



GoTriangle  
Board of Trustees  
June 23, 2021  
12:00 pm-2:30 pm Eastern Time

*Based on NC Safer At Home executive orders in response to COVID-19, the GoTriangle Board of Trustees will meet remotely on Wednesday, June 23, 2021, at 12:00 pm.*

*Click here to: Join Webex Meeting  
Or dial: +1 415-655-0003  
Access code: 171 485 3127*

**I. Call to Order and Adoption of Agenda**

*(1 minute Michael Parker)*

ACTION REQUESTED: Adopt agenda with any changes requested.

**II. Recognition**

*(Michael Parker)*

**III. Public Hearing**

**A. FY 2022 Proposed Budget**

**IV. Public Comment**

*(Michael Parker)*

*The public comment period is held to give citizens an opportunity to speak on any item. The session is no more than thirty minutes long and speakers are limited to no more than three minutes each. Speakers are required to sign up in advance with the Clerk to the Board at mdawson@gotriangle.org.*

**V. Consent Agenda**

*(1 minute Michael Parker)*

*Items listed on the consent agenda are considered as a single motion. At the request of any Board member, or member of the public, items may be removed from the consent agenda and acted on by a separate motion. Items pulled from the consent agenda will be placed at the beginning of the general business agenda for discussion and action. Any Board member wishing to remove an item from the consent agenda should advise staff in advance.*

ACTION REQUESTED: Approve consent agenda.

**A. Minutes Regular Session - May 26, 2021**

**B. Minutes Closed Session - May 26, 2021**

**C. Policy Framework for Use of Wake Transit Funds to Acquire Real Property**

*P&L RECOMMENDATION: Approve Policy Framework for Use of Wake Transit Funds to Acquire Real Property.*

Policy Framework for Real Property Acquisition

**D. Master Research Agreement and Task Order 1 – Triangle Regional Model Service Bureau**

*O&F RECOMMENDATION: Authorize the President/CEO to sign a master research agreement with North Carolina State University (NCSU) Institute for Transportation Research and Education (ITRE) to provide continued model development services of the Triangle Regional Model (TRM) and regional Simplified Trips on Project Software (STOPS) model, and to execute Task Order 1 of the agreement for FY22 model management services for an amount not to exceed \$250,000.*

Master Research Agreement

Task Order 1

**E. Professional Services to Support Bus Plans and Short Range Transit Plans**

*O&F RECOMMENDATION: Authorize the President/CEO to execute a task order for bus planning services with Nelson\Nygaard to develop multi-year bus service plans for Wake and Durham and short-range transit plans for GoTriangle, GoRaleigh, GoCary, GoWake Access, GoDurham and GoDurham ACCESS for an amount not to exceed \$1,093,750.*

**VI. General Business Agenda**

*Items listed on the general business agenda are for discussion and possible action. Such designation means that the Board intends to discuss the general subject area of that agenda item before making any motion concerning that item.*

**A. Items Removed from the Consent Agenda**

*(1 minute Michael Parker)*

ACTION REQUESTED: Discuss and take action on any items removed from the consent agenda.

**B. FY21 Budget Ordinance Amendment(s)**

*(10 minutes Sandra Freeman)*

ACTION REQUESTED: Adopt FY 2021 budget ordinance amendment.

**C. FY22 Proposed Budget - 2nd Reading**

*(15 minutes Sandra Freeman)*

ACTION REQUESTED: Adopt FY 2022 budget ordinances (#13 -xx); the three county transit plan annual work programs/plans, the Wake Transit project agreement structure and the amended Wake Transit Financial Policies & Guidelines.

***GoTriangle Budget Ordinances***

***Durham Transit FY22 Work Program & Budget Ordinances***

FY22 Durham Annual Transit Work Program

***Orange Transit FY22 Work Program & Budget Ordinances***

FY22 Orange Annual Transit Work Program

***Wake Transit FY22 Work Plan & Budget Ordinances***

FY22 Wake Transit Work Plan

Wake Transit Project Agreement Structure

Wake Transit Financial Policies and Guidelines\_Amended

FY22 Wake Transit Work Plan\_Community Engagement Report

Wake Transit FY22 Budget Ordinances

**D. General Counsel Search Committee Report**

*(5 minutes Sig Hutchinson)*

**1. General Counsel Job Description**

ACTION REQUESTED: Approve amended General Counsel job description.

**E. Operations & Finance Committee Report**

*(3 minutes Vivian Jones)*

**F. Planning & Legislative Committee Report**

*(3 minutes Will Allen III)*

**VII. Other Business**

**A. President & CEO's Report**

*(5 minutes Charles Lattuca)*

Contracts

New Hires & Promotions

**1. Operations Update**

*(5 minutes Patrick Stephens)*

**2. Capital Projects Status Report**

*(5 minutes Katharine Eggleston)*

Presentation - CRT Update

*(10 minutes Katharine Eggleston)*

**B. Chair's Report**

*(5 minutes Michael Parker)*

**C. Board Member Reports**

**1. CAMPO Executive Board Representative**

*(5 minutes Will Allen III)*

**2. DCHC MPO Board Representative**

*(5 minutes Michael Parker)*

**3. Regional Transportation Alliance (RTA) Rep.**

*(3 minutes Will Allen III)*

**VIII. Closed Session - Personnel**

*(30 minutes Michael Parker & Sig Hutchinson)*

NCGS §143 318.11.(a) (6) To consider the qualifications, competence, performance, character, fitness or conditions of appointment of an individual public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee.

ACTION REQUESTED: Enter into closed session pursuant to the General Statutes listed for the purpose of conducting the annual performance evaluation for the President/CEO and the Clerk to the Board.

**IX. Adjournment**

*(Michael Parker)*

NOTICE OF PUBLIC HEARING  
GoTriangle

The proposed FY 2022 Operating and Capital budgets for GoTriangle, the Durham Transit Plan, the Orange Transit Plan and the Wake Transit Plans have been submitted to the GoTriangle Board of Trustees. The revised draft budget is available for public inspection on the GoTriangle website: [www.gotriangle.org](http://www.gotriangle.org) in the “**Publications**” section.

Due to the restrictions of COVID-19 the GoTriangle Board of Trustees will hold a public hearing remotely on the proposed budget at 12:00 noon on Wednesday, June 23, 2021 via Webex. Information on how to listen or view the meeting will be posted on GoTriangle’s website under the “Board of Trustees” link. The budget will be available online prior to the scheduled meeting. Persons wishing to comment on the proposed budget may do so in writing anytime from the date of this posting until 24 hours after the public hearing. This will be the final public hearing prior to the approval of the final FY22 budget.

Persons with disabilities or who otherwise may need special accommodations for the public hearing should contact Michelle Dawson at (919) 485-7438 by 5 p.m. on June 18, 2021. GoTriangle will accommodate all reasonable requests. GoTriangle is an equal opportunity employer.

Saundra Freeman  
CFO/Director of Administrative Services

**GoTriangle Board of Trustees**  
**Planning & Legislative Committee Meeting Minutes**  
**May 26, 2021**  
Held Remotely via Webex

**Committee Members Present:**

Will Allen III, Chair  
Brenda Howerton

Sig Hutchinson

**Committee Members Absent:**

Michael Fox

Renée Price (excused)

**Other Board Members Present:**

Michael Parker

Committee Chair Will Allen III called the meeting to order at 1:44 p.m.

**I. Adoption of Agenda**

**Action:** On motion by Hutchinson and second by Howerton the agenda was adopted.

**II. Approval of Minutes**

**Action:** On motion by Howerton and second by Hutchinson the minutes of the March 24, 2021, meeting were approved.

**Action:** Upon vote by roll call, the two prior motions were carried unanimously.

**III. Transit Plan Updates**

Meg Scully offered background on the on-going efforts to update the Durham and Orange County Transit Plans. She introduced those leading the update efforts for the two counties: Caroline Dwyer, consultant for Orange County, and Tom Altieri of Orange County planning staff and Ellen Beckmann, Durham County Transportation Manager and Aaron Cain, DHCH MPO Planning Manager.

**A. Orange Transit Plan Update**

Carolyn Dwyer's presentation is attached and hereby made a part of these minutes. She stated the update process is in the second phase to present two conceptual scenarios to leadership boards and committees. She said transit service providers also will have opportunity to provide feedback before conducting public outreach. All feedback received will be used to create one balanced scenario by October.

Sig Hutchinson asked for more detail on the scenarios. Dwyer responded that the scenarios have not been released, but shared that one scenario is

more focused on routes with higher ridership and in higher ridership transit corridors and the other provides wider geographic coverage to increase access to transit. She added that there is significant overlap within the two scenarios; both focus on providing inter-county connections between Durham and Orange and improving service frequency along those commuter routes.

**B. Durham Transit Plan Update**

The Durham County Transit Plan update presentation is attached and hereby made a part of these minutes.

Ellen Beckmann stated this is the largest revision of the transit plan since its adoption in 2011, initiated by the cancelation of the D-O LRT project. The update will consider local transit needs along with regional connections to replace the purpose of the D-O LRT project for service to Orange County and ways to connect to Wake County including the commuter rail project. Also included in the update is a governance study that will help develop a new ILA, create new and/or updated policies that reflect the new projects in the plan, facilitate better regional coordination with Orange and Wake counties and provide a stronger oversight and accountability structure.

Beckmann said the update process is about halfway complete, with the options developed using feedback received during public outreach. The options will be released for public engagement in June, with a final plan adopted late this year.

She reviewed the feedback receiving during the first outreach phase:

- Greater frequency, more 15-minute service
- Improved bus stops
- Increased sidewalk access
- Crosstown service
- More transit access to jobs
- Commuter rail

Beckmann noted that there were slight differences in responses from the engagement ambassador sessions and the online survey:

- Investments in paratransit service was most important
- Street maintenance/road quality
- Wheelchair and stroller access at bus stops and on buses
- Service running later at night, all-day and weekends

Aaron Cain stated that more frequent service, improvements to bus stops and service later at night were incorporated into all three of the options;

however, the options vary in ways that give people an opportunity to weigh in on what they like better. He emphasized that people will not be asked to choose one option but rather what they like best about each of the options. He said it is expected that the final preferred option will be a mix of the three options.

Cain added that there are a number of already committed projects including bus routes and capital and administrative projects. He said these projects account for approximately half of the \$1 billion expected to be generated over the next 20 years in tax revenues. Cain noted that all the options are fiscally feasible.

#### ***Option A***

- Focus on local and regional bus operations with increased frequency, extended hours and capital expenditures to support service.
- Highest level of sidewalk access and paratransit service improvements.
- Most services implemented in first five years.
- Most projects locally funded and less complex.

#### ***Option B***

- Focus on local and regional bus infrastructure improvements.
- Bus Rapid Transit implementation in FY32 with faster and more efficient service for local and regional buses, dedicated lanes and improved regional connections to Chapel Hill and RTP. This will require federal funding and regional partnerships.
- Some sidewalk access and paratransit service improvements.
- Fewer service improvements and later implementation than in Option A.

#### ***Option C***

- Includes commuter rail with rapid, dependable service to Wake (and possibly Johnston) County. Major Durham destinations also will be served with implementation in FY29. This will require federal funding and regional partnerships.
- Some paratransit service improvements and fewer sidewalk access projects.
- Fewer service improvements and later implementation than in Options A and B.

Cain said following public outreach over the next month, a preferred option will be presented in late summer.



Allen stated his surprise that only one option includes commuter rail. Cain responded that it does not reflect the importance of the project, rather an attempt to create options that provide a contrast for the public to be able to provide feedback.

Beckmann pointed out that Durham is faced with the task of replacing the function the D-O LRT project served within Durham and as a connection to Orange County. She said Durham County has to figure out how to balance connections to Orange and Wake counties as well as within Durham County. She also noted limited funding.

Parker commented that in Durham and Orange counties the half cent sales tax is inadequate to meet the legitimate transit needs both counties have. He said without more money both counties will be forced to make sub-optimal choices.

#### **IV. Policy Framework for Use of Wake Transit Funds to Acquire Real Property**

Gary Tober stated that GoTriangle owns five parcels in Wake County along the proposed commuter rail line. He said in order to retain ownership of those properties which were purchased with an FTA contribution, GoTriangle had to reimburse FTA. Wake Transit funds were used for the reimbursement and a policy was proposed to outline rules and expectations for use of Wake Transit tax funds for the acquisition, utilization and disposition of real property.

Tober introduced Wake Transit program manager Bret Martin to present the policy framework. His presentation is attached and hereby made a part of these minutes.

Martin reviewed the proposed policy framework:

- Purpose
- Applicability
- Submission of Information for Consideration of Funding Real Property Acquisition
- Real Property Inventory and Utilization Plan
- Real Property Disposal Methods
- Further Methods of Institutionalization

He restated the purpose for the policy is to clarify requirements and responsibilities of project sponsors and lead agencies for:

- Submission of information for TPAC review of requests,
- Maintaining and reporting certain information for applicable real property,
- Methods allowed for disposal and use of applicable proceeds, and

- Methods for incorporating tenets of policy framework into program-level processes for transit plan implementation.

The policy does not apply to the acquisition of personal property, real property leasing, or the acquisition of easements or other nonpossessory interests. Wake Transit funds used to acquire any individual parcel, or combination of contiguous parcels, that exceed an area of 0.10 acre and have an assessed or appraised value of greater than \$50,000 are subject to the policy. Property acquired for streetside bus stops or bus transfer point infrastructure is exempt from the policy framework if the property is less than 0.50 acre and has a value of no more than \$75,000.

Martin added that in the event federal and/or state funding is involved with a parcel and there is inconsistency between this policy and state or federal law, the state or federal law shall control.

Martin stated that Part 3 of the policy addresses the information to be submitted by the project sponsor requesting the use of Wake Transit funds for the acquisition of real property:

- Necessity
- Location and size
- Property value(s)
- Funding source(s)
- Title issues
- Environmental issues
- Displacements
- Incidental uses

The TPAC will consider need, cost and location when evaluating requests under this policy.

Project sponsors approved for funding under this policy must prepare, and update at least annually, a real property inventory and utilization plan for all real property acquired.

Finally the policy addresses disposal methods, which is required within three years of determining the property has no remaining eligible use:

- Sell and reimburse Wake Capital Fund
- Offset within same distinct wake Transit-funded project
- Sell and keep net proceed in open project
- Transfer property to other eligible project
- Retain title with buyout

Tober stated that this policy is consistent with FTA requirements.

Planning & Legislative Committee  
Meeting Minutes  
May 26, 2021

**Action:** On motion by Howerton and second by Hutchinson the Committee recommended Board approval of the Policy Framework for Use of Wake Transit Funds to Acquire Real Property. The motion was carried unanimously.

**V. Adjournment**

**Action:** Chair Allen adjourned the meeting at 2:59 p.m.

Prepared by:

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

Draft



Connecting all points of the Triangle

## MEMORANDUM

**TO:** GoTriangle Board of Trustees Planning & Legislative Committee  
**FROM:** Real Estate and Facilities  
**DATE:** May 25, 2021  
**SUBJECT:** Policy Framework for Use of Wake Transit Funds to Acquire Real Property

### Strategic Objective or Initiative Supported

Implement the Wake Transit Plan with Transit Planning Advisory Committee

### Action Requested

Staff requests that the Planning & Legislative Committee recommend to the GoTriangle Board of Trustees approval of the Policy Framework for Use of Wake Transit Funds to Acquire Real Property.

### Background and Purpose

The purpose of this policy framework is to outline rules and expectations for the use of "Wake Transit Tax Revenue," as defined by the Wake Transit Master Participation Agreement, for the acquisition, maintenance, use and disposition of real property for a Wake Transit Plan implementation purpose

At the time of the GoTriangle Planning and Legislative Committee receiving this item, TPAC will have already reviewed and recommended this amendment to both the CAMPO Executive Board and the GoTriangle Board of Trustees. The CAMPO Executive Board is anticipated to approve this item during the June 16<sup>th</sup> Executive Board Meeting.

### Financial Impact

The Policy Framework for Use of Wake Transit Funds to Acquire Real Property has zero financial impact.

### Attachments

- Final policy recommended by the Transit Planning Advisory Committee (TPAC)

### Staff Contacts

- Gary Tober, Director of Real Estate and Facilities, [GTober@gotriangle.org](mailto:GTober@gotriangle.org), 919-485-7577
- Sandra Freeman, CFO, [sfreeman@gotriangle.org](mailto:sfreeman@gotriangle.org), 919-485-7415

## ATTACHMENT C

### Policy Framework for Use of Wake Transit Funds to Acquire Real Property

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#### Part I: Purpose

The purpose of this policy framework is to outline rules and expectations for the use of “Wake Transit Tax Revenue,” as defined by the Wake Transit Master Participation Agreement, for the acquisition, maintenance, use, and disposition of real property for a Wake Transit Plan implementation purpose. This policy framework clarifies the requirements and responsibilities of Wake Transit Plan implementation project sponsors and assigned lead agencies for the following:

- 1) Submission of necessary information for the Wake County Transit Planning Advisory Committee’s (TPAC) review of requests for funding the acquisition and use of real property;
- 2) Maintenance and reporting of certain information and data for real property acquired with Wake Transit Tax Revenues;
- 3) Allowable methods for the disposal of and use of applicable proceeds for real property acquired with Wake Transit Tax Revenues; and
- 4) Methods for incorporating and institutionalizing this policy framework into program-level processes for Wake County Transit Plan implementation.

#### Part II: Applicability

This policy framework applies to the acquisition, management, use, and disposition of real property acquired with “Wake Transit Tax Revenue,” as defined by the Wake Transit Master Participation Agreement, that meets or exceeds certain applicability thresholds. This policy framework does not apply to the acquisition of personal property, real property leasing, or the acquisition of easements or other nonpossessory interests. It is the intent of this policy framework to apply to cases in which the real property to be acquired would be used for such projects as transit centers, maintenance and operations facilities, transit stations, park-and-ride facilities, construction laydown areas, transit administrative offices, and right-of-way for fixed-guideway facilities. Part IV: Real Property Inventory and Utilization Plan and Part V: Real Property Disposal Methods of this policy framework shall apply to any case in which Wake Transit Tax Revenue will be used to acquire any individual parcel, or combination of contiguous parcels, that exceed both of the following thresholds:

- 1) Land area of 0.10 acre; and
- 2) At the time of acquisition, has an assessed or appraised value of greater than \$50,000 based on the greater of a fair market value appraisal commissioned by the project sponsor for the parcel(s) or, in cases in which a fair market value appraisal is not commissioned, the most recent general reappraisal conducted by the applicable county tax assessor.

Acquisition of real property that will exclusively support streetside bus stop or bus transfer point infrastructure is **exempt** from the requirements of this policy framework, insofar as any applicable individual parcels, or combination of contiguous parcels, do not exceed both of the following thresholds:

- 1) Land area of 0.50 acre; and
- 2) At the time of acquisition, has an assessed or appraised value of greater than \$75,000 based on the greater of a fair market value appraisal commissioned by the project sponsor for the parcel(s) or, in cases in which a fair market value appraisal is not commissioned, the most recent general reappraisal conducted by the applicable county tax assessor.

## ATTACHMENT C

The same thresholds provided above shall apply to the project funding request submission requirements detailed in Part III: Submission of Information for Consideration of Funding Real Property Acquisition of this policy framework in cases for which the applicable subject property has been identified at the time of the funding request. For cases in which the subject property has not been identified, and therefore an assessment of value to determine applicability is unavailable, project sponsors should make efforts to provide the information requested in Part III of this policy framework if the real property to be acquired is likely to exceed the established thresholds.

If Federal Transit Administration (FTA) or other sources of federal or state funding are used to acquire real property that is covered by the scope of this policy framework in combination with Wake Transit Tax Revenues, in the event of any conflict or inconsistency between the real property applicability terms and provisions of this policy framework and the real property applicability regulations and provisions of the FTA Award Management Circular (FTA C 5010.1E, or any subsequent updates thereto), or other applicable federal or state administrative regulations, the applicable federal or state administrative regulations shall control. For all cases in which Wake Transit Tax Revenue is used to acquire real property, in the event of any conflict or inconsistency between the terms and provisions of this policy framework and applicable state or federal law, the applicable state or federal law shall control.

### **Part III: Submission of Information for Consideration of Funding Real Property Acquisition**

Any project sponsor proposing the use of Wake Transit Tax Revenue for the acquisition of real property applicable to this policy framework shall submit information to sufficiently answer the following questions in or with the applicable Wake Transit Work Plan project funding request form or amendment request form:

1) Necessity:

- a. Why is acquiring title to the property(ies) a better alternative than leasing or other arrangements?
- b. Can the project proposed to make use of the property(ies) still move forward without acquiring title?
- c. What is the useful life of the project that is proposed to make use of the subject property(ies)?

2) Location and Size:

- a. If available, what is the location (address or other descriptive information to understand the general location of the property) and size of the subject property?
- b. If a single property has not been selected, what feasible locations, described in general terms, have been identified as options/finalists?

3) Property Value(s):

- a. What is the appraised value of the subject property(ies) or of those properties identified as options/finalists (per applicable county tax assessor)? A range of value may be provided.

## ATTACHMENT C

- b. If a more recent appraisal than that of the applicable county tax assessor has been performed by the project sponsor, what is the appraised value according to the most recent appraisal?

4) Funding Source(s):

- a. Will any share of the cost for the subject property(ies) to be acquired come from funding sources other than Wake Transit Tax Revenue?
- b. If so, disclose any other revenue sources and the projected respective shares of each.

5) Title Issues: If applicable and known, what other interests in title to the subject real property(ies) are there or will there be that are relevant to the TPAC's consideration of funding acquisition of the property (e.g., liens, significant easement interests, etc.)?

6) Environmental Issues:

- a. If applicable and known, what environmental issues exist on the subject property(ies)?
- b. Does acquisition of the property involve environmental remediation, significant grading, or demolition of pre-existing structures?

7) Displacements:

- a. How many parcels are affected by the acquisition?
- b. If applicable and known, would residents of businesses be displaced and need to be relocated from the subject property or any of the properties identified as options/finalists?

8) Incidental Uses:

- a. What other potential uses are there for the subject property beyond the most immediate intended use?
- b. Would acquisition of the subject property help meet other goals of Wake County Transit Plan implementation that are unrelated to the specific immediate intended use?

Information that answers the preceding questions will be provided by project sponsors with the submission of applicable funding or amendment requests beginning on July 1, 2021. The Capital Area Metropolitan Planning Organization (CAMPO) will incorporate the preceding questions into the Wake Transit Work Plan project funding request and amendment request form templates beginning on July 1, 2021. Real property acquisition funding requests submitted before July 1, 2021, are **exempt** from the information submission requirements detailed in this section.

With the submission of the aforementioned information by project sponsors, the TPAC and/or its delegate subcommittees should consider each request in light of the following questions:

- 1) **Need** – Is the acquisition of the property necessary or beneficial to the continued implementation of the Wake County Transit Plan as opposed to other potential viable alternatives?



## ATTACHMENT C

- 2) **Cost** – Are the costs of the proposed real property acquisition and its continued use reasonable for the applicable project's relative level of priority toward the implementation of the Wake County Transit Plan? Are the costs reasonable compared to other viable options?
- 3) **Location** – Does the location of the subject property comport with the needs of the applicable project and the overall intent of the project toward implementation of the Wake County Transit Plan?

### Part IV: Real Property Inventory and Utilization Plan

All project sponsors receiving Wake Transit Tax Revenue for real property acquisition that is applicable to this policy framework shall prepare and keep up to date a real property inventory and utilization plan for all real property acquired. The following information should be maintained for each applicable individual parcel, or combination of contiguous parcels:

- 1) Wake Transit Work Plan project ID number
- 2) Property location;
- 3) Summary of any conditions on title;
- 4) Original acquisition cost;
- 5) Appraised value and date of appraisal;
- 6) Wake County Transit Tax Revenue participation percentage;
- 7) Percentage of participation of any other funding partners;
- 8) Brief description of existing improvements;
- 9) Current use of property;
- 10) Planned use of property and schedule for planned use; and
- 11) If no eligible use is planned, proposal for disposition of property, with reasons included (e.g., system or design changes, project alignment change, acquired for construction staging and laydown and construction is complete, etc.).

The preceding information should be updated as often as necessary to accurately portray the listed characteristics, but no less frequently than annually, and should be reported as part of the 4<sup>th</sup> quarter progress report for the subject Wake Transit Work Plan project in accordance with otherwise established reporting deadlines. The preceding information shall also be provided in accordance with the aforementioned timelines for all real property applicable to this policy framework, regardless of when funding was requested or when it was acquired.

### Part V: Real Property Disposal Methods

If it has been reported by the project sponsor through the real property inventory and utilization plan that there is no remaining eligible use of real property that has been acquired with Wake Transit Tax Revenue, project sponsors should take action to fully dispose of the subject real property within three (3) years in accordance with one of the following disposal methods:

- 1) Sell and Reimburse the Wake Transit Capital Fund

Competitively market in accordance with sales procedures that provide for maximum competition to the extent practicable to achieve the highest possible return, sell the subject property, and reimburse the Wake Transit Capital Fund with the net proceeds in an amount that equals the same percentage of interest represented by the share of Wake Transit Tax Revenues used for the property's acquisition. Net proceeds are defined as the amount realized from the sale of the subject property no longer needed for its originally intended



## ATTACHMENT C

use minus the expense of any actual and reasonable selling and other necessary expenses associated with repairs to make the property saleable. Marketing, brokerage, and other reasonable transaction costs shall be considered reasonable selling expenses. These expenses may be deducted from the total amount of proceeds resulting from the sale of the subject property at the same percentage of interest represented by the share of Wake Transit Tax Revenues used for the property's acquisition. Net proceeds from the sale of subject property must be reimbursed to the Wake Transit Capital Fund within one (1) year of settlement.

### 2) Offset Within Same Defined Wake Transit-Funded Project

Competitively market in accordance with sales procedures that provide for maximum competition to the extent practicable to achieve the highest possible return, sell the subject property, and apply the net proceeds, as defined in Method #1 above, from the sale to the cost of appropriate replacement property under the same Wake Transit Work Plan-defined project (i.e., represented by a single project ID). To effectuate this disposal method, a Wake Transit Work Plan amendment will be required for Wake Transit-funded transit centers, operations and maintenance facilities, park-and-ride facilities, transit stations, or other similar projects that are represented as a separate distinct implementation element in the applicable Wake Transit Work Plan or projects that are otherwise applicable to this policy framework in which a single parcel or a single grouping of contiguous parcels was acquired for the subject project. For other projects involving more than one (1) single parcel or one (1) single grouping of contiguous parcels, this disposal method may be implemented without a Wake Transit Work Plan amendment, but all actions and records associated with the disposition and acquisition of proceeds must be documented and reported in the quarterly progress report covering the quarter of the applicable actions. Project sponsors may not hold any net proceeds generated from this disposal method for greater than one (1) year from the date of sale. Any net proceeds not applied to a replacement property within one (1) year must be immediately reimbursed to the Wake Transit Capital Fund.

### 3) Sell and Keep Net Proceeds in Open Project

Competitively market in accordance with sales procedures that provide for maximum competition to the extent practicable to achieve the highest possible return, sell the subject property, and apply the net proceeds, as defined in Method #1 above, to reduce the gross cost of the same Wake Transit-funded project. This disposal method may be beneficial to project sponsors responsible for implementing Wake Transit-funded projects with multiple separate property purchases or with multiple project actions and phases wrapped into a single implementation element as defined by the applicable Wake Transit Work Plan. It may additionally be beneficial to projects in which real property must be acquired for construction staging and laydown activities and will be sold when those activities are complete and while other project activities are still ongoing. Consequently, this disposal method shall only be applicable to projects involving the cases referenced above. Project sponsors may not hold any net proceeds generated from this disposal method from being applied to the same project, if eligible, for greater than two (2) years from the date of sale. Any net proceeds not applied to eligible costs under the same project within two (2) years must be immediately reimbursed to the Wake Transit Capital Fund.

For cases in which the project sponsor's collection of net proceeds from the sale of the subject property causes the Wake Transit share of available funds for the project to exceed

## ATTACHMENT C

the original budget amount allocated in the applicable Wake Transit Work Plan, the project sponsor should reimburse the Wake Capital Fund in an amount equal to the difference between the total funds made available for the project after the sale of the subject property and the original budget amount allocated in the applicable Wake Transit Work Plan within one (1) year of the sale of the subject property.

### 4) Transfer Property to Other Eligible Project

Transfer real property acquired with Wake Transit Tax Revenues for a specific implementation element defined in an adopted Wake Transit Work Plan to use for another separate implementation element. This disposal method will require a Wake Transit Work Plan amendment to adjust funding allocations and scopes of work associated with the donor and recipient projects, as appropriate.

### 5) Retain Title with Buyout

Retain title to the subject Wake Transit-funded real property and compensate the Wake Transit Capital Fund at the same percentage of interest represented by the share of Wake Transit Tax Revenues used for the property's acquisition. In this case, the subject property shall undergo a fair market appraisal, and the share of the funds due to the Wake Transit Capital Fund must be reimbursed within one (1) year of the appraisal. The buyout shall be in an amount equal to the percentage of Wake Transit's interest in the fair market value as determined by the appraisal.

#### Fair Market Value Exemption for Certain Real Property Uses

For cases in which a project sponsor sells the subject property and applies the net proceeds to the purchase of real property that will be used for publicly supported affordable housing or other transit-oriented or -supportive land uses, the project sponsor is permitted to only reimburse the Wake Transit Capital Fund with the net proceeds in an amount that equals the amount of Wake Transit Tax Revenues used for the property's acquisition OR the percentage of interest represented by the share of Wake Transit Tax Revenues used for the property's acquisition in cases in which the amount of net proceeds is less than the amount of Wake Transit Tax Revenues used for the property's acquisition. The same fair market value exemption provisions shall apply to cases in which a project sponsor retains title to the subject property, as per Method 5 described above, and the subject property will be used for publicly supported affordable housing or other transit-oriented or -supportive land uses

#### Further Provisions

In any case in which real property that has been acquired with Wake Transit Tax Revenues will be sold, the applicable sales procedures shall provide for maximum competition to the extent practicable to achieve the highest possible return. The preceding disposal methods shall apply to all real property applicable to this policy framework, regardless of when funding was requested or when the real property was acquired.

In the event there is a federal or state interest in a property that is being disposed and which is subject to this policy framework, and there is any conflict or inconsistency between the real property disposal terms and provisions of this policy framework and the real property disposal regulations and provisions of the Federal Transit Administration Award Management Circular (FTA C 5010.1E, or any updates thereto) or other applicable state or federal administrative regulations, the applicable state or federal administrative regulations shall control.

**ATTACHMENT C****Part VI: Further Methods of Institutionalization**

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All project-level funding agreements that tie to projects involving real property acquisition included in adopted annual Wake Transit Work Plans shall expressly require compliance with this policy framework. For project-level funding agreements that tie to projects involving real property acquisition included in previously adopted Wake Transit Work Plans that have already been executed, express compliance with Parts IV and V of this policy framework will be included in any future project-level funding agreements for additional phases or allocations that are part of the same project, or in any amendments to the original agreement, regardless of reason for the amendment.



*Connecting all points of the Triangle*

## MEMORANDUM

**TO:** GoTriangle Board of Trustees Operations & Finance Committee

**FROM:** Planning and Capital Development

**DATE:** May 20, 2021

**SUBJECT:** **Master Research Agreement and Task Order 1 – Triangle Regional Model Service Bureau (TRMSB) Contract with North Carolina State University (NCSU) Institute for Transportation Research and Education (ITRE)**

### Strategic Objective or Initiative Supported

1.2 Pursue service improvements and expansion opportunities

### Action Requested

Staff requests the Committee to recommend that the Board authorize the president and CEO to sign a master research agreement with North Carolina State University (NCSU) Institute for Transportation Research and Education (ITRE) to provide continued model development services of the Triangle Regional Model (TRM) and regional Simplified Trips on Project Software (STOPS) model, and to execute Task Order 1 of the agreement for Fiscal Year 2022 model management services for an amount not to exceed \$250,000.

### Background and Purpose

The TRM Service Bureau maintains the Triangle region's travel demand forecasting models. Its work is funded through a four-way partnership involving GoTriangle, NCDOT, DCHC-MPO, and CAMPO.

The TRM provides sophisticated data analysis of traffic patterns, volumes, and capacities on the Triangle road network as well as bus ridership and rail ridership forecasts for the future. The model is used by the MPOs as the foundation of their long-range transportation planning efforts included in the Metropolitan Transportation Plans (MTP). The regional STOPS model will be used by GoTriangle, GoRaleigh, and the MPOs to forecast transit ridership on potential major transit investments.

On a recurring/ongoing basis, the model team collects updated data and makes improvements to the models to better estimate transit ridership now and in the future.

The master research agreement would establish contract terms for work assigned to the TRM Service Bureau for a five year period.

Task Order 1 would fund the GoTriangle portion of the TRM Service Bureau annual work plan for FY22. In FY22, GoTriangle plans to execute a second task order for up to \$60,000 for additional work to perform household travel surveys to support the model.

### **Financial Impact**

Execution of the master research agreement has no financial impact.

Task Order 1 is proposed to be budgeted across multiple funding sources in FY22. The GoTriangle Major Transit Investment Fund (MTIF) is budgeted to fund 80% (\$200,000) which is planned to be submitted for federal reimbursement, and the 20% local match is split across Wake (25,000), Durham (12,500), and Orange (12,500) workplans. The GoTriangle Board of Trustees is scheduled to consider adoption of the budget for MTIF and the three county transit plans including these values at its June 2021 meeting.

### **Attachments**

- Master Research Agreement
- Task Order 1

### **Staff Contacts**

- Katharine Eggleston, CDO, (919) 485-4764, [keggleston@gotriangle.org](mailto:keggleston@gotriangle.org)
- Jay Heikes, Sr. Transportation Planner, (919) 314-8741, [jheikes@gotriangle.org](mailto:jheikes@gotriangle.org)



NORTH CAROLINA STATE UNIVERSITY  
Master Research Agreement (v. 06-30-2020)  
NCSU RADAR Number: 21-2654

This Master Research Agreement ("MRA") is entered into this 1st day of July, 2021, by and between North Carolina State University ("NC State" and/or "University"), and the Research Triangle Regional Public Transportation Authority d/b/a GoTriangle with a principal place of business in Research Triangle Park, NC ("GoTriangle").

## RECITALS

A. GoTriangle and NC State University have numerous mutual research and development interests. Those interests are conducive both to the academic mission of NC State University and the corporate mission of GoTriangle; and

B. From time to time, these mutual interests result in a desire for GoTriangle to provide funding in support of various research programs in exchange for receiving certain rights in the research results.

NOW, THEREFORE, the parties agree as follows:

1. Field of Research

University agrees to use reasonable efforts, as a public educational institution, working as an independent contractor, to perform the public service or development ("Research or Project") as described in the Project Abstract that is incorporated into this MRA as Appendix B.

2. Task Orders

A Task Order will be issued by GoTriangle upon its decision to fund a proposal submitted by NC State University. The Task Order template outlined in Appendix A of this Master Research Agreement shall be used and shall include as attachments: (1) The final statement of work outlined in NC State University's proposal; (2) The name of the University's Principal Investigator supervising the Project; and (3) A budget detailed by primary cost categories (e.g. salary, benefits, travel, materials & supplies, equipment, tuition, facilities & administrative costs, etc.). Facilities and Administrative costs shall be applied at the level negotiated by the federal government, which represents a significant savings of the actual overhead costs associated with the conduct of research at NC State University. If for any reason a Task Order's Principal Investigator is unable to continue to serve and a successor acceptable to both Parties is not available, the affected Task Order may be terminated as hereinafter provided.

### 3. Period of Performance

The Master Research Agreement shall be effective from July 1, 2021 through June 30, 2026. This period is subject to renewal only by mutual written agreement of the parties. Task orders issued under this Master Research Agreement will identify the period of performance for individual projects and may be renewed by mutual written agreement of the parties.

### 4. Payment of Costs

In consideration of NC State University's performance hereunder, GoTriangle will pay NC State University the amount agreed upon in each individual task order. These task order amounts may not be exceeded by NC State University without prior written authorization of GoTriangle. GoTriangle will select either a cost reimbursement or a fixed price payment plan for each individual task order. Payment provisions for each type are as follows:

- (a) **Cost Reimbursement Payment:** In consideration of University's performance under a specific Task Order, GoTriangle agrees to reimburse the University for all costs incurred up to the agreed upon amount stated in said Task Order. This amount can be changed by a written modification signed by both parties. GoTriangle acknowledges that University's proposed budget incorporated in the Task Order's appendix represents the University's best estimate of planned costs for the Project. University shall have the right to modify its budget as needed to complete the Project's objectives during the period of performance referenced in the Task Order. University shall notify GoTriangle via electronic correspondence of said budget revisions.
- (b) Invoices will be sent monthly and should be paid by GoTriangle within thirty (30) days of receipt. A final invoice will be provided to GoTriangle not later than ninety (90) days after Task Order end date, and will constitute the University's final financial report for the Project. University will not provide supporting documentation or justification of expenditures made in the performance of the Project as a condition of payment. For payment by check, the remittance address is shown below. For payment by electronic funds transfer or financial questions, please contact a Contracts & Grants Authorized Representative via telephone at 919-515-2153 or via email at [cnghelpdesk@ncsu.edu](mailto:cnghelpdesk@ncsu.edu). GoTriangle shall pay for all wire transfer fees if electronic funds transfer is elected as the payment method.

North Carolina State University  
Office of Contracts and Grants  
2601 Wolf Village Way, Suite 240  
Campus Box 7214  
Raleigh, NC 27695-7214



United States of America

University shall send GoTriangle invoices to [invoices@gotriangle.org](mailto:invoices@gotriangle.org) with a carbon copy to [tjohnson@gotriangle.org](mailto:tjohnson@gotriangle.org), unless otherwise provided in the Task Order.

5. Export Controls and Confidentiality

GoTriangle will not disclose any Export Controlled, Confidential, or Proprietary information to University personnel during the performance of this Project.

6. Reporting

NC State University must deliver to GoTriangle reports and/or deliverables for the Project in accordance with the Research as outlined in the individual Task Orders delivered under this master agreement. Request assistance with delinquent technical reports or deliverables from the University address on the Task Order(s).

7. Intellectual Property

- (a) “Intellectual Property” means all forms of intellectual property under the laws of any state or country, including but not limited to, patentable inventions, patentable plants, copyrightable works, mask works, novel plant varieties, trademarks, service marks, and trade secrets, that is conceived and actually or constructively reduced to practice by one or more employees of the University, alone or in collaboration with others, in performance of a specific Task Order. Inventorship will be determined in accordance with Title 35 of the United States Code (US Patent Law).
- (b) University and/or GoTriangle own any Intellectual Property made or conceived in the performance of each Task Order in accordance with the following criteria:
  - (i) University or GoTriangle exclusively owns title to any Intellectual Property made or conceived solely by their respective employees in the performance of a specific Task Order (hereinafter called “University Intellectual Property or “GoTriangle Intellectual Property”).
  - (ii) University and GoTriangle jointly own title to any Intellectual Property made or conceived by one or more University employee and one or more GoTriangle employee in the performance of a specific Task Order (hereinafter called "Joint Intellectual Property").
- (c) Each party shall promptly disclose to the other party in writing any Intellectual Property of which it becomes aware during the term of a Task Order or afterwards. University Principal Investigator must disclose inventions to



University Technology Transfer Office via eDisclosure portal. University Technology Transfer Office will disclose invention(s) to GoTriangle.

- (d) The parties shall agree on the procedure to be used for the protection and administration of Joint Intellectual Property. NCSU shall have the first right to file a patent application on Joint Intellectual Property in the names of both parties. All expenses incurred in obtaining and maintaining any patent on such Joint Invention shall be equally shared except that, if one Party declines to share in such expenses, the other Party may take over the prosecution and maintenance thereof, at its own expense, provided that title to the patent remains in the names of both Parties.
- (e) Each Party shall have the independent, unrestricted right to license to third parties any such Joint Intellectual Property without accounting to the other Party, except that the GoTriangle shall be entitled to the first right to negotiate for a fee or royalty-bearing exclusive license or fee bearing option as described in Article 8(b) below.

#### 8. License

- (a) In consideration for sponsoring a Task Order, the University shall grant to GoTriangle a fully paid-up, non-exclusive, non-transferable, royalty-free license (without the right to sublicense) to use all Task Order data and the final report from the Research owned by University, either solely or jointly, exclusively for GoTriangle's own internal, research and development purposes.
- (b) GoTriangle also has the first right to negotiate for a fee or royalty-bearing exclusive license or fee bearing option to any University Intellectual Property and/or University's interest in Joint Intellectual Property, provided that GoTriangle pays all costs for the preparation, filing, prosecution and maintenance of any patents on such Intellectual Property ("Negotiation Right"). GoTriangle has 90 days following disclosure of an Intellectual Property by the University to exercise its Negotiation Right (the "Negotiation Period"). GoTriangle must submit a written notice to the University, within the Negotiation Period, in order to exercise their Negotiation Right. If the Negotiation Period expires before University receives GoTriangle's written notice exercising the Negotiation Right or as otherwise provided herein, GoTriangle shall have no further rights to the Intellectual Property.
- (c) If GoTriangle has not begun good faith, substantive negotiations with University for an option or license to such Intellectual Property within 90 days of the date of GoTriangle's exercising its Negotiation Right in accordance paragraph 8(b), the University may, in its sole and unfettered discretion, terminate GoTriangle's Negotiation Right.

- (d) Further, if GoTriangle and University have not negotiated a mutually agreeable license agreement on or before twelve months from the disclosure of the Intellectual Property by the University, then University may, in its sole and unfettered discretion, terminate GoTriangle's Negotiation Right. GoTriangle is only obligated to pay expenses incurred and noncancelable obligations that have accrued up to the date that University terminates GoTriangle's Negotiation Right.

9. Publications

University has the right to publish any of the results of the Project. University must furnish GoTriangle with a copy of any proposed publication or public disclosure, at least sixty (60) days in advance of the proposed publication date to allow for the protection of GoTriangle's proprietary, confidential, or information that if published within sixty (60) days would have an adverse effect on a patent application in which GoTriangle owns full or part interest, or intends to obtain an interest from University pursuant to this Agreement. In the event that GoTriangle notifies the University in writing that the proposed publication or presentation contains confidential information as described in Article 5, the University shall remove the identified confidential information from the draft prior to such publication or presentation. In the event GoTriangle requests a delay in publication to file for patent protection, a written request must be submitted to the University's Office of Technology Transfer with a copy to the University's Principal Investigator and the University and the Principal Investigator shall refrain from making such publication or presentation for a maximum of ninety (90) days from the receipt of such request, and GoTriangle shall indicate with specificity to what manner and degree University may disclose said information during the ninety (90) day period.

10. Termination

Either Party may terminate performance of a Task Order under this Agreement and/or this Agreement at any time upon sixty (60) days written notice to the other Party. Upon receipt of notification, University must proceed in an orderly fashion to limit or terminate any outstanding commitments. GoTriangle agrees to reimburse University for all costs and noncancelable obligations including graduate assistantships, fellowships, and postdoctoral associate appointments incurred in performance of the Project prior to receipt of termination notice. University agrees to reimburse GoTriangle any funds that have been received but remain unexpended at the time of termination, except for those funds needed to pay for noncancelable obligations.

11. Use of Names

Neither party will use the name of the other in any form of advertising or publicity related to commercial sales without the express written permission of the other

party. GoTriangle is advised that this Agreement is subject to the North Carolina Public Records Law and as such, the existence of this Agreement is recorded in a database accessible to the public.

12. Notices

Any non-intellectual property and licensing notices required to be given or which may be given under this Agreement and any resulting Task Orders (unless otherwise specified in a specific Task Order) must be in writing and delivered by first-class mail, email correspondence or facsimile addressed to the parties as follows:

For GoTriangle:

GoTriangle  
Attn: Ms. Katharine Eggleston, PE  
PO Box 13787  
Research Triangle Park, NC 27709

Phone: 919-485-7455  
e-mail: [keggleston@gotriangle.org](mailto:keggleston@gotriangle.org)

For NC State University:

North Carolina State University  
Sponsored Programs and  
Regulatory Compliance Services  
ATTN: Authorized Representatives  
2601 Wolf Village Way, Suite 240  
Campus Box 7514  
Raleigh, North Carolina 27695-7514  
e-mail: [sps@ncsu.edu](mailto:sps@ncsu.edu)

13. Independent Parties

For purposes of this Agreement and all resulting Task Orders the parties are independent contractors and neither may be considered an agent or an employee of the other at any time or for any purpose. No joint venture, partnership or like relationship is created between the parties by this Agreement.

14. Assignment

This Agreement and all resulting Task Orders are binding upon and inure to the benefit of the parties and may be assigned only to any subsidiary, affiliate, equity partner or to the successors to substantially the entire business and assets of the respective parties as part of a sale or other transfer of controlling interest. Any other assignment by either party without the prior written consent of the other party is void. GoTriangle must notify University of any transfer allowed herein.

15. Governing Law

This Agreement and all resulting Task Orders are acknowledged to have been made and must be construed and interpreted in accordance with the laws of the State of North Carolina, without regard for its conflict of laws provisions, provided that all questions concerning the construction or effect of patent applications and patents

shall be decided in accordance with the laws of the country in which the particular patent application or patent concerned has been filed or granted, as the case may be.

16. Liability, Disputes and Warranty

- (a) Sponsor and University agree to each be responsible for their own negligence and the negligence of their employees and agents. Notwithstanding any other provision of this Order, the liability of the University, as an agency of the State of North Carolina, for any injury or damage arising out of this Order or the University's performance of the Work is subject to the immunities, procedures and limitations of the North Carolina Tort Claims Act, GS §143-291 et seq. The University does not waive any rights or defenses under this Act.
- (b) All work under this Master Research Agreement will be classified as research and development. NC State disclaims all warranties, whether express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and freedom from infringement, as to any information, result, design, prototype, product or process deriving directly or indirectly and in whole or part in connection with work accomplished under this Master Agreement.
- (c) In the event of a dispute or claim regarding any matter under this MRA or any resulting Task Order that is not disposed of by mutual agreement, the parties agree to pursue those necessary institutional and/or legal remedies as may be appropriate. Legal remedies may include pursuit of the dispute by either party under the Governing Law. In this event, each party shall be responsible for all their own costs incurred resulting from such action. University agrees to continue performance on a disputed matter until any such dispute is resolved.

17. Order of Precedence

If any provisions stated in this Agreement, resulting GoTriangle purchase orders (contemplated on occasion as a functional aspect of GoTriangle's accounting and procurement system), and/or any resulting Task Orders are in conflict, the order of precedence, beginning with the first to last, shall be (1) this Agreement, (2) any resulting Task Orders, and (3) GoTriangle's purchase order. The parties understand and agree that any purchase order or similar document issued by GoTriangle will be for the sole purpose of establishing a mechanism for payment of any sums due and owing hereunder. Notwithstanding any of the terms and conditions contained in said purchase order, the purchase order will in no way modify or add to the terms and conditions of this Agreement.

18. Entire Agreement

Unless otherwise specified herein, this Agreement embodies the entire understanding of the parties for this project and any prior or contemporaneous representations, either oral or written, are hereby superseded. No amendments or changes to this Agreement or any resulting Task Orders including, without limitation, changes in the field of research, total estimated cost, and period of performance, are effective unless made in writing and signed by authorized representative of the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date first hereinabove written.

NORTH CAROLINA STATE UNIVERSITY

GOTRIANGLE

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX A**  
**Task Order Template**

Master Research Agreement Number 2021-2654

By and Between

GOTRIANGLE and NC STATE UNIVERSITY

Upon execution by the parties below, the Research Project specified herein is funded. The Master Research Agreement is incorporated herein by reference in its entirety throughout the Period of Performance. Any capitalized term not otherwise defined in this Task Order shall have the definition ascribed to it in the Agreement.

TASK ORDER Number: \_\_\_\_\_

☐ New

☐ Modification No. \_\_\_\_\_

<b>NC STATE UNIVERSITY</b>  2601 Wolf Village Way, Suite 240 Raleigh, NC 27695  For Contract: Sponsored Programs & Regulatory Compliance Services, Box 7514  For Remittance: Office of Contracts and Grants Box 7214  TIN/EIN: 56-6000756 DUNS: 04-209-2122	<b>GOTRIANGLE</b>  Address: PO Box 13787 Research Triangle Park, NC 27709   Phone: 919-485-7455 Email: keggleston@gotriangle.org						
Principal Investigator: Leta Huntsinger Email: lfhunsi@ncsu.edu Phone: (919) 515-8625  Administrative: Sherrie Settle Email: <a href="mailto:sps@ncsu.edu">sps@ncsu.edu</a> Phone: 919-515-2444	Project Director: Katharine Eggleston Email: keggleston@gotriangle.org Phone:  Administrative: Tara Johnson Email: tjohnson@gotriangle.org Phone:						
Description/Purpose of This Action:							
Period of Performance: Start Date: (Spending authorized up to 60 days prior to Start Date) End Date:	Funding Information in United States Dollars: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">a. Amount Funded This Action</td> <td style="text-align: right; border-bottom: 1px solid black;">\$0</td> </tr> <tr> <td style="border-bottom: 1px solid black;">b. Amount Prior Funding</td> <td style="text-align: right; border-bottom: 1px solid black;">\$0</td> </tr> <tr> <td>c. Total Sponsored Funds To Date</td> <td style="text-align: right;">\$0</td> </tr> </table>	a. Amount Funded This Action	\$0	b. Amount Prior Funding	\$0	c. Total Sponsored Funds To Date	\$0
a. Amount Funded This Action	\$0						
b. Amount Prior Funding	\$0						
c. Total Sponsored Funds To Date	\$0						

Invoicing Frequency: ☐ Monthly ☐ Quarterly ☐ Other Specify:

A final invoice will be provided to GoTriangle not later than ninety (90) days after Task Order end date.

University shall submit invoices to the following address:

GoTriangle

Email: [invoices@gotriangle.org](mailto:invoices@gotriangle.org)

Technical Reporting Requirements: ☐ Quarterly; ☐ Biannually; ☐ Annually; ☐ Final (90 days post termination)

Special Terms and conditions: PI may make revisions to the estimated budget as required with no increase in Total Funded amount.

Attachments Incorporated:

☐ # 1: Statement of Work;

☐ # 2: Budget;

☐ # 3: Other:

Each Signatory below certifies that they are authorized to execute legally binding commitments on behalf of their named party.

For: NORTH CAROLINA STATE  
UNIVERSITY

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For: GOTRIANGLE

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX B**

### **Project Abstract**

The Triangle Regional Model Service Bureau (TRMSB) at the Institute for Transportation Research and Education (ITRE) provides technical services in the development and maintenance of the TRM for four sponsoring agencies: The Capital Area Metropolitan Planning Organization, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, GoTriangle, and the North Carolina Department of Transportation. The primary services provided under an annual work program include overseeing the development of the TRM through contracted services, overseeing the collection of travel behavior survey data, supporting TRM Stakeholders through model maintenance and application support, implementing improved reporting tools to support MTP targets, exploring model enhancements, providing management of TRM related data, managing the regional STOPS model, and performing data analytics to support systems analysis in the region.



**Task Order Template**  
Master Research Agreement Number 2021-2654  
By and Between  
GOTRIANGLE and NC STATE UNIVERSITY

Upon execution by the parties below, the Research Project specified herein is funded. The Master Research Agreement is incorporated herein by reference in its entirety throughout the Period of Performance. Any capitalized term not otherwise defined in this Task Order shall have the definition ascribed to it in the Agreement.

TASK ORDER Number: 001

☒ New

☐ Modification No. \_\_\_\_\_

NC STATE UNIVERSITY		GOTRIANGLE	
2601 Wolf Village Way, Suite 240 Raleigh, NC 27695  For Contract: Sponsored Programs & Regulatory Compliance Services, Box 7514  For Remittance: Office of Contracts and Grants Box 7214  TIN/EIN: 56-6000756 DUNS: 04-209-2122		Address: PO Box 13787 Research Triangle Park, NC 27709  Phone: 919-485-7455 Email: keggleston@gotriangle.org	
Principal Investigator: Leta Huntsinger Email: lfhuntsi@ncsu.edu Phone: (919) 515-8625  Administrative: Sherrie Settle Email: <a href="mailto:sps@ncsu.edu">sps@ncsu.edu</a> Phone: 919-515-2444		Project Director: Katharine Eggleston Email: keggleston@gotriangle.org Phone:  Administrative: Tara Johnson Email: tjohnson@gotriangle.org Phone:	
Description/Purpose of This Action: Triangle Regional Modeling (TRM) Service with North Carolina State University (Go Triangle)			
Period of Performance: Start Date: 07/01/2021 (Spending authorized up to 60 days prior to Start Date) End Date: 06/30/2022		Funding Information in United States Dollars:	
		a. Amount Funded This Action \$247,232	
		b. Amount Prior Funding \$0	
		c. Total Sponsored Funds To Date \$247,232	

Invoicing Frequency: ☒ Monthly ☐ Quarterly ☐ Other Specify:

A final invoice will be provided to GoTriangle not later than ninety (90) days after Task Order end date.

University shall submit invoices to the following address:

GoTriangle

Email: [invoices@gotriangle.org](mailto:invoices@gotriangle.org)

Technical Reporting Requirements: ☒ Quarterly; ☐ Biannually; ☐ Annually; ☐ Final (90 days post termination)

Special Terms and conditions: PI may make revisions to the estimated budget as required with no increase in Total Funded amount.

Attachments Incorporated:

☒ # 1: Statement of Work;

☒ # 2: Budget;

☐ # 3: Other:

Each Signatory below certifies that they are authorized to execute legally binding commitments on behalf of their named party.

For: NORTH CAROLINA STATE  
UNIVERSITY

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For: GOTRIANGLE

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT 1

### Statement of Work

The following scope of work is presented as the proposed work plan for the TRM Model Team including the TRM Service Bureau (TRMSB) for the budget year July 1, 2021 – June 30, 2022. The primary efforts outlined in this scope are intended to focus the efforts of the Model Team and Service Bureau on overseeing the development of TRMG2 through contracted services, supporting TRM Stakeholders through model maintenance and application support, implementing improved reporting tools to support MTP targets, exploring model enhancements, providing management of TRM related data, and performing data analytics to support systems analysis in the region. Several assumptions are made within the context of this scope.

1. Signatory agencies will commit one-half FTE per agency to the completion of the tasks outlined in this work plan, with the exception of GoTriangle who will provide in kind funding to cover a one-half FTE. The ITRE Associate Director will assume responsibility for providing adequate work to meet this obligation by specifying the task description, deliverables, and person hours required. This information will be provided at least quarterly and will be sufficient to fully incorporate the one-half FTE required of each agency.
2. All TRM staff representing the signatory agencies will, as needed, work on site at ITRE, including any third person who is providing services in the name of a signatory agency. This enables the Team to work together on issues that require the input of multiple team members and reduces the tendency for team members to be reassigned to other tasks in their home offices.
3. The ITRE Associate Director will assign tasks with associated deliverables and target dates. TRM Team members will agree to take responsibility for specific tasks and will be held accountable for completion of those tasks. The responsible team member (stakeholder and TRM Service Bureau) will be responsible for monthly reporting on progress including 1) task effort and status, 2) changes in anticipated completion dates, 3) reasons for change, and 4) hours spent on model development work and percent of task complete for the month reported. Stakeholder team members are requested to report in a timely manner if any external resources or assistance is needed to complete tasks.
4. Each signatory agency's one-half FTE contribution may include staff time from people other than their TRM Team member, but the TRM Team member will take full responsibility for the work, and will play a key role in providing direction to agency staff. Agency staff must be adequately trained to meet the needs of the TRM Team.
5. All intermediate and final products of this work program belong to the four stakeholders (NCDOT, CAMPO, DCHC, and GoTriangle) and these will be delivered to the stakeholders in a form and via media acceptable to each stakeholder at the end of the contract year or before. The products include: model files including input files; scripts and program source code; all technical memoranda; estimation data file inputs and outputs; technical reports and user guides; and tools prepared including script files and user guides for their use.

Note on model version names: the following version names will be used in this scope of work.

TRMv6.2: TRMv6 model (2010 estimation year, and 2013 base year, delivered in May 2016 and used for developing the 2045 Metropolitan Transportation Plan (MTP) and Air Quality Conformity Analysis, transit analysis, and Comprehensive Transportation Plan analysis) validated to a 2016 base year using 2016 highway networks, transit networks, socioeconomic (SE) data, traffic counts, and ridership data. Used to support development of the 2050 MTP.

TRMG2: The TRM generation two best practice trip-based model under development by Caliper Corporation through contracted services with ITRE. TRMG2 will include improved network management capabilities, improved reporting capabilities, a university model, travel choices informed by parking cost and availability, and a nested mode choice model with capabilities of evaluating motorized and non-motorized travel and multiple modes of premium transit including express bus, bus rapid transit, light rail transit, and commuter rail. The model will be estimated, calibrated and validated to an initial 2016 base year using the 2016 and 2018 household travel survey data

and the most recent transit on-board survey, and then validated to a 2020 base year prior to model delivery. The official base year of TRMG2 will be 2020, but the validation data will actually reflect late fall 2019 due to the impacts of the pandemic.

## 1 Project Management

ITRE will provide overall project administration, including the review and monitoring of the project schedule, coordination and communication with the project stakeholders, coordination and communication with stakeholder model team members, quarterly invoices and progress reports tracking the progress towards specific tasks, and the development and maintenance of project files. Currently project files and documents for team sharing are stored on a Google Drive, but this approach has proven to be less than effective. Consideration will be given to how this process can be improved, either through improved folder organization and mapping, or through another file sharing system. Monthly status reports tracking the task progress and any outstanding issues impacting task completion will also be provided. This task also covers the enforcement of established procedures and protocols related to model development, model maintenance, and model application.

*Deliverable(s):*

- Quarterly invoices and progress reports.
- Monthly status reports.
- Tracking and adjustments, as necessary, to scope, schedule, and budget.

## 2 Coordination and Communication

This task covers the coordination and communication necessary to keep the TRMSB program operating effectively. Executive Committee meetings will take place once per quarter and will be attended by the agency designated Executive Committee member and ITRE's Associate Director responsible for TRMSB oversight. Agency managers responsible for the TRM work program, TRM Team members as designated by their respective agencies, or others may also be invited to participate by the Executive Committee or ITRE's Associate Director. The focus on these meetings is high level decision making required to advance the TRM work program, the receiving of information related to technical TRM work tasks, and the discussion of important issues related to funding, staffing, and administration of the TRM work program. TJCOC is responsible for the scheduling, facilitation, and documentation of these meetings. The work program assumes four (4) meetings per year.

TRM Monthly Team meetings will take place once per month and will be attended by TRM Model Team members. Agency managers responsible for the TRM work program are also invited to attend these meetings, though their participation is not required. The focus of these meetings is on decision making related to key work tasks in the TRM work program, monitoring and reporting of project tasks and schedule, brainstorming and problem solving related to advancing the TRM work program, and the sharing of knowledge and information. Scope assumes twelve (12) meetings per year.

TRM weekly technical team meetings will provide a formal way to build team camaraderie, share technical findings, build knowledge and understanding, transfer technology and knowledge, conduct problem solving around specific technical issues, and to generally create a space where work load and technical assistance can be discussed and administered. Scope assumes thirty-five (35) meetings per year.

Meetings related to any work being undertaken by sub-consultants or contractors is covered under the specific task related to that work.

*Deliverable(s):*

- Documentation and materials as requested by the Executive Committee.
- Monthly team meeting notes and action item tracker.
- Weekly team meeting decision tracker.

## 3 Model Development

### 3.1 TRMG2

This task covers oversight and coordination related to the development of TRMG2, including:

- Development, documentation and transfer of data needed to support TRMG2, including but not limited to highway and transit systems, socioeconomic data, survey data, traffic count data, and transit ridership data.
- Technical coordination related to model development decision making.
- Focused technical meetings, as needed.
- Review of documentation and deliverables.
- Monthly project meetings.

The TRMG2 model is expected to be delivered in late fall of 2021. Following delivery of the TRMG2 model, work under this task will focus on developing a strong knowledge base with the new model through testing, evaluation, and acclimation to the new modeling framework, data structures and output. In particular, it will be important to develop a high level of comfort and familiarity with the new network management process. This task also includes the development of procedures or processes for integrating the TRMG2 into other work flows such as MOVES, CommunityViz, STOPS, etc.

Model team members will receive training on TRMG2 from Caliper under their model development scope and budget. Training on TRMG2 to stakeholder team members who are not a part of the Model Team will be provided by Model team members under Task 8.4.

Caliper will provide on-call technical support to the TRM Team following delivery of the TRMG2 model. This technical support may cover additional targeted training, the development of additional reporting tools, modifications to address specific technical issues, and initial management of the GitHub repository.

*Deliverable(s):*

- Procedures/processes as appropriate for TRMG2 work flow integration.

## 4 Model Maintenance and Applications

### 4.1 Model Maintenance

Ongoing model maintenance activities are an important part of any modeling program. This task covers:

- Review of highway networks, centroid connectors, transit networks, and TAZs in order to identify areas where improvements or modifications are needed.
- Review of all model related input data, including network attributes and socioeconomic data for base year and future year scenarios.
- Script modifications, as needed, to address any errors or inconsistencies discovered during model application. All requested modifications must go through the issue identification, discussion and tracking process.
- Documentation of requested model modifications identified through the application of the model, by either agency or consulting staff, to support agency planning work programs. Requested modifications will be documented and considered for future model modification or enhancement.
- Documentation of any process related issues identified through the application of the model to support agency planning work programs.
- Evaluate Census Journey to Work data in order to make recommendations on the expansion of the TRM boundary. This work will also include a review of the future year trip tables from the North Carolina Statewide model.

Model maintenance activities completed under this task will be documented, including all requests for future modifications or enhancements.

*Deliverable(s):*

- Documentation that supports all maintenance activities including data management, script modifications, and model modification/enhancement requests.

## 4.2 Model Application Support

The purpose of this task is to provide model application support to the TRM sponsoring agencies which could include the reporting and summarization of model results, preparation of travel forecasts, support for coding changes necessary to evaluate model alternatives, preparation and/or evaluation of model performance measures. The hours estimated for this task reflect uncertainties in application needs and staff capabilities.

This task also included the development of Wiki style Model Application Guidelines specific to the end user. The guidelines will document things like the type of analysis that the model is well suited for, and the types of analysis that it is not well suited for. The guidelines will include recommendations for how to handle certain off model analysis such as off model demand analysis for roadways with on-street parking, auxiliary lanes, ramp metering, etc.

*Deliverable(s):*

- Model outputs and summary data.
- Model Applications Guidelines

## 5 Model Enhancements

### 5.1 Reporting Tools

This task will focus on the implementation of the reporting tools developed for TRMv6.2 into TRMG2 after the final TRMG2 model has been delivered and fully vetted.

This task also covers an investigation of the built in capabilities of TransCAD 9.0 (the TRMG2 platform) to identify and implement ways to better capitalize on the full capability of TransCAD from the standpoint of model users. This investigation is focused on non-modelers and will lead to the development of a TransCAD for Planners guidebook that presents various types of exploratory and mapping analysis that can be done using specific outputs from the TRM and built-in TransCAD mapping and analysis tools. The guidebook will provide an overview of the application in addition to steps for implementing the application. This guidebook will be oriented towards technically focused transportation planners and can be shared with agency planners and presented to broader TRM community through the TRM User Forum.

*Deliverable(s):*

- TRMG2 Model Reporting Toolbox
- TransCAD for Planners Guidebook

### 5.2 Innovations

This task covers the development and implementation of model innovations intended to improve existing model components or processes. The FY22 work program will focus on developing a tighter integration between the TRMG2 and CommunityViz, with a particular focus on the use of place types to inform the development of TRMG2 required variables such as household size, income and workers. This work will require close coordination with TJCOG. This work is expected to start in the second quarter of FY22 when the TRMG2 model is close to delivery, through the initial conversations and “mapping” of the task could certainly start much sooner. Work in FY22 will focus on clarifying needs and constraints and developing an implementation plan. The final process needs to remove the current barriers and constraints associated with generating SE data inputs for TRM scenarios while at the same time respecting the CommunityViz allocations.

*Deliverable(s):*

- Recommendations and procedures for using CommunityViz to support TRMG2.

### 5.3 Investigations

This task covers parallel investigations intended to provide insight into future model enhancements. The goal for this work is twofold:

1. To support a graduate student who will leverage TRM work towards a master’s thesis or PhD dissertation, while at the same time providing a direct benefit to the future of the TRM.
2. To provide opportunities for TRM team members to more closely investigate emerging issues that the TRM sponsors have expressed an interest in.

The following investigations are recommended for consideration in the FY22 work program. Pending approval of the TRM Executive Committee, work will move forward on only one of these.

### 5.3.1 Options for leveraging and supporting graduate student research

- The consideration of AV/CAV modes in the mode choice model for travel demand models is gaining attention as agencies increasingly want to include this as a part of their future year scenarios. This investigation would look at various mode choice specifications that would include a nest for AV/CAV. Under a separate research project NCSU researchers are working to collect household data on preferences related to AV/CAV adoption to support a stated choice experiment. This investigation would leverage that data to develop a modified mode choice model that could be considered for future inclusion in the TRM.
- The increased demand for home deliveries for all types of goods and services is increasing the freight and commercial vehicle traffic on our transportation system in ways that we may not have previously expected. While the TRMG2 reflects an improvement in the way trucks and commercial vehicles are modeled, there is still room for improvement. This investigation would research and propose an enhanced freight component that could be considered for future inclusion in the TRM.

The focus on this work would be towards applications based work and the student will report to the ITRE Associate Director, not to the university professor. The outputs from this effort would generally include progress meetings, literature review, data review and analysis, findings and recommendations. The work would likely span over two work programs, e.g. a two-year time frame, though continued student appointment will be performance based.

*Deliverable(s):*

- Meeting notes.
- Literature review.
- Data review and analysis documentation.

### 5.3.2 Option for supporting sponsor identified emerging issues

- Travel demand models are important analytical tools that support the planning programs for MPOs, DOTs, and transit agencies, but as a macro model they have limited utility for understanding the dynamics of traffic assignment and the associated performance measures, for example bottlenecks, queuing, and operational vs. planning level capacity. To overcome this limitation, many agencies are exploring the integration of micro models, such as TransModeler, with their macro models, such as TransCAD, to improve their analytical power. The Triangle region has often discussed the benefits of such an integration. This investigation would research the benefits and challenges of an integrated system for modeling in the Triangle. The investigation would include conversations with peer agencies, conversations with model providers, identification of data and resource needs, and a draft action plan.

*Deliverable(s):*

- Summary of peer review findings.
- Summary of findings from model providers.
- Data and resource needs summary.
- Draft action plan.

## 6 Data Management

### 6.1 TRM Data Repository

This task covers the ongoing management, maintenance and documentation of data in the repository.

*Deliverable(s):*

- Year-end report on any data changes.



## 6.2 Traffic Count Data

Maintain the Triangle region traffic count point layer. The point layer, created in TransCAD, is used to manage TRM count data and to update, the TRMG2 model.

*Deliverable(s):*

- Traffic count point data layer.

## 6.3 Household Travel Survey

This task covers the oversight and management of the next wave of household travel survey data collection, including participation in meetings and review of materials. See scope of work from RSG for details on the household survey effort, this separate 2-year contract covers survey design, sampling, data collection, and processing. This task covers team participation in that effort.

## 6.4 Transit On-Board Survey

This task covers participation in the 2021/2022 transit on-board survey that will be administered by GoRaleigh and the City of Raleigh. Specifically, this task includes participation in meetings, review of survey design and sampling plan, review of survey instruments, data collection monitoring, and data checking and analysis of key data metrics.

*Deliverable(s):*

- High level data summaries for key metrics.

# 7 Data Tools and Analytics

The purpose of this task is to use available data and tools to describe travel and travel metrics in the Triangle region in a way that provides useful insights for informing the public and transportation planners, guiding future actions, or informing future decisions. This task also covers the development of interactive data visualizations that can be deployed to a data dashboard and accessed by agency staff and members of the public. Several options are provided below with priority placed on tools and analytics focused on the survey data, but the work program recognizes that there may be some flexibility in which tools are actually advanced.

FY22 tools and analytics will focus on the following:

- Data dashboard application that allows users to select a TAZ (or group of TAZs) and report attraction TAZs for the productions in the selected TAZ(s), or production TAZs for the attractions in the selected TAZ(s). This is similar to what LEHD/LODES and streetlight does, and as such will serve as secondary data checks. The tool will report total trips, home-based work trips, home-based university trips, home-based other trips.
- Process 2016, 2018, and 2021 Triangle Travel Survey data to generate a user-friendly synopsis of travel behavior and trip statistic data. The analysis will include key travel metrics related to trip types, trip rates, trip lengths, and mode choice, including analysis and reporting of differences by household type and geographic location. The data driven report (written to easily support the development of topical fact sheets) will also cover how the is used to support the development of travel models, including the definition of trip purposes and the difference between tours and trips, especially as related to work trips. Create an interactive dashboard highlighting key metrics.
- Develop a travel profile of transit users in the region using the 2014 and 2015 Triangle on-board transit survey data. This will become the base line for future travel profiles using newly collected on-board survey data.
- Interactive tool that allows users to view transit travel mode, travel time, destination locations and other summary information based on user selected origin zone.
- Interactive tool that reports key highway assignment metrics.

*Deliverable(s):*

- Travel behavior and trip statistics synopsis.
- Public facing fact sheets.



- Data dashboard content.

## 8 Technical Support, Training and Outreach

This task covers technical support, training, and outreach in support of the transportation planning and analysis programs of stakeholder agencies.

### 8.1 Stakeholder Planning Program Support

To better understand the region's needs for travel model development, enhancement, applications, and analytics, it is important for the TRMSB to be involved, on some level, in the planning programs for the Stakeholder agencies. The purpose of this task to breakdown the silos between the TRMSB and its work program and the TRM Stakeholders and their work program through regular and purposeful interactions with the Stakeholder's planning programs, and to provide active engagement and technical expertise as needed. This includes periodically attending MPO Technical Committee meetings and Joint MPO Technical Team meetings, and participation in key project meetings as requested by TRM Stakeholders to serve as a technical representative or to provide TRM technical expertise. This task also includes regular one on one meetings with Executive Committee members.

*Deliverable(s):*

- NA

### 8.2 TRM User Forum

Under this task, the TRMSB will facilitate the TRM User Forum in order to create a space where model users (consultants and agency staff) can share ideas and views related to the TRM.

The format of the forum will vary from meeting to meeting, but will likely include elements such as panel discussions, lightning round presentations on modeling topics, a focused presentation around a small number of recent TRM applications along with lessons learned and suggested improvements, or a facilitated conversation around a specific question or topic.

This scope assumes meeting planning, preparation, and documentation for two (2) meetings during FY22.

*Deliverable(s):*

- User Forum material and documentation of meeting outcomes.

### 8.3 TRMG2 Training

Under this task, the TRM Team will provide training on the TRMG2 model to agency staff, including NCDOT MPO Coordinators, MPO planning staff, and GoTriangle planning staff. The training will focus on the basics of running the model, interpreting model outputs, and understanding model limitations and capabilities. The training is expected to cover either one full day, or two half days. Part 1 will cover a bit of theory, model inputs and why they matter, model outputs and how they can be used, model limitations, and enhancements/differences between the G2 and v6 models. Part 2 will cover hands on application of the model and will be geared towards agency staff more interested in the technical aspects of the model. This task covers preparation and administration of the training.

*Deliverable(s):*

- Training and training materials.

## 9 Regional STOPS Model

The Triangle region is embarking on several key transit planning initiatives, including corridor studies, county transit plans, and Commuter Rail using FTA's STOPS model. As a result of these efforts the regional stakeholder would like to standardize on one regional STOPS model that can be used to support transit project analysis in the region. The stakeholders have identified ITRE as the custodian of that model. To facilitate this role, the TRM team will participate in STOPS related training, including training using on-line materials, attendance at a virtual training session or in-person training held in the Triangle region.

This task covers participation in STOPS technical meetings for the projects underway in the region during FY22, and meetings with agency and consultant staff as necessary to build relationships with STOPS model developers in order to better understand how they are using and/or modifying the regional STOPS model. This task also covers custodial activities related to data checking, process monitoring, and file management.

### **Data Checking**

This covers big picture data checking related to the STOPS model key inputs such as background transit networks and appropriate representation of the adopted transit plans, characteristics of the build alternatives, and other key data assumptions.

#### **Process Monitoring**

This covers process review and tracking. To facilitate this effort, a process tracking tool (spreadsheet, database, or similar) will be developed to document and track key elements and assumptions for each specific project under development using the STOPS model. Tracked elements are expected to include items such as:

- TRM version
- No-build network definition (what is included vs. what is not included)
- Assumptions about coded projects (e.g. BRT or other MTP projects included)
- Modification to background network for companion transit services
- Project time lines
- Data assumptions
- Parameter assumptions
- On-board survey processing and assumptions

The effort requires on going communication between TRM leadership and STOPS project team(s) in order to provide and interface between STOPS team and TRM team, to understand the big picture project elements and how they fit within the project schedule, and to provide overall consistency between the various processes. Ideally, this interface will also include participation in the consultant review process and scope of work in order to create efficiencies.

#### **File Management and Model Distribution**

The covers the management and tracking of data files related to the Triangle STOPS model, including maintaining official Triangle STOPS model files and documentation, a log of model requests, a log of model changes between model versions, a complete backup of STOPS model files, and managing access to the model via FTP or other file exchange medium.

*Deliverable(s):*

- Process Tracking Tool (spreadsheet, database, etc.)

Summary of Hours by Task

**Placeholder**

## ATTACHMENT 2

### Budget

GO TRIANGLE STAKEHOLDER BUDGET TRIANGLE REGIONAL MODEL SERVICE BUREAU BUDGET FOR FY 2022: July 1, 2021 to June 30, 2022		
Budget Items	Description of Level of Effort	Budget
		FY 2020-21
<b>Salaries and Wages (Personnel) *</b>		
ITRE Associate Director	25% of 75 % effort for 12 mo	\$ 29,934
Director	NA	\$ -
Senior Research Scholar	25% of 100% effort for 12 mo	\$ 24,000
Research Scholar	NA	\$ -
Senior Research Associate	62.5 % effort for 12 mo	\$ 46,875
Graduate Student	50 % /sem; 100 % summer	\$ 8,034
<b>SUBTOTAL PERSONNEL</b>		<b>\$ 108,843</b>
<b>Staff Benefits</b>		
Staff (30.73%+\$6,512 ea. Health Insurance)		\$ 37,818
Graduate Student (9.50%+\$2,620 Health Insurance)		\$ 1,418
<b>SUBTOTAL STAFF BENEFITS</b>		<b>\$ 39,234</b>
<b>TOTAL PERSONNEL &amp; BENEFITS</b>		<b>\$ 148,077</b>
<b>Supplies and Materials</b>		
(Supplies, plotter paper, plotter ink)		\$ 100
Computer replacements (0)		\$ -
<b>Travel</b>		
In State		\$ 75
Out of State		\$ -
Training		\$ 675
<b>Current Services</b>		
Communications (long distance)		\$ 37
Printing and Binding		\$ -
<b>Contracted Services</b>		
Model Development Contract (FY22 only)		\$ 28,438
On-Call Contract		\$ 3,750
		\$ -
<b>Fixed Charges</b>		
TransCAD (\$1,800/ea)		\$ 2,813
Software (Tableau, MS Project, etc. )		\$ 256
<b>Student Aid / Tuition Remission</b>		
In State		\$ 3,692
<b>Subcontract</b>		
Household travel survey update - Resource Systems Group, Inc.		\$ -
<b>Rental of Office Facilities</b>		
Rent 6.2% of MTDC		\$ 11,422
<b>TOTAL OTHER DIRECT COSTS</b>		<b>\$ 51,257</b>
<b>Facilities &amp; Administrative Costs</b>		
26% of MTDC **		\$ 47,897
<b>TOTAL BUDGET</b>		<b>\$ 247,232</b>

\* Uses a 3% growth factor/yr

\*\* GoTriangle contributes 0.5 FTE plus 25% of remaining 0.5 FTE

\*\*\* 26% based on one contract through the Master Agreement between NCSU-ITRE and NCDOT.

## MEMORANDUM

**TO:** GoTriangle Board of Trustees  
**FROM:** Planning and Capital Development  
**DATE:** June 14, 2021  
**SUBJECT:** Professional Services to Support Bus Plans and Short Range Transit Plans

### Strategic Objective or Initiative Supported

- Implement the Wake Transit Plan with Transit Planning Advisory Committee
- Update Durham and Orange County Transit Plans with Durham and Orange Staff Working Groups

### Action Requested

Staff requests that the Committee recommend that the Board authorize the president and CEO to execute a task order for bus planning services under GoTriangle Contract #16-045, Master Agreement for Planning Services between Nelson\Nygaard and GoTriangle, to develop multi-year bus service plans for Wake and Durham and short-range transit plans for GoTriangle, GoRaleigh, GoCary, GoWake Access, GoDurham, and GoDurham ACCESS for an amount not to exceed \$1,093,750. The proposed subcontracting approach supports DBE participation that exceeds the task order goal of 14%.

### Background and Purpose

An update to the Wake County Transit Plan was adopted in April 2021 by the CAMPO Executive Board and GoTriangle Board of Trustees. The Durham County Transit Plan and Orange County Transit Plan are in the process of being updated and are anticipated to be completed in fiscal year 2022. While the county transit plans identify overarching goals, the Bus Plan will study and refine the bus service projects identified in the county transit plans in order to provide the level of detail necessary for implementation of bus service in the short term. In addition, the Bus Plan will produce a short range transit plan for each transit agency, which includes specific route details that will be implemented each year from FY 2024-2027.

GoTriangle, along with transit partners, will produce updated or new county bus plans and corresponding transit agency-specific, short-range transit plans with these objectives:

1. To define, confirm, or reevaluate bus service investments for FYs 2024-2027
2. To determine the programming of any bus service expansion investments in FYs 2028-2030

While the plan updates may revisit project delivery assumptions and market assumptions and redirect priorities for local and regional bus service investments, the plan updates will not change the overarching goals defined by the county transit plans.

The primary deliverables for the Wake Bus Plan and Durham Bus Plan (a.k.a. Multi-year service implementation plans) are the year-by-year operating and capital plans used to inform the annual work plan development for FY 2024-2030. Short range transit plans will be developed for GoRaleigh, GoCary, GoTriangle, GoDurham, GoWake Access, and GoDurham ACCESS.

GoTriangle is the project manager for the Bus Plan and Short Range Transit Plans because the Wake Transit Governance ILA identifies GoTriangle as the lead agency for the Wake Bus Plan, GoTriangle is the project sponsor for the Durham Bus plan in the Durham Transit FY21 work plan, and GoTriangle is the project sponsor for the GoTriangle short range transit plan in the Orange County Transit Plan FY21 work plan.

To inform the county transit plan work plan development for FY 2024,

- The Wake Bus Plan update should be completed and adopted by October 2022, and
- The Durham Bus Plan should be completed and adopted by February 2023.

### Financial Impact

This task order will be funded through the FY21 and FY22 Wake, Durham, and Orange County Work Plans which include a total budget of \$1,093,750 for the bus plan and short-range transit plan activities split as shown in the table below. The GoTriangle Board of Trustees is scheduled to consider adoption of the FY22 budget for the three county transit plans including these values at its June 2021 meeting.

	FY21 Work Plan (amended)	FY22 Recommended Work Plan	Total
Wake County	\$100,000	\$650,000	\$750,000
Durham County	\$62,500	\$250,000	\$312,500
Orange County	\$31,250	\$0	\$31,250
<b>TOTAL</b>			<b>\$1,093,750</b>

### Attachments

- None

### Staff Contact

- Jennifer Green, Transit Svc. Planning Supervisor, 919-485-7529, [jgreen@gotriangle.org](mailto:jgreen@gotriangle.org)



**2021 00**

**GOTRIANGLE  
FISCAL YEAR 2022  
TRIANGLE TAX DISTRICT -- WAKE OPERATING FUND BUDGET ORDINANCE**

**BE IT ORDAINED** by the Research Triangle Regional Public Transportation Authority Board of Trustees:

**Section 1.** It is estimated that the following revenues will be available in the **Triangle Tax District - Wake Operating Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

Article 43 ½ Cent Local Option Sales Tax	\$ 14,379,425
Vehicle Rental Tax	2,800,000
\$7 Vehicle Registration Tax	6,670,000
\$3 Vehicle Registration Tax (Transfer from Wake Tax District)	2,860,000
Farebox	0
Other/Miscellaneous	370,000
<b>Total</b>	<b>\$ 27,079,425</b>

**Section 2.** The following amounts hereby are appropriated in the **Triangle Tax District - Wake Operating Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

Tax District Administration (GoTriangle)	\$ 501,338
Transit Plan Administration	0
GoTriangle	2,152,405
Capital Area Metropolitan Planning Organization (CAMPO)	420,249
City of Raleigh	1,108,690
Town of Cary	984,311
Community Funding Areas	0
Town of Wake Forest	366,083
Twon of Apex	379,770
Town of Morrisville	338,800
Reserve	352,570
Bus Operations	0
GoTriangle	5,052,534
City of Raleigh	12,571,145
Town of Cary	2,161,481
Wake County	559,512
Town of Wendell	4,523
Town of Zebulon	6,089
Reserve	119,925
<b>Total</b>	<b>\$ 27,079,425</b>

**Section 3.** The GoTriangle President/CEO, or his or her designee, is hereby authorized to transfer funds within appropriations under the following conditions:

- A) No transfer may be made that changes the adopted allocations to fund balance.
- B) All budget transfers will be reported to the Transit Planning Advisory Committee.
- C) All increases to an appropriation, and all transfers between appropriations, must be reviewed by the Transit Planning Advisory Committee and approved by the CAMPO and GoTriangle governing boards.

**Section 4:** Triangle Tax District – Wake Operating Funds encumbered as of June 30, 2021, by GoTriangle as the Tax District Administrator are hereby appropriated to this budget.

**Section 5.** Copies of the Budget Ordinance shall be furnished to the Clerk, to the Board of Trustees, to the Finance Officer, and to the Budget Officer of this Authority to be kept on file for their direction in the disbursement of funds. Copies also shall be furnished to representatives of the Agencies under Section 2. The Budget Ordinance shall be entered into the Board minutes.

**ADOPTED THIS 23<sup>rd</sup> DAY OF JUNE 2021.**

\_\_\_\_\_  
Michael Parker, Board of Trustees Chair

**ATTEST:**

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



**2021 00**

**GOTRIANGLE  
FISCAL YEAR 2022  
TRIANGLE TAX DISTRICT - WAKE CAPITAL FUND BUDGET ORDINANCE**

**BE IT ORDAINED** by the Research Triangle Regional Public Transportation Authority Board of Trustees, that pursuant to section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following project ordinance is hereby adopted:

**Section 1.** It is estimated that the following revenues will be available in the **Triangle Tax District - Wake Capital Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

Article 43 ½ Cent Local Option Sales Tax	\$ 83,620,577
Allocation from Wake Capital Fund Balance	44,739,770
<b>Total</b>	<b>\$ 128,360,347</b>

**Section 2.** The following amounts hereby are appropriated in the **Triangle Tax District - Wake Capital Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

Capital Planning	
GoTriangle	\$ 650,000
Community Funding Area	
Town of Knightdale	50,000
Research Triangle Foundation	263,463
Bus Infrastructure	
GoTriangle	8,439,000
City of Raleigh	7,192,160
Town of Cary	35,776,000
Reserve	4,080,000
Bus Acquisition	
City of Raleigh	12,773,312
Bus Rapid Transit	
City of Raleigh	12,000,000
Allocation to Wake Capital Fund Balance	47,136,412
<b>Total</b>	<b>\$ 128,360,347</b>

**Section 3.** The GoTriangle President/CEO, or his or her designee, is hereby authorized to transfer funds within appropriations under the following conditions:

- A) No transfer may be made that changes the adopted allocations to fund balance.
- B) All budget transfers will be reported to the Transit Planning Advisory Committee.

- C) All increases to an appropriation, and all transfers between appropriations, must be reviewed by the Transit Planning Advisory Committee and approved by the CAMPO and GoTriangle governing boards.

**Section 4:** Triangle Tax District – Wake Capital Funds are appropriated pursuant to section 13.2 of Chapter 159 of the General Statutes of North Carolina; therefore, appropriations do not lapse at the end of the fiscal year and are available for duration of the project unless subsequently recommended for reallocation by the Transit Planning Advisory Committee and approved by the CAMPO and GoTriangle governing boards, or as specified in Section 5.

**Section 5:** GoTriangle Finance Department has authority to close projects and/or programs and reduce appropriations upon notification of project completion by the project sponsor. When actual revenues are available in projects to be closed or which are substantially complete, GoTriangle Finance may transfer savings to Triangle Tax District Wake Capital fund balance. These funds will be then available for future appropriations which require recommendation by the Transit Planning Advisory Committee and approval by the CAMPO and GoTriangle governing boards. This section applies to current and prior year appropriations. A list of project closeouts shall be provided quarterly to the Transit Planning Advisory Committee.

**Section 6.** If received, Small Starts Funding from the FTA in support of the New Bern Avenue project will be awarded directly to the City of Raleigh. Expenditures funded by these federal funds will be budgeted by the City of Raleigh in their respective Transit Grant Fund. Dollars budgeted above are the local funds budgeted by the tax district and allocated to the City of Raleigh in support of this project.

**Section 7.** Copies of the Budget Ordinance shall be furnished to the Clerk, to the Board of Trustees, to the Finance Officer, and to the Budget Officer of this Authority to be kept on file for their direction in the disbursement of funds. Copies also shall be furnished to representatives of the Agencies under Section 2. The Budget Ordinance shall be entered into the Board minutes.

**ADOPTED THIS 23<sup>rd</sup> DAY OF JUNE 2021.**

---

Michael Parker, Board of Trustees Chair

**ATTEST:**

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Michelle C. Dawson, Clerk to the Board

**2021 00**

**GOTRIANGLE  
FISCAL YEAR 2022  
WAKE SPECIAL TAX DISTRICT FUND BUDGET ORDINANCE**

**BE IT ORDAINED** by the Research Triangle Regional Public Transportation Authority Board of Trustees:

**Section 1.** It is estimated that the following revenues will be available in the **Wake Special Tax District Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

\$3 Vehicle Registration Tax	<u>\$ 2,860,000</u>
<b>Total</b>	<b>\$ 2,860,000</b>

**Section 2.** The following amounts hereby are appropriated in the **Wake Special Tax District Fund** for the fiscal year beginning July 1, 2021, and ending June 30, 2022:

Transfer to Triangle Tax District – Wake Operating Fund	<u>\$ 2,860,000</u>
<b>Total</b>	<b>\$ 2,860,000</b>

**Section 3.** Copies of this Budget Ordinance shall be furnished to the Clerk to the Board of Trustees and to the Budget Officer of this Authority to be kept on file for their direction in the disbursement of funds.

**ADOPTED THIS 23<sup>rd</sup> DAY OF JUNE 2021.**

\_\_\_\_\_  
Michael Parker, Board of Trustees Chair

**ATTEST:**

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

**GoTriangle Board of Trustees**  
**Operations & Finance Committee Meeting Minutes**  
**June 3, 2021**  
Held Remotely via WebEx

**Committee Members Present:**

Corey Branch

Vivian Jones, Committee Chair

Michael Parker

Jennifer Robinson (arr. 8:33 a.m.)

Steve Schewel (arr. 8:36 a.m.)

Stelfanie Williams

**Committee Members Absent:**

Valerie Jordan

**Other Board Members Present:**

Will Allen III

Committee Chair Vivian Jones officially called the meeting to order at 8:30 a.m.

**I. Adoption of Agenda**

**Action:** The agenda was adopted by consent.

**II. Approval of Minutes**

**Action:** On motion by Parker and second by Williams the minutes of May 6, 2021, were adopted. Upon vote by roll call, the motion was carried unanimously.

**III. Master Research Agreement and Task Order 1 – Triangle Regional Model Service Bureau**

Jay Heikes stated that typically this is an annual agreement with the regional model service bureau housed at ITRE at NC State to perform travel demand modeling services. He stated this year staff is requesting a five year sole source contract. He explained that ITRE is the only entity capable of providing this service at a reasonable cost. Heikes said five years will be less burdensome on staff and offer more certainty to the TRM service bureau. He noted that NCDOT, DCHC MPO and CAMPO are GoTriangle's partners in the agreement.

Robinson arrived.

**Action:** On motion by Parker and second by Branch the Committee voted to recommend the Board authorize the President/CEO to sign a master research agreement with North Carolina State University (NCSU) Institute for Transportation Research and Education (ITRE) to provide continued model development services of the Triangle Regional Model (TRM) and regional Simplified Trips on Project Software (STOPS) model, and to execute Task Order 1

of the agreement for FY22 model management services for an amount not to exceed \$250,000. Upon vote by roll call, the motion was carried unanimously.

#### **IV. Professional Services to Support Bus Plans and Short Range Transit Plans**

Jennifer Green's presentation is attached and hereby made a part of these minutes.

Schewel arrived.

Green explained that GoTriangle is the lead agency to coordinate the development of bus service implementation plans for Wake, Durham and Orange counties. She said that although this effort could revisit how projects are delivered and prioritized for local and regional bus service investments, it will not change the overarching goals of the county transit plans. The project will study and refine bus service projects to confirm the projects are responsive to changes in travel patterns and examine the impact of COVID-19 on transit ridership trends to ensure projects continue to support county transit plan goals.

She said the bus plan and subsequent short range transit plans will provide detailed implementation plans for services in fiscal years 2024-2027 as well as phasing for projects in future years 2028-2030. The primary deliverable for the bus plan is year-by-year operating and capital plans which will be used to inform each county's annual work plans. The planning effort also will create six agency-specific short range transit plans for fiscal years 2024-2027 and will include specific details for service expansion or adjustments.

Green stated that work will begin for Wake County in the summer and is anticipated to take 15 months. Work will begin in Durham County following the adoption of the updated Durham Transit Plan. The project is funded through the FY21 and FY22 county work plans.

Parker asked about the absence of Orange County from this project. Green responded that when this project was conceived Chapel Hill Transit was undergoing an extensive short range transit plan process and staff did not feel the need for a county-wide plan.

Allen asked how the funding split was determined. Green replied based on estimates from previous planning efforts for bus plans and short range transit plans. Lattuca stated that it is based on the needs for each county and not a regional share.

**Action:** On motion by Parker and second by Robinson the Committee voted to recommend the Board authorize the President/CEO to execute a task order for bus planning services with Nelson\Nygaard to develop multi-year bus service

plans for Wake and Durham and short-range transit plans for GoTriangle, GoRaleigh, GoCary, GoWake Access, GoDurham and GoDurham ACCESS for an amount not to exceed \$1,093,750. Upon vote by roll call, the motion was carried unanimously.

## **V. FY21 Q3 Financial Results**

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

### ***Year to Date Revenues***

- Total revenues through March - \$22.7 million (43.5% of budget), compared to \$23.8 million in FY20 same period
- Transit service revenue for bus - \$3.6 million (63.6% of budget), compared to \$5.3 million in FY20
- Transit service revenue for paratransit - \$363,000, compared to \$398,000 in FY20
- \$5 Vehicle Registration taxes - \$5 million, compared to \$4.8 million in FY20
- Vehicle Rental taxes - \$2.8 million, compared to \$5.1 million in FY20 (due to COVID-19 travel restrictions)
- FY21 CARES Act grant reimbursement - \$7.9 million (received in full)
- Other reimbursements - \$2.3 million

### ***Year to Date Expenses***

- Total expenses through March - \$27.2 million (50.9%), compared to \$33.2 million in FY20 same period
- Transit operations expenses - \$18.6 million, compared to \$18.9 million in FY20
- Administrative department expenses - \$3.3 million, compared to \$4.1 million in FY20
- Capital expenditures - \$5.2 million, compared to \$10.2 million in FY20

Branch asked if GoTriangle would be receiving additional CARES Act funding. Freeman responded yes through the DCHC MPO and CAMPO in FY22.

Parker noted that absent the CARES Act money GoTriangle would have had a deficit and it is clear GoTriangle's revenue sources are insufficient to pay for the services it is committed to delivering. He asked what additional revenues are being considered. Freeman offered several options: claiming a greater share of the vehicle rental tax, indexing the \$5 vehicle registration fee to inflation, which would require legislative action, and adjusting the formula used to allocate 5307 funds. Lattuca added that the counties could seek additional authorization to increase the sales tax. Reinstatement of SMAP funding is another source of revenue that was recently cut. Another option, which would require changes to state law, could

## GoTriangle Operations &amp; Finance Committee

June 3, 2021

## Meeting Minutes

allow for alternative delivery for large capital projects. He said although going to the legislature could be risky, it is time for the region to unite and seek funding to meet its needs or to give counties the authority to fund their transit goals.

Committee members discussed how a regional transit plan could be used to justify financial requests and the possibilities of expanding GoTriangle's geographic footprint to surrounding counties.

**VI. FY22 Proposed Budget**

Saundra Freeman discussed changes to the FY22 proposed budget since the last committee meeting. The packet is attached and hereby made a part of these minutes.

**VII. Dashboard Update**

Sharon Chavis' presentation on the performance dashboard is attached and hereby made a part of these minutes.

**VIII. Adjournment**

**Action:** Committee Chair Jones adjourned the meeting at 9:35 a.m.

Prepared by:

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

**GoTriangle Board of Trustees**  
**Planning & Legislative Committee Meeting Minutes**  
**May 26, 2021**  
Held Remotely via Webex

**Committee Members Present:**

Will Allen III, Chair  
Brenda Howerton

Sig Hutchinson

**Committee Members Absent:**

Michael Fox

Renée Price (excused)

**Other Board Members Present:**

Michael Parker

Committee Chair Will Allen III called the meeting to order at 1:44 p.m.

**I. Adoption of Agenda**

**Action:** On motion by Hutchinson and second by Howerton the agenda was adopted.

**II. Approval of Minutes**

**Action:** On motion by Howerton and second by Hutchinson the minutes of the March 24, 2021, meeting were approved.

**Action:** Upon vote by roll call, the two prior motions were carried unanimously.

**III. Transit Plan Updates**

Meg Scully offered background on the on-going efforts to update the Durham and Orange County Transit Plans. She introduced those leading the update efforts for the two counties: Caroline Dwyer, consultant for Orange County, and Tom Altieri of Orange County planning staff and Ellen Beckmann, Durham County Transportation Manager and Aaron Cain, DHCH MPO Planning Manager.

**A. Orange Transit Plan Update**

Carolyn Dwyer's presentation is attached and hereby made a part of these minutes. She stated the update process is in the second phase to present two conceptual scenarios to leadership boards and committees. She said transit service providers also will have opportunity to provide feedback before conducting public outreach. All feedback received will be used to create one balanced scenario by October.

Sig Hutchinson asked for more detail on the scenarios. Dwyer responded that the scenarios have not been released, but shared that one scenario is



more focused on routes with higher ridership and in higher ridership transit corridors and the other provides wider geographic coverage to increase access to transit. She added that there is significant overlap within the two scenarios; both focus on providing inter-county connections between Durham and Orange and improving service frequency along those commuter routes.

**B. Durham Transit Plan Update**

The Durham County Transit Plan update presentation is attached and hereby made a part of these minutes.

Ellen Beckmann stated this is the largest revision of the transit plan since its adoption in 2011, initiated by the cancelation of the D-O LRT project. The update will consider local transit needs along with regional connections to replace the purpose of the D-O LRT project for service to Orange County and ways to connect to Wake County including the commuter rail project. Also included in the update is a governance study that will help develop a new ILA, create new and/or updated policies that reflect the new projects in the plan, facilitate better regional coordination with Orange and Wake counties and provide a stronger oversight and accountability structure.

Beckmann said the update process is about halfway complete, with the options developed using feedback received during public outreach. The options will be released for public engagement in June, with a final plan adopted late this year.

She reviewed the feedback receiving during the first outreach phase:

- Greater frequency, more 15-minute service
- Improved bus stops
- Increased sidewalk access
- Crosstown service
- More transit access to jobs
- Commuter rail

Beckmann noted that there were slight differences in responses from the engagement ambassador sessions and the online survey:

- Investments in paratransit service was most important
- Street maintenance/road quality
- Wheelchair and stroller access at bus stops and on buses
- Service running later at night, all-day and weekends

Aaron Cain stated that more frequent service, improvements to bus stops and service later at night were incorporated into all three of the options;

however, the options vary in ways that give people an opportunity to weigh in on what they like better. He emphasized that people will not be asked to choose one option but rather what they like best about each of the options. He said it is expected that the final preferred option will be a mix of the three options.

Cain added that there are a number of already committed projects including bus routes and capital and administrative projects. He said these projects account for approximately half of the \$1 billion expected to be generated over the next 20 years in tax revenues. Cain noted that all the options are fiscally feasible.

#### ***Option A***

- Focus on local and regional bus operations with increased frequency, extended hours and capital expenditures to support service.
- Highest level of sidewalk access and paratransit service improvements.
- Most services implemented in first five years.
- Most projects locally funded and less complex.

#### ***Option B***

- Focus on local and regional bus infrastructure improvements.
- Bus Rapid Transit implementation in FY32 with faster and more efficient service for local and regional buses, dedicated lanes and improved regional connections to Chapel Hill and RTP. This will require federal funding and regional partnerships.
- Some sidewalk access and paratransit service improvements.
- Fewer service improvements and later implementation than in Option A.

#### ***Option C***

- Includes commuter rail with rapid, dependable service to Wake (and possibly Johnston) County. Major Durham destinations also will be served with implementation in FY29. This will require federal funding and regional partnerships.
- Some paratransit service improvements and fewer sidewalk access projects.
- Fewer service improvements and later implementation than in Options A and B.

Cain said following public outreach over the next month, a preferred option will be presented in late summer.

Allen stated his surprise that only one option includes commuter rail. Cain responded that it does not reflect the importance of the project, rather an attempt to create options that provide a contrast for the public to be able to provide feedback.

Beckmann pointed out that Durham is faced with the task of replacing the function the D-O LRT project served within Durham and as a connection to Orange County. She said Durham County has to figure out how to balance connections to Orange and Wake counties as well as within Durham County. She also noted limited funding.

Parker commented that in Durham and Orange counties the half cent sales tax is inadequate to meet the legitimate transit needs both counties have. He said without more money both counties will be forced to make sub-optimal choices.

#### **IV. Policy Framework for Use of Wake Transit Funds to Acquire Real Property**

Gary Tober stated that GoTriangle owns five parcels in Wake County along the proposed commuter rail line. He said in order to retain ownership of those properties which were purchased with an FTA contribution, GoTriangle had to reimburse FTA. Wake Transit funds were used for the reimbursement and a policy was proposed to outline rules and expectations for use of Wake Transit tax funds for the acquisition, utilization and disposition of real property.

Tober introduced Wake Transit program manager Bret Martin to present the policy framework. His presentation is attached and hereby made a part of these minutes.

Martin reviewed the proposed policy framework:

- Purpose
- Applicability
- Submission of Information for Consideration of Funding Real Property Acquisition
- Real Property Inventory and Utilization Plan
- Real Property Disposal Methods
- Further Methods of Institutionalization

He restated the purpose for the policy is to clarify requirements and responsibilities of project sponsors and lead agencies for:

- Submission of information for TPAC review of requests,
- Maintaining and reporting certain information for applicable real property,
- Methods allowed for disposal and use of applicable proceeds, and

- Methods for incorporating tenets of policy framework into program-level processes for transit plan implementation.

The policy does not apply to the acquisition of personal property, real property leasing, or the acquisition of easements or other nonpossessory interests. Wake Transit funds used to acquire any individual parcel, or combination of contiguous parcels, that exceed an area of 0.10 acre and have an assessed or appraised value of greater than \$50,000 are subject to the policy. Property acquired for streetside bus stops or bus transfer point infrastructure is exempt from the policy framework if the property is less than 0.50 acre and has a value of no more than \$75,000.

Martin added that in the event federal and/or state funding is involved with a parcel and there is inconsistency between this policy and state or federal law, the state or federal law shall control.

Martin stated that Part 3 of the policy addresses the information to be submitted by the project sponsor requesting the use of Wake Transit funds for the acquisition of real property:

- Necessity
- Location and size
- Property value(s)
- Funding source(s)
- Title issues
- Environmental issues
- Displacements
- Incidental uses

The TPAC will consider need, cost and location when evaluating requests under this policy.

Project sponsors approved for funding under this policy must prepare, and update at least annually, a real property inventory and utilization plan for all real property acquired.

Finally the policy addresses disposal methods, which is required within three years of determining the property has no remaining eligible use:

- Sell and reimburse Wake Capital Fund
- Offset within same distinct wake Transit-funded project
- Sell and keep net proceed in open project
- Transfer property to other eligible project
- Retain title with buyout

Tober stated that this policy is consistent with FTA requirements.

Planning & Legislative Committee  
Meeting Minutes  
May 26, 2021

**Action:** On motion by Howerton and second by Hutchinson the Committee recommended Board approval of the Policy Framework for Use of Wake Transit Funds to Acquire Real Property. The motion was carried unanimously.

**V. Adjournment**

**Action:** Chair Allen adjourned the meeting at 2:59 p.m.

Prepared by:

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

Draft



# Durham Transit Plan GoTriangle Planning and Legislative Committee

May 26, 2021



# Presentation Topics

- Ellen Beckmann, Transportation Manager, Durham County
- Aaron Cain, Planning Manager, DCHC MPO
- Background
- Outreach
  - Phase I Summary
  - Phase II Design
- Scenarios → now “Options”
- Next Steps



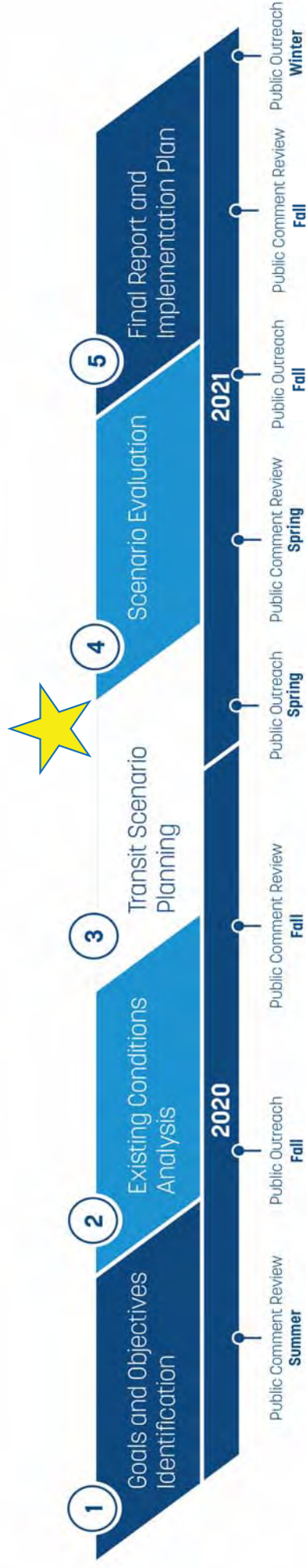
# Durham Transit Plan

- Plan that guides the use of County-wide taxes and fees for public transportation improvements
- Approximately \$35 million annually
- 20-year plan
  - Can be amended
  - Updated every 4-5 years
- Adopted by:
  - Durham County Board of Commissioners
  - GoTriangle Board of Trustees
  - Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board
- Update initiated in 2019 following the cancellation of the Durham-Orange Light Rail Transit project





# Durham Transit Plan – Project Timeline



# Durham Transit Plan – Phase I

## The Durham Transit Plan

Vol 1 • No 1  
September 2020

### WHAT IS A TRANSIT PLAN?

A Transit Plan determines how public transportation funds will be managed and spent. A good transit plan incorporates public input and feedback throughout the planning process.

### THE DURHAM TRANSIT PLAN

The Durham Transit Plan will include how we invest in, expand, and prioritize public transportation services in the Triangle region. The 2017 Durham County voters passed a bond measure to fund the expansion of the Durham Transit Plan. With the development of the Durham Transit Plan, we will look at the contents of the 2017 Transit Plan to identify local transit service improvements, potential high-capacity investments, and help prioritize funds for upcoming projects.

### Announcements

- Learn more about the Durham Transit Plan: <https://www.durhamtransit.com/2020/09/01/learn-more-about-the-durham-transit-plan/>
- Take the Survey: <https://www.surveymonkey.com/r/durhamtransit>

## SurveyMonkey

### Durham Transit Plan Phase I

How should your public transportation dollars be spent?

The Durham Transit Plan will decide what public transportation projects get money like buses, bike lanes, transit services, and more. From the information we get from your survey, we will decide how to spend your public transportation dollars.

Do you see your public transportation priorities in the questions below?

If you do, we will include your ideas in the plan. If you don't, we will include your ideas in the plan. If you don't see your ideas in the plan, we will include your ideas in the plan.

Which of the choices below is most important?

Having a faster, more convenient, and safer to travel within Durham

Having a faster, more convenient, and safer to travel between Durham and other places in the Triangle

## Durham Transit Plan

Durham Transit Plan is developing goals and objectives and your input!

# Take the survey!

¡Toma la encuesta!

<https://www.surveymonkey.com/r/DurhamTransit>

the latest Durham Transit Plan updates:

<https://engagedurham.com/durham-county-transit-plan/>

### Comprehensive Plan

The Comprehensive Plan includes topics on transportation and is therefore collaborating with the Transit Plan. Visit [engagedurham.com](https://engagedurham.com) to learn more, sign-up for updates, and get involved.

**ENGAGE Durham** | Comprehensive Plan

## Durham Transit Plan

¡Ayuda a determinar el futuro del transporte público en Durham!

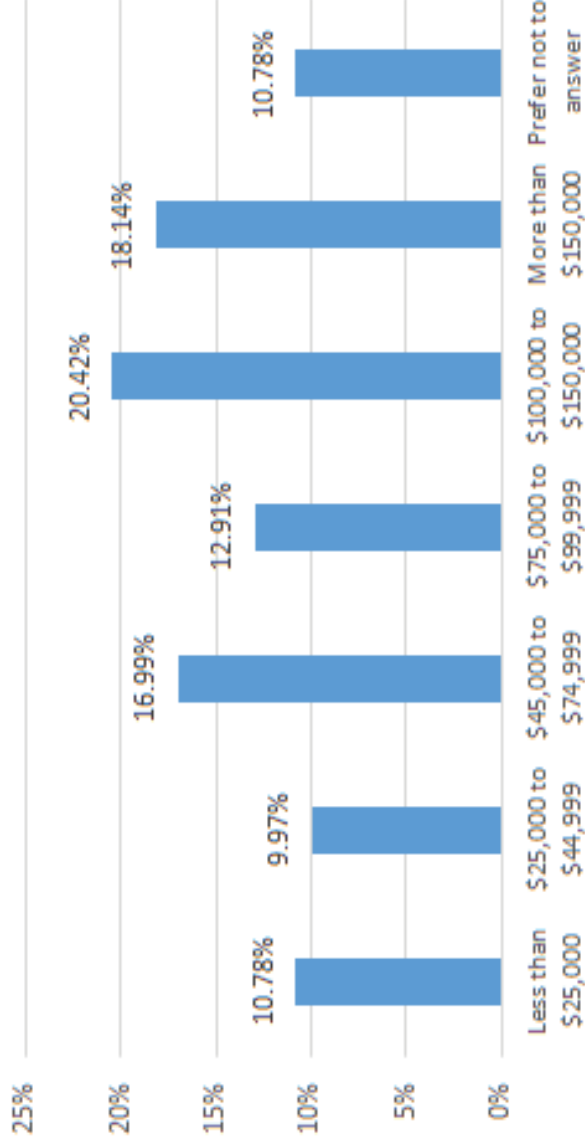
Para involucrarte, visita <https://engagedurham.com>

**ENGAGE Durham** | Comprehensive Plan

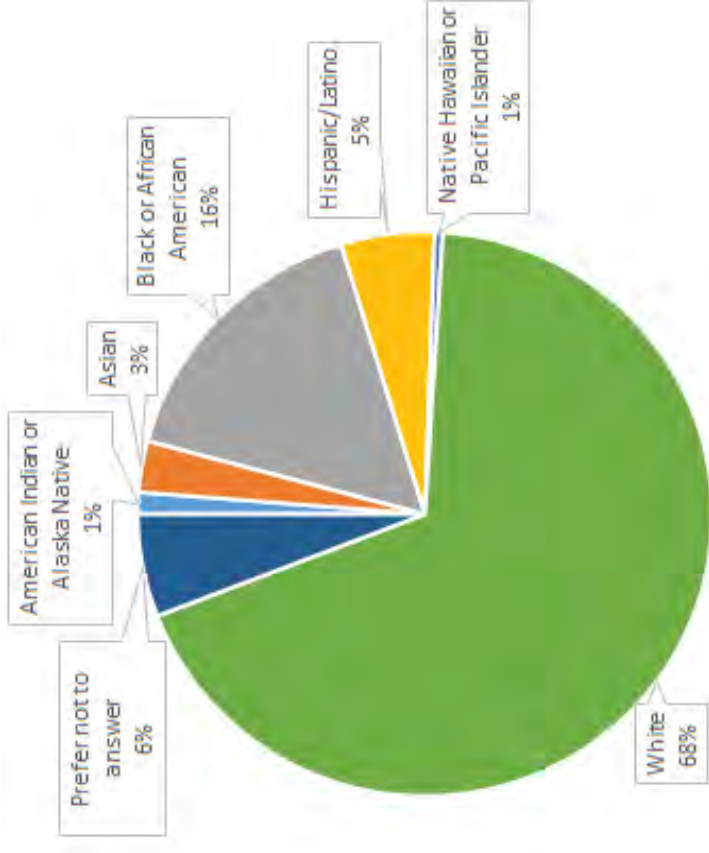
# Online Survey Summary

- 673 Respondents
- 50% are current public transit users

## What is your household income?



## What is your race and/or ethnicity?

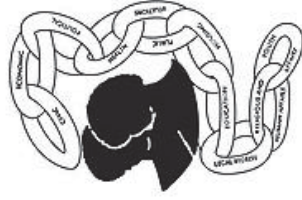


# Stakeholder Meetings



**NCCentral**  
UNIVERSITY

Discover what's Central to you.



Durham Committee on the  
Affairs of Black People



Durham Congregations  
In Action



GREATER  
**DurhamChamber**  
OF COMMERCE



# Engagement Ambassadors

- Direct engagement with under-represented communities
  - Communities of color
  - Spanish-speakers
  - Youth
  - Lower-income
  - Unincorporated areas
- Compensated ambassadors
- More than half of comments expected to come from ambassadors

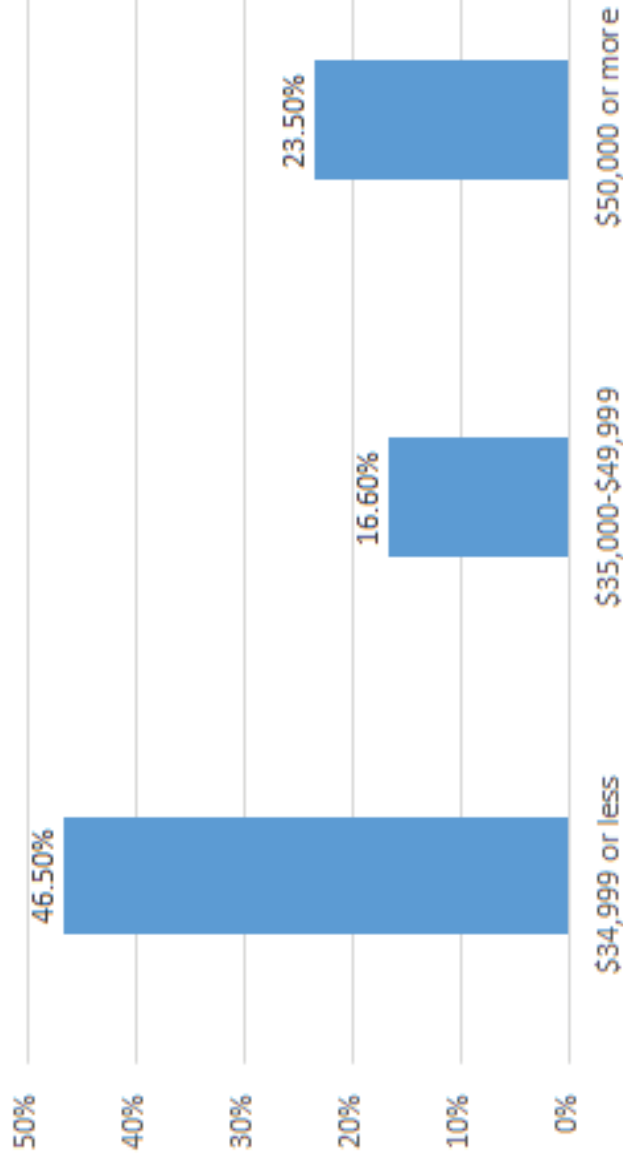




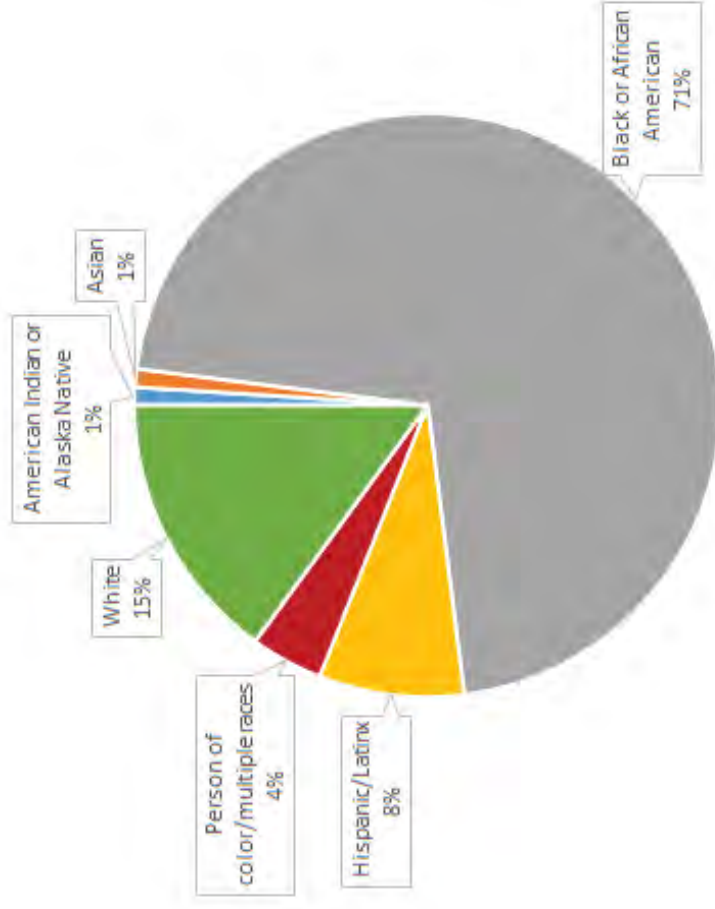
# Engagement Ambassador Summary

- 174 total responses
- 70% are current public transit users

What is your household income?



What is your race and/or ethnicity?



## Phase I Outreach Key Highlights

- Across all methods of outreach, there was universal interest in the following transit improvements:
  - More 15-minute service
  - Improved bus stops
  - Increased sidewalk access
  - Crosstown service
  - More transit access to jobs
  - Commuter Rail
- Engagement Ambassador Session responses that differed from online survey responses:
  - Investments in paratransit service prioritized the highest
  - Street maintenance/road quality was a high priority
  - Wheelchair and stroller access at bus stops and onto buses was a high priority
  - Service running later at night was a high priority

# Outreach Key Highlights

- |   |  |
|---|--|
| ✓ | More frequent service (expanded 30-minute) |
| ✓ | Improve bus stops                          |
| ✓ | Service later at night                     |
| ● | More routes going more places              |
| ● | More transit access to jobs                |
| ● | More sidewalk access to bus stops          |
| ● | Faster, more reliable service              |
| ● | Commuter Rail                              |
| ● | Paratransit Service Improvements           |

Addressed at the same level in every option



Addressed at varying levels in each option































# Committed Projects – Bus Service

Bus service already funded by the Transit Plan that is continued in all options

Route	Destinations	Service Funded	Key	
Route 1	Northgate - North Pointe - Horton/Guess			30 minute night and Sunday service
Route 2	E Main - Angier Ave - Brier Creek			
Route 4	Roxboro - Duke Regional - North Duke			30 minute daytime service (Mon-Sat)
Route 5	Fayetteville - NCCU - Southpoint	 (full route)		
Route 8	Lawson - NCCU - Durham Tech	 (Saturday)		15 min daytime service (Mon-Sat)
Route 10	Chapel Hill Rd - South Square - Walmart	 (S. Square)		
Route 12	E Main - NCCU - Southpoint			60 minute Sunday service
Route 20	Woodcroft - South Square - Duke/VA	New route – peak only		
Route 400	Durham - Patterson Place - Chapel Hill			
Route 700	Durham -Regional Transit Center (TC)			
Route 800	Chapel Hill – Southpoint – Regional TC			
Route ODX	Durham - Hillsborough - Mebane	New route – peak only		
Route DRX	Duke/VA - Durham - NCSU - Raleigh	 (peak only)		
	Paratransit, Transportation Alternatives, Senior Food Shuttle			

# Committed Projects – Capital & Administrative

## Projects & Staff already funded by the Transit Plan and included in all options

Project	Category	Key
Transit Plan staff and oversight		 Staff and Consultants
Tax district administration		 \$
Annual onboard customer surveys		 \$
Vehicle purchases		 Vehicles and Maintenance
Maintenance facilities		 Bus Stops, Access & Passenger Facilities
Durham Station: improve and add bus platforms & canopy		
Regional Transit Center relocation		
<b>All bus stops: ADA upgrade, sidewalk connection, lighting</b>		
Holloway Transit Reliability, access, & stop improvements		
Fayetteville Transit Reliability, access & stop improvements		
Village Transit Center: improve access, waiting area		
SouthPoint Transit Center: add bus platforms, waiting area		
Annual Operating and Capital Project Reserves		 \$

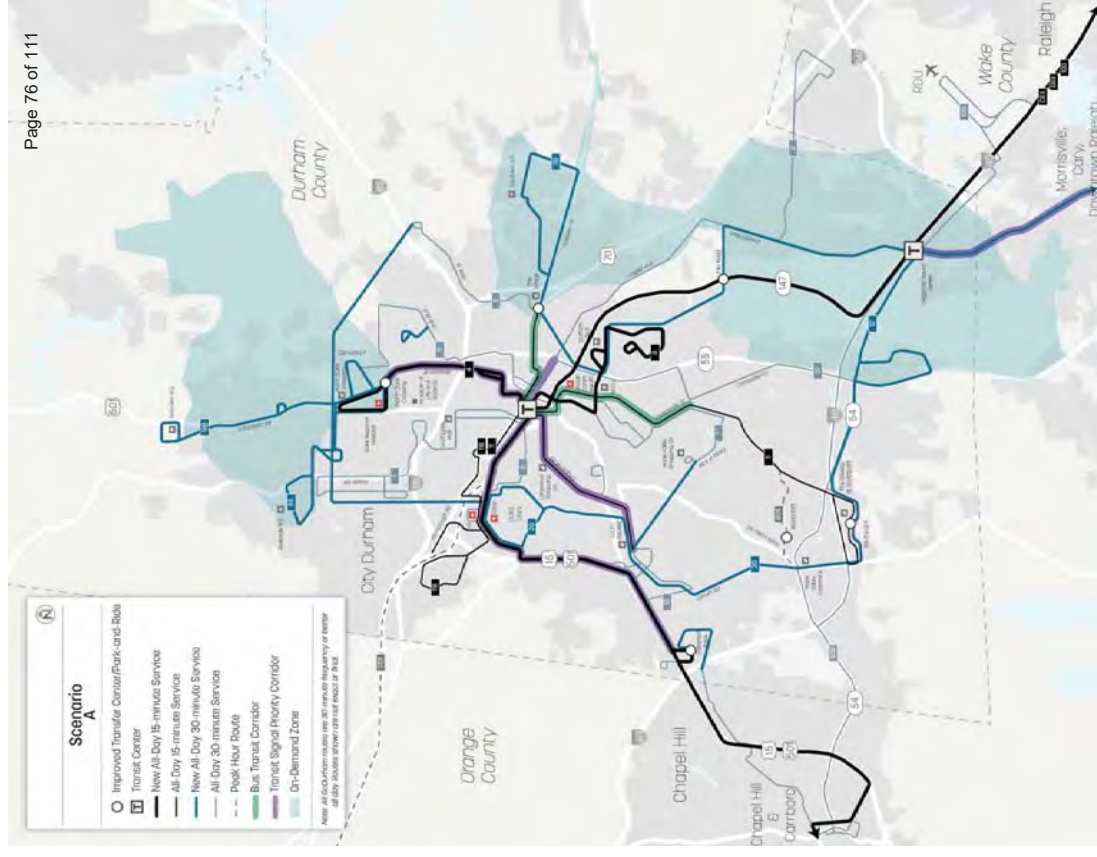
# Option Input

- Committed projects to receive 50 percent of transit tax funds
- Fiscally feasible
- Illustrate tradeoffs
- All projects are good projects
- Public not asked to choose one option
  - Prioritize aspects of each option
- Preferred option will likely be a mix of two or more options



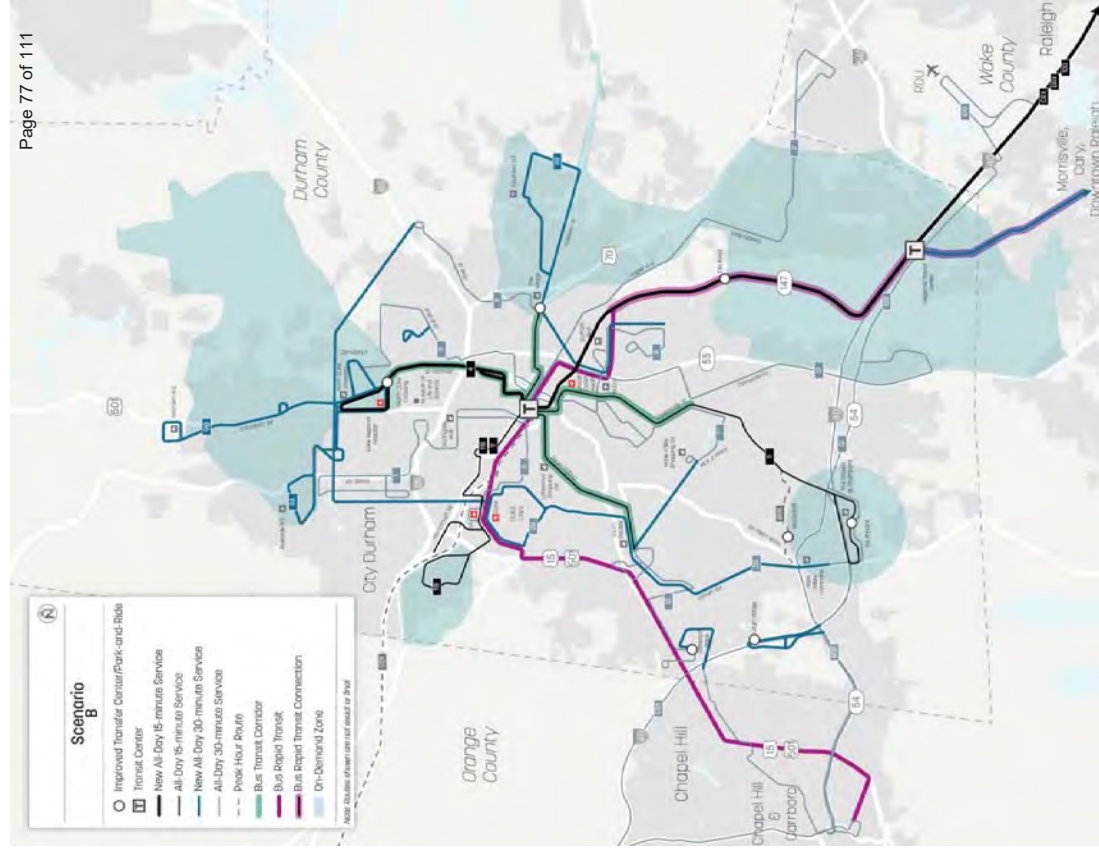
# Option A

- Focus on local and regional bus operations
  - Increase frequency
  - Extend hours
  - Capital expenditures support service
  - Dedicated lanes not funded
- Highest level of sidewalk access and paratransit service improvements
- Most services implemented in first 5 years
- Most projects are locally funded and less complex



# Option B

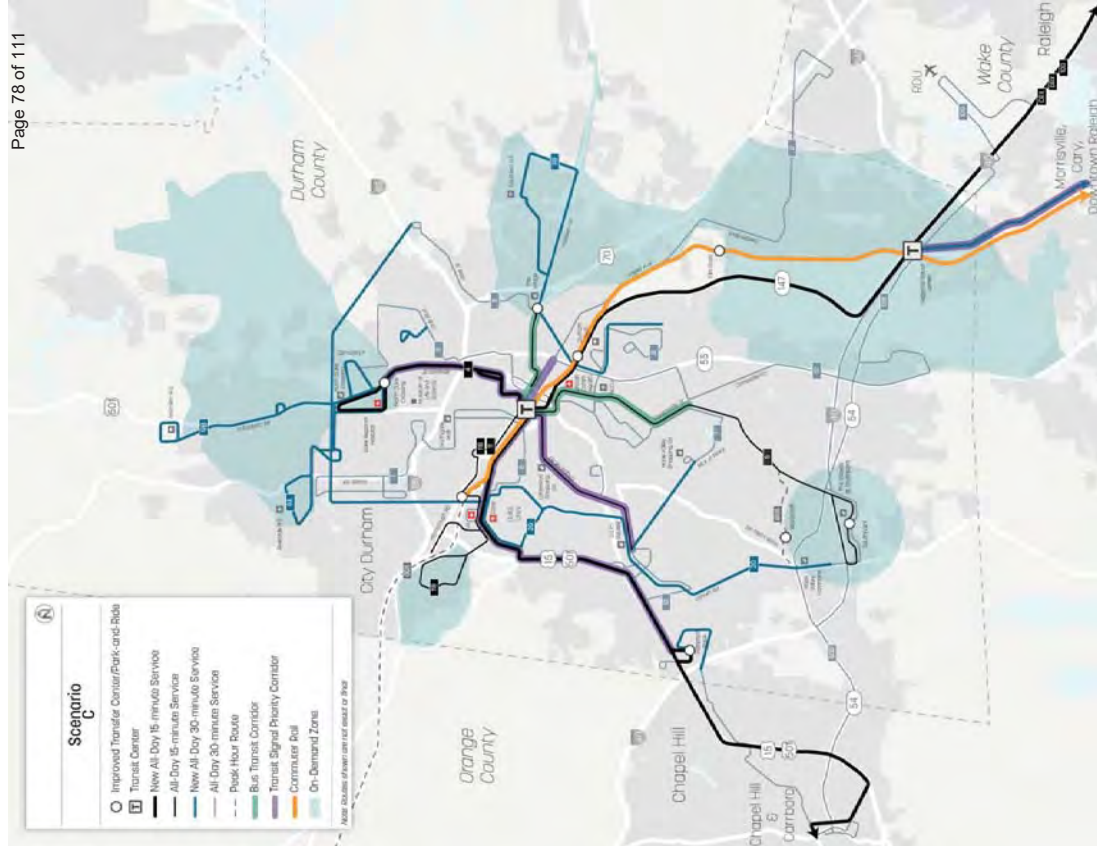
- Focus on local and regional bus infrastructure improvements
- Bus Rapid Transit
  - Faster and more efficient service for local and regional buses
  - Dedicated lanes
  - Improved regional connections to Chapel Hill and RTP
  - Implementation in FY32
- Medium level of sidewalk access and paratransit service improvements
- Fewer service improvements and later implementation than in Option A
- Bus Rapid Transit requires federal funding and regional partnerships





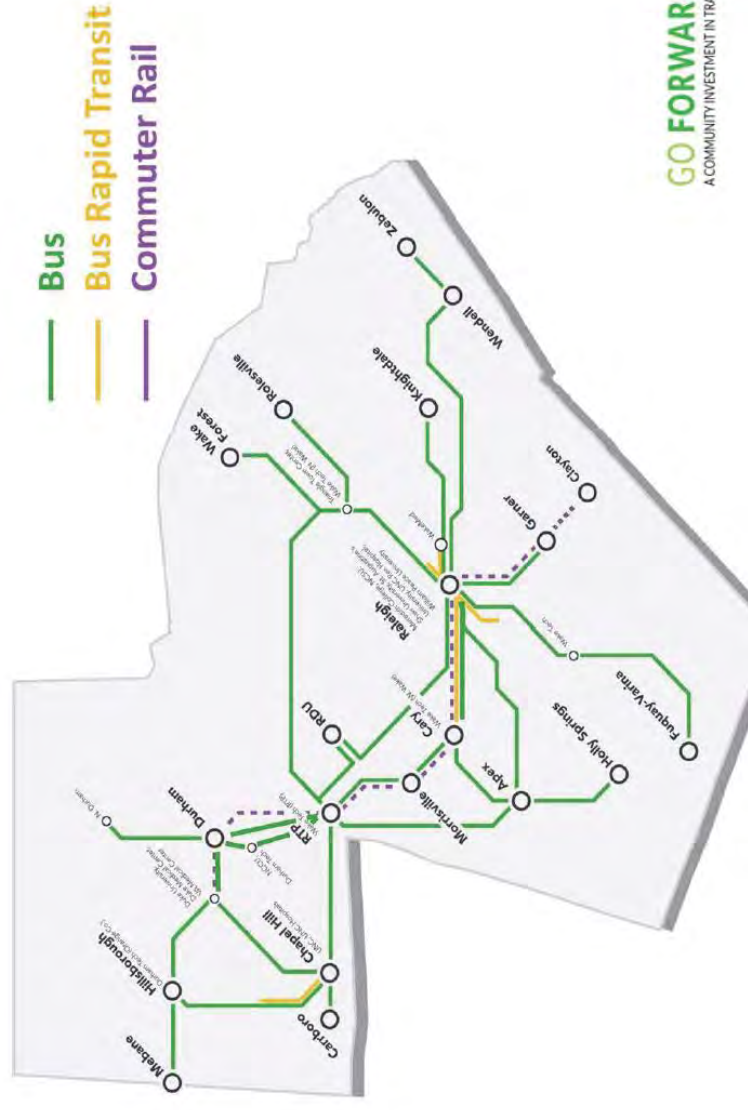
# Option C

- Inclusion of Commuter Rail
  - Rapid, dependable service to Wake (and possibly Johnston) County
  - Serves major Durham destinations
  - Implementation in FY29
- Medium level of paratransit service improvements and fewer sidewalk access projects
- Fewer bus improvements and later implementation than in Options A & B
- Commuter rail requires federal funding and regional partnerships



# Regional Transit Connections

- Connections to Orange
  - Regional Connections Opportunities Report
    - 15/501, NC 54, I-85
- Connections to Wake
  - CRT
  - BRT
  - I-40 bus on shoulder



## Option Performance Metrics

- More Routes Going More Places (network service miles)
- Frequent Service (15-minute or better)
- Faster, More Reliable Service (dedicated bus lanes or rail)
- More Sidewalk Access to Bus Stops
- Paratransit Service Improvements
- Jobs Accessible From Low-Income Communities
- No-Car Households with Access to Major Employment Areas in Durham, Orange, and Wake counties
- Projects Implemented by 2027





## Phase II Outreach

- Tentative Release – June 1
- Same four methods as Phase I
  - Engagement Ambassadors
  - Stakeholder Interviews
  - Online Survey
  - In-person tabling at major transit sites
- Outreach will conclude mid-to-late July
- Outreach will be focused on identifying priorities across all three options for inclusion in the final plan



## **Durham Transit Plan Next Steps**

- Phase II Outreach – June through mid-July
- Construction of Preferred Scenario – beginning in August
- Update Elected Boards – August
- Begin Phase III Outreach – Late August or Early September



## Contract Work Orders – May 2021 (< \$100K)

Contract #	Contractor (or subject if no contractor listed)	Contract Amount	Subject	Comments	President/CEO Date Executed
20-008	RB Infrastructure, LLC	\$0	Amendment to MOU – Predevelopment Addendum 1	Extension to December 15, 2021 with Hoffman and Associates. Other amendments are stated in document.	05/03/2021
20-040	City of Raleigh & Capital Area Metropolitan Planning Organization (CAMPO)	\$0	Amendment One General Operating Agreement for Bus Operations	The Budget is outlined in Exhibit A. Except as modified herein, the Original Agreement shall continue in full force and effect.	05/03/2021
21-036	Triangle J Council of Governments	\$0	Letter of Commitment for TDM Project	FY22 TDM grant. The total project cost for GoPerks is \$50,468 for FY22. If awarded, GoTriangle will provide 20%, or \$10,093.60 of the total cost, and requests 80%, or \$40,374.40 in grant funding.	05/06/2021
12-024	Parker Poe	\$0	General Legal Services	Extension of Engagement for General Legal Services	05/13/2021
20-033	Norfolk Southern Railway Company	\$333,333	Agreement for RTC Study concerning the Greater Triangle Commuter Project	This contract Agreement is to establish terms for the performance of necessary Railroad Traffic Controller (“RTC”) modeling and other analysis that will be used by the Parties to identify alternate commuter-rail operating plans and associated infrastructure improvements in the event of the implementation of the GTCR project. The amount of this agreement shall not exceed \$333,333 without written approval. This Agreement shall have a term of eighteen months commencing on May 15, 2021.	05/14/2021
18-041E	Kimley-Horn and Associates, Inc.	\$0	Amendment Five to Task Orders 1	Extends expiration date to September 30, 2021	05/24/2021
18-041F	Ramey Kemp and Associates	\$9,632	Task Order 3	Design services for stop improvements and an accessible connection to leased park and ride spaces located in the Bent Tree Plaza parking lot. Design on the original scope along Strickland Road neared completion. After coordination with the property owner and reexamination of the scope, a new location was identified; the City of Raleigh, GoTriangle and NCDOT met and verbally agreed upon the new location. The design services will move the stop improvements to Falls of the Neuse Road. Design services include accessible access to the parking spaces, the City of Raleigh Site Plan review and NCDOT review.	05/26/2021
08-050	Town of Chapel Hill	\$0	Amendment 16 – Operation of 420 Route	For operation of route 420 service on GoTriangle’s behalf. The Term of this agreement is from 07/01/2021 – 06/30/2022. The compensation is based off a calculation of \$383,226.75.	05/27/2021

## HR Board Report – June 2021

### NEW HIRES

Deno Lloyd – Bus Operator I

Kayla Loyd – Bus Operator I

Laquita Watson – Bus Operator I

### PROMOTIONS

None

### SERVICE AWARDS

None

### RECRUITING

Bus Operator I

Electronics Technician II

Paratransit Operator I

Service Attendant



Triangle



May 2021

# TRANSIT PERFORMANCE REPORT



## Fixed Route

Consists of vehicles operating  
along a defined route on a  
consistent schedule

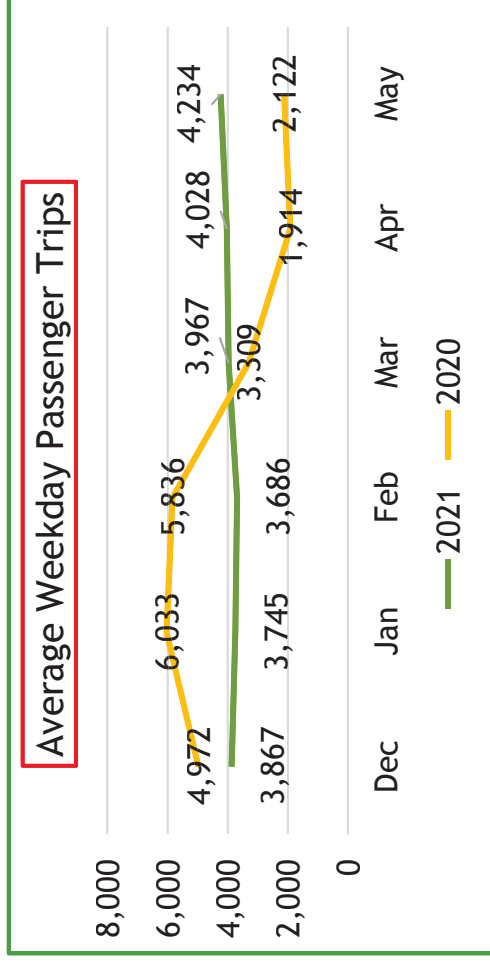
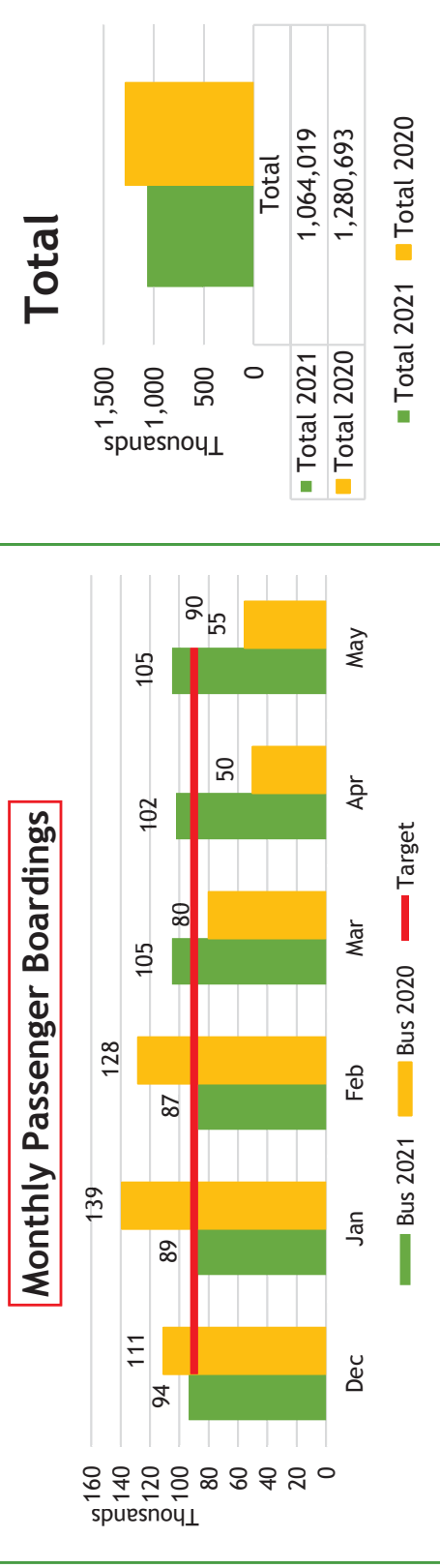
# Fixed Route Year-to-Year Summary

	YTD 2021	YTD 2020	May 2021	May 2020
Passenger Boardings	1,064,019	1,280,693	104,980	55,462
Passengers/Revenue Hour	8.7	10.8	9.6	11.9
On-Time Performance	92.1%	88.7%	90.9%	93.9%
Total Mechanical Failures	54	60	5	2
Mean Distance Between Failures	53,446	45,532	47,596	56,464
Bus Total Miles	2,886,059	2,731,927	237,981	112,927
Collisions per 100,000 Revenue Miles	0.7	1.0	0.5	0.0
Verified Complaints per 100,000 Passengers	0.1	4.4	0.0	0.0



# Passenger Boardings

- ◆ Defined as the number of times passengers board public transportation vehicles
- ◆ All years shown are fiscal years





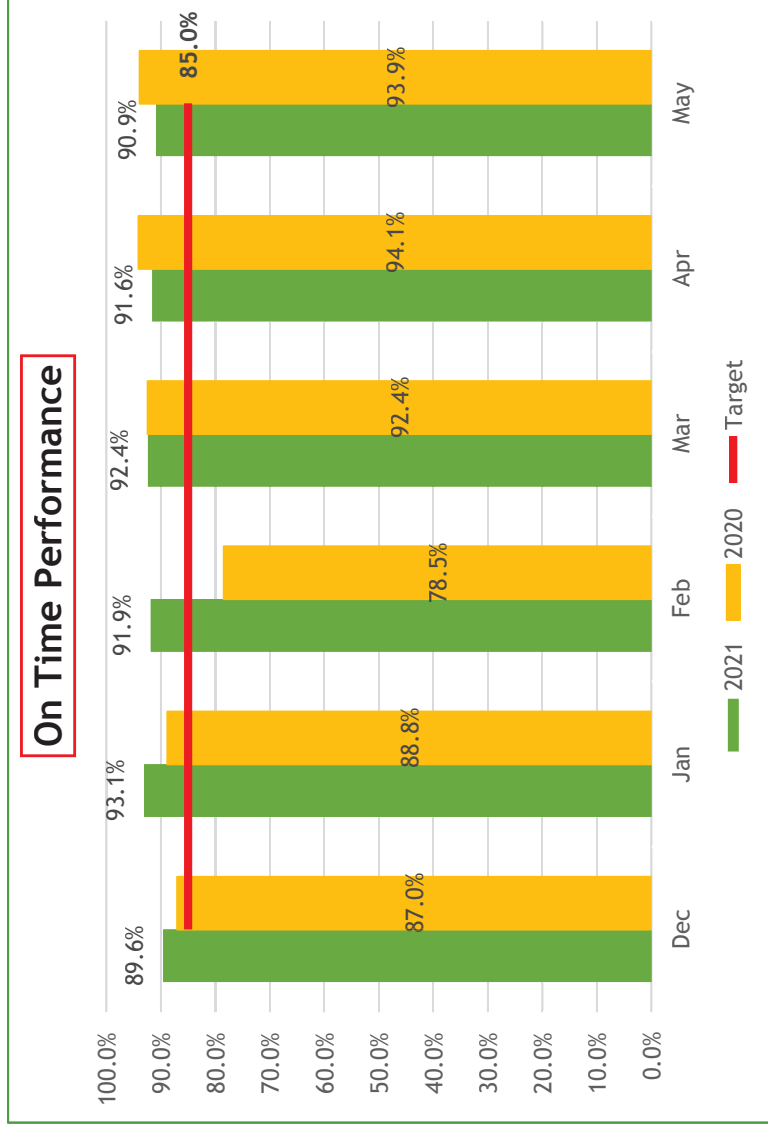
# Passengers per Revenue Hour

Measures total fixed route bus ridership, divided by total fixed route bus revenue service hours



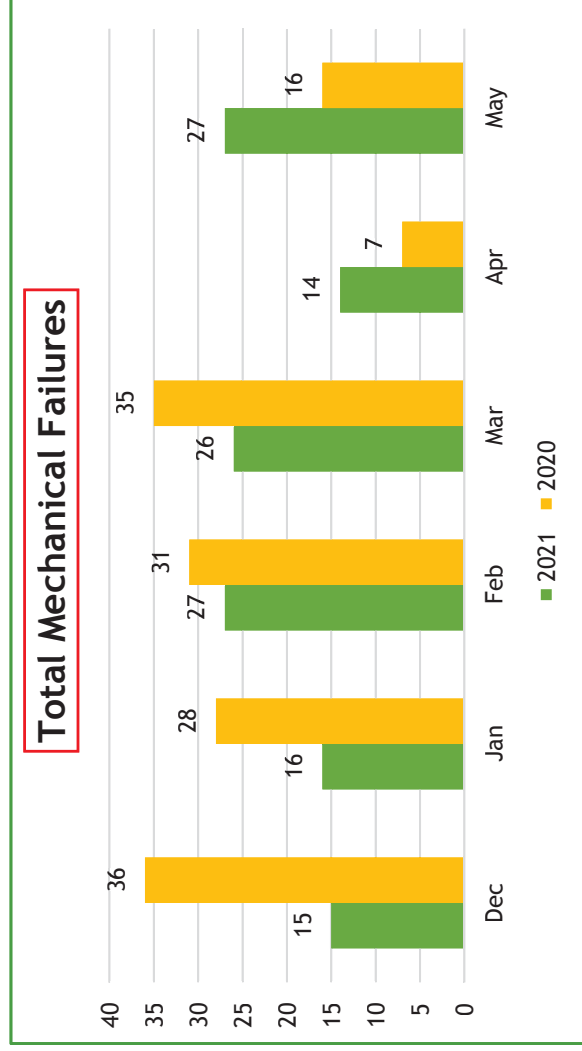
# On-Time Performance

Measures on-time performance of fixed route bus service. On-time is defined as bus arrival at the stop between one minute early and five minutes late.



# Mechanical Failures

Measures the total number of mechanical failures, major and other, of the bus fleet.

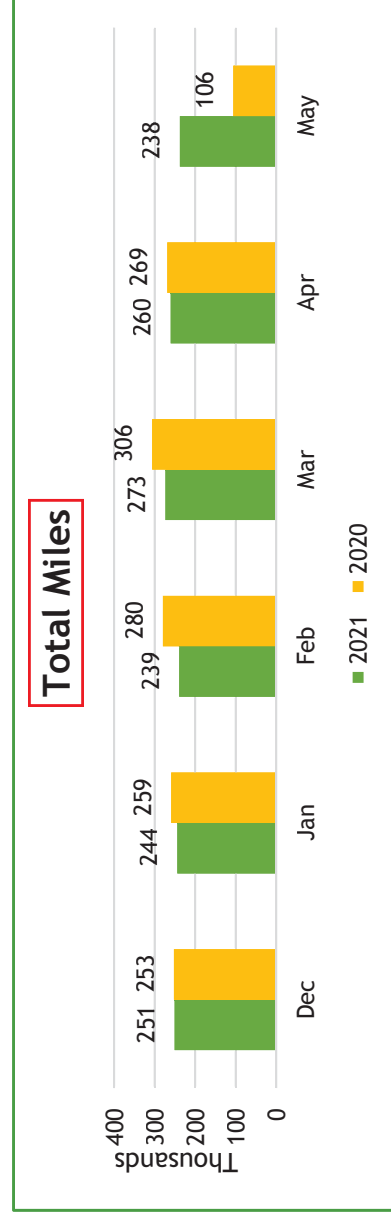
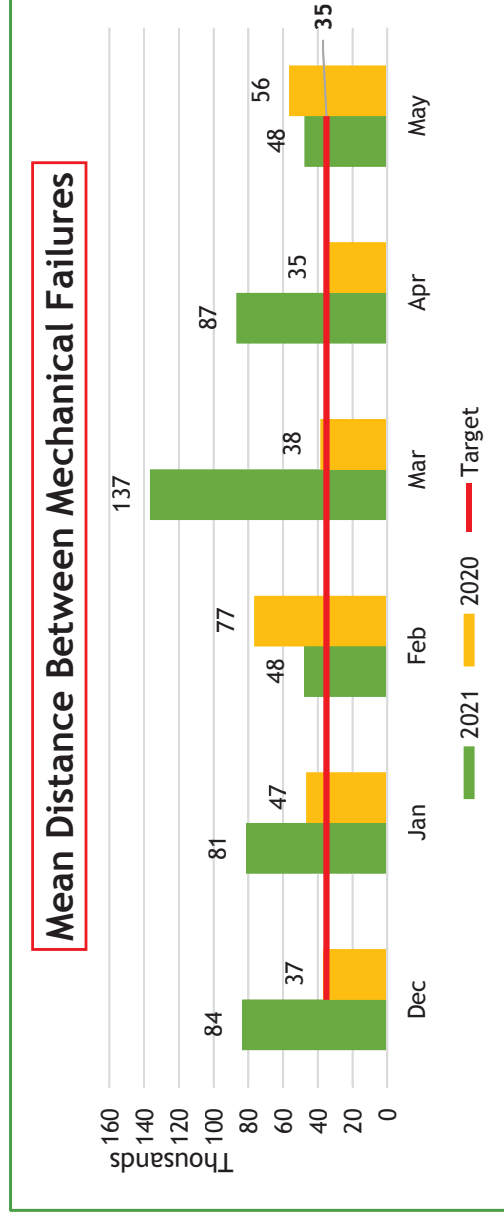


FY 2021						
	Dec	Jan	Feb	Mar	Apr	May
Major	3	3	5	2	3	5
Other	12	13	22	24	11	22
Total	15	16	27	26	14	27

FY 2020						
	Dec	Jan	Feb	Mar	Apr	May
Major	7	6	4	7	3	2
Other	29	22	27	28	4	14
Total	36	28	31	35	7	16

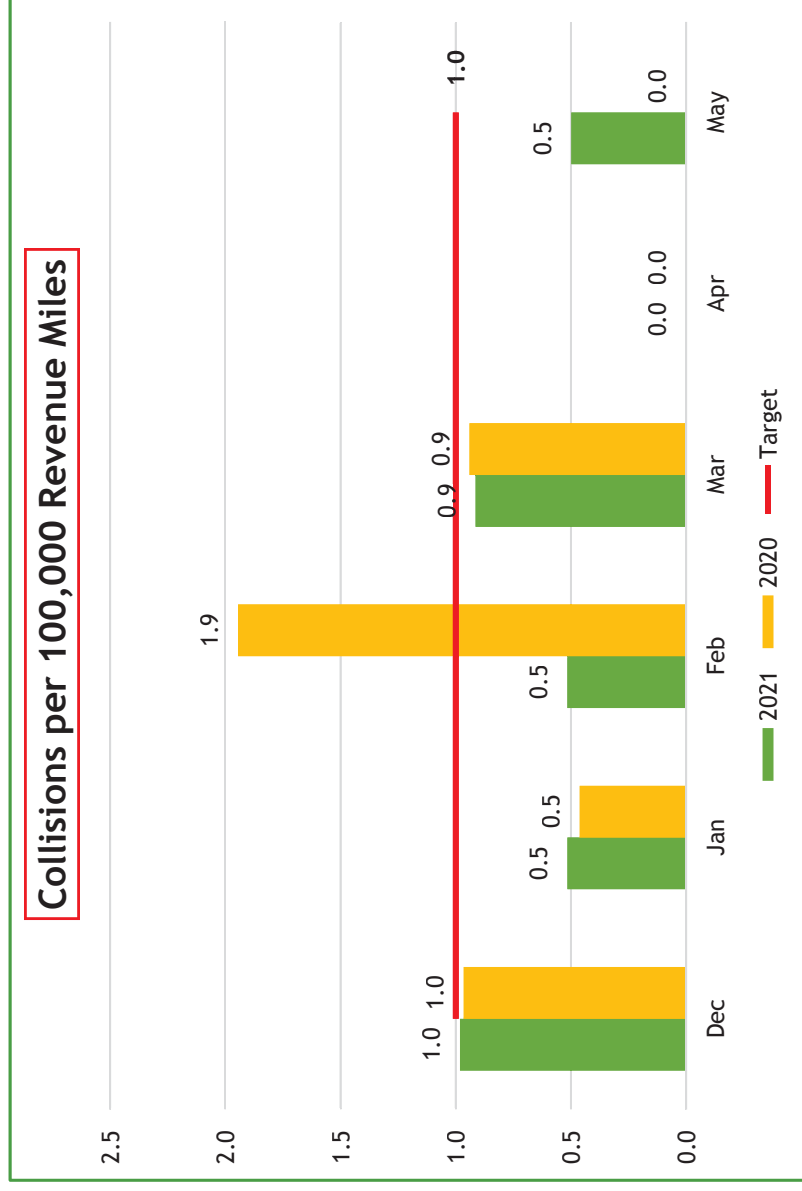
# Mean Distance Between Failures

Measures the miles between major mechanical failures on the fixed route fleet (Note: Higher Bus Mean Distance Between Failures is better.)



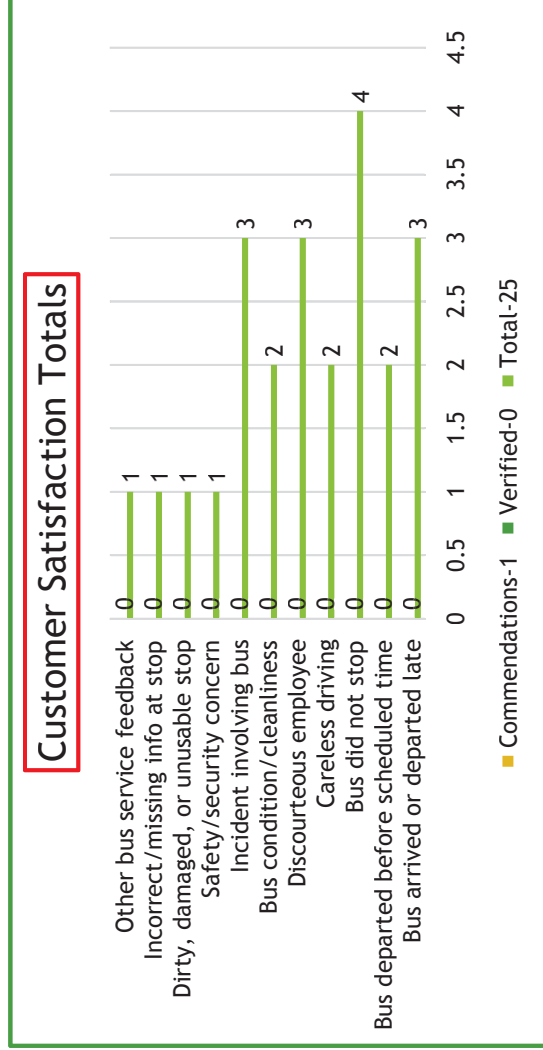
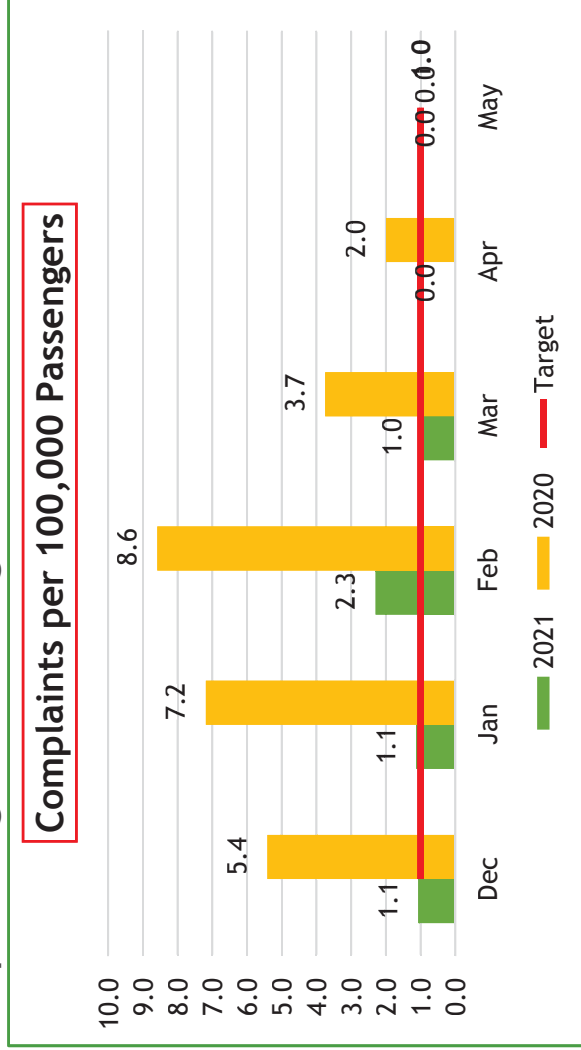
# Collisions per 100,000 Revenue Miles

Measures the number of preventable collisions involving bus service per 100,000 miles.



# Customer Satisfaction

Measures verified customer complaints about bus service per 100,000 bus passenger boardings.





## Paratransit

ADA service where passengers request trips and vehicles respond to the request.

# Paratransit Year-to-Year Summary

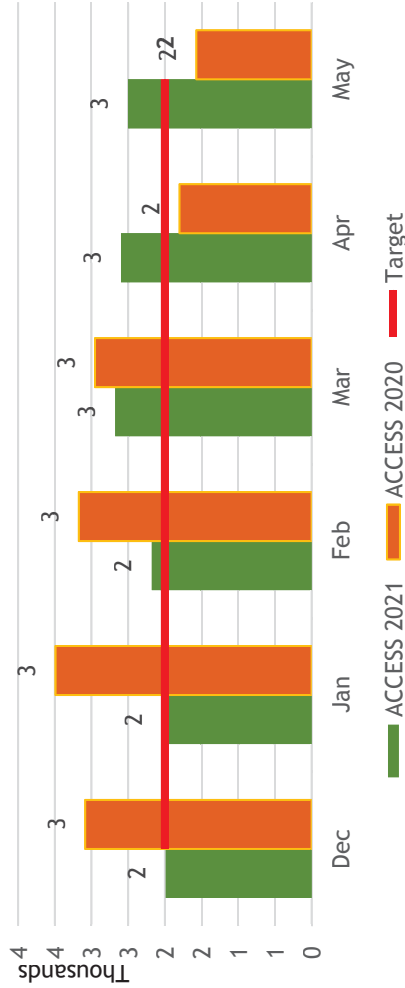
	May 2021	May 2020	YTD 2021	YTD 2020
Passenger Boardings	2,503	1,571	25,205	32,807
Passengers/Revenue Hour	2.10	2.35	2.14	1.90
On-Time Performance	93.3%	57.0%	93.1%	80.7%
Total Mechanical Failures	0	0	0	5
Mean Distance Between Failures	No failures	No failures	No failures	114,783
ACCESS Total Miles	39,286	27,709	475,603	542,555
Collisions per 10,000 Revenue Miles	0.0	0.0	0.1	0.0
Verified Complaints per 10,000 Passengers	0.0	0.0	0.1	0.5



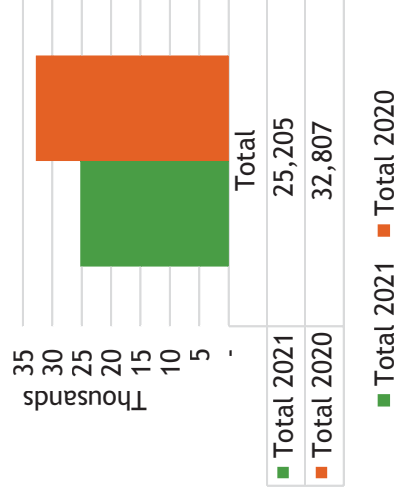
# Passenger Boardings

Defined as the number of times passengers board public transportation vehicles

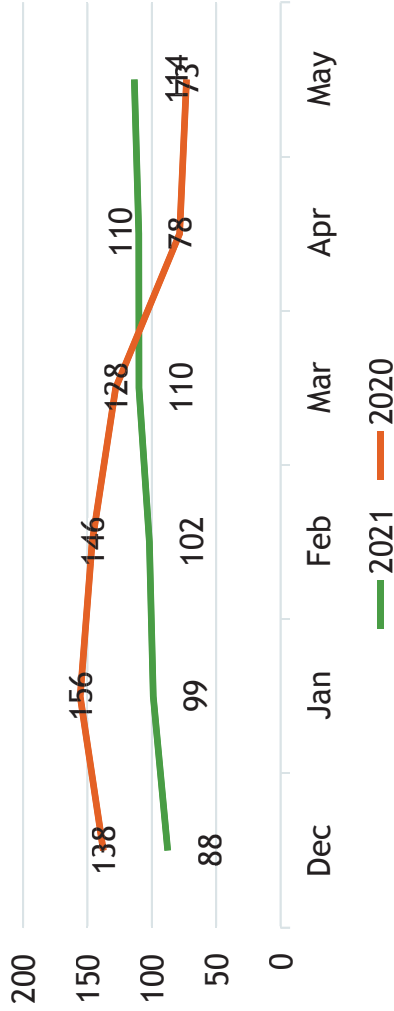
Monthly Passenger Boardings



Total

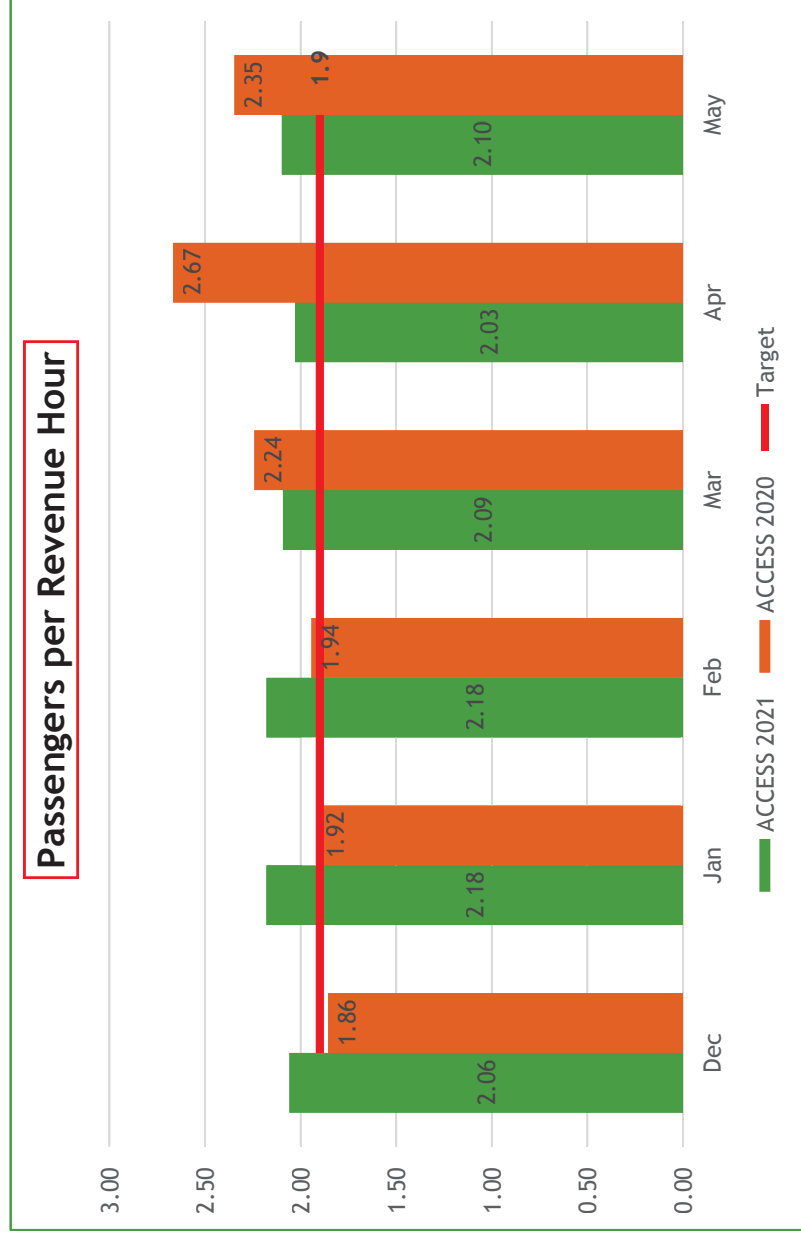


Average Weekday Passenger Trips



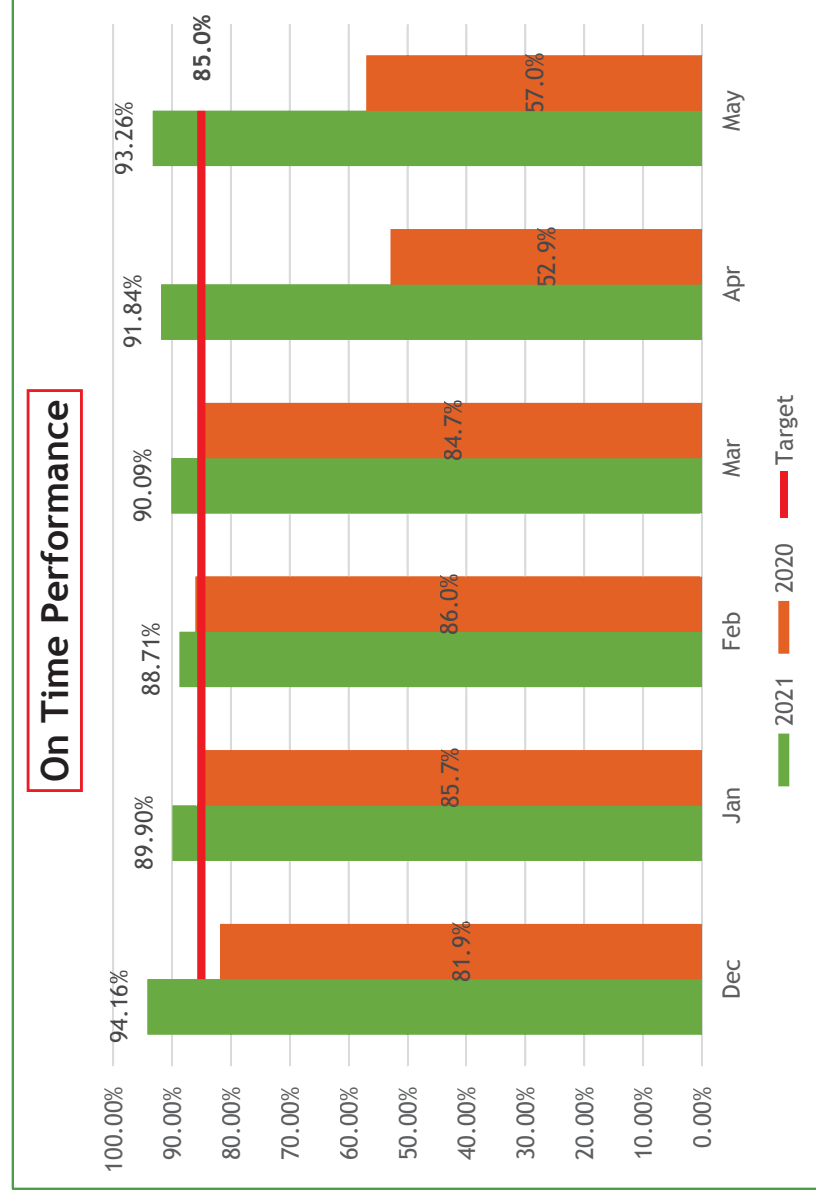
# Passengers per Revenue Hour

Measures total ridership, divided by total service hours.



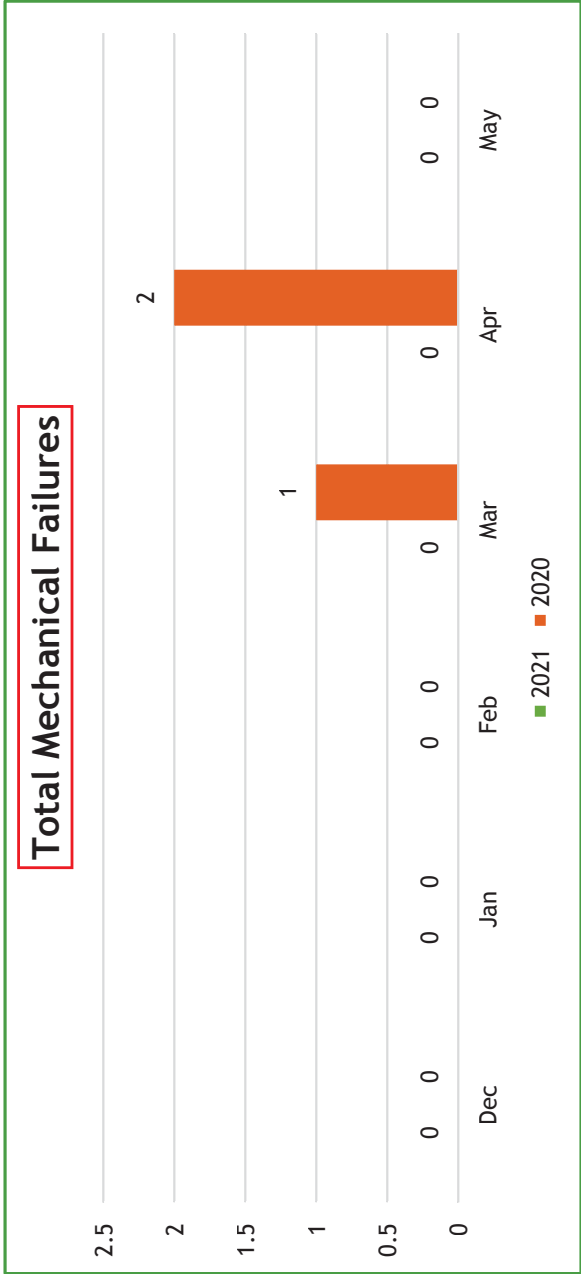
# On-Time Performance

Define as being picked up within 30 minutes of requested pickup time.



# Mechanical Failures

Measures the total number of mechanical failures, major and other, of the paratransit fleet.

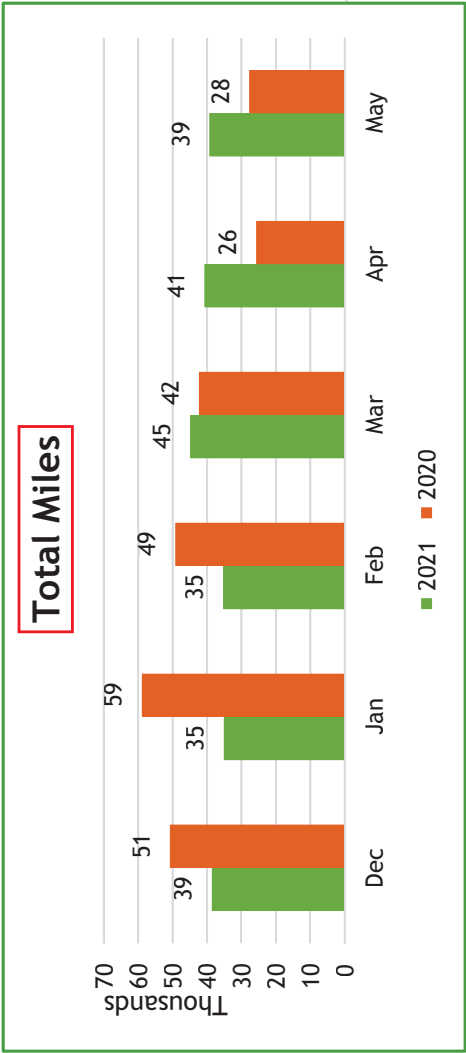
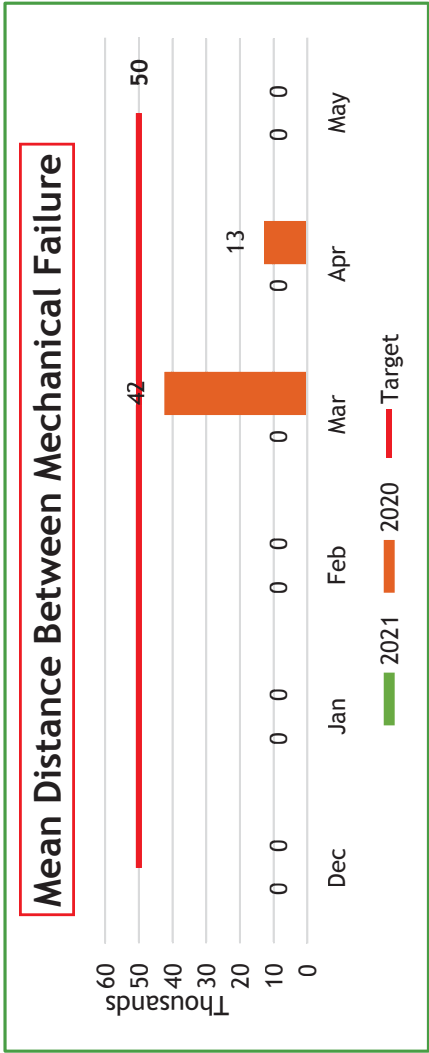


FY 2021						
	Dec	Jan	Feb	Mar	Apr	May
Major	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	0	0	0	0	0	0

FY 2020						
	Dec	Jan	Feb	Mar	Apr	May
Major	0	0	0	1	2	0
Other	0	0	0	0	0	0
Total	0	0	0	1	2	0

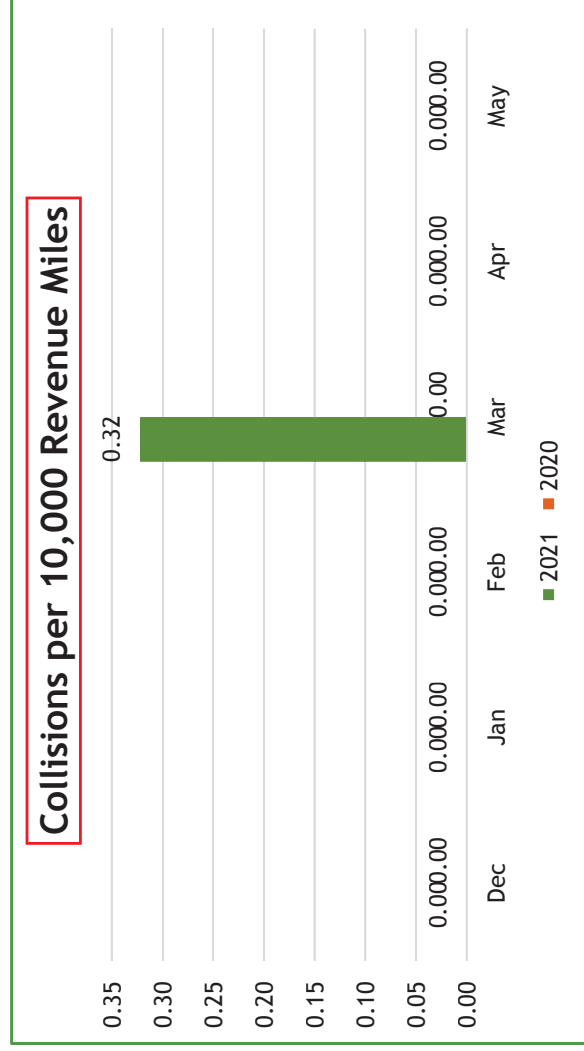
# Mean Distance Between Failures

Measures the miles between major mechanical failures on the Paratransit fleet. (Note: Higher Mean Distance Between Failures is better.)



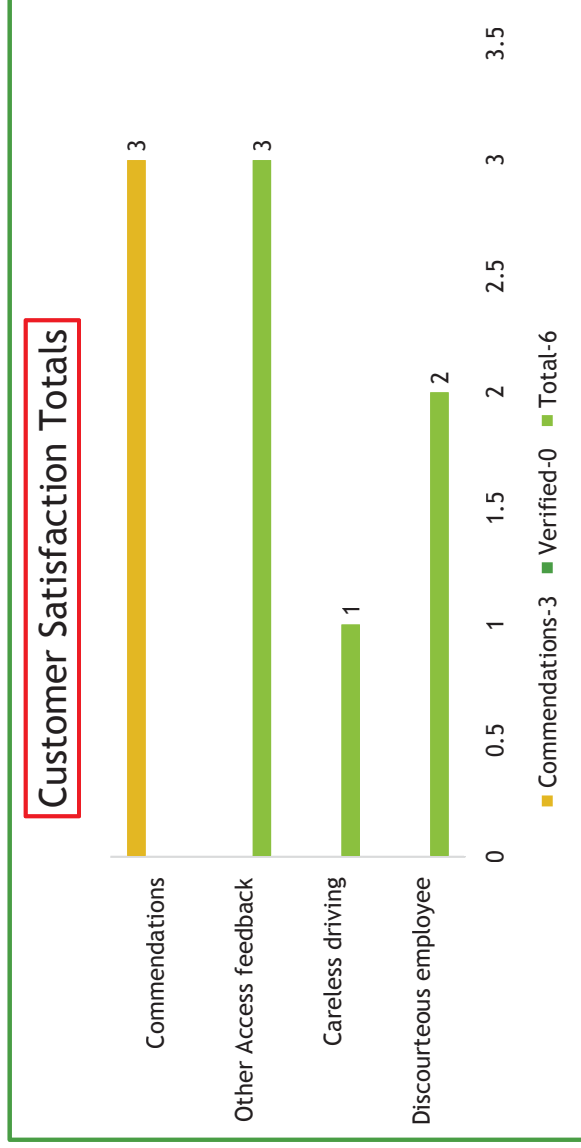
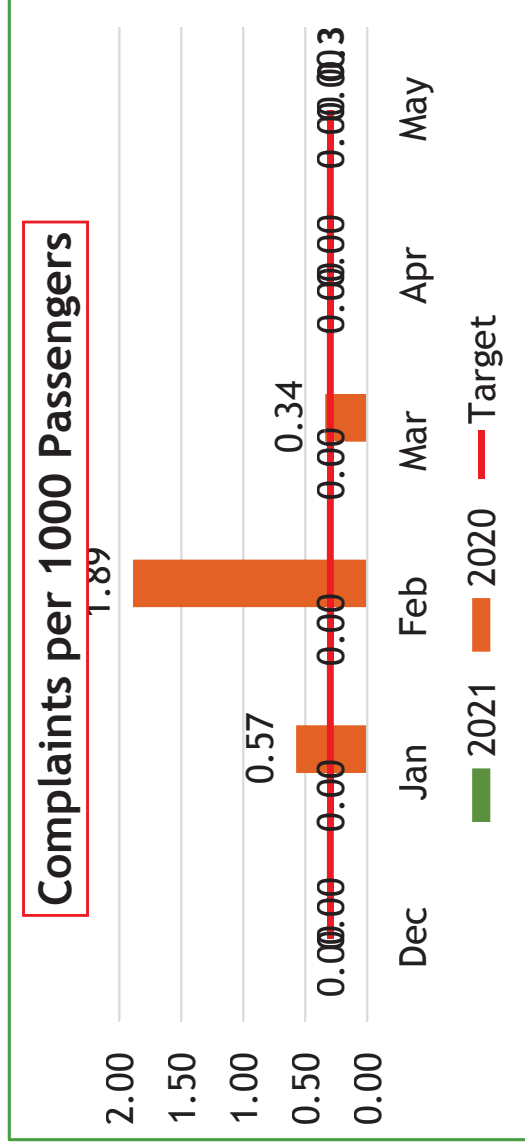
# Collisions per 10,000 Revenue Miles

Measures the number of preventable collisions involving paratransit service per 10,000 miles.



# Customer Satisfaction

Measures verified customer complaints about paratransit service per 1,000 passenger boardings.



## MEMORANDUM

**TO:** GoTriangle Board of Trustees  
**FROM:** Planning and Capital Development  
**DATE:** June 9, 2021  
**SUBJECT:** Capital Projects Status Report

### Strategic Objective or Initiative Supported

2.4 Ensure an attractive and accessible transit environment

### Action Requested

None

### Background and Purpose

The Wake, Durham, and Orange transit plans and the GoTriangle Capital Improvement Program include funds to support planning, development, and delivery of transit capital infrastructure projects ranging from bus stop amenities to commuter rail infrastructure. This report includes a brief snapshot of the status, upcoming activities, and notable risks to on-time/on-budget delivery for active capital projects. The report is organized into the following sections:

- Bus Passenger Facilities
- Bus Operations and Maintenance Facilities
- Rail Transit Infrastructure Development

This report is updated monthly. New/updated information from the previous month's report is shown in underlined green text.

### Financial Impact

None

### Attachments

- None

### Staff Contact

- Katharine Eggleston, 919-485-7564, [keggleston@gotriangle.org](mailto:keggleston@gotriangle.org)





## Bus Passenger Facilities

### Projects Under Construction

#### **GoDurham Bus Stop Improvements FY19 (18DCI CD4)**

Description – This project includes site selection, design, and construction of passenger amenities at 21 bus stops in the GoDurham system.

Status – Construction at 20 stops is complete.

Upcoming Activities – The final bus stop is scheduled for construction as part of a group of 17 bus stops currently underway.

#### **GoDurham Bus Stop Improvements FY20 (20GOT CD2)**

Description – This project includes site selection, design, and construction of passenger amenities at 50 bus stops in the GoDurham system for which design began in FY20.

Status – The City of Durham has approved construction drawings for 35 stops, with an additional 14 stops under review. Construction of the first group of 16 bus stop improvements is complete and final seating installation is underway. GoTriangle issued a Notice to Proceed for the next group of 17 GoDurham bus stop improvements on April 14, 2021; and GoTriangle has begun real estate acquisition activities for 19 additional stops.

Upcoming Activities – Completion of design, plan approval, right-of-way acquisition, and construction procurement for the remaining groups of stops is planned to continue through the remainder of the fiscal year and into the next fiscal year.

#### **GoTriangle Bus Stop Improvements In Wake County (TC002-L/M/Y)**

Description – The Wake Transit Plan includes funding for improvements at existing and new GoTriangle bus stops throughout Wake County.

Status – Bus stop construction activities are complete at the Wake Tech RTP campus on Watkins Road, and 12 other locations throughout the county are now under construction.

Upcoming Activities – Construction activities for this package of 12 will proceed in the coming months.

### Projects in Design

#### **Patterson Place Improvements (18GOT CD4)**

Description – Nearly 200 riders per day board buses at the existing transfer point and park-and-ride served by GoTriangle route 400 and GoDurham routes 10 and 10A. This project includes new and additional concrete shelter pads and shelters at Witherspoon Boulevard and McFarland Drive. Improvements include: landscaping, curb-radius improvement to allow buses to turn right from southbound Witherspoon Boulevard onto westbound McFarland Drive to reduce bus travel time and serve additional future park-and-ride spaces.

Status – The designer is preparing plans for a second submittal into the City of Durham. Easement exhibits preparation [and coordination with real estate acquisition team](#) is also underway.

Upcoming Activities – Pending construction drawing approval, GoTriangle will schedule necessary right-of-way acquisition activities.

#### **Hillsborough Park-and-Ride (18GOT CD8)**

Description – This project includes site selection, real estate acquisition, design, and construction of a permanent park-and-ride for GoTriangle route ODX in Hillsborough. Park-and-ride utilization at the current leased lot for the ODX in Hillsborough is approximately 15 spaces per day. The original plan for the new lot included 35-50 spaces across two parcels of land; right-of-way for the full facility was acquired, however due to increased construction cost estimates, the scope was reduced to 31 spaces to allow for some growth in utilization while deferring full build-out to a future phase.

Status – Staff and outside counsel have identified the need for additional real estate agreements related to use of property that had previously been identified as an existing undeveloped right-of-way within the



site, and are currently coordinating with Orange county staff to evaluate the procedural steps and time required to resolve. The design is currently awaiting to advance through the plan approval process with Orange County once the property issues are resolved. The Real Estate consultant is performing appraisals on the properties as a step in a resolution of related issues. [The Real Estate consultant is appraising properties for easements, and the design Consultant is reviewing potential easements needed for construction.](#)

Upcoming Activities – [Upon resolution of real estate approach, staff will engage the design consultant for additional services to update site design to align with real estate modifications.](#)

Schedule Risks – As noted above, a need for additional real estate agreements was identified during site plan review. Coordination with Orange County to resolve this is ongoing. The schedule for plan approval and turnover of the project to Orange County for construction is dependent on resolution of the real estate issue.

#### **GoTriangle Bus Stop Improvements in Orange County (18GOT CD12)**

Description – This project includes site selection, design, and construction of passenger amenities at up to 10 bus stops in the GoTriangle system within Orange County.

Status – Designs for four stops are complete and have been turned over to Orange County for construction, Orange County forecasts construction to start by the end of FY21. Design of an additional six stops is under review by Town of Chapel Hill, UNC and NCDOT.

Upcoming Activities – Orange County will initiate construction on the initial group of four. GoTriangle expects to complete design and permitting for the additional six stops in the coming months.

#### **GoTriangle Bus Stop Improvements In Wake County (TC002-L/M/Y)**

Description – The Wake Transit Plan includes funding for improvements at existing and new GoTriangle bus stops throughout Wake County.

Status – A task order for design of 23 stops was issued in early May 2020. Of these, 12 are now under construction and 11 are under review with NCDOT, NCRR, or municipalities.

Upcoming Activities – Completion of plan approval, right-of-way acquisition, and construction procurement for the remaining stops is planned to continue through the remainder of the fiscal year and into the next fiscal year.

#### **GoTriangle Bus Stop Improvements in Durham County (18GOT CD7)**

Description – This project includes site selection, design, and construction of passenger amenities at up to 10 bus stops in the GoTriangle system within Durham County.

Status – Coordination with RTP regarding stop improvements at the future HUB site is ongoing. RTP has added bus stop art to their shelters. Coordination with the Durham VA Medical Center and Duke University regarding stops on Erwin Road and on campus is ongoing; plans for eight bus stop locations were submitted to the City of Durham for review in April 2021.

Upcoming Activities – GoTriangle will continue to coordinate with RTP stops at HUB RTP. Completion of plan approval, right-of-way acquisition, and construction procurement for the remaining stops is planned to continue through the remainder of the fiscal year and into the next fiscal year.

#### **Raleigh Union Station Bus Facility (TC002-A)**

Description – This project includes publicly-funded design and construction of an eight-bay off-street bus facility and related transit access improvements adjacent to Raleigh Union Station in downtown Raleigh, in conjunction with a privately-funded mixed-use air rights development above the bus facility. The project was awarded a \$20 million BUILD grant from the US Department of Transportation (USDOT).

Status – GoTriangle and the preferred developer are progressing in the Interim Design/Administrative Site Review process as well as developing an agreed upon scope for the remaining design work. [The design review consultant is on board and reviewing project documents including the Schematic Design drawings and cost estimate.](#) The NEPA/Section 106 process is anticipated to reach conclusion in the coming quarter. The developer agreements are progressing and are anticipated to be completed later

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this calendar year; term sheets were signed in April. Coordination with FTA, City of Raleigh, SHPO, NCDOT and other stakeholders is ongoing to confirm third-party requirements affecting the project definition. Monthly federal oversight meetings are continuing with the PMOC assigned to the project. Upcoming Activities – Completion of the developer agreements, Interim Design Phase (beginning of Design Development phases), coordination activities, management meetings, and agreement negotiations will continue on the project. The project schedule and cost estimates continue to be evaluated and updated. The Section 106 process is expected to be finalized with SHPO in the coming months.

Schedule Risks – The structure of the delivery approach for the project is complex, and will require coordination and partnership with FTA region IV and headquarters staff to ensure grant requirements are appropriately met and documented as the contracting process with the development partner progresses. Development and execution of the development agreements are critical.

Cost Risks – Continued design advancement is critical to begin advancing design to obtain a more detailed basis to refine cost estimates and obtain a clear cost risk profile for the project. Key cost risk areas include unknown geotechnical conditions, joint development project structure and negotiations, and design details.

#### **I-540 Bus On Shoulder (TC002-BC)**

Description – This project will design, purchase, and install signage along the northwest leg of I-540 to facilitate Bus on Shoulder implementation. GoTriangle's NRX route would benefit by the ability to use the shoulder during times of heavy traffic.

Status – GoTriangle received proposed agreement revisions from NCDOT in May. Revisions were reviewed and accepted. GoTriangle will obtain contracting services to install the highway signs; NCDOT will ensure signs are fabricated and delivered to GoTriangle for installation. GoTriangle will provide \$9,600 to NCDOT for fabrication and delivery of signs.

Upcoming Activities – GoTriangle will route agreement for internal and NCDOT signatures, transmit funding to NCDOT for fabrication and delivery of signs, obtain quotes for installation of highway signs from NCDOT safety certified firms.

#### **Durham Station Improvements Preliminary Design (21GOT CD03)**

Description – This project will develop a Schematic Design package for improvements to the passenger experience and functional operations of Durham Station. Upon completion of the design, the project will be handed off to the City of Durham for design development and construction.

Status – The core review team continues to meet and coordinate efforts with other initiatives and projects in the City that are being developed adjacent to Durham Station. Conceptual design is complete, and the consultant is progressing the schematic design. Canopy designs are being developed for cost estimates and preparation for owner approval meeting. Engagement with Regional Fleet and Facilities Study team is planned to coordinate planning for future electric charging options. Public presentation is also being developed.

Upcoming Activities – Completion of schematic design, updated cost estimate, and turnover of the project to the City of Durham for further design development and construction.



## Projects in the Planning Phase

### **Park-and-Ride Improvements in Wake County (Short-Term) (TC002-K)**

**Description** – The Wake Transit Plan includes funding for short-term improvements to existing park-and-ride locations, in anticipation of more substantive investments that may be identified through the park-and-ride feasibility study. One such improvement is currently in the planning phase; this project includes signs, markings, and passenger amenities at a new/replacement leased park-and-ride for GoTriangle route WRX at a new location to be determined.

**Status** – GoTriangle signed a lease agreement with the Town of Wake Forest to lease the SunTrust lot until June 30, 2021. A bus stop has been added at this location. Design of the Bent Tree Plaza Park and Ride is scheduled to begin in [June 2021](#). Scoping of improvements to Apex park and rides in coordination with the Town is underway.

**Schedule Risks** – [The nature of short-term leased/licensed park-and-rides and associated property owner coordination contributes to obstacles for scoping and delivering improvements. Efficient and timely development of high-quality facilities for short-term use requires strong partnerships with host property owners.](#)

### **Regional Transit Center Feasibility Study (TC002-N)**

**Description** – The Regional Transit Center (RTC) is the primary hub for GoTriangle regional bus services connecting Wake, Durham, and Orange Counties. The current location of the RTC on Slater Road in Durham creates overlapping routes leading to inefficiency. This feasibility study is evaluating location options that improve route efficiency and improve passenger amenities.

**Status** – The Board adopted the relocation strategy at its April 28, 2021 meeting. The local funding match for the project is included in the recommended Wake and Durham county transit plans; the Durham Board of County Commissioners and Durham-Chapel Hill-Carrboro MPO Board approved inclusion of local funding in the FY22 Durham County work program. [The project team is assembling materials to support a RAISE grant submittal in July.](#)

**Upcoming Activities** – [CAMPO Executive Board will consider the FY22 Wake Transit Work program on June 16, the GoTriangle board will consider the FY22 Durham and Wake Annual Work Programs on June 23. GoTriangle staff will submit RAISE grant materials ahead of July 12 deadline.](#)

**Schedule Risks** – The primary risk to continued progress is securing Federal funding to implement the project.

### **Wake Transit Long-Term Park-and-Ride Feasibility Study (TC002-O)**

**Description** – This feasibility study will assess potential locations for park-and-ride facilities throughout Wake County. Many municipalities within the county have expressed a desire for a park and ride facility to meet the long-term needs of residents. While many communities currently lease space in existing lots, mainly within commercial developments, their locations lack amenities and proximity to major thoroughfares. This study will determine the best location for park-and-ride lots in the county.

**Status** – Initial public engagement, including a web and social media presence and a survey was completed in June as a part of GoTriangle's virtual engagement initiative. Search criteria for new park and rides in Northern Wake and West Raleigh, identified in the Wake Bus Plan, have been finalized. The consulting team has identified and screened initial alternative sites for the two new park and rides that meet those criteria and prepared preliminary evaluation criteria for each of those sites in coordination with GoTriangle. Review of the site selection evaluation is complete and stakeholder engagement is ongoing. A single viable site was identified for the West Raleigh Park and Ride and an initial design concept has been produced and is being reviewed by GoTriangle staff. Recommendations for improvements, and in some cases relocation/expansion of, existing park and ride lots have been produced and will support the design and construction of FY22 and future year improvements to existing park and ride lots.



Upcoming Activities – Remaining tasks for a new park and ride lot in Northern Wake, selection of a preferred site, and development of a conceptual design for the preferred site. The need for additional coordination with Wake County and NCDOT regarding land use regulation and site access prior to selecting a preferred site has been identified. Projected budget at completion of this study is less than originally budgeted; remaining funds will be used to conduct feasibility, site selection, and conceptual design for two additional park and ride lots included in the Wake Transit Plan – Gorman Street and Wake Forest.

Schedule Risks – The primary risk to continued progress is potential postponement of community/rider engagement related to COVID-19.

#### **Mebane Park-and-Ride Relocation Study (18GOT\_CD11)**

Description – This feasibility study will assess potential new permanent locations for the Mebane park-and-ride. The current facilities is undersized for growing demand, and operates under a short-term agreement with Cone Health. This study will establish site parameters and evaluation criteria for a 150-200 space park and ride to be shared by GoTriangle, PART, and Orange County Public Transit; identify up to five candidate sites; screen sites and select preferred site and an alternate site; develop conceptual design for a preferred location and a possible alternate.

Status – GoTriangle has executed a task order with its on-call planning consultant to complete the study.

Upcoming Activities – Kickoff meeting is scheduled for June 10.

#### **Priority GoTriangle Bus Stop Safety Improvements in Durham (21GOT\_CD02)**

Description – This program includes funding for design and construction of improvements to GoTriangle bus stops serving a high volume of passengers located on high-speed NCDOT roadways. Improvements could include, but are not limited to, construction of bus stop ADA pads, shelters, benches, bus pullouts and appropriate tapers, sidewalk, curb and gutter, curb ramps, crosswalks, pedestrian median refuge islands, appropriate safety signage, pedestrian signal heads and complimentary traffic signal modifications, and other complimentary or supporting roadway modifications.

Status – Scoping for a high traffic location on NC 54 at Farrington Road is underway.

Upcoming Activities – GoTriangle staff will coordinate final scope with NCDOT District office to prepare for initiation of design activities.

#### **GoDurham Tactical Bus Stop Amenities (21GOT\_DC03)**

Description – Purchase and installation of seating, solar lighting, and real-time arrival signs at locations identified through customer requests and staff analysis of bus stops with existing conditions suitable for quick implementation.

Status – GoTriangle has convened an implementation team including representatives of City of Durham, DCTC and GoTriangle. Team has developed a draft Request for Proposals for real-time arrival sign equipment, and is evaluating an initial list of 13 sites for installation.

Upcoming Activities – Staff is coordinating the technical specifications for the real-time arrival signs with the upcoming CAD/AVL procurement prior to issuance.





## Bus Operations and Maintenance Facilities

### Projects in the Design Phase

#### Paratransit Office Space Upfit (TC002-J)

Description – This project will upfit office space and the parking lot at the Plaza building to facilitate moving Paratransit operations from the Nelson Road Facility.

Status – [The consultant has updated floor plans for interior work to address final comments from GoTriangle. The consultant has also prepared site plan for submittal to City of Durham, and has reviewed concrete testing from parking lot to confirm no pavement updates are required.](#)

Upcoming Activities – [The consultant is preparing for development of construction drawings, permitting, and preparation of the bid package for construction. Final coordination of information technology requirements is anticipated in the coming month.](#)

### Projects in the Planning Phase

#### Regional Fleet and Facilities Study (CD-21-19 A)

Description – This study includes three components: (1) assessing fleet and maintenance facility needs for GoDurham and developing a conceptual design for these needs, (2) assessing fleet and maintenance facility needs for GoTriangle and developing a conceptual design for these needs, and (3) planning for potential regional electric bus charging infrastructure and other potential shared operations and maintenance resources for GoTriangle and partners in the region. The scope of services includes 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 for GoDurham and GoTriangle. The Study will identify potential expansions and alternatives to current utilization of existing facilities that will improve cost-efficiency and provide responsive services.

Status – [The consultant is reviewing information submitted by GoTriangle and GoDurham to prepare 1\) a high-level "straw-man" program to determine approximate facility size and 2\) identify optimal locations for potential new facilities. Preparation is ongoing for first technical review committee meeting in mid-June.](#)

Upcoming Activities – [The consultant will conduct Immersion workshops in mid-July with front-line users of GoDurham and GoTriangle facilities \(i.e. mechanics, service attendants, operators, supervisors\) to refine program needs.](#)



## Rail Transit Infrastructure Development

### **Greater Triangle Commuter Rail Study (19GOT CO2/20GOT CD1/TC004-A)**

Description – The current phase of study is evaluating the potential for new commuter rail service in the North Carolina Railroad Company (NCRR) corridor in Durham, Wake, and Johnston counties, and will refine the project definition; engage community members, municipalities, and institutional stakeholders; and better understand critical project success factors. In coordination with project partners, GoTriangle will conduct preliminary engineering analysis in areas of concern along the corridor, model rail traffic on the corridor with the inclusion of commuter rail to better define infrastructure needs, and better refine cost and ridership estimates.

Status and Upcoming Activities – As of April 6, 2020, all parties to the Memorandum of Understanding in Support of Continued Development of the GTCR Project, including Johnston county, had voted to proceed with further study. Authorizations for additional consultant support were approved by the GoTriangle Board in May 2020. Study activities across a range of tasks were initiated in June and were ongoing through the summer. Priority activities in this phase of work are as follows:

- Railroad Coordination – GoTriangle and NCRR resolved initial discussions regarding liability, indemnification, and insurance. As of May 17, all parties have signed the railroad capacity modeling agreement. [Norfolk Southern has begun work and has indicated that they are preparing to engage a consultant.](#) NCRR has requested that Norfolk Southern complete capacity modeling no later than December 1, 2021.
- Engagement with “resource partners” including local governments, institutions, and other regional partners – GoTriangle is continuing meetings with municipalities individually and as a group with institutional partners on a monthly basis as needed. [City of Durham and Town of Cary have provided comments on initial concept designs, and design refinement is underway by the consultant.](#)
- Community Engagement – The project website launched in late April, and the website is being updated based on user feedback. Staff is preparing for education-focused public involvement in the coming months.
- Schedule Management – The initial baseline schedule is complete; GoTriangle and the consultant are meeting monthly to formally assess progress and manage interfaces between dependent tasks.

Schedule Risks – To date, primary risks to timely completion of the next steps are related to coordination with entities that are not party to the MOU (e.g. railroads, municipalities, affected major institutions), identification and resolution of competing/conflicting stakeholder goals, and satisfactory engagement with the public under COVID restrictions. These are key priorities with the next steps defined in the MOU. [Delay in progressing](#) the railroad capacity modeling will result in delay to study completion.

Cost Risks – To date, it appears that primary risks to setting a budget within the range of \$1.4B to \$1.8B identified during the earlier phase of study for the Durham-Garner project concept are related to the infrastructure requirements resulting from rail network modeling and related negotiation, design for engineering solutions to engineering constraints in downtown Durham and downtown Cary, quantification of necessary levels of contingency required to address FTA risk management guidelines, and emerging interest in evaluation of additional off-peak service and level boarding. These are key priorities with the next steps defined in the MOU.

