

GoTriangle Operations & Finance Committee November 05, 2020 8:30 am-10:00 am Eastern Time

Based on NC Executive Order No. 121 Stay at Home Order in response to COVID-19, the GoTriangle Operations & Finance Committee will meet remotely on Thursday, November 5, 2020, at 8:30 am.

Click here to: Join Webex Meeting

Meeting Number / Access code: #171 387 2144

Password: 1234

Or dial: +1 415-655-0003

Call to Order and Adoption of Agenda

(1 minute Vivian Jones)

ACTION REQUESTED: Adopt agenda with any changes requested.

II. Draft Minutes - October 1, 2020

(1 minute Michelle Dawson)

ACTION REQUESTED: Approve minutes.

III. ILA with City of Durham - Reimbursement Contract for Technical Services Related to Commuter Rail

(5 minutes Katharine Eggleston)

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute an interlocal agreement with City of Durham for reimbursement of actual costs incurred to perform time-critical tasks in support of the Greater Triangle Commuter Rail Study, up to an amount not to exceed \$75,000.

Draft ILA

IV. Regional Fleet and Facilities Study Contract

(5 minutes Katharine Eggleston)

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute an agreement with the selected consultant for the Regional Fleet and Facilities Study at a cost not to exceed \$987,500.

Scope of Services

V. <u>Durham Station Improvements Preliminary Design Contract</u>

(5 minutes Bryan Hammond)

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute an agreement with the selected consultant for the Durham Station Improvements Preliminary Design at a cost not to exceed \$300,000.

Scope of Services

VI. Task Order for Design of GoDurham FY21 Bus Stops

(5 minutes Willie Noble)

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute a task order for bus stop design services under Master Agreement between Ramey Kemp and Associates and GoTriangle for On-Call Architectural and Engineering Consultant Services for an amount not to exceed \$500,000.

VII. FY20 Annual Bus Service Performance Report

(30 minutes Andrea Neri)

Attachment A

Attachment B

Attachment C

VIII. RTP Connect Boxyard Update

(5 minutes Jennifer Green)

IX. Presentation of Dashboard

(15 minutes Eric Bergstraesser)

X. Adjournment

(Vivian Jones)

GoTriangle Board of Trustees Operations & Finance Committee Meeting Minutes October 1, 2020 - DRAFT

Held Remotely via Webex

Committee Members Present:

Corey Branch Jennifer Robinson
Vivian Jones, Committee Chair (arr. 8:52 am) Steve Schewel (left 9:57 am)
Michael Parker

Committee Members Absent:

Valerie Jordan (excused) Stelfanie Williams (excused)

Other Board Members Present:

Will Allen III Mark Marcoplos

Will Allen called the meeting to order at 8:32 a.m. on behalf of the committee chair.

I. Adoption of Agenda

Action: On motion by Robinson and second by Parker the agenda was adopted. The motion was carried unanimously.

II. Approval of Minutes

Action: On motion by Parker and second by Branch the Committee approved the minutes of the February 26, 2020, meeting. The motion was carried unanimously.

III. Railroad Capacity Modeling Reimbursement Agreement

Katharine Eggleston reminded the Committee that this agreement will determine the operating plans and associated infrastructure improvements needed to implement commuter rail in the corridor. She stated that it is expected to come to the Board for approval in the next few months. Norfolk Southern will perform the capacity modeling and GoTriangle will reimburse associated costs.

Lattuca stated that issues around indemnity and liability are not part of this agreement but both NCRR and GoTriangle are setting up a team to talk about these issues in parallel with the capacity modeling study with the hope that Norfolk Southern will agree to this strategy.

Allen asked if there are issues beyond indemnification and liability that have been raised. Lattuca responded that the location of the maintenance facility and non-revenue moves that are contemplated have been requested. Eggleston added that this technical information has been provided in advance as assumptions, including station locations. She emphasized that these locations have not been

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defined. Lattuca further added that Norfolk Southern also raised concern about protecting their confidential projections which they consider proprietary information. He also noted that a process is being developed for resolving disagreements about model input or results.

Action: On motion by Parker and second by Schewel the Committee voted to recommend that the Board authorize the president and CEO to execute an agreement with NCRR and Norfolk Southern for railroad capacity modeling reimbursement. The motion was carried unanimously.

IV. Classification and Compensation Study Update

V. Employee Benefits and Wellness

The combined presentation for both agenda items is attached and hereby made a part of these minutes. Carolyn Lyons shared information about the department and the organization. Kristen Dixon and Mark Holcombe, Consultant from Evergreen Solutions, offered information on the on-going classification and compensation study.

Jones arrived.

Branch asked about the demographics of the staff. Lyons stated the organization overall is primarily African American, with transit operations approximately 95% African American. Saundra Freeman suggested a report by Sylvester Goodwin on EEO composition.

Christy Winstead from the Human Resources department shared information about GoTriangle's benefits and wellness programs.

Jones shared Wake Forest's practice of doing an annual study of one third of the employees so that every employee is considered every three years. She suggested that GoTriangle consider a similar process.

Marcoplos spoke about an employer who has on staff a trainer/paramedic which has reduced costs and absenteeism for that company.

VI. FY21 Budget Update

Saundra Freeman's presentation is attached and hereby made a part of these minutes.

She stated her concerns with the loss of \$2 million in SMAP money. She noted that there also is uncertainty around the amount of TDM funding from NCDOT. The federal CARES grant of \$7.8 million has been approved and staff will be submitting requests for the drawdown of those funds.

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Freeman mentioned that county reimbursements related to the transit plans will be invoiced monthly going forward.

Parker requested a comparison of budget to actual on the financial reports shared with the Board. He asked whether GoTriangle should begin a discussion about the practice of allocating half of the vehicle rental tax to the counties.

Freeman noted that Wake County's half cent sales tax revenues increased by \$10 million in July and August. She said some projects had been deferred based on concerns about sales tax revenues. Freeman reminded the Committee that the full responsibility for billing, collections and auditing of the rental vehicle tax falls on GoTriangle.

Schewel requested that the Durham budget amendments be discussed first.

VIII. Durham Transit Plan Budget Amendments

Jennifer Hayden presented the amendments to the Durham County Transit Plan for a net impact of zero (details are attached and hereby made a part of these minutes).

Action: On motion by Schewel and second by Parker the Committee voted to recommend that the Board approve the proposed budget amendments 2020 0030 - 2020 0031. The motion was carried unanimously.

Schewel left.

VII. GoTriangle Budget Amendments

Jennifer Hayden presented GoTriangle budget amendments related to the loss of SMAP funds and the required grant match for BOSS implementation (details are attached and hereby made a part of these minutes).

Action: On motion by Parker and second by Branch the Committee voted to recommend that the Board approve the proposed budget amendments 2020 0027 - 2020 0029. The motion was carried unanimously.

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IX. Adj	ournment
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Action: The meeting was adjourned at 10:08 a.m.

Attest:

Michelle C. Dawson, CMC
Clerk to the Board of Trustees



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning & Capital Development

DATE: October 22, 2020

SUBJECT: Interlocal Agreement with City of Durham – Reimbursement Contract for

Technical Services Related to Commuter Rail

Strategic Objective or Initiative Supported

2.4 Ensure an attractive and accessible transit environment

Action Requested

Staff requests that the Operations and Finance Committee recommend that the Board of Trustees authorize the CEO and President to execute an interlocal agreement with City of Durham for reimbursement of actual costs incurred to perform time-critical tasks in support of the Greater Triangle Commuter Rail Study, up to an amount not to exceed \$75,000.

Background and Purpose

At its March 2020 meeting, the GoTriangle Board authorized the Board Chair and President and CEO to execute the Memorandum of Understanding (MOU) in Support of Continued Development of the Greater Triangle Commuter Rail (GTCR) Project. This MOU identifies GoTriangle as the project sponsor and lead entity responsible for a range of tasks identified for further study and evaluation prior to a decision by the funding partners on whether or not to advance the project into implementation and apply for entry into the Federal Transit Administration Capital Investment Grants Program.

One of the tasks is to perform detailed engineering study in downtown Durham, to support development and refinement of the project concept. This is the single largest task in the Study, and will have significant bearing on the overall project viability, scope, cost, and constructability. To be successful, it will require significant and timely coordination with the City of Durham in this early Study phase.

The City of Durham has requested reimbursement of costs for consultant services that the City plans to engage to participate in review of materials developed by GoTriangle's consultant and the City's costs to manage that effort. These costs are necessary to ensure that the City is able to participate meaningfully in the Study process and provide timely and thorough input.

Reimbursement agreements of this type and/or payment of review fees to municipalities is typical of major capital projects undertaken by regional authorities.

This interlocal agreement will provide a mechanism for GoTriangle to reimburse the City of Durham for these costs.

Financial Impact

The cost of this agreement is within the FY20 Wake and Durham transit plan budgets for commuter rail. At its March 2020 meeting, the GoTriangle Board approved FY20 work plan budget amendments for Wake and Durham resulting in total project allocations of \$6,000,000 and \$2,700,000, respectively. Johnston County has also committed \$250,000. This equates to a total of \$8,950,000 available for this study from the three counties, of which \$7,890,000 has been allocated to date. This agreement is for actual costs up to \$75,000.

Attachments

• Interlocal Agreement with City of Durham – Reimbursement Contract for Technical Services Related to Commuter Rail

Staff Contact

Katharine Eggleston, Chief Development Officer, (919) 485-7564, keggleston@gotriangle.org

GoTriangle Contract Number 20-____

REIMBURSEMENT CONTRACT FOR TECHNICAL SERVICES RELATED TO COMMUTER RAIL

This REIMBURSEMENT CONTRACT FOR TECHNICAL SERVICES RELATED TO COMMUTER RAIL ("Contract") is made and entered into by and between the Research Triangle Regional Public Transportation Authority d/b/a GoTriangle, a public body and body corporate and politic of the State of North Carolina ("GoTriangle"), and the City of Durham, a municipal corporation of the State of North Carolina ("City"). This Contract will become effective when all parties have signed it. The date of this Contract will be the date this Contract is signed by the last party to sign it. GoTriangle and City may be referred to individually as a "party" and collectively as the "parties."

STATEMENT OF PURPOSE

GoTriangle, in collaboration with regional partners, is conducting a study of potential commuter rail transit service in the North Carolina Railroad Company corridor between the city of Durham in the west and the cities of Garner or Clayton in the east ("Study"). City is a key stakeholder in this Study. The purpose of this Contract is to establish terms and conditions upon which City will be reimbursed for actual costs incurred to perform time-critical tasks in support of the Study.

TERMS AND CONDITIONS

Pursuant to the provisions of Article 20 of Chapter 160A of the General Statutes related to interlocal cooperation, and in consideration of the mutual promises contained herein, the parties agree as follows:

- **A. Term.** Unless otherwise terminated pursuant to the provisions herein, this Contract shall be in effect until December 31, 2022. The term of this Contract may be extended by a written agreement duly executed by all parties.
- **B.** Scope of Work. City shall perform the tasks set forth in the Scope of Work attached hereto as Exhibit A (the "Work"). In performing the Work, City may use its own qualified personnel, qualified third-party contractors, or a combination of both.
- **C. Reimbursement Cap.** GoTriangle shall reimburse City for the actual rates and costs properly invoiced by City for all Work satisfactorily performed in accordance with this Contract, up to but not in excess of \$75,000. GoTriangle shall not be liable to City for payments in excess of \$75,000 unless this cap is increased by a written agreement duly executed by all parties.
- **D. Invoicing.** For Work satisfactorily performed in accordance with this Contract, City shall invoice GoTriangle for allowable costs incurred by City, documenting actual rates and costs for City's in-house personnel and for any third-party contractor retained by City. All itemized invoices submitted to GoTriangle shall reasonably substantiate the actual incurred rates and costs for the Work. No more frequently than every 30 days, City shall electronically submit an itemized invoice and progress report to invoice@gotriangle.org, based on the Work satisfactorily completed by City. Upon request, City shall provide GoTriangle with backup documentation and any other information reasonably necessary to verify the invoice.

- **E. Payment Terms.** GoTriangle, within 30 days of receipt of an invoice from City, shall review and reimburse one hundred percent (100%) of the rates and costs invoiced, unless GoTriangle within 10 days of receipt of the invoice notifies City that it has a question about an invoiced cost. In the event GoTriangle has a question about an invoiced cost from City, the designated representatives of the Parties agree to discuss promptly the questioned cost(s) and to make reasonable efforts to resolve the matter(s). If the designated representatives cannot resolve the matter(s) within 30 days after receiving notice of the questioned cost(s) from GoTriangle, the appropriate manager of City and of GoTriangle shall meet promptly to resolve the matter(s).
- **F.** Audits. City shall maintain books and records supporting all amounts invoiced to GoTriangle under this Contract. City shall preserve such books and records for the duration of this Contract and for 3 years thereafter, during which time upon 5 days' prior written notice, GoTriangle employees or contractors, as well as authorized representatives of the Federal or State government, shall have access to the pertinent records relating to the amounts invoiced by City and shall have the right to make any copies thereof for audit or verification purposes.
- **G.** Applicable Laws. GoTriangle and City are public entities and are subject to the North Carolina Public Records Law (Chapter 132 of the N.C. General Statutes, as amended) and other requirements under Federal and State law. This Contract shall be interpreted consistently with such requirements.
- **H. Ownership of Materials.** Each party shall maintain ownership of any materials or work product generated by that party in the performance of this Contract.
- **Liability**. Regardless of the nature of the cause of action, whether in contract, tort, or otherwise, in no event shall City or GoTriangle be liable to each other or to any third party for any consequential, special, reliance, indirect, or punitive damages, regardless of whether City or GoTriangle knew or should have known of the possibility of such damages.
- J. Amendment. Any changes, amendments, corrections, modifications, or additions to this Contract shall be by an amendment in writing; shall be executed and approved by the duly authorized representative (or her/his designee) of each respective party; shall be in accordance with applicable law; and shall become effective upon approval by both GoTriangle and City.

K. Termination.

- **1.** For Convenience. Either party may terminate this Contract for its convenience. The terminating party shall notify the other party in writing at least sixty (60) days in advance of such election to terminate this Contract.
- **2.** For Default. Either party may terminate this Contract for the material breach of the other party following written notice to the breaching party, specifying the nature of the breach

and providing a 30-day cure period in which to cure the breach to the reasonable satisfaction of the notifying party. The 30-day cure period shall commence upon receipt of the written notice by the breaching party. If the breach is not cured in the cure period, the non-breaching party may terminate the Contract. If the breach cannot reasonably be cured in the cure period, the parties may agree in writing to extend the cure period beyond 30 days, or the non-breaching party may terminate the Contract upon expiration of the cure period.

- 3. For Insufficient Funds. This Contract is void and unenforceable if all or part of Federal, State, or local funds applicable to this Contract are not available to GoTriangle. GoTriangle's obligations under this Contract are subject to the availability of authorized funds, determined by GoTriangle's fiscal budget, which runs from July 1 to June 30 of each fiscal year. GoTriangle may terminate this Contract, or any part of the Work, without prejudice to any right or remedy of GoTriangle, for insufficient funds. If this Contract is terminated for insufficient funds: (i) GoTriangle will be liable only for payment in accordance with the terms of this Contract for Work actually completed prior to the termination date designated by GoTriangle in its notice of termination; and (ii) City shall be released from the obligation to perform further Work pursuant to this Contract.
- **4.** In the event of termination of this Contract for any reason, GoTriangle shall reimburse City for all actual Work and costs incurred to that point for completed Work and also for all direct costs City reasonably incurs in connection with ending any Work.
- **L. Governing Law.** This Contract shall be governed by and construed in accordance with the laws of the State of North Carolina without regard to any conflict of laws provisions.
- M. Notice. All notices, communications, documents, and other materials submitted or exchanged between the parties pursuant to this Contract shall be in writing and shall be addressed to the representatives for each party as set forth below and shall be deemed to have been duly given (i) on the date of delivery, if delivered personally to the party to whom notice is given, or (ii) on the date of actual receipt if mailed by United States mail, postage prepaid, return receipt requested. Telephonic and electronic mail communications and facsimile transmittals may be used to expedite communications, but neither shall be considered official communications under this Contract unless and until confirmed in writing by the party to whom the communication was sent. A party shall promptly notify the other party if there is a change regarding the person(s) to whom notices and other communications shall be directed. Notices and other communications shall be directed to the parties at the addresses listed below:

1. If to GoTriangle: GoTriangle

Attn: President and CEO

Delivery: 4600 Emperor Boulevard, Suite 100, Durham, NC 27703

US Mail: P.O. Box 13787, RTP, NC 27709

Email: clattuca@gotriangle.org

With a copy to: GoTriangle

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Attn: General Counsel

Delivery: 4600 Emperor Boulevard, Suite 100 Durham, NC 27703

US Mail: P.O. Box 13787, RTP, NC 27709

Email: scurran@gotriangle.org

2.	If to City:		

- **N. No Waiver.** No failure or waiver or successive failures or waivers on the part of either party, its successors or permitted assigns, in the enforcement of any provision of this Contract shall operate as a discharge of any such provision nor render the same invalid, nor impair the right of either party hereto, their successors or permitted assigns, to enforce the same in the event of any subsequent breaches by the other party hereto, its successors or permitted assigns.
- **O. Merger.** This Contract constitutes the entire agreement of the parties, all prior discussions, representations, and Contracts being merged herein. The Contract may not be changed, modified, extended, or amended, nor any provision thereof waived, except by a written amendment duly executed by the parties. Any Exhibit attached hereto is an integral part of this Contract and is incorporated into this Contract as fully as if the contents thereof were set out in full herein at each point of reference thereto.
- **P. Severability.** If any part, term, or provision of this Contract is judicially determined to be illegal or in conflict with any applicable law, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Contract did not contain the particular part, term, or provision held to be invalid or illegal.
- **Q. No Third Party Rights.** Except as expressly set forth herein, the representations, warranties, terms, and provisions of this Contract are for the exclusive benefit of the Parties hereto, and no other person or entity shall have any right or claim against either Party by reason of any of these terms and provisions or be entitled to enforce any of these terms and provisions against either Party.
- **R.** Successors and Permitted Assigns. Subject to the provisions herein, this Contract shall be binding upon and inure to the benefit of the parties, their successors and permitted assigns. No assignment of this Contract shall be permitted except with the express written consent of the other party, which consent shall not be unreasonably withheld.
- S. Relationship of the Parties. Nothing contained in this Contract will be deemed to be construed by the Parties or any third party as creating a partnership, an agency relationship, or joint venture between the Parties or any of their respective employees, representatives, or agents. Neither Party has any express or implied authority to

assume or create any obligations on behalf of the other or to bind the other to any contract, Contract, or undertaking with any third party.

T. Contracting Laws.

- 1. City and GoTriangle agree, pursuant to NCGS 147-86.55 et seq., that each will not do business with any company appearing on the list of companies determined to be engaged in investment activities in Iran by the North Carolina State Treasurer.
- **2.** City and GoTriangle agree, pursuant to NCGS 147-86.80 et seq., that each will not do business with any company appearing on the list of companies determined to be engaged in a boycott of Israel by the North Carolina State Treasurer.
- **3.** City further agrees to not contract with any entity suspended, debarred, or otherwise ineligible for engaging in business under public contracts.
- **4.** City and GoTriangle agree to comply, and to require their contractors to comply, with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes (E-Verify).
- **U. Contractors.** This Contract shall be specifically incorporated by reference into all third-party contracts and subcontracts regarding or pertaining to the Work. All provisions required by law, regulation, or this Contract shall apply to all contracts and subcontracts of any tier.
- V. Separate Counterparts. This Contract may be executed in one or more counterparts, each of which, when so executed, shall be deemed to be an original. Such counterparts shall together constitute and be one of the same instrument.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute and deliver the Contract.

CITY OF DURH	AM	
Ву:		
Title:	City Manager	
Print Name:		_
Date:		
RESEARCH TRI d/b/a GOTRIA	ANGLE REGIONAL PUBLIC TRANSPOR	TATION AUTHORITY
BY:		_
Title:	President and CEO	
Print Name:	Charles E. Lattuca	
Date:		
	has been pre-audited in the manner Local Government Budget and Fiscal Control le.	Reviewed and approved as to legal form by GoTriangle.
Saundra Freema	n	Shelley Curran
Chief Financial Officer		General Counsel

Exhibit A – Scope of Work

The City of Durham and/or the City's Consultant(s) will review preliminary engineering drawings and related submittals for modifications to City facilities associated with the Greater Triangle Commuter Rail Study. City departments anticipated to utilize the City's Consultant(s) for review of materials generated by GoTriangle and GoTriangle's Consultant include Transportation, Public Works, and Water Management.

Specific activities to be performed by the City of Durham and/or the City's Consultants are described below.

- Attend virtual meetings.
- Review plans submitted to the City and note water and sewer conflicts and deviations from City
 of Durham Standards and Specifications.
- Review proposed typical section changes, grade changes and road network changes. The review
 will be to confirm the proposed changes follow current City standards and to evaluate their
 overall impact to the City's road network.
- Review proposed relocations to confirm that the proposed location is logical for regular maintenance and accessible after the project is complete.
- Review the corridor for possible locations of any future use crossings that the City may need.
- Review plans and compare to any known development along the project corridor.
- Review the impacts on existing Public Works and Water Management facilities.
- Provide a constructability and phasing review on City streets, water and sewer systems, and other City-maintained networks that may be affected by the Greater Triangle Commuter Rail project.



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Capital Development

DATE: October 22, 2020

SUBJECT: Consulting Services for Regional Fleet and Facilities Study

Strategic Objective or Initiative Supported

1.2 Pursue service improvements and expansion opportunities

Action Requested

Staff requests that the Operations and Finance Committee recommend that the Board of Trustees authorize the CEO and President to execute an agreement with the selected consultant for the Regional Fleet and Facilities Study at a cost not to exceed \$987,500.

Background and Purpose

The FY21 transit work plans in Durham, Orange, and Wake counties include funding for GoTriangle to perform a Regional Transit Fleet and Facilities Study. To complete this project, GoTriangle is seeking consultant support with assessing fleet and maintenance facility needs for GoTriangle and GoDurham, developing a conceptual design for these needs, and planning for potential regional electric bus charging infrastructure and other potential shared operations and maintenance resources. This effort will be closely aligned with ongoing transit plan updates in the three counties by the local Metropolitan Planning Organizations (MPOs), GoTriangle, and transit partners. If significant bus service expansion is contemplated in the transit plan updates, particularly in Durham, both GoTriangle and GoDurham will likely require additional maintenance capacity. The scope of services will include planning, conceptual design, and cost estimating to assess needs for expansion of existing maintenance facility sites and evaluate up to four alternative sites for new facilities.

The Study will identify potential expansions and alternatives to current utilization of existing facilities that will improve cost-efficiency and provide responsive services. GoTriangle will evaluate the alternatives based upon the following objectives:

- Strategic capital improvement investment that will add value
- Optimized usage of all facilities space and equipment (performance and safety)



- Improved employee working environment (lounge, computer room, workout room, outdoor area, etc.)
- Optimized logistical efficiency for bus dispatch, maintenance, and materials management
- Optimized maintenance costs and out-of-service time for road call incidents
- Minimization of deadhead time and cost
- Reduced operating costs
- Leveraging existing publicly owned real estate portfolios to the extent practicable
- Prioritized sustainability goals by providing recommendations that minimize energy use and emissions, focus on maintenance and building renewal to reduce operating costs, maximize the life expectancy of facilities and equipment, and optimize space utilization
- Consideration of regulatory requirements

The current schedule for this procurement plans for the selection committee to complete its evaluations and make a recommendation of the preferred consultant to the President and CEO by November 10. The DBE participation goal for this solicitation is 11.1%.

Financial Impact

The total budget allocated for projects comprising the Regional Fleet and Facilities Study across the Durham, Orange, and Wake transit work plans and GoTriangle budget is \$1,512,500. The amount allocated for this component of study is \$987,500, attributed to approved amounts by funding source as follows: \$551,025 for Durham, \$34,562 for Orange, \$121,463 for Wake, and \$280,250 for GoTriangle. GoTriangle will seek reimbursement for a portion of the GoTriangle share from its annual allocation of federal funds.

Attachments

• Scope of Services

Staff Contact

• Katharine Eggleston, CDO, 919-485-7564, keggleston@gotriangle.org

I. INTRODUCTION

GoTriangle, a regional transit agency operating bus services in Durham, Orange, and Wake counties in North Carolina, is requesting proposals from qualified firms to provide professional architectural and engineering services for the study and design through the conceptual phase of the proposed Regional Fleet Maintenance Facilities. We anticipate that the consultant will provide complete professional architecture/engineering services, including, but not limited to planning, programming, studies, analysis, and concept design services. This scope of work is intended to provide an overview of the anticipated major activities in the study; GoTriangle will finalize the detailed scope of services with the selected consultant during the negotiation phase of this procurement. This request for proposal does not include services beyond the concept design. However, the selected firm may be requested to provide a limited scope of follow-on services and assistance at the sole discretion of GoTriangle.

II. PROJECT OVERVIEW AND OBJECTIVES

GoTriangle has access to up to \$1.1M local funding for regional fleet and facilities study in FY21, assessing fleet and maintenance facility needs for GoTriangle and GoDurham, developing a conceptual design for these needs, and planning for potential regional electric bus charging infrastructure and other potential shared operations and maintenance resources. This effort will be closely aligned with ongoing transit plan updates in the three counties by the local Metropolitan Planning Organizations (MPOs), GoTriangle, and transit partners. If significant bus service expansion is contemplated in the transit plan updates, particularly in Durham, both GoTriangle and GoDurham will likely require additional maintenance capacity. The scope of services will include planning, conceptual design, and cost estimating to assess needs for expansion of existing maintenance facility sites and evaluate up to four alternative sites for new facilities (Study).

The Study will identify potential expansions and alternatives to current utilization of existing facilities that will improve cost-efficiency and provide responsive services. GoTriangle will evaluate the alternatives based upon the following objectives:

- Strategic capital improvement investment that will add value
- Optimized usage of all facilities space and equipment (performance and safety)
- Improved employee working environment (lounge, computer room, workout room, outdoor area, etc.)
- Optimized logistical efficiency for bus dispatch, maintenance, and materials management
- Optimized maintenance costs and out-of-service time for road call incidents
- Minimization of deadhead time and cost
- Reduced operating costs
- Leveraging existing publicly owned real estate portfolios to the extent practicable
- Prioritized sustainability goals by providing recommendations that minimize energy use and emissions, focus on maintenance and building renewal to reduce operating costs, maximize the life expectancy of facilities and equipment, and optimize space utilization
- Consideration of regulatory requirements

III. SCOPE OF WORK SUMMARY

GoTriangle is soliciting proposals from qualified consultants to develop a Regional Fleet and Facilities Study (Study). The Study will include:

- Assessment of the existing GoDurham and GoTriangle maintenance facilities
- Collection and incorporation of input from stakeholder groups gathered through stakeholder workshops
- Recommendations from evaluation of alternatives to expand existing maintenance facilities and to develop new sites, including cost/benefit analysis, to guide the City of Durham and GoTriangle in future decision-making
- Recommendations for future fleet size and fleet management approaches for both GoDurham and GoTriangle based on transit plan updates for Durham, Orange, and Wake counties
- Identification of partnership opportunities
- Identification and evaluation of shared maintenance opportunities
- Analysis of electric bus charging infrastructure needs

The Study will evaluate future needs, consider alternatives, recommend implementation strategies, and consider economic and environmental impacts. The consultant is expected to provide a thorough documented analysis reporting viable and sound alternatives to current facilities utilization. The analysis should be focused on creating facilities that are optimally configured and operated in a manner that will provide sufficient capacity to deliver cost-effective and responsive transit services to our customers in both current and future operating environments. Additionally, the Study should consider current and impending state and federal regulations affecting the transit industry.

The consultant shall be familiar with following reference documents, at a minimum:

- 1. Durham County Transit Plan Update (in progress target completion fall 2021)
- 2. Orange County Transit Plan Update (in progress target completion spring 2021)
- 3. Wake Transit Vision Plan Update (in progress target completion spring 2021)
- 4. GoTriangle Short-Range Transit Plan (Approved 2018)
- 5. GoDurham Short-Range Transit Plan (Approved 2019)
- 6. GoTriangle BOMF Assessment Report (Published 2019)
- 7. Durham County Transit Plan (Adopted 2017, amended 2019)
- 8. Orange County Transit Plan (Adopted 2017, amended 2019)
- 9. Wake County Transit Plan (Adopted 2016)
- 10. FTA Asset Management Guide Supplement: Asset Category Overviews & Lifecycle Management (Original October 2012, Updated September 2019)

GoDurham operations and maintenance activities are currently performed primarily at the GoDurham facility at 1903 and 1911 Fay Street, Durham:

- Fixed-route fleet 59 vehicles, of which five are contingency. Current fleet includes a combination of Gillig 40-foot low floor diesel and Gillig 40-foot low floor hybrid. GoDurham expects to take delivery of two Gillig 40-foot low floor electric buses later this calendar year, and has ordered eight replacement Gillig 40-foot low floor clean diesel buses.
- Demand-response fleet 48 vehicles. Typical (pre-COVID) peak vehicles in service is 41-43; current peak vehicles in service is 30. Fleet includes a mix of unleaded gasoline fueled Ford high-top vans, Dodge Caravan low floor vehicles, Ford 20-foot light transit vehicles (LTV), Ford 22-foot LTVs.
- Maintenance facility interior space
 - o Fixed route: 25,240 sf
 - o Demand response: 8,130 sf
- Maintenance facility total size: 39.94 acres

GoTriangle operations and maintenance activities are currently performed primarily at the GoTriangle facility at 5201 Nelson Road, Morrisville:

- Fixed-route fleet 70 vehicles. Current fleet includes a combination of Gillig 40-foot and 35-foot diesel, and two Proterra 40-foot electric buses.
- Demand-response fleet 25 vehicles. Current fleet includes a mix of unleaded gasoline fueled Champion and Startran LTVs.
- Maintenance facility interior space: 33,245 sf
 Maintenance facility total size: 13.81 acres

IV. SCOPE DETAILS AND DELIVERABLES

1. Project Management

The consultant shall:

- 1.1. Develop and maintain project execution plan for Study activities. Include the consultant's identified single point-of-contact for communication with GoTriangle and organizational charts identifying key team members. The execution plan shall also include QA/QC and safety plans and procedures applicable to the consultant and its subconsultants. Submit initial documents for GoTriangle review within 15 calendar days (days) of notice to proceed (NTP). GoTriangle and the consultant will use best efforts to finalize these documents no later than 45 days following NTP.
- 1.2. Develop and maintain a detailed, task-specific project schedule, including consultant-led tasks in this scope of work and tasks led by GoTriangle and other partners, in a format acceptable to GoTriangle. Schedule shall identify, at a minimum, activities and durations, work phases, milestones, anticipated delivery dates, and GoTriangle and partners review periods. Furnish initial schedule within 15 days of NTP and furnish monthly schedule updates.
- 1.3. Progress reporting (documentation and meetings)
 - 1.3.1. Furnish monthly progress reports and itemized invoices in a format acceptable to GoTriangle no later than the 20th day of the month following each invoice period. For June invoices (GoTriangle fiscal year close), furnish June invoice amount no later than July 15.
 - 1.3.2.Lead weekly/biweekly project administration meetings with GoTriangle; develop and distribute agendas and furnish meeting summaries.
 - 1.3.3. Furnish projected expenditure forecast by month within 15 days of NTP; furnish updated forecasts on a quarterly basis thereafter.
- 1.4. Submit all project deliverables, associated quality records, and in-progress work products requested by GoTriangle via project SharePoint site in a format consistent with GoTriangle file system specifications.
- 1.5. Perform a formal review of this scope of work at the midpoint of the period of performance, and coordinate with GoTriangle to update as necessary to conform to evolutions in project needs.

Deliverables

- Project Execution Plan
- Project Schedule (initial and updated monthly)
- Expenditure Forecast (initial and updated quarterly)
- Monthly Progress Report / Invoice (monthly)

2. Operations and Maintenance Facility Assessment

- 2.1. The consultant shall hold workshop(s) with key GoTriangle, GoDurham and partner staff to obtain a clear understanding of the current operating conditions, needs of the facility and staff, deficiencies, priorities for improvements and future service level needs. Examples of discussion points include state of space utilization, business processes, operating procedures, workflow, space relationships, adjacencies, and building systems.
- 2.2. The consultant shall review existing real estate portfolios owned by City of Durham, Durham County, GoTriangle, and other potential partners as identified by GoTriangle, and consider opportunities to leverage existing inventory in developing recommendations in the remainder of Task 2.
- 2.3. After identifying facility needs and performing facility assessments, the consultant shall provide recommendations for current and future facilities investments. In determining the need for upgrades or replacements to existing facilities, operations and maintenance related equipment, and systems, the Study should consider but not be limited to, recent experience and lessons learned from peer agencies, new building code requirements, regulatory compliance (e.g., hazardous waste management and occupational health & safety), site safety and security considerations, economic service life, obsolescence, and deterioration. Recommendations should also maximize efficiency and utility of current and projected operations. The various recommendations should be accompanied with cost estimates that can be used for budgeting purposes and a cost-benefit analysis or related evaluation technique for capital-intensive recommendations. It is important to identify key investment priorities that provide GoTriangle with the greatest return on investment. The Study should also highlight the costs and consequences of maintaining the status quo, which should include impacts to current and projected operations.
- 2.4. The subsequent analysis should provide, at a minimum, the following:
 - a. Optimal use of existing site or optimal acreage of new site to accommodate maintenance of anticipated future fleet size and make-up (based on transit plan updates, which may contemplate multiple scenarios of bus service investment and fleet size expansion; iterative analysis in parallel with transit plan updates and coordination with the transit plan consultants is likely to be required).
 - Required functions (including administration, operations, maintenance, and amenities storage) to be housed, optimal square footage required for each function, and recommendations for separation/collocation of functions.
 - c. Preliminary building(s) specifications.
 - d. Optimal circulation plan for parking, cleaning buses, including considerations for electric bus charging, parking needs for future fleet expansion and non-revenue vehicles, and employee parking, and consideration for assignment/reporting booth in bus parking area if not adjacent to building.

- e. Passenger handling requirements, if necessary (GoTriangle does not expect passenger handling to be co-located at these facilities, although it is possible depending on location).
- 2.5. The following outlines the minimum components of the assessment for both the GoDurham (Fay Street) and GoTriangle (Nelson Road) facilities:
 - a. Functional Needs and Capacity Evaluation
 - i. The consultant shall utilize workshops with GoDurham/GoTriangle staff (see 2.1) and site visits to confirm the functional needs of the space (including deficiencies), assess accessibility and evaluate the existing capacity limits.
 - ii. Assessment of existing facility condition as it relates to the facility's ability to meet functional and operational needs. GoTriangle does not anticipate that a structural assessment and other detailed facility health assessments will be required. (A preliminary study of the GoTriangle facility was recently conducted; consultant shall review that study and refresh for recent facility changes.)
 - b. Expansion Recommendations
 - i. On-site expansion
 - Space Programming for building and site: Determine adequacy of existing property to accommodate future transit operation requirements.
 Consultant will determine, based upon the forecast facility and programming needs, the facility elements and space requirements needed to meet these needs. The Study will also include a proposal for where these needs will physically be met/located and will include considerations for interdependencies between departments/functions to improve communications, reduce operating costs and improve efficiency.
 - Schematic(s)
 - Include pro and con arguments for each of the options, along with a list of potential concerns of major stakeholders who may be impacted.
 - Site environmental assessment: Assessment of the overall impact on the surrounding area including historic preservation (where applicable), land, air, water use, neighboring business, traffic-noise impacts, etc.
 - Site geotechnical assessment.
 - Consultant shall provide all due diligence documents, reports and analysis to preserve federal funding eligibility for future design and construction (e.g. Title VI, NEPA screening).
 - ii. Off-site expansion/relocation/satellite schematic(s)
 - Evaluation and Selection of New Facility Sites
 - With input from GoTriangle, develop geographic target areas for site selection, considering efficiencies/minimizing non-revenue miles for current and anticipated future fixed route services and paratransit trips.
 - Provide a list of conditions that determine whether alternative sites are reasonable to pursue.
 - Establish a list of available or potentially available properties through a criteria-driven site search. An example of site features to be reviewed include: Parcel PIN, Owner, Address, Size (ac), Total Assessed Value, Cost per Acre, Existing Structures, Above Ground

- Utility, Existing Zoning, Streams, Water Bodies, Flood Zones, Historic Properties, Community Resource and Hazardous Materials.
- Coordinate with GoTriangle to confirm the (up to) four alternative sites to be presented with the assessment.
- Identify any required zoning changes that would be needed.
- Develop organizational and operational plans for each alternative site.
- Evaluate impact to deadhead miles and the associated costs.
- Space Programming for building and site
- Include pro and con arguments for each of the options, along with a list of potential concerns of major stakeholders who may be impacted.
- Site environmental assessment: Assessment of the overall impact on the surrounding area including historic preservation (where applicable), land, air, water use, neighboring business, traffic-noise impacts, etc.
- Site geotechnical assessment.
- Consultant shall provide all due diligence documents, reports and analysis to preserve federal funding eligibility for future construction associated with GoTriangle and GoDurham maintenance facilities (e.g. Title VI, NEPA screening).
- iii. Conceptual designs for all alternatives, including graphical renderings
- iv. Cost estimates for expansion and new site alternatives confirmed for consideration by GoTriangle
 - A detailed conceptual phase opinion of probable cost for each alternative. The cost opinion will include hard costs for any off-site utilities or other improvements required for the projects, all site development and building construction, as well as all soft costs for land acquisition, permitting, design, bidding, construction administration services, surveys, environmental and geotechnical services, and construction materials testing and special inspections, if necessary. The opinion will also include both designer and owner contingencies and be in format as requested by GoTriangle.
 - Cost estimates shall include detailed clarifications and assumptions.
 - GoTriangle does not require an appraisal of its properties but expects the consultant to include a Broker's opinion of value or equivalent.
- Anticipated design and construction schedule for expansion and new site alternatives, including initial land acquisition where applicable. Schedules for expansion at existing sites shall consider that the facilities need to remain operational.
- vi. Opportunities for phasing improvements, considering both funding/grant availability as well as phasing over time to align with anticipated fleet expansion schedule
- vii. High-level relocation plan and phasing for each alternative
- viii. Proposed plan for potential re-use and sale of existing facilities and properties.
- ix. Comparison of on-site and off-site expansion/relocation options
 - a. Cost/benefit analysis, feasibility analysis, text narrative and table presentation, pros and cons of each alternative. Analysis should consider the study objectives.

Deliverables

Data Collection Plan (Reference Task 2.1)

- Prepare and send to GoTriangle for review and approval: workshop plan with timeline, staff information, objectives, methodology, and post-workshop deliverables.
- Data Collection Meeting Agendas and Materials (Reference Task 2.1)
- Review and discuss findings from data collection workshops (Reference Task 2.1)
- Review and discuss summary of findings and preliminary recommendations/analysis with GoTriangle for input and feedback prior to developing draft reports. (Reference Task 2.1-2.4)
- GoDurham Facility Expansion Report (Draft and Final) (electronic copy) (Reference Task 2.2-2.4)
 - Draft report shall be provided to GoTriangle for review and comment. The review period shall be a minimum of two weeks. After receiving all comments, the consultant shall submit a final report within 30 days.
 - The report shall be informed by the findings of the GoDurham Fleet Size and Composition Assessment Technical Memorandum (Reference Task 3.1) and the full Technical Memorandum shall be included with the report as an attachment or appendix.
 - The report shall be informed by the GoDurham components of the Regional Shared Maintenance Opportunities Technical Memorandum (Reference Task 4.2) and the Regional On-Route Electric Charging Infrastructure Report (Reference Task 3), both of which shall be included with the report as an appendix.
- GoTriangle Facility Expansion Report (Draft and Final) (Reference Task 1.2-1.4)
 - Draft report shall be provided to GoTriangle for review and comment. The review period shall be a minimum of two weeks. After receiving all comments, the consultant shall submit a final report within 30 days of receiving comments.
 - The report shall be informed by the findings of the GoTriangle Fleet Size and Composition Assessment Technical Memorandum (Reference Task 3.2) and the full Technical Memorandum shall be included with the report as an attachment or appendix.
 - The report shall be informed by the GoTriangle components of the Regional Shared Maintenance Opportunities Technical Memorandum (Reference Task 4.2) and the Regional On-Route Electric Charging Infrastructure Report (Reference Task 3), both of which shall be included with the report as an attachment or appendix.
- Present Final Report summary to GoTriangle and City of Durham leadership.
- Attend board presentation as requested by GoTriangle and City of Durham.

3. Fleet Size and Composition Assessment

- 3.1 GoDurham Fixed Route and Paratransit
 - a. The most recent current fleet inventory will be provided to the consultant for reference.
 - b. Consultant shall recommend the future fleet size and composition (e.g. diesel versus electric for fixed route; potential propane for paratransit) to achieve the goals set forth in the Durham Transit Plan updates, suitability of electric bus range considering routes, runcutting, and blocking, and input from GoTriangle/GoDurham. Future fleet projections will inform future maintenance needs and capital plan.
 - c. Consultant shall provide recommendations regarding a fleet acquisition/management plan.
- 3.2 GoTriangle Fixed Route and Paratransit
 - a. The most recent current fleet inventory and buying process shall be provided to the consultant for reference.
 - Consultant shall recommend the future fleet size and composition (e.g. diesel versus electric) to achieve the goals set forth in the Durham, Orange, and Wake Transit Plan updates, including suitability of electric bus range considering routes, runcutting, and

- blocking, with input from GoTriangle. Future fleet projections will inform future maintenance needs and capital plan.
- c. Consultant shall provide recommendations regarding adjustments to the existing fleet management plan.
- d. Contracted Services Assessment Consultant shall assess current list of contracted routes for potential conversion to direct operation and shall assess current list of directly operated routes for potential conversion to contracted services. Evaluation shall include assessment of costs, non-revenue miles, and other relevant considerations.

Deliverables

- GoDurham Fleet Size and Composition Assessment Technical Memorandum (Draft and Final).
- GoTriangle Fleet Size and Composition Assessment Technical Memorandum (Draft and Final).

4. Regional Partnership Opportunities

- 4.1 Regional Transit Partner Meetings
 - a. Consultant shall work with GoTriangle to convene meetings or workshops as necessary with other Triangle area transit operators (e.g. GoCary, GoRaleigh) to engage on the topics in this task (Reference 4.2 and 4.3).
- 4.2 Partnership Opportunities
 - a. Consultant shall document all potential partnership opportunities discussed during Partner Meetings, including those beyond what directly influences this Study.
 - Consultant shall evaluate opportunities for and feasibility of shared maintenance activities
 or shared space for contracted activities (e.g. paint/body, heavy duty vehicle maintenance,
 overhaul/rebuild).
- 4.3 Regional On-Route Electric Charging Infrastructure
 - a. Consultant shall conduct an electric charging infrastructure needs assessment based on current and future anticipated electric bus fleet and routes.
 - b. Consultant shall evaluate and propose infrastructure locations (opportunity sites).
 - c. Consultant shall recommend a phased schedule for installing electric charging infrastructure based on fleet projections and future route planning.
 - d. Consultant shall provide an opinion of probable cost for infrastructure upgrades, aligned with the proposed phased schedule.

<u>Deliverables</u>

- Data Collection Meeting Agendas and Materials (Reference Task 4.1).
- Present summary of findings and preliminary recommendations/analysis to GoTriangle for input and feedback prior to developing Technical Memorandum and Electric Charging Infrastructure Report (Reference Task 4.1).
- Regional Shared Maintenance Opportunities Technical Memorandum (Draft and Final).
- Regional On-Route Electric Charging Infrastructure Report (Draft and Final).

V. PROJECT DURATION

GoTriangle anticipates this scope will be completed within a period of 12-18 months from notice to proceed.



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Capital Development

DATE: October 22, 2020

SUBJECT: Consulting Services for Durham Station Improvements Preliminary Design

Strategic Objective or Initiative Supported

2.4 Ensure an attractive and accessible transit environment

Action Requested

Staff requests that the Operations and Finance Committee recommend that the Board of Trustees authorize the CEO and President to execute an agreement with the selected consultant for the Durham Station Improvements Preliminary Design at a cost not to exceed \$300,000.

Background and Purpose

Durham Station, located at 515 W Pettigrew Street in Durham, is central and critical to transit in the City of Durham now and will remain vital to successful transit in the city in the future. The City of Durham is seeking to make improvements to the transportation center, taking into account the many years of feedback and knowledge of the facility from operations staff, users, and community members. In addition, the area around Durham Station has greatly changed since it opened in the mid-2000s, as developments have filled in the fabric of the city around the facility and many new developments are being planned or are in construction in close proximity to the site.

The FY21 transit work plan in Durham includes funding for GoTriangle to lead the preliminary design phase for improvements to Durham Station as part of its larger Regional Fleet and Facilities Study project. The Durham Station Improvements Preliminary Design component will advance work on the project to support cost estimating and scheduling and provide a schematic design package for the City to use to carry the project forward if/when funding to complete final design and construction of the project is identified in future year transit work plans.

To complete the preliminary design effort, GoTriangle is seeking consultant support to validate prior planning work, confirm a program of improvements, and develop a schematic design package.

The current schedule for this procurement plans for the selection committee to complete its evaluations and make a recommendation of the preferred consultant to the President and CEO by November 10. The M/WBE participation goal for this solicitation is 14%.

Financial Impact

The total budget allocated for projects comprising the Regional Fleet and Facilities Study across the Durham, Orange, and Wake transit work plans and GoTriangle budget is \$1,512,500. The amount allocated for the Durham Station Improvements component of the effort is \$300,000, attributed 100% to Durham.

Attachments

• Scope of Services

Staff Contacts

- Katharine Eggleston, CDO, 919-485-7564, keggelston@gotriangle.org
- Bryan Hammond, Project Architect, 919-314-8742, bhammond@gotriangle.org

RFQ Scope of Services for Durham Station Improvements Preliminary Design

1 OVERVIEW

1.1 Project Summary

The role of the selected firm shall perform the services in three phases:

- 1. Ridership Survey Collection and Validation of Existing Data
- 2. Programming and Conceptual Design (10%)
- 3. Schematic Design (35%)

Durham Station located at 515 W Pettigrew Street in Durham, NC is central and critical to transit in the City of Durham now and will remain vital to successful transit in the city in the future. The City of Durham is seeking to make improvements to the transportation center, taking into account the many years of feedback and knowledge of the facility from operations staff, users and community members. In addition, the area around Durham Station has greatly changed as developments have filled in the fabric of the city around the facility, and many new developments are being planned or are in construction in close proximity to the site.

In 2011, the Freelon Group performed a detailed study of Durham Station, its users, and pedestrian movement on site, as well as developed several conceptual ideas on ways to improve the station. The successful team selected to perform this work will need to show their ability to validate the data from the 2011 study, and assess the current setting of Durham Station and the necessary improvements the station needs to improve the user experience and successfully provide transit services in the future.

The selected team shall begin the process of developing a plan for necessary improvements to the station. In the conceptual design phase, the team shall work with the Agency and its partners to provide a program and requirements of necessary work to be performed. The program developed should provide clarity on clear goals with measurable success and maximum benefit to the ridership and transit operations. Conceptual designs shall include a high/low context for budget considerations. Renovations, demolition, or expansions to any of the facilities on-site should be carefully considered to be focused on improving the station's passenger experience and delivering clear and/or measurable improvements to the station experience.

Working with GoTriangle, GoDurham and the City of Durham, the selected team shall produce an updated and validated study of Durham Station and incorporate that data into a bilingual public outreach exercise to inform and get feedback from the community about the conceptual design direction being considered.

A schematic design package (35%) shall be produced by the selected team, following approval and selection of a conceptual design and cost estimate. Upon completion of the final Schematic Design package, it is anticipated that the City of Durham's General Services Department shall take over completion of the designs for the improvements to Durham Station and will engage a contractor for construction of the improvements through a separate process.

2 SCOPE OF SERVICES

2.1 Survey Collection and Validation

a. Assess 2011 Freelon Group study of Durham Station

- i. Review and/or validate data in Freelon Group study particularly regarding pedestrian movements and access on site.
- ii. Meet with station operations staff to confirm validation of data as required.
- iii. Utilize relevant data in updated comprehensive report.

b. Provide Updated Report with Survey Data and Site Context

- i. Assess the site context and future developments around Durham Station to provide a report on the needs of the station in the future
- ii. Considerations to renovation of Durham Station building shall include a cost/benefit analysis
- iii. Assessment of exterior improvements for the site, including but not limited to pavement repair/replacement, canopy re-design, complete canopy coverage of entire bus island, bus movement and turning, relocating or reconfiguring buses on the site, reducing pedestrian/bus conflicts, safety and security, taxi area, limiting non-bus vehicular access on site, pedestrian circulation, passenger waiting areas, pedestrian crossings and access, site lighting, restroom location, mobile ticketing, landscaping, wayfinding and bilingual considerations, energy efficiency measures, potential future use of ev vehicles and/or charging, etc.
- iv. Assessment of interior improvements should focus on clear and measurable, fiscally responsible improvements, taking into account customer and community feedback.

Task 1 Deliverables

Report summarizing data validation and current development context

2.2 **Programming and Conceptual Design (10%)**

a. Develop Conceptual Design

- i. Develop program of improvements and establish basis for project scope, schedule and budget for high and low cost options.
- ii. Itemize material and product data for consideration in use of conceptual designs.
- iii. City of Durham staff will select and approve the program before proceeding to conceptual design.
- iv. City of Durham staff will comment on and review the conceptual designs prior to finalization of 10% conceptual design package.
- v. Conceptual designs shall include a unit/cost benefit analysis and/or estimate for comparison purposes.
- vi. Conceptual designs shall consider relevant implementation planning and analysis, including but not limited to site utilities, demolition, drainage and runoff, transportation schedule, bus and pedestrian movements and passenger

RFQ Scope of Services for Durham Station Improvements Preliminary Design

- safety and security.
- vii. Final conceptual design package shall be approved by City of Durham staff prior to schematic design phase.
- viii. Preferred conceptual designs shall be focused on clearly improving the passenger experience of Durham Station

b. Presentation of Conceptual Design and Collect Updated Rider Feedback

 Work with Agency and partners to present a bilingual presentation of the conceptual designs and perform a bilingual rider and community survey to get feedback about the needs of Durham Station.

Task 2 Deliverables

- Technical memorandum documenting proposed program (draft and final)
- Conceptual design package
- Summary of rider feedback to conceptual design presentation

2.3 Schematic Design (35%)

- a. Team to develop schematic design package, including detailed project budget, schedule and associated documentation.
- b. Schematic design package includes relevant drawings, details, product data, specifications, and renderings sufficient for design development to begin.
- c. Final schematic design package shall include a detailed cost estimate.

Task 3 Deliverables

Schematic design package (35%)

SCHEDULE

- Target date for Contract Award December 15, 2020
- Target completion of Schematic Design (35%) package by June 30, 2021

2.4 Assumptions

- 1. GoTriangle is facilitating the process for 35% Schematic Design set, and will facilitate coordination with City of Durham for review and approvals.
- 2. Project management and invoicing for this contract will be through GoTriangle.
- 3. Upon completion of the 35% Schematic Design set, the City of Durham's General Services Department will take over completion of the design and construction phases for the project.
- 4. 2011 Freelon Group presentation on improvements to Durham Station attached



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Capital Development

DATE: October 22, 2020

SUBJECT: Authorization to Contract for Design of 50 GoDurham Bus Stops

Strategic Objective or Initiative Supported

2.4 Ensure an attractive and accessible transit environment

Action Requested

Staff requests that the Operations and Finance Committee recommend that the Board of Trustees authorize the CEO and President to execute a task order for bus stop design services under GoTriangle Contract #18-041F, Master Agreement between Ramey Kemp and Associates and GoTriangle for On-Call Architectural and Engineering Consultant Services for an amount not to exceed \$500,000.

Background and Purpose

The adopted FY21 workplan for the Durham County Transit Plan includes funding for GoTriangle to continue managing a pipeline of 50 bus stop improvements per year for GoDurham. Bus stops improvements initiated through this program in FY20 are now transitioning to the construction phase, and it is now time to begin design on the FY21 group of stops. GoTriangle has coordinated refinements to the prioritization methodology used to identify stops for improvement with the City of Durham, and is in the process of confirming feasibility of the individual locations in the prioritized list.

With approval to authorize this task order, staff will be able to initiate design as the locations for the FY21 improvements are confirmed. Staff will request future authorizations to contract for real estate acquisitions services, amenities purchase, and construction as necessary to complete the project.

The M/WBE goal for this task order is 12%.

Financial Impact

The adopted FY21 workplan for the Durham County Transit Plan includes \$2,500,000 for development and delivery of improvements at 50 bus stops, of which \$500,000 is allocated for design services.

Attachments

None

Staff Contact(s)

- Katharine Eggleston, CDO, 919-485-7564, keggleston@gotriangle.org
- Willie Noble, Manager of Construction, 919-485-7563, wnoble@gotriangle.org



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Capital Development

DATE: October 22, 2020

SUBJECT: FY 2020 Annual Bus Service Performance Report

Strategic Objective or Initiative Supported

1.1 Increase number of customers served with sustainable transportation services

Action Requested

None

Background and Purpose

In September 2003, GoTriangle's Board of Trustees adopted the Regional Bus Service Standards to establish performance expectations for the agency's fixed-route services. This report provides a summary of GoTriangle's regional bus service performance during fiscal year (FY) 2020, with comparisons to FY 2019 and prior years to illustrate changes and trends in performance.

Key Findings

- Ridership dropped by 18 percent in FY 2020. However, before the COVID-19 pandemic it
 was substantially stable over FY 2019. Therefore the entire drop in ridership appears
 attributable to the pandemic.
- The reduction in service levels implemented in response to the pandemic was rightly sized and helped limit the loss in boardings per revenue hour across the system.
- There are consistent signs that the demand for regional transit service is increasing on the core routes, particularly at off-peak times (weekday evenings and Sundays).
- Ridership on the core routes is more resilient to prolonged emergency scenarios than the peak-only commuter routes.
- Before the pandemic, Route 405 was the most productive route in the system, followed by the DRX.



- The NRX, which replaced Route 201 with a new routing in August 2019, did not meet ridership and productivity expectations in the first eight months of service.
- The replacement of Go OnDemand with RTP Connect led to a moderate ridership increase and a strong productivity increase.

Financial Impact

None

Attachments

- Attachment A: FY 2020 Annual Bus Service Performance Report
- Attachment B: FY 2020 Service Statistics
- Attachment C: FY 2020 Fare Program Statistics

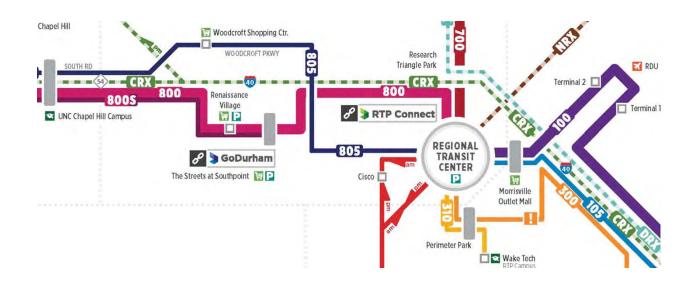
Staff Contacts

- Andrea Neri, Transit Service Planner, 919-485-7592, aneri@gotriangle.org
- Matthew Frazier, Data Specialist, 919-485-7528, mfrazier@gotriangle.org



FY 2020 Annual Bus Service Performance Report

October 2020



Introduction

In September 2003, GoTriangle's Board of Trustees adopted the Regional Bus Service Standards to establish performance expectations for the agency's fixed-route services. The intent was to drive improvements in productivity by routinely and systematically evaluating bus service performance against quantifiable indicators. Since the adoption of the Standards, the annual performance reporting process has been incrementally adjusted to provide the most useful information about GoTriangle's bus service.

Fiscal year 2020 presented unique challenges in the transit world and beyond due to the COVID-19 pandemic. Toward the end of the 3rd quarter, ridership dropped suddenly and dramatically due to the progressive increase in the population testing positive to the virus and the announcement of the Stay-at-Home order imposed by the Governor of North Carolina (Executive Order 121). To better facilitate health and safety protocols and match the reduced demand with right-sized service, GoTriangle reduced its service levels starting March 29th, 2020. At the end of the fiscal year, the pandemic and Stay-at-Home orders were still in place and ridership had not recovered: the 4th quarter showed ridership levels substantially lower than those recorded in FY 2019.

For this reason, the performance indicators presented in this report are also broken down in "before" the pandemic with February 29th, 2020 as a cutoff date and the time "during" the pandemic starting on April 1st. The month of March was a transitional time when ridership collapsed and because of its uniqueness, it is generally not included in either the "before" or "during" datasets.

The principal performance indicators presented are:

- **Daily Boardings** how many people are using the service provided?
- Boardings per Revenue Hour how cost-effective is this service compared to others?
- On-Time Performance how well is the service meeting the expectations set by the schedule?

This report also provides comparisons to Fiscal Year 2019 and prior years in order to illustrate changes and trends in performance.

Key Findings

- Ridership dropped by 18 percent in FY 2020. However, before the COVID-19 pandemic it
 was substantially stable over FY 2019. Therefore the entire drop in ridership appears
 attributable to the pandemic.
- The reduction in service levels implemented in response to the pandemic was rightly sized and helped limit the loss in boardings per revenue hour across the system.
- There are consistent signs that the demand for regional transit service is increasing on the core routes, particularly at off-peak times (weekday evenings and Sundays).
- Ridership on the core routes is more resilient to prolonged emergency scenarios than the peak-only commuter routes.
- Before the pandemic, Route 405 was the most productive route in the system, followed by the DRX.



- The NRX, which replaced Route 201 with a new routing in August 2019, did not meet ridership and productivity expectations in the first eight months of service.
- The replacement of Go OnDemand with RTP Connect led to a moderate ridership increase and a strong productivity increase. The new structure allowed the boardings per revenue hour indicator to grow even during the pandemic.

What Changed in FY 2020

GoTriangle usually implements major service changes in August of each year and minor service changes in January. In FY 2020 the COVID-19 outbreak led to three additional service changes in March, May and June, which modified service to respond to the fall in ridership and public health concerns such as facilitating social distancing.

August 5th, 2019

In an effort to advance the implementation of the approved Short Range Transit Plan the August 2019 service changes introduced new routes, discontinued some and altered others:

Route	Service Change							
201/NRX (North Raleigh – RTC)	Route 201 was discontinued due to low ridership replaced by Route NRX.							
310 (RTC – Wake Tech)	The new route started service. Upon completion of McCrimmon Pkwy it will extend to Cary Depot (October 2020).							
311 (Apex – RTC)	New routing serving Kit Creek Rd instead of EPA.							
700 (Durham – RTC)	New routing started in 2016 made permanent.							
CRX (Chapel Hill – Raleigh Express)	Additional trips.							
DRX (Durham – Raleigh Express)	Additional trips.							
OnDemand/RTP Connect (RTP)	OnDemand discontinued due to low ridership, replaced by RTP Connect.							
RSX (Duke - UNC)	Discontinued.							

October 14th, 2019

Route KRX and 102 were discontinued. Concurrently, GoRaleigh started new service in the areas previously covered with the KRX and 102.

January 25th, 2020

In January 2020, GoTriangle made another set of minor service changes:

Route	Service Change
420 (Chapel Hill - Hillsborough)	Minor schedule changes.
800 (Chapel Hill – RTC)	New routing.
800S (Chapel Hill – Southpoint)	New routing.
805 (Chapel Hill – RTC)	Additional trip.
CRX (Chapel Hill - Raleigh	New stop.
Express)	

March 29th, 2020

Responding to the drop in ridership due to the pandemic outbreak and the Stay-at-Home order and in an effort to better comply with health protocols and safety measures, GoTriangle reduced its service to Saturday service during weekdays (with shorter span at night) and Sunday levels during the weekend still guaranteeing access to major health and employment centers to essential workers.

This resulted in operating the five core routes (100, 300, 400, 700 and 800) only. Chapel Hill Transit also continued to operate Route 420 with reduced frequency. Fare collection was suspended and rear-door boarding was implemented on fixed-route vehicles to limit contact between the operators and the passengers.

May 26th, 2020

Another minor service change expanded the span on the routes that showed signs of overcrowding. Early morning trips were added to meet the demand for transit originating from essential workers and facilitate social distancing on GoTriangle buses.

June 28th, 2020

Most routes resumed regular service. Only routes 310, 311, NRX and routes operated by GoRaleigh (FRX, WRX and ZWX) remained suspended through the last few days of FY 2020.



System Ridership and Productivity

FY 2020 overview

Across the system and including contracted services, GoTriangle had 1,371,441 customer boardings in FY 2020. This represents an 18% decrease from FY 2019 (1,674,324 boardings).

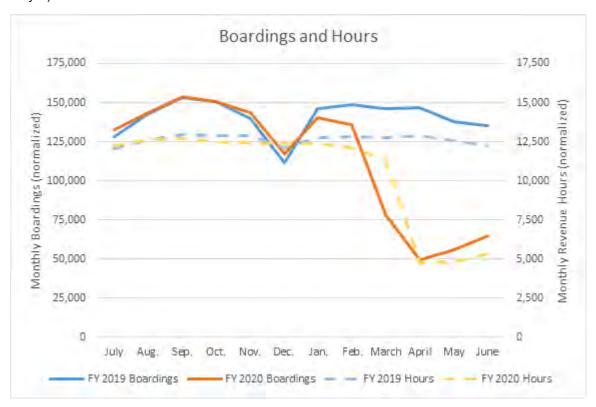
		Entire Fiscal Year								
	5-Year	Tot	al Boarding	Total I	Revenue Hours					
Route	Trends	FY 2019	FY 2020	Change	FY 2019	FY 2020	Change			
Whole System		1,674,324	1,371,441	-18%	150,610	126,328	-16%			
Weekday		1,534,369	1,234,694	-20%	132,806	110,933	-16%			
Peak		1,157,273	901,937	-22%	97,943	81,426	-17%			
Midday	~	274,674	265,055	-4%	23,686	23,084	-3%			
Night	~~	74,298	67,702	-9%	7,301	6,424	-12%			
Saturday		84,960	76,886	-10%	11,232	9,272	-17%			
Sunday	~~	54,995	59,861	+9%	6,572	6,123	-7%			

FY 2020 was a year of tremendous ridership loss for the commuter/express routes connecting to major employment centers because of a dramatic drop in March followed by three months of service suspension due to the COVID-19 pandemic. Ridership was consistently down by about one third on high-productivity routes like the 420, DRX, CRX, ODX and ZWX as well as other peak-hour service including Routes 105, 301, 305, 311 or 405. (The routes did not operate in Q4, and if that was the only factor one would expect a ridership drop of only one quarter.) Among the peak-hour routes the 805 had the lowest ridership loss (-23 percent) while the 311 (which also suffered from unsuccessful service changes) lost the highest percentage (-44 percent).

Among the core routes that were operated throughout the year, overall loss in ridership was limited to a maximum of 4% with the exception of Route 800. Route 800 lost 21 percent of its ridership due to the loss of commuter riders between Southpoint and UNC Chapel Hill.

The "boardings" and "hours" were still tracking with each other well during the outbreak. In fact, similarly to the ridership trend, the productivity across the system (measured with the boardings per hour indicator) has been stable in FY 2020 over FY 2019, with a slight uptick (+1 percent to 11.2). This was driven by the off-peak service until February followed by a sharp decline in March (6.9 boardings per hour) and a strong recovery to 11.4 in the last quarter due to the service reduction. The change suggests that the service provided to GoTriangle customers as a response to the outbreak efficiently matched the demand.

The following chart shows the total amount of service (in revenue hours) and boardings in each month. (For ease of comparison, each month is normalized to 21 weekdays, 4 Saturdays, and 5 Sundays.)



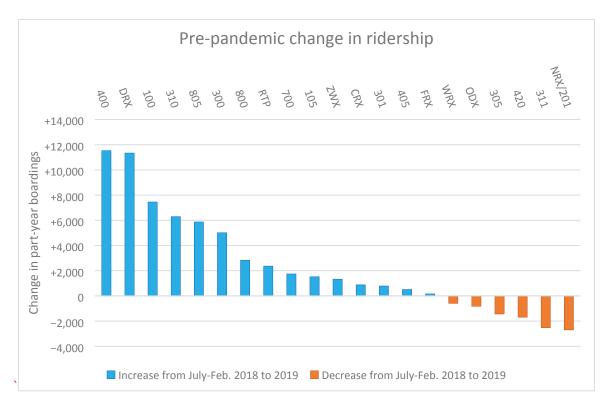
The uniqueness of FY 2020 makes a meaningful comparison of productivity year-to-year only possible in the July-February timeframe (see below).



Changes in Ridership by Route

Before the COVID-19 outbreak (July 2019 – February 2020)

Ridership was fairly stable across the system when compared to FY 2019 before the outbreak, however a notable growth can be observed on core route service, mostly driven by the increase in Sunday and midday ridership balancing a slight decrease on the peak only commuter service.



This chart shows the changes in ridership at the route level from FY 2019, only comparing the data before the pandemic. The 102, KRX, and RSX were discontinued at the beginning of FY 2020, so they are not included. The 310 started service in FY 2020, so all of its ridership is an increase.

Ridership analysis¹ (average daily boardings performance measure – Attachment B)

- Most of GoTriangle's routes increased in ridership.
- The peak commute to Durham and Chapel Hill continued their upward trajectory (+6 percent and +4 percent, respectively), while peak ridership to Raleigh decreased by 2 percent and to RTC decreased by 5 percent.
- The increase on Routes 400 and 405 is not necessarily a result of the discontinuation of the Robertson Scholars Express from the GoTriangle network, since the Robertson Scholars Foundation continued operations with a different service provider.

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¹ For more details refer to the average daily boardings performance measure – Attachment B

- Changes to Routes 311 appear to have had a negative effect on ridership. Providing fixed route service to employers such as Cisco, Pfizer and Biogen along Kit Creek Rd instead of the US EPA and NIEHS resulted in a sharp loss in ridership (-20 percent). Similarly, Route 201 was discontinued in August 2019 and replaced with the express Route NRX to increase ridership but the result in its first seven months of service was a decline even sharper than that on Route 311 (-32 percent). Another route that had very low ridership is the new Route 310. It was planned to expand, connecting the Regional Transit Center with Cary Depot, in January 2020 but due to delays in road construction, it continued to operate with a shorter routing to Wake Tech's RTP Campus until the reduction of service in March. As a result of these three routes' poor performance, they were the only routes operated by GoTriangle that did not resume service on June 28th 2020.
- The increase in ridership on other routes outweighed the loss in ridership due to the discontinuation of Routes 102, KRX and RSX.
- Ridership grew by about 3 percent on average on the core routes during weekdays. The
 growth was more substantial on Route 400. Worth noting is that this ridership increase
 was not achieved at the expenses of Route 405, which serves the same corridor at peak
 and maintained stable ridership levels.
- Sunday ridership has continued its upward trend by growing 6 percent over 2019 although service was not expanded in FY 2020.
- The January 2020 service change that adjusted the routing of Route 800 to utilize I-40 at all times between the Regional Transit Center and Southpoint was only operated for a little over a month before the pandemic hit the Triangle, which is insufficient to adequately evaluate the ridership performance at this stage.
- In August 2019 the Go OnDemand microtransit program which was operated in-house with ACCESS vehicles and did not meet the ridership and productivity goals was replaced with the RTP Connect program operated in partnership with Uber and Lyft. The service change did increase ridership (+13 percent to 106 daily boardings on average), but more notably it favorably increased the boardings per hour and the cost per hour. The productivity from one program to the other increased dramatically (+77 percent) with 7.6 boardings/hour with the RTP Connect program compared with only 4.3 with OnDemand.



Changes in Productivity by Route

Before the COVID-19 outbreak

The table below includes the comparison in productivity FY 2019 – FY 2020 (July – February) by typology of service:

Typology of service	July to February ("pre- pandemic" in FY 2020)					
	Boar	dings per	Hour			
	FY 2019 FY 2020 Chan					
	11.1	11.2	+1%			
Weekday	11.5	11.6	+1%			
Peak	11.8	11.6	-2%			
Midday	11.6	12.1	+4%			
Evening	9.8	10.7	+8%			
Saturday	7.6	7.8	+4%			
Sunday	8.7	9.6	+11%			

The High Productivity routes (those that exceeded 125 percent of the category average) were Route 405 (with 20.3 average boardings/hour) and Route DRX (14.0 average boardings/hour).

The Low Productivity routes (those with productivity level lower than 75 percent of the category average) were Routes 301, 305, 310, 311, NRX and WRX. Route 310 (still in its short routing to Wake Tech – RTP Campus) was the worst performing route with only 3.0 average boardings/hour followed by the NRX with 3.7.

Before the pandemic, the most productive destination for peak-hour commuters was Chapel Hill with 17.8 average boardings/hour against 13.3 to Durham and 9.7 to Raleigh, matching closely the 2019 results. In contrast, the trips heading to the Research Triangle Park, which had 8.8 in FY 2019, further lowered their productivity to only 7.8 boardings/hour in FY 2020.

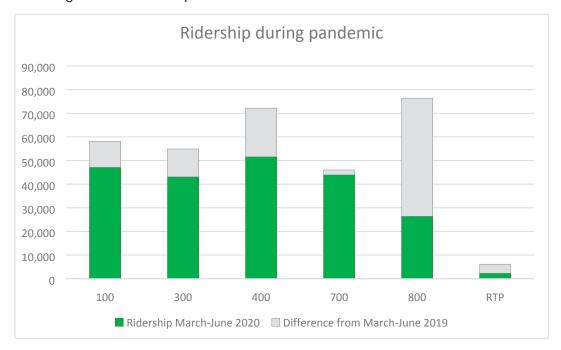
The sharp productivity improvements on Sunday (+11 percent) is partially the result of providing the same amount of service on Routes 400 and 800 with only 3 buses from previous 4 thanks to the new routing on I-40; in addition, before the pandemic started, the evening ridership went up 9 percent.

Changes in Ridership by Route

During the COVID-19 pandemic

The weekday ridership in the last quarter of FY 2020 fell dramatically as a result of the fall in demand for transit and of the reduced levels of service implemented in response to the COVID-19 pandemic. In the April 1st - June 30th timeframe the agency retained only 36 percent of the riders compared with the same time period in FY 2019. The loss in ridership was primarily concentrated in the peak-hour service (when the non-core routes usually operate but were not with the reduced service levels), which only retained 23 percent of its ridership while the midday service was at 87 percent and evening 53 percent. A striking result was achieved with Sunday service where ridership grew by 26 percent running the regular schedule, possibly as a result of the temporary zero-fare policy.

The next chart shows the ridership on the core routes during the pandemic period, compared to the ridership they had in the previous year. Please note that only the core routes and RTP Connect operated through the whole time period.



- Route 700 was the most resilient. The route only lost 5 percent of its ridership over the same period in 2019. One contributing factor is that it was rerouted to serve a hotel temporarily utilized to shelter families in need during the pandemic.
- The worst performer among the Core Routes was the 800, which primarily serves UNC commuters who had parking restrictions lifted during the time period and had widespread work-from-home options. The route lost 65 percent of its ridership over 2019.
- Ridership on RTP Connect went down about 86 percent compared to pre-COVID levels and 78 percent over the OnDemand service provided in the same period in FY 2019.

On-Time Performance

GoTriangle considers a trip on time if it arrives at its end-of-line timepoint no more than five minutes later than the scheduled time. The defined goal is for 85 percent of trips to arrive on time. For FY 2020, GoTriangle was on track to meet this goal before the pandemic with 88 percent of trips arriving on time (matching FY 2019) but further improved this result to 94 percent during the pandemic.



In the portion of FY 2020 that preceded the pandemic only a few routes did not meet the 85 percent mark:

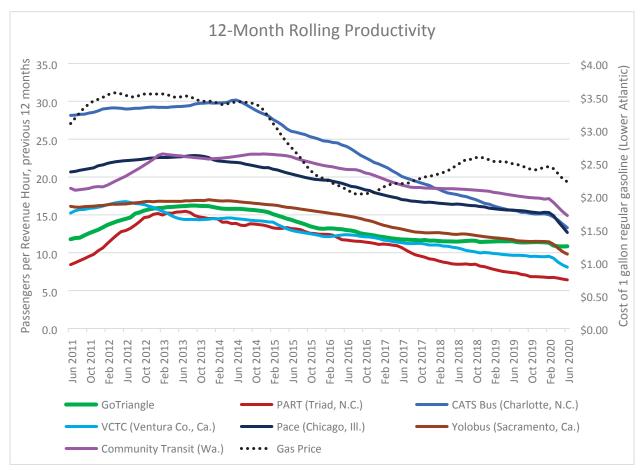
	July – Fe (bej pand	ore
	On-Tim	e Perf.
Route		(FY19)
Peak-Only Routes		
CRX Chapel Hill – Raleigh Exp.	83%	86%
WRX Wake Forest – Raleigh Exp.	83%	80%
Core Routes – Weekday Peak Service		
800 Chapel Hill – Southpoint – RTC	79%	80%
Core Routes - Weekday Midday Service		
300 Raleigh – Cary	82%	83%
Core Routes – Saturday Service		
300 Raleigh – Cary	71%	79%
400 Durham – Chapel Hill	84%	84%

- Route 300 on Saturday, which is operated by GoCary, showed the worst OTP at 71
 percent, a sharp drop from 79 percent in 2019.
- Route 305 failed to meet the standard last year, but did meet it this year.
- The service changes on Route 800 in January 2020 that were implemented only one
 month before the pandemic affected the Triangle, inclusive of substantial schedule
 changes, could potentially lead to improvements in its peak service.
- In January 2020 a stop was added to Route CRX but this is likely not the reason of the lower on-time performance from FY 2019.
- All routes met the 85 percent mark during the pandemic.

Peer Comparison

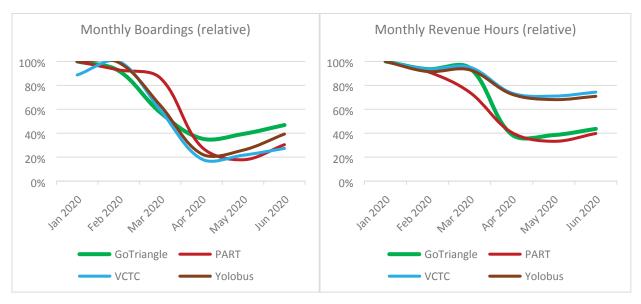
FY 2020 was showing signs of stabilization or small growth for most transit agencies in the United States after several years of steady decline (possibly as a result of raising gas prices) until the pandemic disrupted the transit market. Most agencies experienced a tremendous drop in ridership and productivity starting in March 2020.

The chart below shows productivity (in terms of boardings per revenue hour) for transit agencies that have been identified as GoTriangle's peers in their regional scope of service and size. GoTriangle is included for comparison. While the other agencies' productivity dropped together with their ridership, GoTriangle managed to improve its productivity with a timely adjustment in its service levels that matched the new demand more effectively than any peer in the analysis.

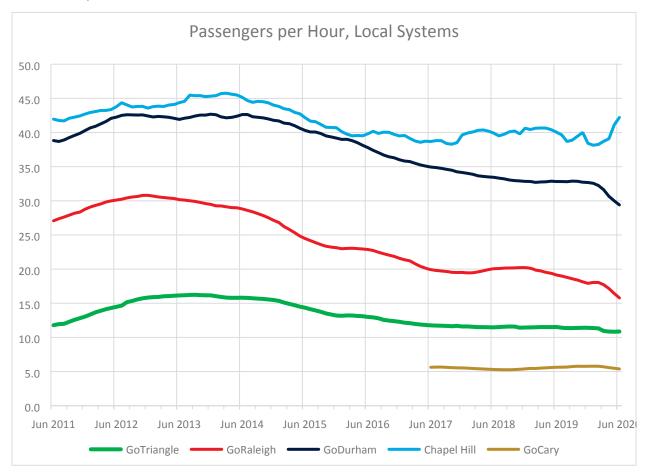




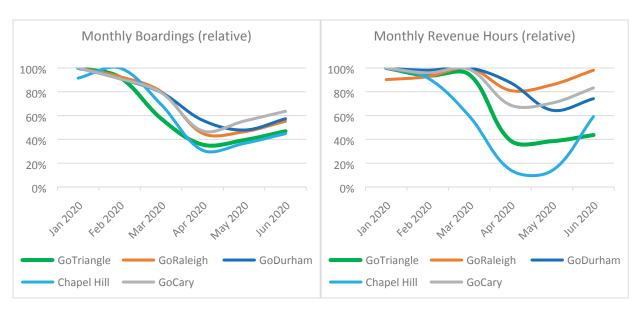
The charts below separately track the two measures that compose the productivity analysis including GoTriangle's peer agencies (boardings and revenue hours), suggesting that GoTriangle is the agency that saw the lowest reduction in ridership while being one of those that cut most revenue hours:



Finally, when comparing productivity in FY 2020 with GoTriangle's partner agencies in the Triangle, only Chapel Hill Transit adjusted its service levels more efficiently than GoTriangle, widening the gap with GoDurham, the second most productive transit agency in the Triangle (see chart below).



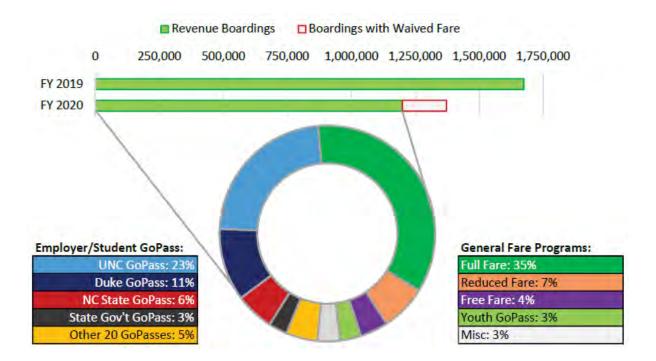




The detailed charts above tracking the loss in boardings and revenue hours suggests that CHT's good productivity performance was the result of heavy cuts in the service provided, which in mid-April only reached 10 percent of its 2019 levels. At the peak of its service reductions, GoRaleigh cut about 20 percent of its regular service while GoDurham about 38 percent (GoTriangle over 62 percent).

Ridership by fare program

The chart below shows the ridership by fare program, which has been very stable from FY 2019 through the beginning of the pandemic. As GoTriangle waived fares in March, 12.5 percent of the total boardings are not captured in any fare program.



All of the major GoPass customers (UNC, Duke, NC State and State Government) had minimal changes in their percent usage and although four new GoPass partnerships were added to the program in FY 2020, they have not generated significant additional ridership in the "Other" category. The Youth GoPass program, which was successfully introduced in 2019, has not expanded substantially in FY 2020.

What's Next?

Under the climate of uncertainty due to the COVID-19 outbreak on ridership and revenues, the planning for short term service changes will require flexibility and resilience. The previously approved County Transit Plans (Durham, Orange and Wake) will require amendments and many projects will likely be re-scoped to better respond to the change in the environment they need to operate.

The resumption of service on routes that were suspended at the start of FY 2021 (Route 311 and NRX) is to be determined. In October 2020, Route 100 and 105 were combined to maximize efficiency and decrease travel time between Raleigh and the Regional Transit Center given the drop in ridership to/from RDU Airport during the COVID-19 pandemic. Service to/from the airport is guaranteed by a newly created RDU Shuttle between the airport and the Regional Transit Center. The resumption of regular service on Route 100 and 105 is to be determined.

The October 11, 2020 service change implemented the following recommendations from the GoTriangle Short-Range Transit Plan:

- The extension of **Route 310** from the Regional Transit Center to Cary Depot. Originally planned for FY 2020, it was postponed due to delays in the construction of the McCrimmon Pkwy extension. Concurrently, **Route 300** had maintained the peak service between the Regional Transit Center and Cary Depot until the Route 310 started. The changes have been implemented on October 11th, 2020.
- A new Park-and-Ride at Wake Tech's Southern Wake Campus for Route FRX, will allow the route to serve trips to Wake Tech along with commutes to Raleigh – Successfully implemented in October 2020.
- The extension of **Route 305** to Apex and Holly Springs, serving a new park-and-ride at Ting Park on Sportsmanship Way in Holly Springs.

Other service change recommendations included in the GoTriangle Short-Range Transit Plan will be considered for implementation in FY 2022 and beyond. These changes include:

 Additional service on Route 305 to provide all-day service between Apex and Raleigh, with 30-minute service at peak and hourly service during the middle of the day, evenings and on weekends.



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- Upon completion of signage installation, GoTriangle vehicles will be allowed to utilize the Bus On Shoulder System on the section of I-540 currently utilized by Route NRX, potentially benefitting the on-time performance of the route. Given the low performance during the first seven month of activity before the COVID-19 outbreak, the route was temporarily suspended and might be subject to routing changes. The availability of bus on shoulder operations will nonetheless benefit any bus service that utilizes the corridor in the years to come.
- The elimination of the peak period deviation on Route 400 to SW Durham Drive and University Dr to create direct, consistent service all day. Mitigation measures with alternative service will be investigated.
- The addition of a stop at Patterson Place on Route 405.
- The realignment of Route 420 service from Old NC-86 and US-70 to Churton St and I-40.
- The removal of underutilized trips (eastbound AM and westbound PM) on Route 805.
- The elimination of **Route 301** once new services provided by GoRaleigh and GoCary are implemented (likely not happening in the current fiscal year).
- RTP Connect pilot program will likely add options for the customers. Through a
 partnership with the Research Triangle Foundation, additional service will include a new
 pick-up/drop-off location at the Boxyard RTP and the extension of the coverage area to
 include the entirety of the Regional Triangle Park area. GoTriangle will evaluate the pilot
 to discuss whether the program will remain permanent.

Other improvements that will benefit the operations of the GoTriangle system in FY 2021 include:

- GoTriangle has planning studies underway for multiple facilities, including several new or improved Park-and-Rides (for Routes 305, CRX, DRX, NRX, ODX, WRX), a bus facility at Raleigh Union Station, and an improved Regional Transit Center.
- Durham, Orange, and Wake counties are updating their county transit plans in FY 2021.
 When complete, they may include recommendations for regional bus service beyond GoTriangle's current plans.
- GoTriangle, GoRaleigh, GoCary, and GoDurham plan to deploy the Delerrok TouchPass
 account-based fare collection system in 2021. TouchPass will allow riders to pay their
 fares using a mobile phone application or a smartcard, and automatically "cap" riders who
 pay for transit one ride at a time at the price of a 1-day, 7-day, or 31-day pass. This will
 save money for existing riders and reduce the barrier to entry for new riders, which the
 partners expect will lead to increased ridership.

Section 1: System and Route Totals

Section 1. System and Noute Totals		Entire Fiscal Year							
	5-Year	Total Boardings Total Revenue Hou							
Route	Trends	FY 2019	FY 2020	Change	FY 2019	FY 2020	Change		
Whole System	\	1,674,324	1,371,441	-18%	150,610	126,328	-16%		
Weekday		1,534,369	1,234,694	-20%	132,806	110,933	-16%		
Peak		1,157,273	901,937	-22%	97,943	81,426	-17%		
Midday	~	274,674	265,055	-4%	23,686	23,084	-3%		
Night	~~~	74,298	67,702	-9%	7,301	6,424	-12%		
Saturday		84,960	76,886	-10%	11,232	9,272	-17%		
Sunday	~	54,995	59,861	+9%	6,572	6,123	-7%		
Core Routes (Seven-Day Service)									
100 Raleigh – Airport – RTC ●		170,353	166,780	−2% ⊚	17,391	16,982	-2% ⊚		
300 Raleigh – Cary – RTC ●		156,171	149,397	-4% ⊚	13,468	12,465	-7% ⊚		
400 Durham – Chapel Hill ●		211,375	202,358	-4% ●	18,984	17,793	-6% ⊚		
700 Durham – RTC 🖲		134,775	134,435	0%	9,501	9,194	-3% ⊚		
800 Chapel Hill – Southpoint – RTC ◆●	~	225,547	178,393	-21% 🍖	19,422	17,179	-12% 🍖		
Peak-Only Routes									
102 Raleigh – Garner ‡	~~~	17,982	-	-72% ‡	1,494		-71% ‡		
105 Raleigh – RTC		54,189	39,983	-26%	4,645	3,558	-23%		
201 North Raleigh – RTC †		13,853	961	-93% †	2,039	197	-90% †		
301 Raleigh – Southeast Cary		29,639	22,443	-24%	4,264	3,243	-24%		
305 Raleigh – Cary – Lake Pine	~	23,993	15,743	-34%	2,934	2,236	-24%		
311 Apex – Lake Pine – RTC – EPA		21,252	11,983	-44%	3,675	2,812	-23%		
405 Durham – Chapel Hill/Carrboro		122,833	87,981	-28%	6,020	4,519	-25%		
420 Hillsborough – Chapel Hill ●	~~~~	45,784	32,800	−28% ●	3,404	2,870	-16% ●		
805 Chapel Hill – Woodcroft – RTC		87,726	67,395	-23%	6,841	5,172	-24%		
CRX Chapel Hill – Raleigh Exp. △		92,010	66,616	-28% Δ	7,698	6,335	-18% Δ		
DRX Durham – Raleigh Exp. ∆		131,119	102,590	−22% ∆	8,890	7,748	-13% Δ		
FRX Fuquay-Varina – Raleigh Exp.		14,702	10,856	-26%	1,805	1,356	-25%		
KRX Knightdale – Raleigh Exp. ‡		7,689		-74% ‡	1,399		-71% ‡		
NRX North Raleigh – RTC Exp. *	new	0	5,380	new *	0	1,549	new *		
ODX Orange – Durham Exp.		27,436	18,885	-31%	2,686	2,047	-24%		
WRX Wake Forest – Raleigh Exp.	\	13,684	9,246	-32%	2,448	1,838	-25%		
ZWX Zebulon – Wendell – Raleigh Exp.		19,014	13,873	-27%	1,785	1,341	-25%		
Special Services									
310 Wake Tech – RTP *	new	0	,		0	2,269	new *		
RTP Go OnDemand †		21,419	1,629		5,272	431	-92% †		
RTP Connect *	new	0	18,342	new *	0	2,350	new *		
RSX Robertson Scholars Exp.		31,779	0	n/a	4,544	0	n/a		

- Discontinued at end of FY 2019.
- † Discontinued as of August 5, 2019.
- * Began on August 5, 2019.
- △ Added trips on August 5, 2019.
- ‡ Discontinued as of October 14, 2019 (replaced by GoRaleigh Routes 20 and 33).
- Began using I-40 at all times on January 26, 2020. This reduced the number of off-peak revenue hours, though frequency and span remained the same.
- Operated (with reduced schedule) from March 28 through June 27, 2020 ("Reduced Service"). All other routes were suspended entirely.

Attachment B-2: FY 2020 July-February and March (onset) - Ridership, Productivity and On-Time Performance

B-2(a): System and Route Totals, July – March

		July – February (befo				March (onset)	
	5-Year	Avg. Daily	Boardings	On-Tim	e Perf.	Avg. Daily	Boardings
Route	Trends	Boardings	per Hour		(FY19)	Boardings	per Hour
Whole System			11.2	88%	88%		6.9
Weekday		6,105	11.6	88%	87%	3,370	7.0
Peak		4,661	11.6	87%	87%	2,477	6.8
Midday	~	1,129	12.1	88%	89%	703	7.9
Night	~~	315	10.7	93%	92%	191	7.4
Saturday		1,622	7.8	87%	89%	943	4.9
Sunday	~	1,030	9.6	94%	94%	693	7.1
Core Routes (Seven-Day Service)							
100 Raleigh – Airport – RTC			10.2	90%	91%		6.5
300 Raleigh – Cary – RTC			11.7	84%	85%		7.6
400 Durham – Chapel Hill			11.8	88%	87%		7.7
700 Durham – RTC			14.2	94%	97%		9.2
800 Chapel Hill – Southpoint – RTC	\		11.8	83%	83%		6.7
Peak-Only Routes							
102 Raleigh – Garner	~~~	70	11.7	85%	84%	ended O	
105 Raleigh – RTC		222	11.8	88%	89%	124	7.3
201 North Raleigh – RTC		40	4.9	89%	83%	ended A	ıg. 2019
301 Raleigh – Southeast Cary		124	7.2	91%	91%	78	4.6
305 Raleigh – Cary – Lake Pine	~	87	7.4	88%	83%	54	4.5
311 Apex – Lake Pine – RTC – EPA		68	4.5	88%	89%	30	2.0
405 Durham – Chapel Hill/Carrboro		486	20.3	87%	88%	287	13.4
420 Hillsborough – Chapel Hill	\	161	11.8	86%	89%	53	4.1
805 Chapel Hill – Woodcroft – RTC		377	13.8	89%	87%	193	7.8
CRX Chapel Hill – Raleigh Exp.		373	11.1	83%	86%	188	6.1
DRX Durham – Raleigh Exp.		573	14.0	87%	85%	299	7.9
FRX Fuquay-Varina – Raleigh Exp.		61	8.4	93%	89%	34	4.6
KRX Knightdale – Raleigh Exp.	\	27	4.8	83%	86%	ended O	ct. 2019
NRX North Raleigh – RTC Exp.	new	35	3.7	86%		16	1.7
ODX Orange – Durham Exp.		105	9.7	91%	89%	67	6.1
WRX Wake Forest – Raleigh Exp.	\	51	5.2	83%	80%	34	3.5
ZWX Zebulon – Wendell – Raleigh Exp.		77	10.7	86%	85%	51	7.2
Special Services							
310 Wake Tech – RTP	new	42	3.0	94%		17	1.2
RTP Go OnDemand		68	3.8	n/a		ended A	ug. 2019
RTP Connect	new	112	7.6	n/a		61	8.6

High productivity – Exceeded 125% of the category average	14.0		
Low productivity – Less than 75% of the category average	5.0		
Did not meet on-time performance target (85%)		80%	80%

B-2(b): Peak Commutes, July - March

B-2(b): Peak Commutes, July – March		July – Fel	oruary (bef	demic)	March	(onset)	
	5-Year	Avg. Daily	Boardings	e Perf.	Avg. Daily	Boardings	
Route	Trends	Boardings	per Hour		(FY19)	Boardings	per Hour
Peak Commute to Raleigh		1,214	9.7	88%	87%	639	5.7
100 From RTC/Airport ⇄		89	7.6	88%	92%	54	4.7
102 From Garner	~~	70	11.7	85%	84%	ended O	ct. 2019
105 From RTC 	\	103	12.2	89%	91%	57	6.7
300 From Cary (Raleigh-Cary section only)		211	13.3	89%	86%	123	7.9
301 From Southeast Cary		124	7.2	91%	91%	78	4.6
305 From Cary/Apex	~	87	7.4	88%	83%	54	4.5
CRX From Chapel Hill ⇄		137	8.8	83%	86%	77	4.8
DRX From Durham ⇄		231	14.8	88%	88%	124	7.9
FRX From Fuquay-Varina		61	8.4	93%	89%	34	4.6
KRX From Knightdale	\	27	4.8	83%	86%	ended O	ct. 2019
WRX From Wake Forest		51	5.2	83%	80%	34	3.5
ZWX From Zebulon/Wendell		77	10.7	86%	85%	51	7.2
Peak Commute to Durham		887	13.3	86%	86%	510	8.2
400 From Chapel Hill ⇄		151	12.1	82%	79%	91	7.5
405 From Chapel Hill/Carrboro ⇄		209	17.8	85%	87%	136	11.6
700 From RTC 		80	12.3	90%	93%	49	7.6
DRX From Raleigh ⇄		342	13.5	85%	84%	205	7.9
ODX From Hillsborough/Mebane		105	9.7	91%	89%	67	6.1
Peak Commute to Chapel Hill		1,635	17.8	86%	87%	798	9.4
400 From Durham/Patterson Place		247	16.5	91%	91%	133	9.3
405 From Durham ⇄		277	22.7	88%	89%	179	15.2
420 From Hillsborough		161	11.8	86%	89%	53	4.1
800 From RTC/Southpoint	~	441	24.9	82%	82%	196	11.5
805 From RTC/Woodcroft ⇄		274	17.6	91%	90%	149	9.7
CRX From Raleigh	~~~	235	13.2	83%	86%	130	7.2
Peak Commute to RTC		926	7.8	87%	85%	530	5.0
100 From Raleigh/Airport ⇄		108	9.2	84%	87%	68	5.8
105 From Raleigh ⇄		119	11.4	87%	87%	80	7.7
201 From North Raleigh		40	4.9	89%	83%	ended A	ıg. 2019
300 From Cary (Cary-RTC section only)		112	9.2	88%	89%	70	5.8
310 To/From Wake Tech RTP	new	42	3.0	94%		17	1.2
311 From Apex/Lake Pine		68	4.5	88%	89%		2.0
700 From Durham ⇄		133			93%		12.8
800 From Chapel Hill/Southpoint ⇄		105	7.0	74%	77%		4.9
805 From Woodcroft 		103	8.7	86%	83%	63	5.4
NRX From North Raleigh	new	35	3.7	86%		16	1.7
RTP Go OnDemand		68	3.8			ended Au	ıg. 2019
RTP Connect	new	112	7.6	n/a		61	8.6
High productivity – Exceeded 125% o	_						
Low productivity – Less than 75% o	_					ī	
Did not meet on-time per	formance ta	rget (85%)		80%	80%		

B-2(c): Core Routes by Time Period, July – March

			July – February (before pandemic						
		5-Year	Avg. Daily Boardings On-Time Perf.				Avg. Daily	Boardings	
Route		Trends	Boardings			(FY19)	Boardings	per Hour	
Core F	Routes – Weekday Peak Service		1,677	13.5	85%	86%	927	7.7	
100	Raleigh – Airport – RTC		197	8.4	86%	89%	122	5.3	
300	Raleigh – Cary – RTC		323	11.5	88%	87%	186	7.0	
400	Durham – Chapel Hill		397	14.5	87%	85%	224	8.5	
700	Durham – RTC		213	16.5	89%	93%	129	10.2	
800	Chapel Hill – Southpoint – RTC		546	16.7	79%	80%	266	8.5	
Core F	Routes – Weekday Midday Service	\	1,129	12.1	88%	89%	703	7.9	
100	Raleigh – Airport – RTC		261	12.0	88%	85%	168	7.7	
300	Raleigh – Cary	~	186	13.0	82%	83%	128	8.9	
400	Durham – Chapel Hill	~	290	12.0	89%	90%	190	8.0	
700	Durham – RTC	~~	176	14.1	94%	98%	117	9.3	
800	Chapel Hill – Southpoint – RTC		216	10.4	86%	88%	100	6.1	
Core F	Routes – Weekday Evening Service	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	315	10.7	93%	92%	191	7.4	
100	Raleigh – Airport – RTC	~	80	11.1	96%	95%	47	6.9	
300	Raleigh – Cary		41	11.7	95%	94%	28	8.3	
400	Durham – Chapel Hill		80	10.3	89%	85%	50	7.7	
700	Durham – RTC	~	53	13.2	97%	99%	34	8.9	
800	Chapel Hill – Southpoint – RTC	\	62	8.8	91%	86%	32	6.2	
Core F	Routes – Saturday Service		1,622	7.8	87%	89%	943	4.9	
100	Raleigh – Airport – RTC		476	8.9	96%	97%	292	5.5	
300	Raleigh – Cary	~	250	9.7	71%	79%	154	6.0	
400	Durham – Chapel Hill		383	7.4	84%	84%	254	5.4	
700	Durham – RTC		269	10.1	99%	99%	164	6.1	
800	Chapel Hill – Southpoint – RTC		244	4.9	86%	85%	79	2.0	
Core F	Routes – Sunday Service	~/	1,030	9.6	94%	93%	693	7.1	
100	Raleigh – Airport – RTC	~	330	11.8	97%	98%	219	7.9	
300	Raleigh – Cary		144	10.3	90%	88%	120	8.8	
400	Durham – Chapel Hill	~~~	230	8.8	93%	90%	145	6.4	
700	Durham – RTC	~~	181	13.2	98%	100%	130	9.4	
800	Chapel Hill – Southpoint – RTC	~	145	5.7	93%	89%	79	4.1	

High productivity – Exceeded 125% of the category average

Low productivity – Less than 75% of the category average

5.0

Did not meet on-time performance target (85%)

80% 80%

Attachment B-3: FY 2020 April - June Ridership, Productivity and On-Time Performance

April – June (Reduced Service)								
	Service	Every	Avg. I	Daily Board	ings	Boardings	On-Time	e Perf.
Route		(Usual)		(1	-Y19)	per Hour		(FY19)
Whole System						11.4	94%	90%
Weekday Total			2,202	36% of 6	5,162	11.3	94%	89%
Weekday Peak Service			1,078	23% of 4	1,670	11.4	94%	89%
100 Raleigh – Airport – RTC	30 m 🕘	30 m	206	116% of	178	9.7	97%	93%
300 Raleigh – Cary (no service to RTC)	30 m 🕘	30 m	191	57% of	339	15.7	94%	91%
400 Durham – Chapel Hill (via midday route)	30 m 🍑	30 m	252	69% of	367	12.2	92%	87%
420 Hillsborough – Chapel Hill	90 m	30 m	75	39% of	190	15.8	97%	91%
700 Durham – RTC	30 m 🍑	30 m	203	89% of	229	19.1	96%	91%
800 Chapel Hill – Southpoint – RTC	30 m 🍑	30 m	108	20% of	544	5.9	90%	82%
RTP Connect	n/a		15	22% of	70	10.1	n/a	
Weekday Midday Service			955	87% of 1	L,094	11.1	93%	90%
100 Raleigh – Airport – RTC	30 m	30 m	219	81% of	270	9.6	96%	91%
300 Raleigh – Cary	30 m	30 m	199	111% of	179	14.8	93%	84%
400 Durham – Chapel Hill	30 m	30 m	230	84% of	274	11.0	89%	89%
700 Durham – RTC	30 m	30 m	207	122 % of	170	16.6	95%	99%
800 Chapel Hill – Southpoint – RTC	30 m	30 m	99	49% of	202	6.2	92%	87%
Weekday Evening Service			170	53% of	319	11.7	96%	94%
100 Raleigh – Airport – RTC	60 m 🕕	60 m	39	49 % of	80	10.0	98%	97%
300 Raleigh – Cary	60 m ●	60 m	38	84% of	45	17.1	97%	94%
400 Durham – Chapel Hill	60 m 🕕	60 m	35	43 % of	81	10.5	95%	89%
700 Durham – RTC	60 m ●	60 m	43	83% of	52	20.7	97%	99%
800 Chapel Hill – Southpoint – RTC	60 m ●	60 m	15	26% of	61	5.2	94%	91%
Saturday Service			1,257	82% of 1	L,534	13.0	94%	90%
100 Raleigh – Airport – RTC	60 m €	30 m	302	70 % of	430	11.9	94%	98%
300 Raleigh – Cary	60 m €	30 m	288	117% of	247	18.0	92%	76%
400 Durham – Chapel Hill	60 m €	30 m	263	72 % of	363	11.6	96%	86%
700 Durham – RTC	60 m €	30 m	300	113% of	266	21.7	93%	99%
800 Chapel Hill – Southpoint – RTC	60 m €	30 m	104	45% of	228	5.4	93%	87%
Sunday Service			1,086	126% of	861	11.2	94%	95%
100 Raleigh – Airport – RTC	60 m	60 m	273	105% of	259	10.6	97%	99%
300 Raleigh – Cary	60 m	60 m	232	166% of	140	14.6	93%	92%
400 Durham – Chapel Hill	60 m	60 m	229	115% of	199	10.1	93%	92%
700 Durham – RTC	60 m	60 m	257	169% of	151	18.6	98%	100%
800 Chapel Hill – Southpoint – RTC	60 m	60 m	97	87% of	111	5.1	90%	92%

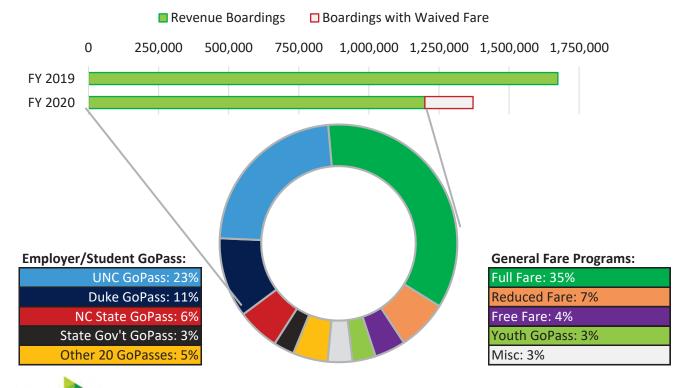
[•] Weekday service on the core routes initially began around 7:00 AM instead of the usual 6:00 AM.
On May 28, 2020, earlier trips were added on Routes 100, 300, 400, and 700 in response to demand.

• Weekday and Saturday service on the core routes ended around 9:00 PM instead of the usual 11:00 PM.

High productivity – Exceeded 125% of the category average	14.0		
Low productivity – Less than 75% of the category average	5.0		
Did not meet on-time performance target (85%)		80%	80%

Attachment C: FY 2020 Fare Program Statistics

	FY 2020		FY 2019		Change in
Fare Program	Boardings	% Usage	Boardings	% Usage	% Usage
Generally Available	634,237	52.9%	877,164	52.4%	
Full Fare Cash/Passes	422,945	35.2%	597,165	35.7%	−0.4 pt
Reduced Fare Cash/Passes*	82,516	6.9%	165,925	9.9%	−3.0 pt
Free Fare	50,674	4.2%	34,827	2.1%	+2.1 pt
Youth GoPass	37,779	3.1%	53,694	3.2%	-
NC By Train Transit Pass	608	0.1%	818	0.0%	-
OnDemand/RTP Connect	19,971	1.7%	21,419	1.3%	+0.4 pt
Unknown	19,744	1.6%	3,316	0.2%	
Employee/Student GoPass	565,651	47.1%	797,160	47.6%	
UNC Chapel Hill	275,083	22.9%	379,056	22.6%	+0.3 pt
Duke University	130,508	10.9%	184,888	11.0%	-
NC State University	69,393	5.8%	97,486	5.8%	_
State Government	33,815	2.8%	47,899	2.9%	-
Durham Tech	13,128	1.1%	19,135	1.1%	-
City of Raleigh	10,635	0.9%	13,509	0.8%	-
American Tobacco	6,037	0.5%	9,184	0.5%	-
City of Durham	5,572	0.5%	7,509	0.4%	-
NC Central University	5,435	0.5%	7,249	0.4%	-
Red Hat	4,729	0.4%	7,069	0.4%	-
GoTriangle	3,567	0.3%	6,719	0.4%	-
Other GoPasses (13)	7,749	0.6%	17,457	1.0%	−0.4 pt
Subtotal Boardings	1,199,888		1,674,324		
Waived Fare (COVID-19)	171,553	12.5%			
Total Boardings	1,371,441		1,674,324		



Triangle



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Capital Development

DATE: October 22, 2020

SUBJECT: Informational Update – RTP Connect and Boxyard RTP

Strategic Objective or Initiative Supported

1.1 Increase number of customers served with sustainable transportation services

Action Requested

None

Background and Purpose

RTP Connect is a pilot program in which GoTriangle provides Uber/Lyft travel vouchers for up to \$10 per trip for customers travelling to or from the Regional Transit Center and destinations within Research Triangle Park (RTP) and surrounding areas. The pilot began in August 2019 and has shown to increase service productivity and reduce cost to GoTriangle compared to previously provided services to RTP destinations.

In FY 2021, the Research Triangle Foundation (RTF) has committed \$150,000 towards the RTP Connect program. To support the opening of the Boxyard RTP in December 2020, RTF has requested that GoTriangle add a connection to the Boxyard RTP (located in the vicinity of The Frontier on NC 54) so that RTP employees can book an RTP Connect trip from their workplace to the Boxyard RTP. The addition of the Boxyard RTP will also increase the attractiveness of the existing RTP Connect service, which connects to GoTriangle services.

In response, GoTriangle will add Boxyard RTP as a connection point to the RTP Connect program. All existing and new customers will be able to receive up to \$10 for a trip to the Boxyard RTP from anywhere within the RTP Connect service area using the existing promo codes and vouchers advertised on the GoTriangle website. The existing RTP Connect program would not be affected.

The RTP Connect service area would be expanded slightly in order to serve all of the Research Triangle Park.



Figure 1: Map of RTP Connect Service Area

Financial Impact

None. Ridership on RTP Connect has been particularly low in FY21 due to the COVID-19 pandemic, and therefore any additional ridership to the Boxyard RTP can be accommodated within the existing budget.

Attachments

None

Staff Contact(s)

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