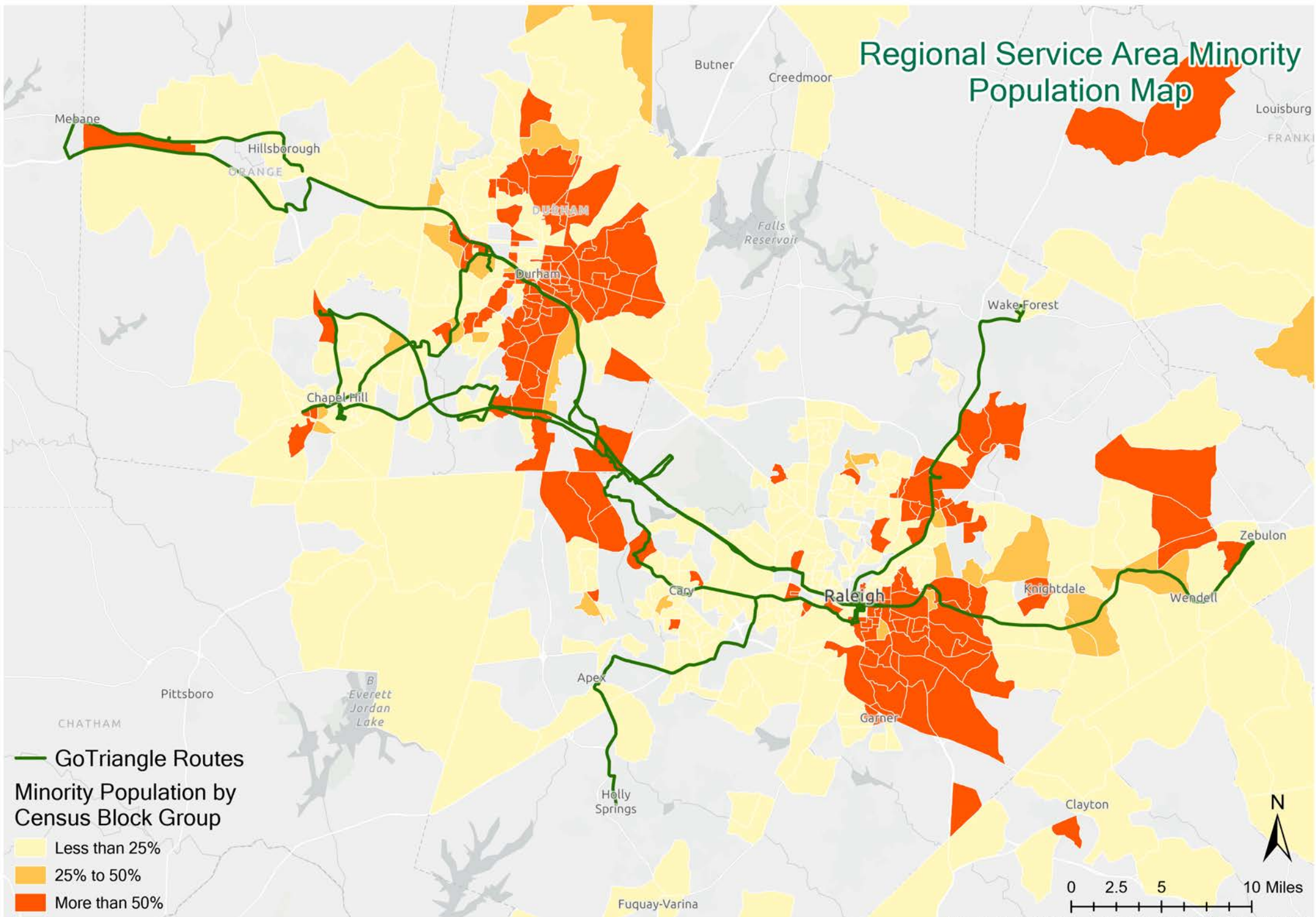
— GoTriangle Routes

Total Population by
Census Block Group

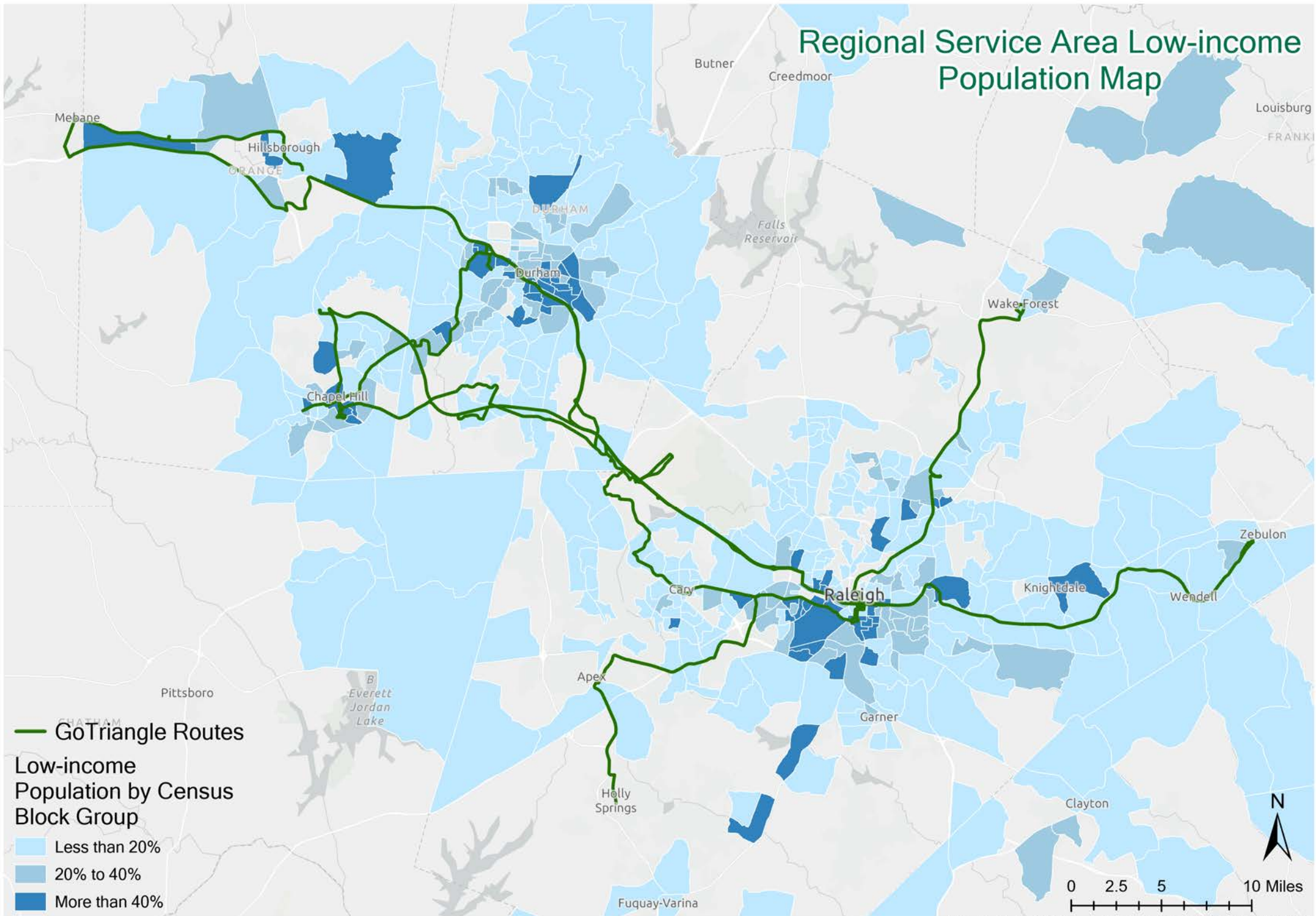
- Less than 1,000
- 1,000 to 2,000
- 2,001 to 4,000
- More than 4,000



Regional Service Area Minority Population Map



Regional Service Area Low-income Population Map

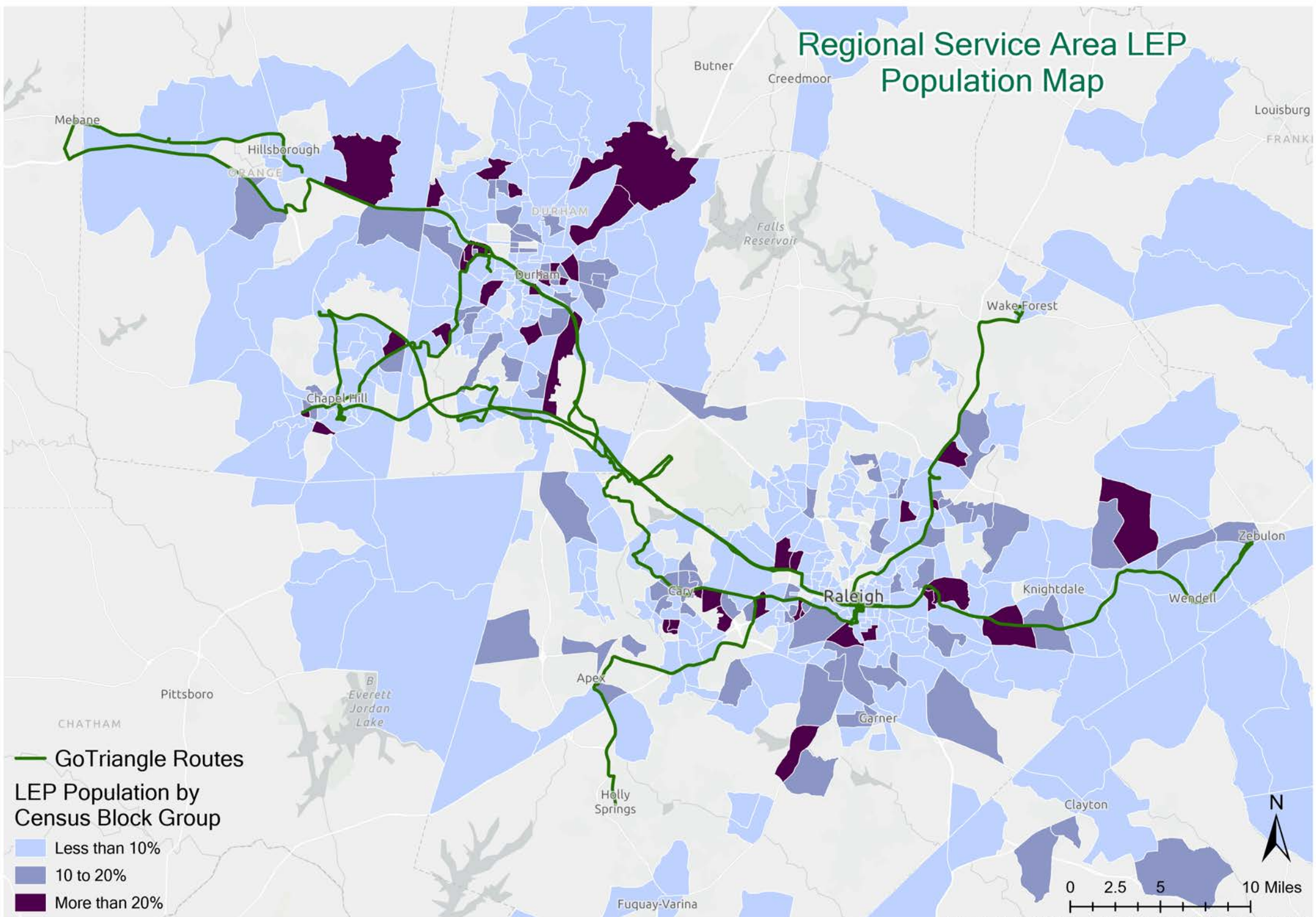


GoTriangle Routes

Low-income Population by Census Block Group

- Less than 20%
- 20% to 40%
- More than 40%

Regional Service Area LEP Population Map



— GoTriangle Routes

LEP Population by
Census Block Group

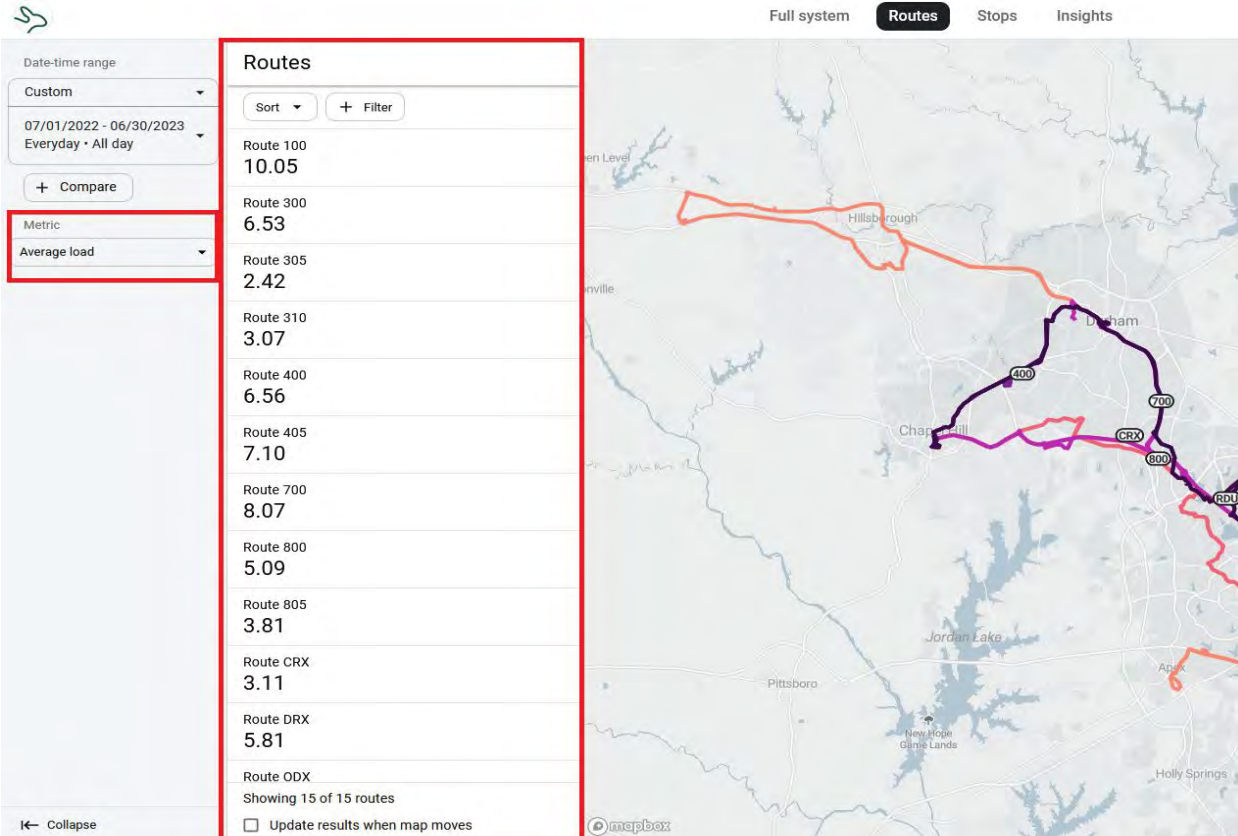
- Less than 10%
- 10 to 20%
- More than 20%

Appendix – E

















Monitoring of Transit Services

2023 Bus Load Factor

Route	Average Load	Max Bus Capacity	Bus Load Capacity
100 Raleigh-Airport-RTC	10.05	36	27.92%
300 RTC-Cary-Raleigh	6.53	36	18.14%
305 Lake Pine-Cary-Raleigh	2.42	36	6.72%
310 - Cary - Wake Tech RTP - RTC	3.07	36	8.53%
400 Durham-Chapel Hill	6.56	36	18.22%
405 Durham-Chapel Hill-Carrboro	7.1	36	19.72%
420 Hillsborough-Chapel Hill		36	0.00%
700 Durham-RTC	8.07	36	22.42%
800 Chapel Hill-Southpoint-RTC	5.09	36	14.14%
805 Chapel Hill-Woodcroft-RTC	3.81	36	10.58%
CRX Chapel Hill-Raleigh Express	3.11	36	8.64%
DRX Durham-Raleigh Express	5.81	36	16.14%
ODX Orange-Durham Express	2.66	36	7.39%
RDU Airport Shuttle	2.7	36	7.50%
WRX Wake Forest-Raleigh Express	1.08	36	3.00%
ZWX Zebulon-Wendell-Raleigh Express	3.86	36	10.72%
BASE	Hopthru		100.00%



2023 Title VI Monitoring Results

Route	Service Type	Minority ridership 10% greater than system average	On-Time Performance	Vehicle Load Factor (out of 1.00)	Peak Headway	Peak Daily Ridership	Off-Peak Headway	Off-Peak Daily Ridership
100 Raleigh-Airport-RTC	Core (Local)	Yes	72.86%	 0.28	30 min	767	60 min	513
300 RTC-Cary-Raleigh	Core (Local)	Yes	75.58%	 0.18	30 min	420	60 min	-
305 Lake Pine-Cary-Raleigh	Regional (Commuter)	Yes	56.72%	 0.07	60 min	59	-	-
310 - Cary - Wake Tech RTP - RTC	Regional (Commuter)	Yes	72.87%	 0.09	60 min	105	-	-
400 Durham-Chapel Hill	Core (Local)	Yes	73.38%	 0.18	30 min	912	60 min	371
405 Durham-Chapel Hill-Carrboro	Regional (Commuter)	Yes	65.84%	 0.20	30 min	398	-	-
420 Hillsborough-Chapel Hill	Regional (Commuter)	Yes	72.58%	0.00	60 min	120	-	-
700 Durham-RTC	Core (Local)	Yes	67.05%	 0.22	30 min	518	60 min	234
800 Chapel Hill-Southpoint-RTC	Core (Local)	No	71.97%	 0.14	30 min	547	60 min	198
805 Chapel Hill-Woodcroft-RTC	Regional (Commuter)	No	69.78%	 0.11	60 min	151	-	-
CRX Chapel Hill-Raleigh Express	Express	No	65.32%	 0.09	60 min	176	-	-
DRX Durham-Raleigh Express	Express	No	67.08%	 0.16	30 min	262	-	-
ODX Orange-Durham Express	Express	No	73.60%	 0.07	60 min	49	-	-
RDU Airport Shuttle	Express	No	80.01%	 0.08	30 min	136	-	-
WRX Wake Forest-Raleigh Express	Express	No	82.10%	 0.03	60 min	154	-	31
ZWX Zebulon-Wendell-Raleigh Express	Express	No	82.20%	 0.11	60 min	163	-	21
System Average		65.4%		 1.00				

2023 and 2019 Onboard Survey

Swiftly

Hopthru (Metric: Average Daily Load per Route / Agency Maximum Bus Load Capacity)

GoT Website

Hopthru

GoT Website

Hopthru

Source:

Time Period:

Notes:

2023 & 2019 Routes that has less than 10 respondents, previous roll of Onboard Survey will be utilized

July 22 - June 23

FY 23 Average load - Average of recorded loads for all segments / 36 Agency Max Load Cap

Jun-23

FY 23

Jun-23

FY 23

Data below from Qrtly. Report

Operated by Chapel Hill

Operated by GoRaleigh

Operated by GoRaleigh

OVERALL AVERAGE

Minority 981 65.40%
 Non Minority 519 34.60%
 Total 1500 100.00%
 Against the Average

2023 Onboard Survey																	
100		300		305		400		405		700		800		RDU			
151	89%	102	92%	24	86%	234	81%	23	79%	31	94%	174	74%	11	61%		
18	11%	9	8%	4	14%	55	19%	6	21%	2	6%	62	26%	7	39%		
169	100%	111	100%	28	100%	289	100%	29	100%	33	100%	236	100%	18	100%		
23.60%		26.60%		20.60%		15.60%		13.60%		28.60%		8.60%		-4.29%			

2019 Onboard Survey													
805		ODX		WRX*		ZWX*		CRX		DRX		420*	
58	46%	18	49%	5	55.56%	6	42.86%	39	27.86%	98	45.58%	18	28.57%
69	54%	19	51%	4	44.44%	8	57.14%	101	72.14%	117	54.42%	45	71.43%
127	100%	37	100%	9	100.00%	14	100.00%	140	100.00%	215	100.00%	63	100.00%
-19.73%		-16.75%		-9.84%		-22.54%		-37.54%		-19.82%		-36.83%	

Appendix – F

Major Fare and Service Changes:

- Title VI Service Equity Analysis, January 21, 2021
- Title VI Service Equity Analysis, June 2, 2021
- Title VI Service Equity Analysis, September 27, 2021
- Title VI Service Equity Analysis, May 20, 2022
- Title VI Service Equity Analysis, August 23, 2023
- Title VI Fare Equity Analysis, March 2023



Title VI Service Equity Analysis – Routes 311 and NRX

Service Suspension

January 21, 2021

Introduction

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. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is an analysis of GoTriangle's recommended service changes to routes 311 and NRX for April 1, 2021.

Key Findings

- Disparate impact amongst minorities due to route NRX suspension
- While a disproportionate burden to low income population was identified on the 311, it is a negative delta, thus indicating that a lower low income population is affected.
- Reduced travel demand to RTP due to COVID-19 pandemic reduces the number of people affected

Title VI Definitions and Policies

Definition of Minority and Low-Income Populations

Minority Population

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 Population

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.

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."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis:

- Major Service Change Policy
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

The requirement for these policies comes from Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

Major Service Change Policy

A "major service change" is defined as follows:

- The addition or elimination of a route
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as 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."

These disparate impact policies establish thresholds for determining when impacts of major service changes disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impacts to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations’ more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

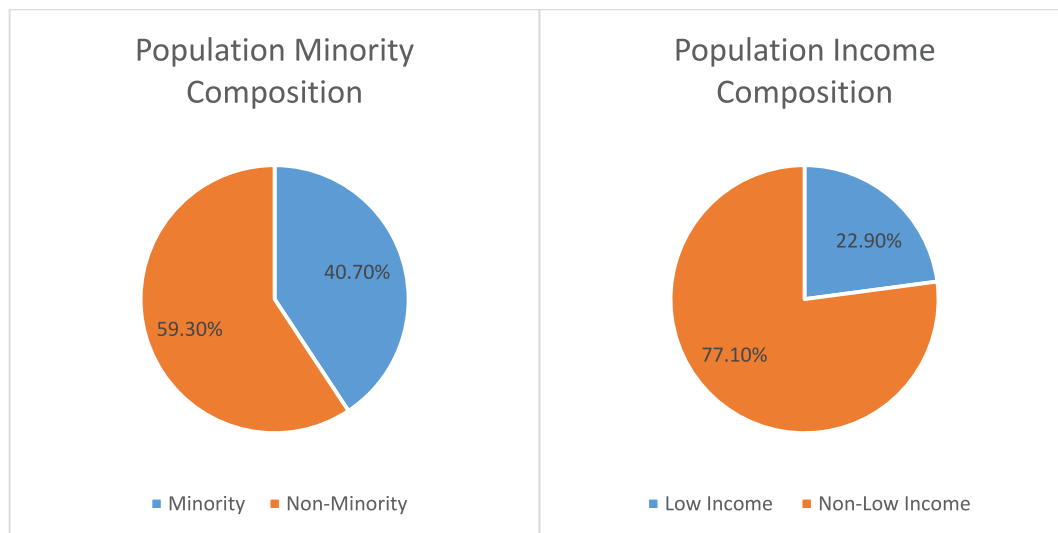
For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

GoTriangle System Profile

GoTriangle provides service to Wake, Durham, and Orange counties. The entire area within these counties is considered the GoTriangle service area.

Race, Ethnicity, and Low Income

According to data provided by Remix*, 40.7% of the population within ¼ mile of a GoTriangle bus stop identifies as minority and 22.9% of the population living within ¼ mile of a GoTriangle bus stop is considered low income as defined by the FTA Circular 4702.1A



*2014-2018 ACS 5-year estimates

Description of Service Change

The proposed service change includes a suspension of the Route 311 and the North-Raleigh Express (NRX). Since this is a service elimination, it is considered a major service change and must be evaluated for impacts to minority and low income populations.

Methodology

The methodology listed below was used to assess the impacts of each route:

1. Identify the current and proposed alignments for each route in Remix
 - The alignments for the current and proposed alignments were stored in Remix under two different projects.
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within $\frac{1}{4}$ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.
4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within $\frac{1}{4}$ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average $\frac{1}{4}$ mile population and the total number of annual trips per route were automatically calculated, the final pieces needed before calculating people trips
6. Determine the Delta for each route and the system overall
 - The Delta is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the Delta exceeds 10%, that means there is a disparate or disproportionate impact.

Service Change Analysis

For proposed service changes, the percentages of impacted minority and low-income populations is calculated and evaluated according to the disparate impact policy and disproportionate burden policy. If the percentage of impacted minority and low-income populations differs by more than 10% from the current routes, the recommended service change will be considered disparate to minority and low-income populations.

Disparate and Disproportionate Impact Analysis

The analysis does not show a disproportionate impact to low income populations on the NRX or minority populations on the Route 311.

The analysis shows that the service suspension of Route 311 has a disproportionate burden on low-income riders. However, while 7.3% of the population affected by its service suspension are low income, the system average is 22.9% low income. Thus, the route has a lower low-income population than the system average.

However, service suspension of route NRX indicates a disparate impact on minorities. Minorities represent 53.6% of the population affected from the suspension, which is over the area average by 12.9%, exceeding the 10% limit.

As a whole, the proposed service change does/does not have a disparate impact on minority or low income populations.

Impact Analysis Table	Low Income	Disproportionate Burden?	Minority	Disparate Impact?
311 (Delta)	7.3% (-15.6%)*	Yes	37.8% (-2.9%)	No
NRX (Delta)	15.6% (-7.6%)	No	53.6% (12.9%)*	Yes
Service Area Average	22.9%		40.7%	

*exceeds FTA's 10% limit

People-Trip calculations

As a result of the service suspensions, tens of millions of people-trips are lost. The table below puts into numbers the amount of change that low income and minority riders bear during service suspension. People-trips for a route are calculated by multiplying the total population within ¼ mile of bus stops by total amount of annual bus trips for that route. This is a metric used to measure potential ridership. The numbers in the table below show the amount of riders potentially lost and does not reflect actual ridership and ridership projections. Routes 311 and NRX rank in the bottom three of GoTriangle-operated routes in terms of bus trips and passenger trips, and bottom five in terms of total population within ¼ mile of its bus stops.

People-trips lost	Total people-trips	Low-income people-trips	Minority people-trips
311	-33,697,485	-2,475,738 (7.3%)	-12,741,840 (37.8%)
NRX	-5,032,170	-786,235 (15.6%)	-2,695,860 (53.6%)

Additional Demographic Analysis

Amongst the population within the ¼-mile radii of the 311's bus stops, 7.35% of the 311's population are classified as low-income, and 34.5% of the 311's population are classified as minorities. These numbers can be compared to the demographic breakdown of the 311's ridership using the October 2019 Onboard Survey. According to the Onboard Survey, 32% of riders were low-income (at or below 150% poverty). This is above the 20% system-wide average. 59% of survey respondents were ethnic minorities. This is above the 54% system-wide average. Thus, the Route 311 serves a population that is lower income than the GoTriangle system average.

Doing the same analysis for the NRX, 15.7% of the NRX's ¼-mile population is low-income, and 53.5% are minorities. The following percentages reported from the on board survey are statistics combining respondents on the NRX and GoRaleigh operated routes. 18% of NRX respondents in the onboard survey identified as low-income riders, and 40% identified as minorities.

Given the commuter-focused service that the NRX and 311 provides, riders are likely using park-and-ride facilities to use both services, meaning they are being drawn much further than ¼-mile away. This possibility reflects in the table below.

Demographic Analysis	Low-income population	Low-income ridership reported in on board survey	Minority population	Minority ridership reported in on board survey
311	7.35%	32%	34.5%	59%
NRX	15.7%	18%	53.5%	40%
System	22.9%	20%	40.7%	54%

Conclusions

The proposal to suspend the Route 311 and NRX considers the change in ridership demand caused by the COVID-19 pandemic. Since many commuters to RTP are working from home, staff anticipates ridership demand for these routes to be severely reduced at this time. In addition, the routes were low performing routes pre-pandemic and it is anticipated that ridership would be further reduced if the routes were to resume operation at this time.

The Title VI analysis identified no disproportionate impact on low-income riders for the NRX or a disparate impact to minorities for route 311. However, it identified a disparate impact on minorities for route NRX and disproportionate burden to low income people on the Route 311.

- The negative deltas indicate that low-income and minorities are potentially less affected by the service suspension than on average
- The 311 and NRX capture a rider base that well succeeds a ¼-mile radius, possibly higher than much of the system
 - Rider base not accounted for in people-trips calculations
- Routes 311 and NRX had daily ridership of 68 and 35, respectively. With RTP employees working remotely during the pandemic, travel demand to RTP is severely reduced. The service suspension impacts a small number of people compared to the 6,105 daily boardings in the FY20 annual performance report.



Title VI Service Equity Analysis – 2021 Service Reductions due to Operator Shortages

June 2, 2021

Report compiled by David Jerrido, Transit Service Planner

Introduction

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. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is an analysis of GoTriangle's service reductions between October 2020 and November 2021.

Key Findings

- GoTriangle reduced service on several routes due to low operator staffing levels in Jan and Nov 2021. This analysis is provided to the Board of Trustees within 12 months of the temporary service changes.
- Per the 2014 approved policy, the changes implemented on the Routes 301, 310, 800S, 805, and Saturday service on 100/400/700/800 qualify as major service changes
- The changes altogether do not have a disparate impacts to minorities nor do they impose a disproportionate burden on low-income riders in the GoTriangle system
- Individually, minority riders are impacted more than the average for the Route 310 frequency reduction, route 800S suspension and the Route 700 Saturday frequency reduction. Low income riders carry a disproportionate burden than average for Route 400 Saturday frequency reduction. Service continues to be provided in these corridors, but less often.

Title VI Definitions and Policies

Definition of Minority and Low-Income Populations

Minority Population

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 Population

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.

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."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis:

- Major Service Change Policy
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

The requirement for these policies comes from Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

Major Service Change Policy

A "major service change" is defined as follows:

- The addition or elimination of a route
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as 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.”

These disparate impact policies establish thresholds for determining when impacts of major service changes disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impacts to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

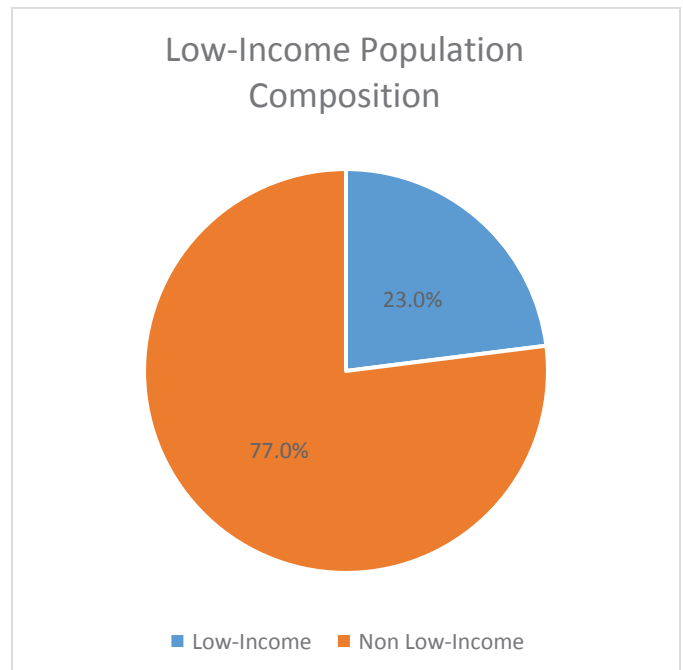
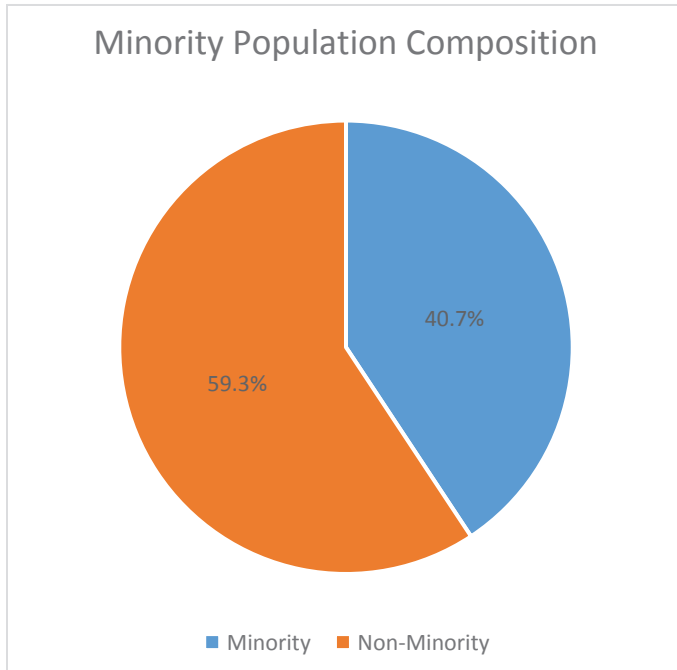
For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

GoTriangle System Profile

GoTriangle provides service to Wake, Durham, and Orange counties. The entire area within these counties is considered the GoTriangle service area.

Race, Ethnicity, and Low Income

According to data provided by Remix*, 40.7% of the population within ¼ mile of a GoTriangle bus stop identifies as minority and 23% of the population living within ¼ mile of a GoTriangle bus stop is considered low income as defined by the FTA Circular 4702.1A.



*2015-2019 ACS 5-year estimates

Description of Service Change

In June and November of 2021, GoTriangle reduced service on several routes due to low operator staffing levels. The suspended routes and trips were identified so as to minimize impact to customers. Ridership, trends in worker commutes, and university class schedule changes were taken into consideration when developing these changes.

The service changes included adjustments or reductions on the following services:

- **Route 300:** Minor schedule changes and ending service at 10pm at Cary Depot on Saturdays
- **Route 301:** Suspended until further notice
- **Route 305:** Revised schedule
- **Route 310:** Revised schedule with service every 60 minutes all day
- **Route 420:** Suspend one AM and one PM block
- **Route 800:** Minor schedule changes
- **Route 800S:** Suspended until further notice
- **Route 805:** Service reduced to every 60 minutes
- **Route CRX:** Minor schedule changes with some trips suspended
- **Route DRX:** Suspend two AM and two PM blocks
- Reduce **Saturday service** to hourly on routes 100, 400, 700 and 800

Major Service Changes

Per the approved GoTriangle major service change policy, the following service reductions are considered a major service change and trigger a service equity analysis:

- **Route 301:** Suspended until further notice

- **Route 310:** Revised schedule with service every 60 minutes all day
- **Route 800S:** Suspended until further notice
- **Route 805:** Service reduced to every 60 minutes
- Reduce **Saturday service** to hourly on routes 100, 400, 700 and 800

Methodology

Staff utilized the following methodology listed below to determine the impacts of the changes altogether and of each of the major service changes individually:

1. Identify the alignments before and after the service changes in Remix
 - The alignments used to calculate the Title VI impacts were the networks from October 2020 and November 2021.
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within ¼ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.
4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within ¼ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average ¼ mile population and the total number of annual trips per route were automatically calculated, the final pieces needed before calculating people trips. People-trips are calculated by multiplying the population living with ¼ mile of bus stops by the number of trips taken by a route.
6. Determine the Delta for each route and the system overall
 - The Delta is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the Delta exceeds +/-10%, that means there is a disparate or disproportionate impact.

Service Change Analysis

For proposed service changes, the percentages of impacted minority and low-income populations is calculated and evaluated according to the disparate impact policy and disproportionate burden policy. If the percentage of impacted minority and low-income populations differs by more than 10% from the current routes, the recommended service change will be considered disparate to minority and disproportionate to low-income populations. Since this is an overall analysis of service reductions in 2021, the system will be analyzed before and after the service reductions in 2021.

Disparate Impact and Disproportionate Burden Analysis

System-wide Impacts

The system reductions as a whole did not identify a disparate impact amongst minority riders nor a disproportionate burden on low-income riders. The Delta for Minority riders is -0.9%, and the Delta for low-income riders is 0.6% (see Table 1). Neither of these numbers exceed the +/-10% threshold to determine a disparate or disproportionate impact.

Table 1: System-wide service equity analysis

	Low-income	Disproportionate Burden?	Minority	Disparate Impact?
Change Borne (Delta)	23.6% (0.6%)	No	39.8% (-0.9%)	No
Service Area Average	23%		40.7%	

Route-level impacts

When looking at each of the major service changes individually, the impacts on riders vary by route (see Table 2). The percentages shown in parentheses indicate the Delta from the system area averages.

Table 2: Route level service equity analysis

	Low-income change borne (Delta)	Disproportionate Burden?	Minority change borne (Delta)	Disparate Impact?
301	25.2% (2.2%)	No	39.6% (-1.1%)	No
310	3% (-20%)	Yes	57.3% (16.6%)	Yes
800S	23.5% (0.5%)	No	29.5% (-11.2%)	Yes
805	17.6% (-5.4%)	No	43.5% (2.8%)	No
100 Sat	26.7% (3.7%)	No	25.8% (-14.9%)	Yes
400 Sat	42.9% (19.9%)	Yes	41.7% (1%)	No
700 Sat	12.4% (-10.6%)	Yes	60% (19.3%)	Yes
800 Sat	22.3% (0.7%)	No	35.7% (-5%)	No

A discussion on the impacts of the service reductions with either or both a disparate impact to minorities or a disproportionate burden to low-income riders is provided below:

Route 310

The service reduction on Route 310 results in a 20% below average disproportionate burden on low-income riders and a 16.6% above average disparate impact on minority riders. While low-income riders are less impacted by the loss in service, minority riders are more impacted by the frequency reduction.

Route 800S

The suspension of route 800S results in an 11.2% below average disparate impact on minority riders. This means the suspension affects minority riders much less than average. Route 800 continues to provide service within the corridor, albeit less frequently.

Reduction of Saturday frequency on Routes 100, 400 and 700

The service reduction of **route 100** results in a 14.9% below average disparate impact amongst minorities meaning that minorities are much less impacted by the loss of service frequency.

The service reduction of **route 400** results in a 19.9% above average disproportionate burden amongst low-income riders. The loss of service frequency impacts low-income riders more than average.

The service reduction of **route 700** results in a 10.6% below average disproportionate burden on low-income riders and a 19.3% above average disparate impact on minority riders. Route 700's change has a much greater impact on minority riders than average, but a below average impact on low-income riders.

Conclusions

Collectively, the service reductions implemented in 2021 due to the operator shortage do not put a disproportionate burden on low-income riders and do not disparately impact minority riders.

There are some notable impacts when looking at these changes on the route-level. Some of the reductions impact minorities and/or low income riders greater than the system area average:

- Minority riders are impacted more than the average for the Route 310 frequency reduction, route 800S suspension and the Route 700 Saturday frequency reduction.
- Low income riders carry a disproportionate burden than average for Route 400 Saturday frequency reduction

Service continues to be available in these corridors although less often.

GoTriangle continues to monitor the operator shortage and works to provide the most equitable and adequate service given the limited resources.



Title VI Service Equity Analysis

RTC-RDU-Raleigh service corridor continuation of current service structure until further notice

September 27, 2021

Introduction

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. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is an analysis of GoTriangle's service changes in the Raleigh-RDU-RTC corridor area inclusive of the rerouting of route 100, operations of the RDU Shuttle and suspension of Route 105.

Key Findings

- Disparate impact amongst minorities due to route 105 suspension
- Minimal impact amongst minorities that is not disproportionate

Title VI Definitions and Policies

Definition of Minority and Low-Income Populations

Minority Population

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 Population

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.

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."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis:

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The requirement for these policies comes from Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

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- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
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Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as 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."

These disparate impact policies establish thresholds for determining when impacts of major service changes disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impacts to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

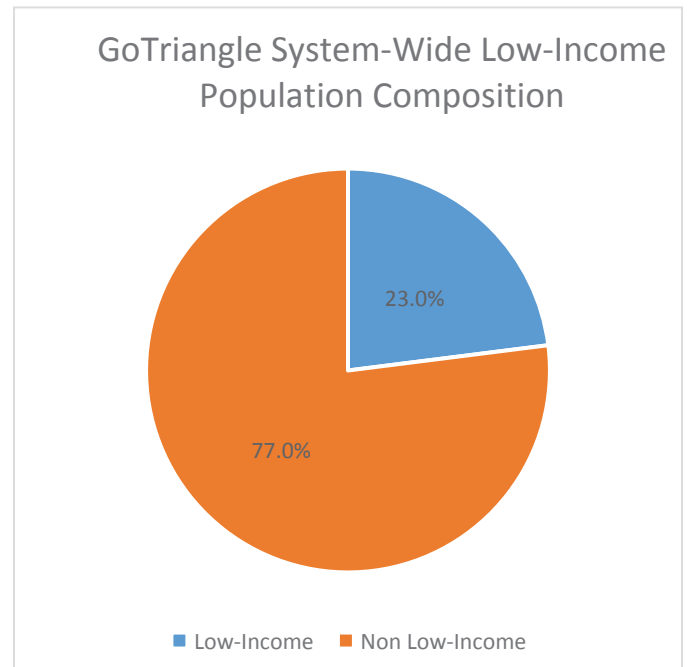
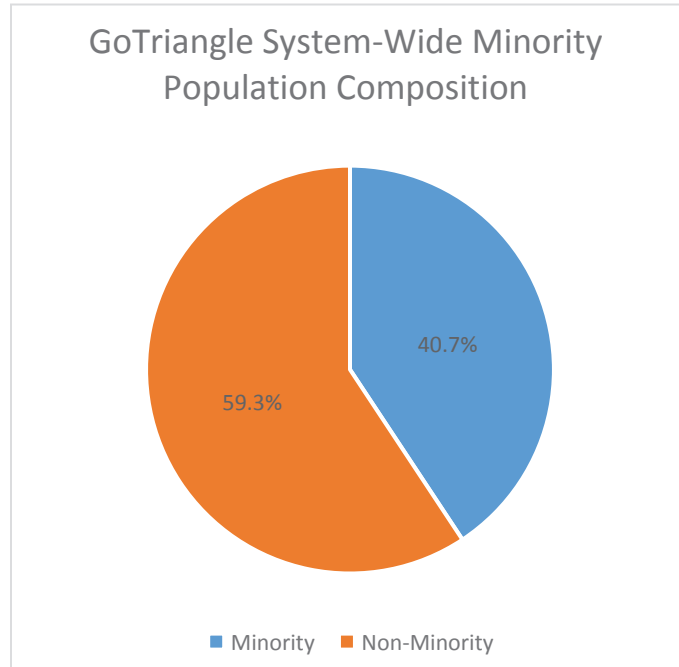
For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

GoTriangle System Profile

GoTriangle provides service to Wake, Durham, and Orange counties. The entire area within these counties is considered the GoTriangle service area.

Race, Ethnicity, and Low Income

According to data provided by Remix*, 40.7% of the population within ¼ mile of a GoTriangle bus stop identifies as minority and 23% of the population living within ¼ mile of a GoTriangle bus stop is considered low income as defined by the FTA Circular 4702.1A.



*2015-2019 ACS 5-year estimates

Description of Service Change

The proposed service changes include continuing until further notice the suspension of Route 105, the re-alignment of Routes 100 and the operations of the RDU Shuttle. These changes allow route 100 to operate route 105's alignment during the morning peak, midday, and afternoon peak. Route 100 serves RDU airport on Monday – Saturday nights and all Sundays. The RDU Shuttle operates between the Regional Transit Center and RDU Airport Mondays through Saturdays from 6:00am to 6:30pm.

Methodology

The methodology listed below was used to assess the impacts of each route:

1. Identify the current and proposed alignments for each route in Remix
 - The alignments for the current and proposed alignments were stored in Remix under two different projects.
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within ¼ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.
4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within ¼ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average ¼ mile population and the total number of annual trips per route were automatically calculated, the final pieces needed before calculating people trips
6. Determine the Delta for each route and the system overall
 - The Delta is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the Delta exceeds 10%, that means there is a disparate or disproportionate impact.

Service Change Analysis

For proposed service changes, the percentages of impacted minority and low-income populations is calculated and evaluated according to the disparate impact policy and disproportionate burden policy. If the percentage of impacted minority and low-income populations differs by more than 10% from the current routes, the recommended service change will be considered disparate to minority and disproportionate to low-income populations.

Disparate and Disproportionate Impact Analysis

The analysis shows a disparate impact amongst minority riders and does NOT show a disproportionate impact amongst low-income riders. The Delta for Minority riders is -18.2%, and the Delta for low-income riders is 2.2%. The area average is 40.7% for minorities and 23% for low-income riders. Comparing the previous 100/105 service to the current 100/RDU Shuttle service, there are a total of 66,984,270 trips lost annually. 15,078,130 (22.5%) of those trips are minority, and 16,884,950 trips are low-income (25.2%).

Impact Analysis Table	Low Income	Disproportionate Burden?	Minority	Disparate Impact?
100/105/RDU (Delta)	25.2% (2.2%)	No	22.5% (-18.2%)*	Yes
Service Area Average	23%		40.7%	

*exceeds FTA's 10% limit

People-trips lost	Total people-trips	Low-income people-trips	Minority people-trips
100/105/RDU (% of people-trips)	-66,984,270 (100%)	-16,884,950 (25.2%)	-15,078,130 (22.5%)

The disparate impact on minorities is a positive impact because there are significantly fewer minorities that bear the suspension of the 105. While -18.2% exceeds the +-10% threshold, this number means the minority population that is affected is 18.2% below average. The loss in people-trips comes from the stripped peak-hour service that was provided by the 105. There are no coverage differences between the former and current services as the 100 currently adopts the 105 routing and the RDU Shuttle covers daytime RDU service. Span of service remains unchanged.

Conclusions

The Title VI analysis identified no disproportionate impact amongst low income riders. A positive disparate impact amongst minority riders was identified as minority riders are significantly less impacted than on average.

- The 2.2% low-income impact does not exceed the 10% threshold
- The -18.2% minority impact indicates a much lower rate of minority riders bearing the service change



Title VI Service Equity Analysis – Fuquay-Varina to Raleigh Express (Route FRX)

Service Elimination

May 20, 2022

Report compiled by David Jerrido, Transit Service Planner

Introduction

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. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

This document provides an analysis of the impacts to minority and low income populations due to the elimination of Route FRX from the GoTriangle system as it the route is transitioned to GoRaleigh.

Key Findings

- This service equity analysis examines the impact of the proposed change to eliminate the Fuquay-Varina to Raleigh Express Route (FRX) from the GoTriangle system on minority and low income populations. The route is proposed to be transitioned to be administered by GoRaleigh per the FY23 Wake Transit Recommended Work Plan.
- The analysis did not identify a disparate impact amongst minorities nor a disproportionate burden amongst low-income riders.

Title VI Definitions and Policies

Definition of Minority and Low-Income Populations

Minority Population

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 Population

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.

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."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis:

- Major Service Change Policy
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

The requirement for these policies comes from Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

Major Service Change Policy

A "major service change" is defined as follows:

- The addition or elimination of a route
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as 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."

These disparate impact policies establish thresholds for determining when impacts of major service changes disproportionately affect minority populations. The thresholds apply to the difference in

impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impacts to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

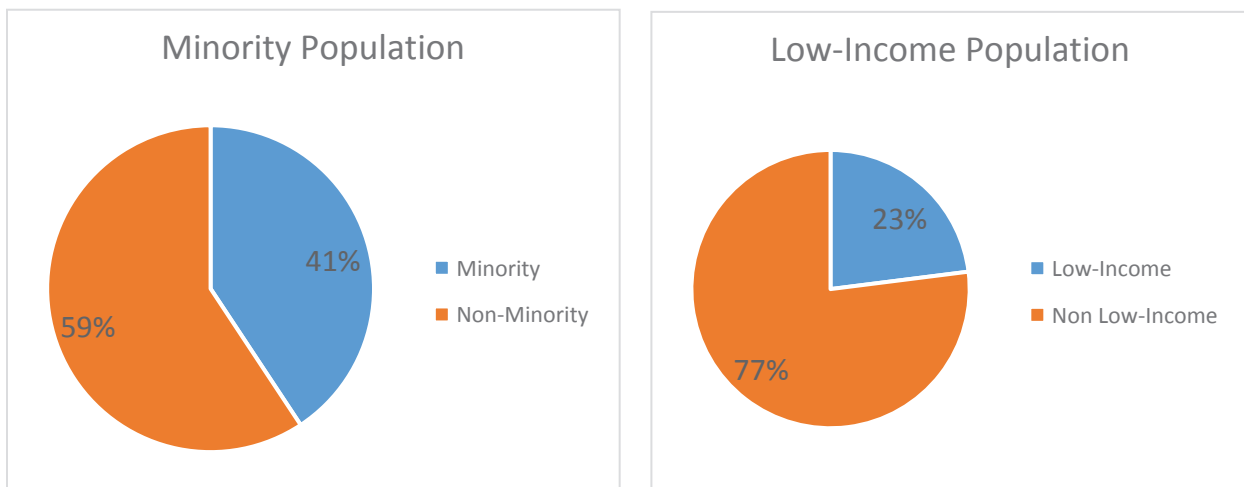
For Service Equity Analyses, a threshold of *10 percent* shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

GoTriangle System Profile

GoTriangle provides service to Wake, Durham, and Orange counties. The entire area within these counties is considered the GoTriangle service area.

Race, Ethnicity, and Low Income

According to data provided by Remix*, 41% of the population within ¼ mile of a GoTriangle bus stop identifies as minority and 23% of the population living within ¼ mile of a GoTriangle bus stop is considered low income as defined by the FTA Circular 4702.1B.



*2015-2019 ACS 5-year estimates

Description of Service Change

The proposed service change includes the elimination of Route FRX from GoTriangle's network. The FY23 Wake Transit Recommended Work Plan identifies that the Route FRX will be transitioned GoRaleigh. Since GoRaleigh will continue operating the route, it is important to note that the service will not change as a result of the service elimination from GoTriangle.

Methodology

GoTriangle uses the Title VI equity analysis tool provided by Remix to assess the impacts:

1. Identify the alignments before and after the service change in Remix
 - The alignment of the current FRX and a 'control' map with no routes displayed were used in the comparison
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within $\frac{1}{4}$ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.
4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within $\frac{1}{4}$ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average $\frac{1}{4}$ mile population and the total number of annual trips per route were automatically calculated, the final pieces needed before calculating people trips
6. Determine the Delta for each route and the system overall
 - The Delta is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the Delta exceeds 10%, that means there is a disparate or disproportionate impact.

Service Change Analysis

For proposed service change, the percentages of impacted minority and low-income populations is calculated and evaluated according to GoTriangle's disparate impact policy and disproportionate burden policy. If the percentage of impacted minority and low-income populations differs by more than 10% from the current routes, the recommended service change will be considered disparate to minority and disproportionate to low-income populations.

Disparate Impact and Disproportionate Burden Analysis

The service equity analysis does not identify a disparate impact amongst minority riders nor a disproportionate impact amongst low-income riders. The minority and low income population served by the Route FRX is less than 10% different from the GoTriangle service area average.

Impact Analysis Table	Low Income	Disproportionate Burden?	Minority	Disparate Impact?
FRX (Delta)	17.2% (-5.8%)	No	39% (-2%)	No
Service Area Average	23%		41%	

Conclusions

This analysis does not identify that the proposed service elimination of the Fuquay-Varina Express (Route FRX) causes a disparate impact nor a disproportionate burden to minority and low income populations. The -2.0% minority Delta and -5.8% low-income Delta does not meet the +/-10% threshold which determines disparate or disproportionate impacts.

In addition, the administration of the service is proposed in the FY23 Wake Transit Recommended Work Plan to transition to GoRaleigh. The route is proposed to continue to be operated and maintained by GoRaleigh as the route is eliminated from the GoTriangle system. Thus, there will not be an immediate change to Route FRX from a rider's perspective.

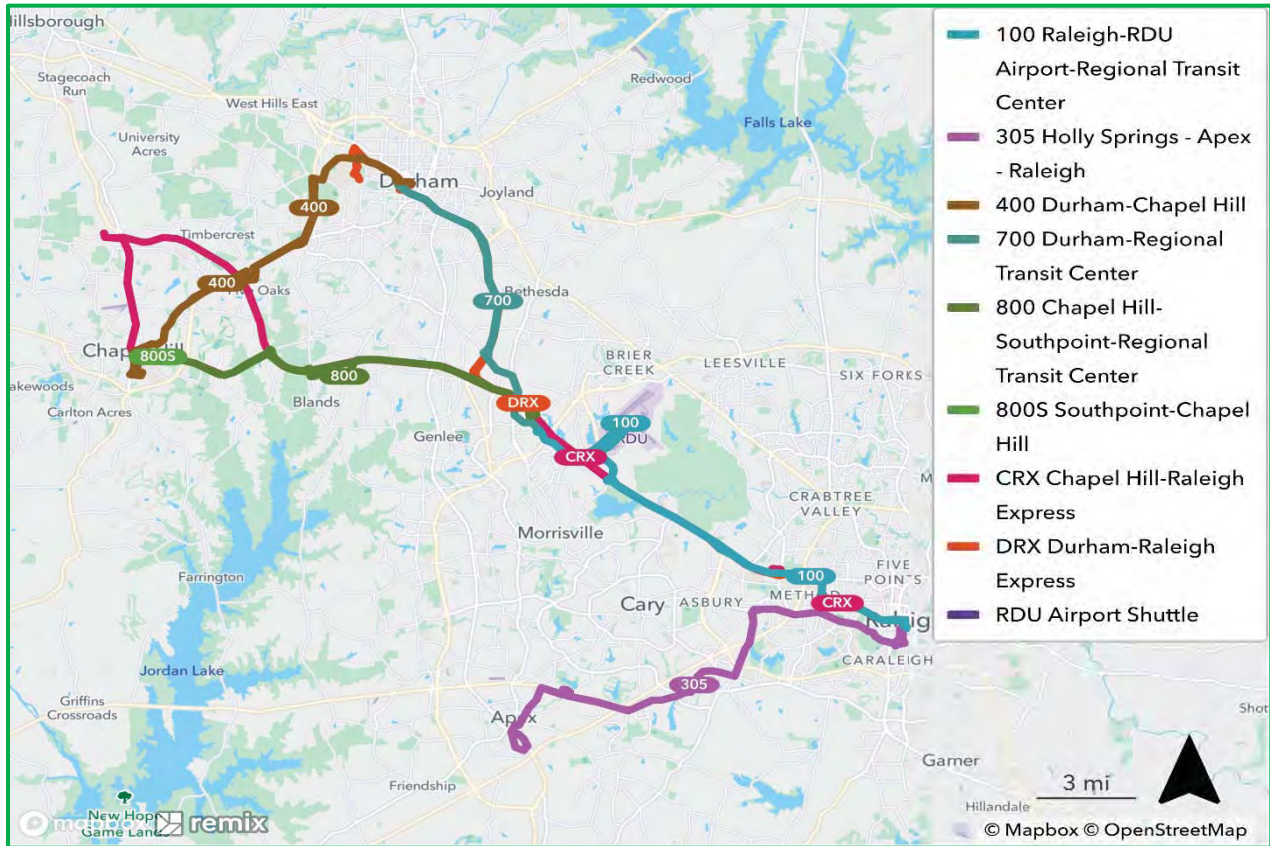


Title VI Service Equity Analysis

Restoration: RDU Shuttle, 100, 700, 800, 800S, CRX, DRX

Expansion: 305

August 2023



Map displays routes included in August service change. Note RDU shuttle is included in the map, but is being overlaid by the route 100. There are no alignment changes proposed for the August service change.

Introduction

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. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is an analysis of the GoTriangle proposed service changes for August 2023.

Proposed Service Changes

GoTriangle is proposing a service change to restore suspended trips on routes 100, 400, 700, 800, 800S, RDU Shuttle, CRX, and DRX, and to expand Route 305 to provide midday service to Apex. The improvements will reinstate service levels to pre-pandemic levels and provide more frequency. The expansion on the route 305 will provide all day connections from the Town of Apex to GoRaleigh Station. All of the service changes proposed are beneficial (increases in service).

Route	Current Service	Proposed Change
100 Raleigh-RDU Airport-Regional Transit Center	60-minute headways on Saturdays, deviates to airport	30-minute headways on Saturdays, does not deviate to airport
305 Holly Springs - Apex - Raleigh	Peak service only	Add midday service between Apex and Raleigh
400 Durham-Chapel Hill	60-minute headways on Saturdays	30-minute headways on Saturdays
700 Durham-Regional Transit Center	60-minute headways on Saturdays	30-minute headways on Saturdays
800 Chapel Hill-Southpoint-Regional Transit Center	60-minute headways on Saturdays	30-minute headways on Saturdays
800S Southpoint-Chapel Hill	No service	30-minute headways during weekday peak periods
CRX Chapel Hill-Raleigh Express	Limited peak service	Additional peak trips
DRX Durham-Raleigh Express	Limited peak service	Additional peak trips
RDU Airport Shuttle	No service on Saturdays (airport coverage provided on Route 100)	30-minute headways on Saturdays

Figure 1. Displays current route and level of service and proposed August service change.

Title VI Definitions

Minority Population

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 Population

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. As described in the following section, GoTriangle’s policy defines low-income persons as those with household incomes below 150 percent of the federal poverty level for a regionally average household size.

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.

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."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis as required by the Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012.:

- Major Service Change Policy
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

Note: Due to service suspensions from impacts of Covid-19 and operator shortages, GoTriangle is currently operating fewer than 50 vehicles in peak service. However, staff has conducted this analysis for consistency with past practice and to ensure we are providing fair and equitable service to the communities served by our routes.

Major Service Change Policy

A "major service change" is defined as follows:

- The addition or elimination of a route
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as 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.”

These disparate impact policies establish thresholds for determining when impacts of major service changes by each respective agency disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impact to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income population’s more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes by each respective agency disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

Methodology

The methodology listed below was used to assess the impacts of each route:

1. Identify the current and proposed alignments for each route in Remix route planning software
 - The alignments for the current and proposed alignments were stored in Remix under two different projects.
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within $\frac{1}{4}$ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.

4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each route pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within ¼ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average ¼ mile population and the total number of annual trips per route were automatically calculated
6. Determine the difference in minority people-trips and low-income people-trips for the system overall with proposed changes
 - The difference is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the difference exceeds 10%, that means there is a disparate or disproportionate impact.

Results

For proposed service changes, the percentages of affected minority and low-income populations is calculated and evaluated according to the disparate impact and disproportionate burden policy. If the percentage of proposed service change affects minority and/or low-income populations within the service change area by more than 10%, then the recommended service change is determined have a disparate impact to minority populations and/or disproportionate burden to low-income populations.

Disparate and Disproportionate Impact Analysis

The Title VI analysis for proposed service changes was conducted based on the service area population that is within one quarter-mile (.25 mi) from the route(s). The service area population for the affected routes is 1,580,405 persons. The percentage of low-income population in that service area is 16.1% and the percentage of minority population is 43.5%. Comparing GoTriangle current service to the proposed service change, there are a total of 420,584,195 people-trips gained annually. People-Trips are calculated by multiplying area population and annual route trips. 108,255,934 (25.7%) of those trips are by low-income persons, and 148,939,970 trips are by minority persons (35.45%).

Low-income population accounts for 16.1% of the service area population. GoTriangle defines low-income as individuals with household incomes 1.5 times the Census-defined poverty rate for a regionally average household size. The low-income change borne from the proposed service change is 25.7%. The delta is +9.6%; the low-income delta is calculated by subtracting the area average from the change borne (25.7%-16.1%). As a result, there is no disproportionate impact on low-income persons—low-income populations are projected to benefit proportionally more from this change.

The Minority population in the service area represents 43.5%. The change borne is 35.4%, which produces a delta of -8.1%. There is no disparate impact on minorities based on GoTriangle's Disparate and Disproportionate Burden policy threshold of 10%.

People-trips Gained	Total people-trips	Low-income people-trips	Minority people-trips
Trips (% of people-trips)	420,584,195 (100%)	108,255,936 (25.7%)	148,939,970 (35.45%)

Figure 2. Analysis was conducted using Remix by Via Software. This chart represents the number of people trips gained annually upon implementation of the August 2023 service change. Data reflected are estimates of new trips available with the proposed schedules.

Impact Analysis Table	Low Income	Disproportionate Burden?	Minority	Disparate Impact?
Change Borne (Delta)	25.7% (9.6%)	No	35.4% (-8.1%)	No
Service Area Average	16.1%		43.5%	

Figure 3. Analysis was conducted using Remix by Via Software, chart compares the impact to the minority and low-income population of the proposed service change. Data reflected are estimates of trips available by the current and proposed schedules.

Route	People-Trips (Population * Trips)	Low Income People-Trips	Minority People-Trips
100 Raleigh-RDU Airport-Regional Transit Center	28,233,480	7,087,666	7,364,280
305 Holly Springs - Apex - Raleigh	105,501,660	17,174,336	39,082,065
400 Durham-Chapel Hill	27,685,680	11,448,311	11,820,160
700 Durham-Regional Transit Center	3,504,805	773,494	1,713,940
800 Chapel Hill-Southpoint-Regional Transit Center	18,001,980	3,829,717	5,679,360
800S Southpoint-Chapel Hill	100,882,080	24,259,667	30,520,440
CRX Chapel Hill-Raleigh Express	49,933,845	15,675,880	15,150,315
DRX Durham-Raleigh Express	85,609,875	27,866,836	36,924,000
RDU Airport Shuttle	1,230,790	140,030	685,410
Total	420,584,195	108,255,936	148,939,970

Figure 4. The table indicates the additional people-trips, low-income trips, and Minority trips by route following the implementation of the proposed service change. Analysis was conducted using Remix by Via Software, chart compares current route and schedule to August 2023 service change. Data reflected are estimates of trips available by the proposed schedules.

Conclusions

The changes proposed in the August Service Change will not impact low income or minority communities in a disproportionate or disparate way. The changes will be expanding service and restoring service that was suspended due to COVID-19. These changes will provide more trips to the population within the service area. Changes will positively affect the communities served. Changes are aligned with our strategy to return pre-Pandemic service frequency and offer more service in the Town on Apex.



Considering Returning to Fare Collection: Title VI Fare Equity Analysis

March 2023

Executive Summary

In 2014, the GoTriangle Board of Trustees adopted Title VI Policies and Definitions aligned with Federal Transit Administration (FTA) Circular 4702.1B, Title VI Requirements and Guidelines for FTA Recipients. The circular is a federal guidance document issued by FTA that outlines requirements for ensuring nondiscrimination in transit programs and activities. The circular provides guidance to recipients of federal funding, such as transit agencies, on how to comply with Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color, or national origin. The circular includes information on how to conduct a Title VI analysis, develop a language assistance plan, and respond to discrimination complaints, among other topics.

GoTriangle's policy requires evaluation of impacts to Title VI and low-income populations for all proposed fare changes regardless of the amount of increase or decrease. GoTriangle is currently evaluating the potential to return to collecting fares after a multi-year period of fare suspension associated with the COVID-19.

This fare equity analysis outlines the Title VI process and requirements and describes the data and methodologies used to identify the impacts. This analysis evaluates the proposed change at GoTriangle from the current zero fare to the fare structure that the GoTriangle Board of Trustees adopted in May 2019 for implementation along with mobile ticketing and fare capping, technology that automatically applies multi-ride discounts for frequent riders rather than requiring riders to purchase multi-ride passes ahead of time.

This analysis uses data about the demographics of GoTriangle's ridership from the most recent on-board survey of GoTriangle customers conducted in 2019. More than half of GoTriangle's riders are minorities and between one-third and one-half of GoTriangle's riders are low-income.

This analysis considers all fare types, including the GoPass employer discount fare program. The average fare analysis uses the ridership demographics by fare type from the 2019 GoTriangle On-Board survey to calculate the expected average fare received by GoTriangle per boarding for each demographic group and fare type.

Key Findings

While there are differences in usage rates of discount programs by minority and low-income customers compared to non-minority and non-low-income customers, there is no disparate impact and no disproportionate burden identified according to GoTriangle's policy definitions.

Even though no disparate impacts or disproportionate burden were found, mitigation strategies are proposed in the addendum to maximize access to discount fare programs for minority and low-income customers.

Background

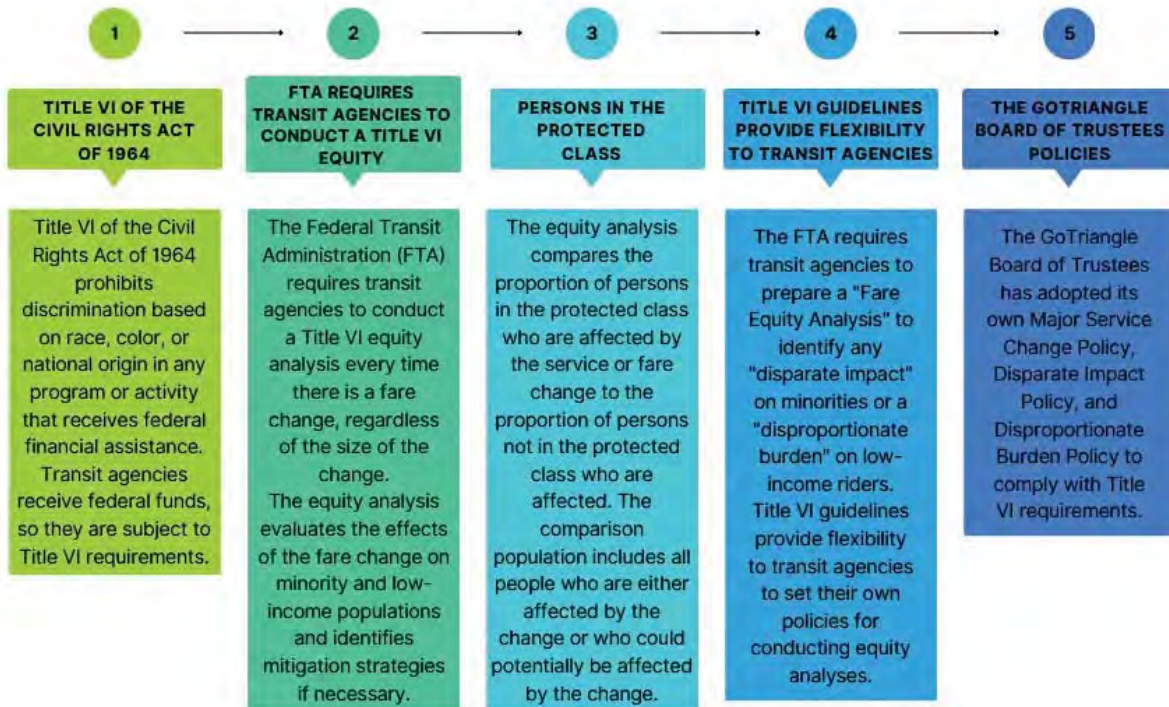
Title VI of the Civil Rights Act of 1964 prohibits discrimination on the grounds of race, color, or national origin in any program or activity that receives federal financial assistance. As transit agencies receive federal funds, they are subject to Title VI requirements. The Federal Transit Administration (FTA) requires transit agencies to conduct a Title VI equity analysis every time there is a fare change, regardless of the size of the change. The purpose of the equity analysis is to evaluate the effects of the fare change on minority and low-income populations and to identify mitigation strategies if necessary.

Title VI equity analysis compares the proportion of persons in the protected class (race, color, or national origin) who are affected by the service or fare change to the proportion of persons not in the protected class who are affected. The comparison population includes all people who are either affected by the change or who could potentially be affected by the change, such as potential passengers.

The FTA requires transit agencies to prepare a "Fare Equity Analysis" to identify any "disparate impact" on minorities or a "disproportionate burden" on low-income riders. Although low-income populations are not a protected class under Title VI, the FTA recognizes the overlap of environmental justice principles in this area and requires transit providers to evaluate the impacts of service and fare changes on passengers who are more likely to rely on public transit.

Title VI guidelines provide flexibility to transit agencies to set their own policies for conducting equity analyses. The GoTriangle Board of Trustees has adopted its own Major Service Change Policy, Disparate Impact Policy, and Disproportionate Burden Policy to comply with Title VI requirements.

Background



GoTriangle Title VI Policies

Title VI guidelines require transit agencies to set their own policies and provide flexibility to the transit agency for how these analyses are conducted. The GoTriangle Board of Trustees adopted two policies in June 2014 related to Title VI that guide this analysis:

- Disparate Impact Policy, and
- Disproportionate Burden Policy

The requirement for these policies comes from FTA Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

FTA guidelines require that impacts to Title VI and low-income populations be evaluated for all fare changes regardless of the amount of increase or decrease.

Disparate Impact Policy

Disparate Impact



The following disparate impact policies establish thresholds for determining when impacts of proposed fare changes by each respective agency disproportionately impact 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.

For Fare Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed fare change are borne disproportionately by minority populations.

Disproportionate Burden Policy

Disproportionate Burden



The following disproportionate burden policies establish thresholds for determining when impacts of proposed fare changes by each respective agency disproportionately impact 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.

For Fare Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed fare change are borne disproportionately by low-income populations.

Description of the Fare Change Proposal

At the beginning of the COVID-19 outbreak in March 2020, GoTriangle suspended bus fares to minimize contact between operators and the public, and to eliminate crowding while boarding the bus. This policy also helped ease the financial burden associated with boarding a bus. GoTriangle has continued this fare suspension through at least this fiscal year ending June 30, 2023. At its January 2023 meeting, the GoTriangle Board of Trustees voted to direct staff to complete a fare equity analysis to inform their consideration of returning to fare collection in FY 2024.

This analysis identifies the impacts of:

1. Reinstating fare collection using the fare structure that was approved by the GoTriangle Board of Trustees in May 2019
2. Reinstating the GoPass program, which allows employees and students of participating institutions to board the bus without paying a fare

GoTriangle Ridership Demographics Overview

This section provides an overview of the demographic characteristics of GoTriangle’s systemwide ridership based on GoTriangle’s most recent onboard survey, conducted in 2019. These demographic statistics were considered in the development of the proposed fare change in order to determine the potential for changes to result in Disparate Impacts on minority customers and/or a Disproportionate Burden on low-income customers.

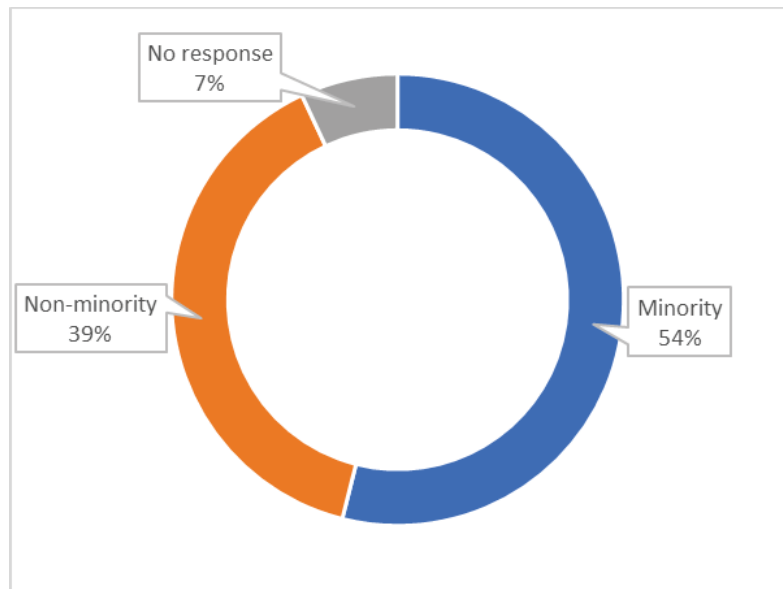
GoTriangle Ridership by Race/Ethnicity, 2019 Survey

Race/Ethnicity

The ethnicity categories in the 2019 survey were as follows:

1. African American/Black
2. Asian
3. Caucasian/White
4. Hispanic
5. Native American Indian
6. Other: _____

For purposes of this Fare Equity Analysis, minority populations are those who have not identified themselves as “White/Caucasian” in the survey.



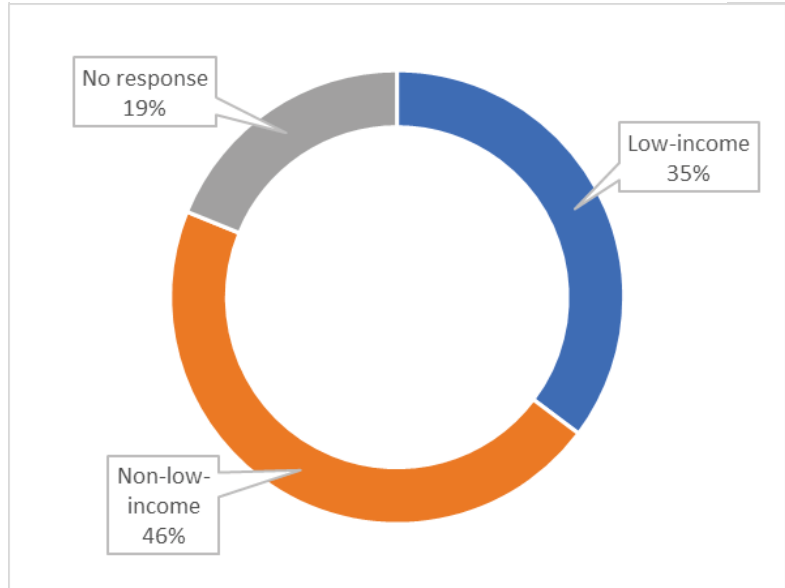
Income Definitions

The household income categories in the 2019 survey were as follows:

1. Less than 10,000
2. 10,000 to 14,999
3. 15,000 to 19,999
4. 20,000 to 24,999
5. 25,000 to 34,999
6. 35,000 to 49,999
7. 50,000 to 74,999
8. 75,000 to 99,999
9. More than 100,000

GoTriangle’s disproportionate burden policy defines low-income populations as “persons with household incomes below 150 percent of the poverty level for a regionally average household size.”

GoTriangle Ridership by Income, 2019 Survey



Federally defined poverty levels by household size and the corresponding 150 percent amount for each are included in the table below. The average household size in each of the three counties in GoTriangle’s service area is between two and three persons.¹ To provide a conservative analysis (including more people in the definition of low-income), the income level corresponding to a three-person household (\$31,995) was selected as the threshold for this analysis.

GoTriangle Ridership by Income, 2019 Survey

The threshold available in the 2019 survey data that corresponds most closely to the \$31,995 household income threshold is \$35,000. As such, responses indicating a household income less than \$35,000 were considered low-income.

Poverty Level Definitions

Household Size	Federally Defined Poverty Level	150% of Federally Defined Poverty Level
1	\$12,490	\$18,735
2	\$16,910	\$25,365
3	\$21,330	\$31,995
4	\$25,750	\$38,625
5	\$30,170	\$45,255
6	\$34,590	\$51,885
7	\$39,010	\$58,515
8	\$43,430	\$65,145

¹ According to data from the United States Census Bureau, the average size of households in the GoTriangle service area is as follows: 2.3 in Durham County, 2.47 in Orange County, and 2.59 in Wake County.

Title VI Fare Equity Analysis
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Household Size	Federally Defined Poverty Level	150% of Federally Defined Poverty Level
More than 8	For families/households with more than 8 persons, add \$4,420 for each additional person	For families/households with more than 8 persons, add \$6,630 for each additional person

***2019 Federal Poverty Level Definition²**

Ridership Demographics by Fare Payment Type

The tables below include a cross-tabulation of survey responses by fare type versus minority status, and fare type versus low-income status. Notable statistics include:

- Pre-pandemic, the GoPass was the most-used fare payment type across all customer categories
- Minority customers and low-income customers were more likely than non-minority and non-low-income customers to use cash fare, day-pass, and 7-day or 31-day pass

Fare Payment Type vs Minority Status

Fare Payment Type	Minority	Non-minority	No response	All Customers
Cash	23.2%	13.1%	9.7%	18.3%
Daypass	15.3%	7.0%	7.4%	11.5%
7-day or 31-day pass	9.9%	6.9%	8.0%	8.6%
Pre-covid GoPass	47.0%	68.9%	32.6%	54.6%
Free senior fare	2.8%	2.4%	1.1%	2.5%
No response	1.8%	1.5%	41.1%	4.4%
Grand Total	100.0%	100.0%	100.0%	100.0%

Fare Payment Type by Income Status

Fare Payment Type	Low-income	Non-low income	No response	All Customers
Cash	24.6%	13.4%	18.6%	18.3%
Daypass	17.6%	8.2%	8.2%	11.5%
7-day or 31-day pass	11.5%	6.7%	7.8%	8.6%
Pre-covid GoPass	40.6%	69.4%	44.6%	54.6%
Free senior fare	3.5%	1.4%	3.6%	2.5%
No response	2.1%	1.0%	17.1%	4.4%
Grand Total	100.0%	100.0%	100.0%	100.0%

² The federal poverty level (FPL), also known as the "poverty line," is the **amount of annualized income earned by a household**, below which they would be eligible to receive certain welfare benefits. While the U.S. Census Bureau computes the poverty threshold, the Dept. of Health and Human Services (HHS) publishes the FPL.

Average Fare Cost per Boarding Analysis

Current and Proposed Fares Overview and Inputs

In March 2020, GoTriangle suspended bus fares to minimize contact between bus operators and the public, and to eliminate crowding while boarding the bus. This policy also helped ease the financial burden associated with boarding a bus. GoTriangle has previously committed to continuing to suspend fares through at least June 30, 2023.

As part of the FY24 budget process, GoTriangle is considering ending the suspension and implementing the fare structure that the GoTriangle Board of Trustees had previously adopted in May 2019 for implementation along with mobile ticketing and fare capping, technology that automatically applies multi-ride discounts for frequent riders rather than requiring riders to purchase multi-ride passes ahead of time.

Fare Category	Fare Cost
Single-Ride Adult Fare - Regional	\$2.50
Single-Ride Adult Fare - Express	\$2.50
Single-Ride Disability Fare - Regional	\$1.25
Single-Ride Disability Fare - Express	\$1.25
Single-Ride Senior Fare - Regional	\$0.00
Single-Ride Senior Fare - Express	\$0.00
Stored Value Card - Regional	\$2.00
Stored Value Card - Express	\$2.00
Regional Day Pass	\$5.00
Regional 7-Day Pass	\$24.00
Regional 31-Day Pass	\$80.00
Express Day Pass	\$5.00
Express 7-Day Pass	\$24.00
Express 31-Day Pass	\$80.00
University or Employer Provided GoPass	\$0.00

May 2019 Adopted Fare Structure

Considering GoPass as Discount Program

This method considers fare revenue received by GoTriangle for each boarding; in other words, GoPass as a discount program rather than zero fare. For the pre-pandemic GoPass, GoTriangle generally received revenue from partner institutions equivalent to 55% of the cash fare for each GoPass boarding.

With this methodology the expected average fare received by GoTriangle is \$1.38 for each GoPass boarding.

2019 Average Fare per Boarding

This analysis calculates average fare per boarding for different groups using data from the 2019 survey to better understand transit costs. This was done by adding up the fare cost relative to the fare usage including all types of fares, and dividing it by the total number of fare usages, also including all fare types, for that group. An example calculation is included in the table below. This methodology provides a calculation of the average fare cost per boarding for each group, which can help provide insight into the financial burden of transit for different groups relative to the Board policy thresholds.

	Example Group A	Example Group B
Example Total Fare Cost	\$1,500	\$2,000
Example Total Fare Usage	460 Riders	560 Riders
Example Average Fare per Boarding	\$3.26	\$3.57

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Disparate Impact Analysis

Typically, a disparate impact analysis compares the percentage increase in fares for minority customers with the percentage increase in fares for non-minority customers. In this case, because the current fare is zero, the absolute increase (rather than percentage increase) is used in the analysis, and the results are compared for minority and non-minority customers.

Without mitigation, the fare proposal to return to fares would expect to result in a fare increase for minority customers that is 8% higher for non-minority customers.

Based on the 2019 GoTriangle On-Board Survey data, minority riders had an average fare per boarding of \$1.62, while non-minority riders had an average fare per boarding of \$1.49, which included all fare types used to board the bus. The tables below include the detailed calculations for how each fare type cost affects the average for per boarding amount.

Disparate Impact Analysis

	Minority	Non-minority	No response	System Average
Existing Fare Per Boarding	\$0.00	\$0.00	\$0.00	\$0.00
2019 Average Fare per Boarding	\$1.62	\$1.49	\$1.53	\$1.57
% of System Average Increase	103%	95%	98%	
Difference	+8%			

Race/Ethnic Group Fare Usage per the 2019 GoTriangle On-Board Survey

Row Labels	Minority		Non-minority		No response		All Customers	
Cash	314	68%	129	28%	17	3%	460	100
Day Pass	207	72%	69	24%	13	4%	289	100
7-day or 31-day pass	134	62%	68	31%	14	6%	216	100
Pre-covid GoPass	637	46%	676	49%	57	4%	1370	100
Free senior fare	38	59%	24	38%	2	3%	64	100
Grand Total	1330	55%	966	42%	103	4%	2399	100

Title VI Fare Equity Analysis
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Race/Ethnic Group Total Fare Cost relative to Fare Usage & Average Cost per Boarding per the 2019 GoTriangle On-Board Survey

Row Labels	Minority		Non-minority		No response		All Customers	
Cash	\$785.0	68%	\$322.50	28%	\$42.50	3%	\$1,150.0	%100
Daypass	\$345.0	72%	\$115.00	24%	\$21.67	4%	\$481.67	%100
7-day or 31-day pass	\$148.8	62%	\$75.56	31%	\$15.56	6%	\$240.00	%100
Pre-covid GoPass	\$875.8	46%	\$929.50	49%	\$78.38	4%	\$1,883.7	100%
Free senior fare	\$0.00	59%	\$0.00	38%	\$0.00	3%	\$0.00	100%
Grand Total	\$2,154.76	55%	\$1,442.5	42%	\$158.10	4%	\$3,755.4	100%

Disproportionate Burden Analysis

Typically, a disproportionate burden analysis compares the percentage increase in fares for low-income customers with the percentage increase in fares for non-low-income customers. In this case, because the current fare is zero, the absolute increase (rather than percentage increase) is used in the analysis, and the results are compared for low-income and non-low-income customers.

Without mitigation, the fare proposal would be expected to result in a fare increase for low-income customers that is 7% higher for non-low-income customers.

Based on the 2019 GoTriangle On-Board Survey data, low-income riders had an average fare per boarding of \$1.63, while non-low-income riders had an average fare per boarding of \$1.51, which included all fare types used to board the bus. The tables below include the detailed calculations for how each fare type cost affects the average for per boarding amount.

Disproportionate Burden Analysis

	Low income	Non-low income	No response	System Average
Existing Fare Per Boarding	\$0.00	\$0.00	\$0.00	\$0.00
2019 Average Fare per Boarding	\$1.63	\$1.51	\$1.57	\$1.57
% of System Average Increase	104%	97%	100%	
Difference	+7%			

Income Group Fare Usage per the 2019 GoTriangle On-Board Survey

	Low income		Non-low income		No response		All Customers	
Cash	218	47%	154	33%	88	19%	460	100%
Daypass	156	54%	94	33%	39	13%	289	100%
7-day or 31-day pass	102	47%	77	36%	37	17%	216	100%

Title VI Fare Equity Analysis
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	Low income		Non-low income		No response		All Customers	
Pre-covid GoPass	359	26%	800	58%	211	15%	1370	100%
Free senior fare	31	48%	16	25%	17	27%	64	100%
Grand Total	866	36%	1141	48%	392	16%	2399	100%

Income Group Total Fare Cost relative to Fare Usage & Average Cost per Boarding per the 2019 GoTriangle On-Board Survey

	Low income		Non-low income		No response		All Customers	
Cash	\$545.00	47%	\$385.00	33%	\$220.00	19%	\$1,150.00	100%
Daypass	\$260.00	54%	\$156.67	33%	\$65.00	13%	\$481.67	100%
7-day or 31-day pass	\$113.33	47%	\$85.56	36%	\$41.11	17%	\$240.00	100%
Pre-covid GoPass	\$493.63	26%	\$1,100.00	58%	\$290.13	15%	\$1,883.75	100%
Free senior fare	\$0.00	48%	\$0.00	25%	\$0.00	27%	\$0.00	100%
Grand Total	\$1,411.96	36%	\$1,727.22	48%	\$616.24	16%	\$3,755.42	100%

Conclusions

Returning to fares does not trigger disproportionate impact or disparate impact findings. However, GoTriangle staff is committed to exploring voluntary mitigation options to reduce the gap between the low-income and non-low-income groups and the minority and non-minority groups if GoTriangle returns to collecting fares. A description of recommended voluntary mitigation measures are included in the addendum to this report.

Mitigation Addendum

Title VI Fare Equity Analysis
March 2023

In Title VI, mitigation refers to actions taken by recipients of federal funding, such as transit agencies, to address any adverse impacts of their programs or activities on individuals or communities protected by Title VI (i.e., those who belong to a race, color, or national origin group). Mitigation measures can include steps to eliminate, reduce, or avoid any discriminatory effects of a program or activity, or to provide compensatory benefits to affected individuals or communities. For example, a transit agency may undertake a fare equity analysis to ensure that its fare policies do not disproportionately burden low-income and minority riders and may implement fare subsidy programs or other measures to address any such disparities. Even though no disproportionate burden or disparate impacts meeting GoTriangle's board-established thresholds were found in the Title VI Fare Equity Analysis, voluntary mitigation strategies are still suggested to minimize the impact of returning to fares on low-income customers and increase usage of the GoPass program by low-income and minority customers.

Mitigation Baseline – Implement Board Approved Fare Capping

In 2019, the Board approved a proposal that would introduce mobile ticketing and fare capping, technology that automatically applies multi-ride discounts for frequent riders rather than requiring riders to purchase multi-ride passes ahead of time. Fare capping sets a maximum limit on the amount each passenger pays for rides within a specific timeframe. This ensures that a rider paying fares incrementally each time they ride does not pay more relative to customers who purchase bulk daily, weekly, or monthly passes in advance. It promotes social equity, affordability, encourages public transportation over private vehicles, reduces traffic congestion and pollution, increases customer satisfaction, and helps to stabilize revenue for transportation agencies.

If GoTriangle returns to fare collection, staff is prepared to launch its mobile ticketing program with fare capping. Riders will have the option to use a smartphone app for payment, or obtain a physical card to access the program. Physical cards and in-app accounts can be pre-loaded with funds online using credit or debit cards, and can be loaded with cash at a network of retail partners including Walmart, Dollar General, and CVS.

Riders will continue to have the option of paying fares with cash without an account, but in that case would not benefit from fare capping discounts.

Mitigation #1 – Create low-income GoPass pilot program through partnerships with Health and Human Services, Housing Authorities, and/or Jobs Access Programs

Providing GoPasses to riders who qualify based on income verification is a key opportunity for GoTriangle to support low-income customers and ensure that public transportation remains accessible for everyone in the community without fare being barrier. These passes would ensure that riders maintain to access job opportunities, medical appointments, and other vital resources that may otherwise become difficult or impossible to reach without affordable, reliable transportation.

GoTriangle did not previously have GoPass partnerships with jobs access programs, low-income housing providers, or major health and human services agencies. Nationally, these agencies are often key purchasers of transit fares and passes to help remove transportation barriers to new job opportunities.

Title VI Fare Equity Analysis
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GoTriangle staff has already begun exploring the potential for partnerships with agencies serving low-income residents to identify opportunities for collaboration and develop strategies to include them as GoPass customers. If a decision is made to return to fare collection, staff will seek funding for a low-income GoPass pilot program through the county transit plans.

Mitigation #2 – Expand traditional GoPass program to include employers and institutions with higher proportions of minority and low-income employees.

The GoPass is a critical program for GoTriangle's budget and has been successful in supporting ridership for major employers, particularly the region's major institutions including UNC, Duke University, NCSU, and state government. However, historically, non-low-income and non-minorities were more likely to use the GoPass.

If a decision is made to return to fare collection, GoTriangle will broaden the traditional GoPass program to be accessible to more employers (not just large employers) and other types of groups (residential complexes, community groups, etc), and develop strategies to market the program more broadly. GoTriangle will also develop outreach strategies to market the program specifically to lower-wage employers and employees, institutions, and groups with higher ratios of minority populations.

Appendix – G

Service and Fare Equity Analysis Policy
SAFE Analysis Policy Board Approval

I, Michelle C. Dawson, Clerk to the Research Triangle Regional Public Transportation Authority Board of Trustees, do hereby certify that the attached is a true and correct copy of the *Service and Fare Equity Analysis Policy*, which was adopted at a regular meeting of the GoTriangle Board of Trustees on the 25th day of October, 2023, a copy of which is now on file in the office of the Clerk to the Board.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official Seal of the Research Triangle Regional Public Transportation Authority, this the 25th day of October, 2023.

(Seal)



Michelle C. Dawson
Michelle C. Dawson, Clerk to the Board

SERVICE AND FARE EQUITY ANALYSIS POLICY

The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

GoTriangle has created a Service and Fare Equity Analysis Policy to evaluate proposed service and fare changes. The following is the updated process for this program update.

The Service and Fare Equity (SAFE) process shall be performed in all of the following conditions:

- A major service change (increase or reduction) is considered on one or more routes or service.
- Any fare change (increase or reduction) is considered on one or more routes or services.

MAJOR SERVICE CHANGE POLICY

GoTriangle proposes service changes to meet the needs of the ridership base and match the available operating budget. All major service changes, as defined below, shall undergo a *service equity analysis* to evaluate whether the changes would have disparate impacts on minority populations or impose a disproportionate burden on low-income populations, consistent with the intent and requirements of FTA Circular 47021B and Title VI of the Civil Rights Act of 1964.

A "major service change" is defined as:

- The addition or elimination of a route within GoTriangle's transit system;
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours;
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy

The FTA circular identifies disparate impacts as 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.”

Title VI of the Civil Rights Act prevents discrimination based on race, color, and national origin in federally funded programs or activities. To ensure equity in access to transit service across the service area, major service changes must be evaluated to determine whether they would adversely affect minority populations more than non-minority populations by more than the threshold defined below. Furthermore, service changes that result in increases in service must be evaluated to determine whether they would benefit non-minority populations more than minority populations by more than that same threshold defined below. If the difference in measured effects on minority and non-minority populations were greater than the set threshold, the proposed change would be considered to have a **disparate impact** on minority populations.

The threshold shall be a **10% point** difference between:

1. The percentage of impacts borne by minority populations in the proposed service change.
2. The percentage of minority populations in GoTriangle’s service area.

If a proposed service change is found to have a disparate impact on minority populations, GoTriangle will analyze viable alternatives that would meet the objectives of the proposed service change and the agency's goals. Such alternatives should be designed to avoid, minimize, and mitigate any disparate impact on minority populations. If this alternatives analysis yields a modified service change proposal, the revised proposal will be analyzed in a service equity analysis. If no viable alternatives are found that reduce or eliminate the finding of disparate impact, and GoTriangle has a substantial and legitimate justification for the change, GoTriangle may implement the initially proposed service change.

Disproportionate Burden Policy

A disproportionate burden addresses impacts to low-income populations. The FTA circular defines a disproportionate burden as “a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.”

Per the requirements of FTA Circular 4702.1B and understanding the linked nature of civil rights and environmental justice issues, GoTriangle will also evaluate whether all service changes will

be equitable for low-income populations. To ensure equity in access to transit service across the service area, major service changes must be evaluated to determine whether they would adversely affect low-income populations more than non-low-income populations by more than the threshold defined below. Furthermore, service changes that result in increases in service must be evaluated to determine whether they would benefit non-low-income populations more than low-income populations by more than that same threshold defined below. If the difference in measured effects on minority and non-minority populations is greater than the set threshold, the proposed change would be considered to have a **disproportionate burden** on low-income populations. GoTriangle shall also describe alternatives available to low-income riders affected by the service change.

The threshold shall be a **10% point** difference between:

1. The percentage of impacts borne by low-income populations in the proposed service change.
2. The percentage of low-income populations in GoTriangle's service area.

If a proposed service change is found to have a disproportionate burden on low-income populations, GoTriangle will analyze viable alternatives that would meet the objectives of the proposed service change and the agency's goals. Such alternatives should be designed to avoid, minimize, and mitigate any disproportionate burden on low-income populations. If this alternatives analysis yields a modified service change proposal, the revised proposal will be analyzed in a service equity analysis. If no viable alternatives are found that reduce or eliminate the finding of disproportionate burden, GoTriangle may implement the initially proposed service change.

If a proposed fare change is found to have a disparate impact on minority populations, GoTriangle will analyze viable alternatives that would meet the objectives of the proposed fare change and the agency's goals. Such alternatives should be designed to avoid, minimize, and mitigate any disparate impact on minority populations. If this alternatives analysis yields a modified fare change proposal, the revised proposal will be analyzed in a fare equity analysis. If no viable alternatives are found that reduce or eliminate the finding of disparate impact, and GoTriangle has a substantial and legitimate justification for the change, GoTriangle may implement the initially proposed fare change.

FARE CHANGE POLICY

GoTriangle proposes fare changes from time to time to meet the needs of the ridership base and match the available operating budget. All fare changes shall undergo a fare equity analysis to ensure equitable effects on GoTriangle's rider base regarding Title VI. Fare changes include

changes to any current fare amount or fare media. Examples include but are not limited to increases in fares, decreases in fares, introduction of new fares, and discontinuation of fares.

Fare Disparate Impact Policy

To ensure equity, fare increases or reductions must be evaluated to determine whether they would adversely affect minorities more than non-minorities by more than the threshold amount defined below. To further ensure equity, fare decreases or additions in fare media options must be evaluated to determine whether they would benefit non-minorities more than minorities by more than that same threshold amount defined below. If the affected populations differ by a span more significant than the set threshold, the proposed change would be considered to have a **disparate impact** on the minority population.

The threshold shall be a **10% point** difference between the minority and non-minority populations affected by the fare change compared to the overall service area.

Fare Disproportionate Burden Policy

To ensure equity in fare increases or reductions in fare media options must be evaluated to determine whether they would adversely affect low-income populations more than non-low-income populations by more than the threshold defined below. To further ensure equity, fare decreases or additions in fare media options must be evaluated to determine whether they would benefit non-low-income populations more than low-income populations, by more than the same threshold amount defined below. If the affected populations differ by a span more significant than the set threshold, the proposed change would be considered to have a **disproportionate burden** on the low-income population.

The threshold shall be a **10% point** difference between the low-income and non-low-income populations affected by the fare change compared to the overall service area.

If a proposed fare change is found to have a disproportionate burden on low-income populations, GoTriangle will analyze viable alternatives that would meet the objectives of the proposed fare change and the agency's goals. Such alternatives should be designed to avoid, minimize, and mitigate any disproportionate burden on low-income populations. If this alternatives analysis yields a modified fare change proposal, the revised proposal will be analyzed in a service equity analysis. If no viable alternatives are found that reduce or eliminate the finding of disproportionate burden, GoTriangle may implement the initially proposed fare change.

Appendix – H

Title VI Program Update Board Approval

I, Michelle C. Dawson, Clerk to the Research Triangle Regional Public Transportation Authority Board of Trustees, do hereby certify that the attached is a true and correct copy of the *Title VI Program Update, September 1, 2023*, which was adopted at a regular meeting of the GoTriangle Board of Trustees on the 25th day of October, 2023, a copy of which is now on file in the office of the Clerk to the Board.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official Seal of the Research Triangle Regional Public Transportation Authority, this the 25th day of October, 2023.

(Seal)



Michelle C. Dawson
Michelle C. Dawson, Clerk to the Board

