



GoTriangle
Operations & Finance Committee
Wed, September 26, 2018 10:30 am-11:45 am

I. Call to Order and Adoption of Agenda

ACTION REQUESTED: Adopt agenda.
(1 minute Michael Parker)

II. Draft Minutes - August 22, 2018

ACTION REQUESTED: Approve minutes.
(1 minute Michelle Dawson)

III. Professional Services Contract Amendment – GEC Phase 3B

ACTION REQUESTED: Recommend the Board authorize the President/CEO to execute Phase 3B of the Professional Services Contract with HDR Engineering Inc. (HDR) for General Engineering Consultant (GEC) Services for the Durham-Orange Light Rail Transit (D-O LRT) Project for a term of 22 months in an amount not to exceed \$18,700,000.
(20 minutes John Tallmadge)

HDR Project Team Members

GEC Phase 3B Scope of Work

IV. Wake County Transit Plan – Multi-Year Service Implementation Plan Update and GoTriangle Short Range Transit Plan
(20 minutes Mary Kate Morookian)

Attachment A - GoTriangle Short Range Transit Plan

Attachment B - FY27 Network Map

Attachment C - GoTriangle SRTP Summary Sheet

V. Transit Operations Vehicle Purchase Authorization

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute a contract for the purchase of five (5) Low floor diesel Gillig Buses for fixed route service, with a maximum dollar amount of \$2,488,21.
(10 minutes Brian McLean)

VI. LTV Purchase

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to approve the purchase of four (4) light transit vehicles (LTVs) from Creative Bus Sales per the City of Fayetteville Joint Procurement Solicitation at a maximum price of \$263,648.
(10 minutes Brian McLean)

VII. Adjournment
(Michael Parker)

GoTriangle Board of Trustees
Operations & Finance Committee Meeting Minutes
August 22, 2018

Board Room, The Plaza, 4600 Emperor Blvd., Suite 100
Durham, NC

Committee Members Present:

Michael Parker
Ellen Reckhow

Russ Stephenson
Steve Schewel (arr. 10:39 a.m.)

Committee Members Absent:

Sig Hutchinson (excused)
Valerie Jordan

Andy Perkins Jr.

Committee Chair Michael Parker officially called the meeting to order at 10:38 am.

I. Adoption of Agenda

Committee Chair Parker stated that there has been a request to remove the Professional Services Contract Amendment from the agenda.

Action: On motion by Reckhow and second by Stephenson the agenda was adopted, removing the Professional Services Contract Amendment as requested. The motion was carried unanimously.

Schewel arrived.

II. Approval of Minutes

Action: On motion by Reckhow and second by Stephenson the Committee approved the minutes of the May 23, 2018, meeting. The motion was carried unanimously.

III. Wake Transit FY 2019 Q1 Proposed Amendment

Steven Schlossberg presented the FY19 Q1 Wake Transit budget amendment, increasing the amount programmed in the Wake Transit Work Plan in FY20 for Raleigh Union Station by \$2.26 million to demonstrate the local funding match requirements for Federal grant applications.

Action: On motion by Reckhow and second by Schewel the Committee voted to recommend Board approval of the Wake Transit FY19 Q1 amendment, increasing the amount programmed for the Raleigh Union Station Bus Facility in FY 2020 by \$2.26 million. The motion was carried unanimously.

IV. Professional Services Contract Amendment – GEC Phase 3B

Removed from agenda.

V. Award of GoDurham Fixed Route Contract

Laurie Barrett presented a recommendation to award the contract for the GoDurham fixed route management contract to First Transit. She stated that the bid is an \$800 savings for the first year over our current contract with them. The contract is for three years with two, one-year options for a five-year total of \$165,574.35.

Parker asked for an explanation of the contract. Barrett stated that the City of Durham contracts with GoTriangle to manage its fixed route and demand response services; as well as providing marketing and planning support, some construction of shelters and amenities. She said GoTriangle cannot directly negotiate with the union; therefore, a contractor is needed to negotiate with the union. Barrett added that when this contract went out for bid the first time, there was only one bidder. After a second request, two bids were received.

Action: On motion by Schewel and second by Reckhow the Committee voted to recommend Board approval of the GoDurham Fixed Route management contract award to First Transit for \$165,574.35. The motion was carried unanimously.

VI. Adjournment

Action: Chair Parker adjourned the meeting at 10:49 am.

Michael Parker, Committee Chair

Attest:

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

*Connecting all points of the Triangle*

MEMORANDUM

TO: Go Triangle Board of Trustees Operations & Finance Committee
FROM: Capital Development, D-O LRT Project Team
DATE: September 20, 2018
SUBJECT: Professional Services Contract Amendment – GEC Phase 3B

Strategic Objective or Initiative Supported

This item supports Strategic Objective 1.1: Increase number of customers served with Sustainable Transportation Services.

Action Requested

Staff requests that the Operations & Finance Committee recommend that the Board of Trustees authorize the President and CEO to execute Phase 3B of the Professional Services Contract with HDR Engineering Inc. (HDR) for General Engineering Consultant (GEC) Services for the Durham-Orange (D-O) Light Rail Transit (LRT) Project for a term of 22 months in an amount not to exceed \$18,700,000.

Background and Purpose

On July 28, 2017, the Federal Transit Administration (FTA) admitted the D-O LRT Project into the Engineering Phase of the FTA New Starts Program. The FTA has since acknowledged GoTriangle's intent to pursue a Full Funding Grant Agreement (FFGA) for the project in September 2019.

On July 27, 2016, the Board of Trustees authorized the General Manager to execute Phase 1 of a Professional Services Contract with HDR for GEC Services for the D-O LRT Project. The term for Phase 1, Design Feasibility Studies and Financial Planning, was up to three (3) months, in an amount not to exceed \$500,000.

On December 14, 2016, the Board of Trustees authorized the General Manager to execute Phase 2, which included a continuation of the Phase I Scope as well as additional tasks determined to be necessary to further the design baseline prior to advancing the Final Design. The term for Phase 2, Design Feasibility Studies, Supplemental Engineering, and Advanced Permitting, was up to five (5) months, in an amount not to exceed \$6,000,000.

On May 24, 2017, the Board of Trustees authorized the General Manager to execute Phase 3, which encompasses those components of the Final Design of the project identified in the Phase 3 Scope. The term for Phase 3 runs through June 30, 2020 is funded at an amount not to exceed \$75,000,000. As of June 30, 2018, the Phase 3 unspent balance is approximately \$37,000,000.

This memorandum describes the proposed Phase 3B, Additional Final Design Services.

The Additional Final Design Services identified to date and included in this Contract Amendment include those changes to the scope of design services required to accommodate significant changes in the design and engineering of the D-O LRT Project that have been identified since the beginning of Phase 3, Final Design. The majority of changes are the result of productive coordination with critical third-party partners, pursuit of construction cost reductions, and efforts to enhance the value of the project to the community.

A summary of the efforts included in the Additional Final Design Services scope of work is included below.

- Erwin Road Bridge – includes design of an additional mile-long bridge requiring specialty design and construction due to its location in constrained right-of-way, heavy traffic, and proximity to significant emergency medical facilities. The negotiated cost for this effort is approximately \$9.3 million.
- Value Engineering Redesigns – significant construction cost savings totaling approximately \$70 million were identified through value engineering studies required by FTA and other cost savings analyses. The negotiated cost for incorporating these design changes is approximately \$3 million.
- Supplemental Environmental Assessment – at the direction of FTA, GoTriangle was required to prepare a Supplemental Environmental Assessment in order to incorporate changes to the project identified during Final Design. The negotiated cost for this effort is approximately \$2 million.
- Other Services – includes several other design changes and additional services necessary to advance the project, such as incorporation of additional bicycle and pedestrian infrastructure into the design; redesigning several station areas as a result of recommendations related to supporting Transit Oriented Development; providing more robust public involvement support; pursuing LEED and Envision sustainability certifications; performing a robust operations analysis to support design of various systems elements; cost estimating; and additional analysis and design of shared railroad grade crossings in the North Carolina Railroad Company (NCRR) Corridor resulting from coordination with NCRR, Norfolk Southern Railway, the North Carolina Department of Transportation, and the Federal Railroad Administration. The negotiated cost for these efforts totals approximately \$3.4 million.

In addition, please note the following:

- A. The DBE goal for this work is 14%, consistent with the DBE goal for the overall contract.
- B. HDR is the prime consultant with which GoTriangle will execute this Phase 3B of the General Engineering Consulting work for the D-O LRT Project. Based on the Phase 3B Scope, the work will be performed by HDR and their Subcontractors which are listed in the accompanying document: HDR Project Team Members proposed for Phase 3B.



- C. The Contract Term will commence on the Effective Date for Phase 3B, and will continue to be in effect for a term of 22 months for the Phase 3B (Additional Final Design Services) effort.

Following completion of Phase 3 and Phase 3B, with Board of Trustees' approval, the Contract Term may be increased for the duration of Construction for Phase 4 (Design Services During Construction).

- D. The negotiated costs for the services described above total to \$17.7 million. GoTriangle staff and HDR have negotiated a \$1 million credit against the existing Phase 3 budget, which brings the total amendment requested to fund the services described above to \$16.7 million.
- E. In addition to negotiated costs for the services described above, staff is also requesting Board authorization to grant signature authority to the President and CEO for a design contingency allowance of \$2 million for additional work to accommodate other ancillary changes including a potential change to the design in downtown Durham. GoTriangle is coordinating with NCDOT, NCRR, and Norfolk Southern to confirm the design in this area. Coordination to date suggests there is a possibility for a need to design and construct a grade-separated pedestrian crossing of the light rail and railroad tracks in downtown Durham. This would constitute Additional Work for the GEC. If these elements are determined to be needed, the cost for the Additional Work would be negotiated by staff at that time, with a not-to-exceed limit of \$2 million without further authorization from the Board.

Financial Impact

Funding for the first year of this Contract Amendment is available in the approved FY 19 Budget which includes approximately \$62 million for professional services related to the D-O LRT Project, therefore no budget amendment is required. Funding for subsequent years of the Contract Amendment is included in the overall budget for the D-O LRT Project. The funding source is the Western Triangle Tax District.

Attachments

1. HDR Project Team Members proposed for Phase 3B
2. Scope of Work for Phase 3B

Staff Contact

- John Tallmadge, 919-485-7430 jtallmadge@gotriangle.org
- Sandra Freeman, 919-485-7415, sfreeman@gotriangle.org



Subconsultant	Disciplines
CALYX	civil engineering structures
Davenport (DBE)	civil engineering park-n-ride signing & pavement sediment & erosion
ECS	civil engineering geotechnical
Gilmore Consultants	estimating
Jacobs	track civil engineering structures management systems
LTK	operations modeling right of way survey
McKim & Creed	subsurface utility engineering
Mid-Atlantic (DBE)	geotechnical borings
New South Associates (DBE)	environmental compliance
Susan Hatchell (DBE)	landscape design
TCSS	safety services
Westridge	estimating
Wetherill Engineering (DBE)	maintenance of traffic

GoTriangle Contract 15-052A Phase 3B – Additional Final Design Services Scope of Work

Durham-Orange Light Rail Transit Project



September 2018

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Phase 3B – Additional Final Design Services

List of Acronyms and Abbreviations

CMC	Construction Management Consultant
CR	Change Request (contract)
D-O LRT	Durham-Orange Light Rail Transit
FFGA	Final Funding Grant Agreement
FTA	Federal Transit Administration
GEC	General Engineering Contractor
LEED	Leadership in Energy and Environmental Design
LRV	Light Rail Vehicle
MOT	Maintenance of Traffic
NCDOT	North Carolina Department of Transportation
OCS	Overhead Catenary System
PMC	Program Management Consultant
RFC	Request for Change (design)
ROMF	Rail Operations and Maintenance Facility
ROW	Right-of-Way
SOW	Scope of Work
TPSS	Traction Power Substation



Phase 3B – Additional Final Design Services

1 Overview

The Durham-Orange Light Rail Project General Engineering Consultant (GEC) contract currently includes three phases:

1. Phase 1 – Design Feasibility and Financial Planning Support (completed)
2. Phase 2 – Preliminary Design and 30% VECR incorporation (completed – see Change Request 11)
3. Phase 3 – Final Design (in-progress)

This supplement identifies Additional Final Design Services beyond those identified in the Phase 3 scope of work (SOW) dated June 12, 2017. The GEC has identified 26 changes to the Phase 3 SOW and is submitting 17 of these as Additional Work in accordance with the Design Contract Change Procedure CMCCP-3. These 17 change requests comprise the scope of work for Phase 3B, Additional Final Design Services. Scope summaries for these change requests are provided in Section 3 of this Supplemental Scope of Work and are based on negotiated scope details agreed upon by GoTriangle and HDR. These changes are packaged together as Phase 3B, Additional Final Design Services.

No-cost refinements and clarifications to the base scope for Phase 3, Final Design Services, are included in a separate document, *Supplemental Scope of Work for Phase 3, Final Design Services*.

2 Current Phase 3 Progress Summary

Notice to proceed for Phase 3, Final Design Services, was received by the GEC on June 30, 2017. The GEC has progressed the design since then and is currently in post-50% design. The 50% contract submittals were completed during February and March of 2018. These submittals were packaged based on the project delivery system specified in Section 1.4 of the original SOW and included the following:

- Separate submittals for Line Sections 1, 2, and 3
- Rail Systems
- Rail Operations and Maintenance Facility (ROMF)
- Corridor-Wide Standard Drawings and Specifications
- Finley Golf Course

Continued design, stakeholder coordination, improvement of the target Full Funding Grant Agreement (FFGA) date from federal fiscal year 2020 to federal fiscal year 2019, and Construction Management Consultant (CMC) refinement of the construction cost estimate has led to some overriding concerns including:

- Project funding is a critical item with the need to limit construction cost to the identified funding level tied to the FTA funding grant
- There are outstanding stakeholder issues to be resolved

These concerns have led to a shift in the focus of project execution, specifically:

- Resolving items critical to the 2018 year-end FFGA-readiness submittal and ultimate approval (FFGA items)
- Making project cost saving changes to meet the project budget of \$2.5 billion
- Resolving outstanding stakeholder issues
- Completing final design to meet projected construction funding and revenue operation schedule

The majority of the changes included in Phase 3B are the result of productive coordination with critical third-party partners, pursuit of construction cost reductions, and efforts to enhance the value of the project to the community. The changes include the addition of the Erwin Road bridge, value engineering redesign, preparation of a supplemental environmental assessment, and several other design changes and services necessary to advance the project.

3 Change Requests

GoTriangle and the GEC have been tracking and identifying changes to the Phase 3 scope of work as the design has progressed. Many of these changes were initiated by GoTriangle to provide assistance in addressing new issues, minimize stakeholder impacts, or to provide construction costs savings. Table 4 lists the change requests that the GEC is submitting for contract changes. Note that change request numbers that appear to be missing were initially tracked but ultimately either abandoned or able to be completed within the existing contract for Phase 3.

Table 4: Contract Change Requests (CR) Since Initiation of Phase 3 Design

Change Request No.	Description
2	Bike/Pedestrian Batch 2 Evaluations
3	Gateway Station Area TOD Alignment Study
4	Additional Strategic Communications and Public Involvement Support
5	Sustainability and LEED/Envision Certification
7	Elevated Erwin Road Alignment Feasibility Study
11	Shift of Selected Phase 2 SOW & Fee to Phase 3
14	Operational Analysis
15	Farrington-Popes Alignment I-40 Shift
16	Elevated Erwin Road Alignment Final Design
19	Construction Cost Estimating
20	Pettigrew Street Grade Crossing Analysis
21	Supplemental Environmental Analysis
22	Shannon Road Underpass
23	Leigh Village Additional Grade Crossings
24	Revision of UNC Hospital Station
25	ROMF Value Engineering
26	New Hope Creek Bridge Single Tracking

3.1.1 CR 2 - Bike/Pedestrian Batch 2 Evaluations (RFC 041)

At the request of GoTriangle, the GEC added the study and design of pedestrian and bicycle connectivity improvements at an additional 10 station locations. These station locations were identified for improvement of the first and last mile access to surrounding neighborhoods. This is Additional Work for the Roadway, Pedestrian, and Bicycle Infrastructure Design described in Section 2.3.1 of the original Phase 3 SOW.

Major tasks included in this change request include:

- Task management and coordination
- Feasibility analysis
- Conceptual design
- Final design

3.1.2 CR 3 - Gateway Station Area TOD Alignment Study (RFC 027)

At the request of GoTriangle resulting from the TOD grant study, the GEC added a study for shifting the location and alignment of the Gateway station and park and ride lot configuration shown in the 30% plans to maximize



Phase 3B – Additional Final Design Services

opportunities for future economic development in the vicinity. This is Additional Work for several disciplines of the original Phase 3 SOW (e.g., Guideway and Track; Roadway, Bicycle, Pedestrian; Stations).

Major tasks included in this change request include:

- Survey verification and right of way assessment
- Geotechnical assessment
- Environmental impacts assessment
- Utility impact assessment
- Conceptual track, roadway, station platform layout and design
- Conceptual station area site plan
- Construction cost approximation

3.1.3 CR 4 - Strategic Communications and Public Involvement Support

The original Phase 3 SOW includes public involvement support for the project. At the request of GoTriangle, the GEC added the implementation of strategic communications and a more robust public involvement program related to the design phase of the project, including additional work required to support community engagement activities related to the design changes described elsewhere in this document. This is Additional Work for the Agencies and Public Participation described in Section 2.13 of the original Phase 3 SOW.

Major task included in this change request include:

- Task management and coordination
- Branding
- Website development and maintenance
- Develop videos
- Extended public and stakeholder engagement
- Comment management and tracking

3.1.4 CR 5 - Sustainability and LEED/Envision Certification

The original Phase 3 SOW included a study of sustainability rating systems for the project, which resulted in a recommendation of two sustainability rating systems for the project, which GoTriangle staff presented to the GoTriangle Board of Trustees for consideration. In September 2017, the GoTriangle Board of Trustees adopted the Third-Party Sustainability Rating Systems for the D-O LRT Project including Leadership in Energy and Environmental Design (LEED) for Building Design and Construction for the Rail Operations and Maintenance Facility and Envision Version 2 for the alignment, stations, park and ride facilities and other project elements. Implementation of the decision to pursue LEED Silver and Envision Certification requires Additional Work for Section 2.5.1, “Architectural Design”, Section 2.3.3, “Park and Ride Facilities”, and Section 2.6, “Rail Operations and Maintenance Facility”, and Section 2.11.2.2, “Sustainable design Requirements” of the original Phase 3 SOW.

Major task included in this change request include:

- LEED Certification Services – Work with GoTriangle to apply the LEED rating system to the ROMF, to both integrate sustainability in the project design and specifications and pursue LEED Silver certification from the U.S. Green Building Council.
- Envision verification Services – Work with GoTriangle to apply the Envision rating system to the D-O LRT Project, to both integrate sustainability in the project design and specifications and pursue Envision verification from Institute for Sustainable Infrastructure.
- Commissioning Services (Ph3 Design) – Prepare a draft Commissioning Plan, develop and incorporate commissioning requirements into construction documents, and other items to prepare for construction.

Phase 3B – Additional Final Design Services

3.1.5 CR 7 - Elevated Erwin Road Alignment Feasibility Study (RFC 021)

At the request of GoTriangle, the GEC added a study of alternative alignments along Erwin Road to minimize impacts to existing facilities such as the buried 44 kV power line, Duke Medical Center, and Veterans Administration Hospital. The base design at that time was at-grade and in the median of Erwin Road. One option included is elevating the median alignment to an aerial structure. This is Additional Work for several disciplines of the original Phase 3 SOW (e.g., Guideway and Track, Structures).

Major tasks included in this change request include:

- Develop several track alignment alternatives
- Utility clash detection for alignment alternatives
- Conceptual level design for alternatives including track, roadway, structures, stations, maintenance of traffic
- Aerial guideway type selection study and report
- Conceptual level cost approximations for alternatives
- Constructability assessment of alternatives including phasing, maintenance of traffic (MOT), and construction schedule
- ROW assessment
- Renderings/Visualization
- Assess environmental impacts

3.1.6 CR 11 – Phase 2 Scope And Deliverables Carryover to Phase 3

On November 6, 2017, the GEC requested that remaining uncompleted Phase 2 field work tasks be shifted to the Phase 3 effort. This change was requested to close out the Phase 2 work effort.

This change reallocates the remaining budget capacity for Geotechnical Field Investigation and Surveying from Phase 2 to be reallocated to Phase 3. Property access delayed some of the work, therefore pushing this work into the Phase 3 contract period.

Major tasks included in this change request include:

- Reallocate unfinished Geotechnical Investigation and Survey work from Phase 2 to Phase 3 scope.

3.1.7 CR 14 - Operational Analysis

At the request of GoTriangle, the GEC has added operational planning and analysis to assess impacts of intersection signalization, selected vehicle performance, optimize emergency crossover locations, determine the need for pocket tracks, and assess the feasibility of potential single track locations. This work has been added to refine designs for cost-effectiveness and to identify the system operational impacts of single-track options for cost reducing changes. This is Additional Work for Section 2.7, “Systems” of the original Phase 3 SOW.

Major tasks included in this change request include:

- Using TrainOps software, determine end-to-end travel time variability Using updated track alignment data and probable intersection delay time
- Complete operational analysis for 7.5 and 10 minute headways for double track system
- Identify up to 4 aerial guideway candidates for single tracking
- Perform conceptual track layout/design to accommodate single tracking
- Repeat operational analysis for 7.5 and 10 minute headways for single track layout alternatives
- Locate emergency crossover alternatives and repeat operation analysis using selected track closures and emergency crossovers



Phase 3B – Additional Final Design Services

- Identify optimal locations for emergency crossovers
- Identify optimal pocket track locations (with and without single track sections)

3.1.8 CR 15 - Farrington-Pope Road Alignment I-40 Shift (RFC 002)

At the request of GoTriangle, the GEC has shifted the track alignment and additional 12 feet west of I-40 between the Farrington Road Bridge and Old Chapel Hill Road Bridge. This alignment shift was requested by the North Carolina Department of Transportation (NCDOT) to accommodate potential future additional widening on I-40. This requires rework to revise the 50% light rail design layout and is Additional Work for several disciplines of the original Phase 3 SOW (e.g., Guideway and Track, Structures).

Major tasks included in this change request include:

- Revision of 50% track design
- Revision of 50% drainage design
- Revision of 50% retaining wall design
- Revision of 50% system design

3.1.9 CR 16 - Elevated Erwin Road Alignment Final Design (RFC 028)

At the request of GoTriangle, the GEC has added the final design of an elevated alignment along the median of Erwin Road through Durham. This alignment was chosen as the selected alternative in the Elevated Erwin Road Alignment Feasibility Study, which was completed as part of Change Request 7. This change request includes the development of 30% drawings and advancing the design through issue for bid. This is Additional Work for several disciplines of the original Phase 3 SOW (e.g., Guideway and Track, Structures, Stations).

Major tasks included in this change request include:

- Survey
- 3D modeling/visualization
- Geotechnical investigation and design
- Aerial guideway design (Erwin Road elevated guideway)
- Revision of the Sandy Creek bridge layout
- Retaining wall layout and design
- Drainage design
- Track design
- Rail system design
- Road design and ROW plans
- Station and site design
- Construction/traffic phasing assessment
- Utility coordination and SUE
- Environmental impact assessment
- Constructability review
- Construction cost estimate for 30% design

3.1.10 CR 19 - Construction Cost Estimating

At the request of GoTriangle, the GEC added construction cost estimating support to the scope of work. This includes cost estimating of alternative design options for decision-making support, and development of preliminary estimates for the 50% design of the ROMF and 30% design of LS3A, Erwin Road. This is Additional work for Section 2.8, "Quantity Take-offs", of the original Phase 3 SOW.



Phase 3B – Additional Final Design Services

Major tasks included in this change request include:

- Preliminary ROMF construction cost estimate
- Line Section 3A construction cost estimate at 30% design
- LS 3A maintenance of traffic analysis for construction staging as input to the LS3A construction cost estimate

3.1.11 CR 20 - Pettigrew Street Grade Crossing Analysis (RFC 001, 042, 052)

At the request of GoTriangle, the GEC is performing additional evaluation of grade crossings along Pettigrew Street in downtown Durham. This evaluation was added to get a clear understanding of options for location of and operation of crossing gates and their link to the existing railroad gate arms. In addition, the feasibility of accommodating future railroad tracks in the design was assessed. Pettigrew Street is in the original scope, but the level of effort has increased due to coordination with the railroads and NCDOT. This is Additional Work for several disciplines of the original Phase 3 SOW (e.g., Guideway and Track; Roadway, Bicycle, and Pedestrian). Work in this change request carries through final design and issue for bid.

Major tasks included in this change request include:

- Evaluation of gate arm location and operation options at 6 grade crossings
- Evaluation of changing a portion of Pettigrew Street to 2 way traffic
- Bus and rail operations studies
- Signal timing on cross streets
- Develop track alternative alignments
- Investigate closing cross streets

Note: As of August 2018, GoTriangle is coordinating with NCDOT, NCRR, and NSR to confirm the design in this area. Coordination to date suggests there is a possibility for a need to design and construct a grade-separated pedestrian crossing of the light rail and railroad tracks near Blackwell Street. This would constitute Additional Work for several disciplines of the original Phase 3 SOW (e.g., Structures; Roadway, Bicycle and Pedestrian). If this design element needs to be incorporated, the cost for the Additional Work will be negotiated at that time.

3.1.12 CR 21 - Supplemental Environmental Analysis

At the request of GoTriangle, the GEC has refined the scope of work to include development of a Supplemental Environmental Assessment, required by FTA. Section 2.11.2 of the original Phase 3 SOW includes technical analysis and documentation for supplemental NEPA clearance. Preparation of a Supplemental Environmental Assessment is Additional Work for Section 2.11.2, “Environmental Compliance of Design Plans and Construction Requirements”, of the original Phase 3 SOW.

Major tasks included in this change request include:

- Task management and coordination
- Supplemental EA/FONSI/amended ROD preparation
- Preparation of Administrative Record
- Technical memoranda and reports
- Draft Section 4(f) evaluation
- Comment management
- Agency coordination

3.1.13 CR 22 - Shannon Road Underpass (RFC 044)

At the request of GoTriangle, the GEC added the study and design of a change in the Shannon/University intersection grade crossing to an undercrossing. This change carries the light rail alignment below the intersection, lowers the South Square station to an at-grade configuration, and adds an at-grade crossing of Auto Drive. The change was proposed as a potential cost savings measure but also improves operations by removing a grade crossing through a busy intersection. This change request requires rework to revise the 50% layout and is Additional Work for several subsections of Section 2.0, “GEC Scope of Work” in the original Phase 3 SOW (e.g., Guideway and Track; Structures).

Major tasks included in this change request include:

- Feasibility study for the undercrossing
- Additional preliminary plan submittal for CMC construction cost estimating
- Revision of 50% plan submittal details
- Additional top-down retaining walls along the lowered section
- Additional bridge carrying the intersection over the LRT tracks
- Additional bridge carrying an access road to the University Marketplace property
- Revision of the aerial guideway over Durham/Chapel Hill Boulevard
- Additional geotechnical borings and analysis
- Revision of station platform design
- Revision of roadway and track design
- Revision of site layout at station including park and ride
- Addition of an at-grade crossing at Auto Drive
- Construction phasing assessment
- Assessment of environmental impacts
- Supplemental survey

3.1.14 CR 23 - Leigh Village Additional Grade Crossings (RFC 014)

At the request of GoTriangle, the GEC has added this change request to modify the 50% design plans in the Leigh Village area to widen the track spacing to provide a pocket track east of the station and make provisions for four (4) future grade crossings through the Leigh Village area at the request of the City of Durham. This change request adds rework to revise the 50% layout and is Additional Work for several subsections of Section 2.0, “GEC Scope of Work” in the original Phase 3 SOW (e.g., Guideway and Track; Roadway, Bicycle, and Pedestrian; Systems).

Major tasks included in this change request include:

- Track layout and re-design
- Re-layout and design of station
- Roadway/traffic design
- Drainage design
- Pedestrian underpass design
- System re-design

3.1.15 CR 24 - Revision of UNC Hospital Station (RFC 030, 043)

At the request of GoTriangle, the station configuration and track spacing/alignment at the UNC Hospital station has been reconfigured to improve interaction with surrounding roads and facilities and to achieve construction cost savings. The station platform has changed from a center platform to side platforms, allowing the track center spacing to be reduced to 14 feet. This change request requires rework to revise the 50% layout and is Additional



Phase 3B – Additional Final Design Services

Work for several subsections of Section 2.0, “GEC Scope of Work” in the original Phase 3 SOW (e.g., Guideway and Track; Structures; Systems).

Major tasks included in this change request include:

- Feasibility study to assess design alternatives
- Track layout and re-design
- Re-layout and design of station
- Roadway/traffic design
- Drainage design
- Aerial guideway re-design for narrower track center spacing
- System re-design

3.1.16 CR 25 - ROMF Value Engineering (RFC 050)

At the request of GoTriangle, the GEC has added the incorporation of Value Engineering (VE) recommendations resulting from a VE Workshop held in spring 2018 for the Rail Operations and Maintenance Facility (ROMF). These VE recommendations seek to reduce construction cost, improve layout and design, and improve how the facility operates. This is Additional Work for Section 2.6, “Rail Operations and Maintenance facility” of the original Phase 3 SOW.

The major task included in this change request include revising layout and design of the ROMF building and yard to incorporate VE recommendations.

3.1.17 CR 26 - New Hope Creek Bridge Single Tracking (RFC 047)

At the request of GoTriangle, the GEC has added an investigation and design of changing the New Hope Creek Aerial Guideway from a double track to a single track structure. In addition, the top-down construction across the New Hope Creek and Sandy Creek floodplains was eliminated and changed to standard hammerhead bent construction. This change request was initiated to achieve construction cost savings. This change request requires rework to revise the 50% layout and is Additional Work for several subsections of Section 2.0, “GEC Scope of Work” in the original Phase 3 SOW (e.g., Guideway and Track; Structures).

Major tasks included in this change request include:

- Abbreviated feasibility study
- Interpretation of operational analysis for headway impacts and turnout locations
- Revision of 50% track design
- Revision of 50% bridge design
- Revision of 50% retaining wall design
- Additional geotechnical testing and design
- Redesign/analysis for hydraulics
- Rail systems redesign
- Reassessment of environmental impacts

*Connecting all points of the Triangle*

MEMORANDUM

TO: Operations & Finance Committee
FROM: Regional Services Development
DATE: September 12, 2018
SUBJECT: Wake County Transit Plan – Multi-Year Service Implementation Plan Update and GoTriangle Short Range Transit Plan

Strategic Objective or Initiative Supported

This item supports the strategic initiative, implement the Wake Transit Plan with Transit Planning Advisory Committee.

Action Requested

No action required.

Background and Purpose

GoTriangle, City of Raleigh and CAMPO executed a master contract with Nelson\Nygaard to work on several tasks related to the implementation of the Wake County Transit Plan, including the Wake Bus Plan.

The Wake Bus Plan contains the following deliverables:

- 10-year implementation plan for operating and capital projects
- Operating and capital projects to be included in the FY19 Wake Transit Work Plan
- Short range transit plan for each transit agency (GoTriangle, GoRaleigh, GoCary, and Wake TRACS)
- Project prioritization policy
- Service standards and performance measures
- Community funding areas market analysis
- Locally coordinated transportation plan

The Wake Bus Plan Core Technical Team (consisting of staff from GoTriangle, CAMPO, GoRaleigh, GoCary, Wake County, and representatives from small municipalities in Wake County) has reviewed and refined the technical details of the 10-year operating and capital plans, which identify bus service and capital improvements through 2027. As outputs of the 10-year plans, short range transit plans (detailed service proposals through 2024) were drafted for each Wake County transit agency and presented to the public for comment. GoTriangle's short range transit plan also includes service proposals for Durham and Orange Counties.



Each decision making body for the four transit operators (GoTriangle, GoRaleigh, GoCary, and Wake TRACS) will receive a short range transit plan.

10-Year Operating and Capital Plans

The 10-Year Wake Operating Plan contains service improvements that connect all Wake County Communities and build up the frequent network until its integration with bus rapid transit and commuter rail in 2027. Capital investments for parking and passenger waiting areas are also programmed each year to compliment bus service improvements.

The GoTriangle Board of Trustees and the CAMPO Executive Board will receive the 10-year operating and capital plans.

GoTriangle Short Range Transit Plan

The Wake Bus Plan generated a short range transit plan for GoTriangle bus service operating in Wake County. GoTriangle Planning staff also coordinated concurrent short range transit planning efforts for Durham and Orange County services in an effort to deliver a single, cohesive short range transit plan addressing all areas served by GoTriangle. The goals of the short range transit plan are to make service faster and more competitive, provide more frequent service, and provide more all-day service.

Public outreach efforts were conducted throughout Wake, Durham, and Orange Counties at pop-up events, formal public meetings, presentations to elected officials, and online.

Attachments

- Attachment A, GoTriangle Short Range Transit Plan (SRTP)
- Attachment B, Final Wake Bus Plan 2027 Network Maps
- Attachment C, Summary Sheet of GoTriangle Changes in SRTP

Staff Contact

Mary Kate Morookian, 919-485-7549, mmorookian@gotriangle.org



PO Box 13787
Research Triangle Park, NC 27709
P: 919.485.7510 | F: 919.485.7547

www.gotriangle.org



Short-Range Transit Plan

Proposed Transit Service Projects and Changes



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Project Sheet Route Index

To find your existing route's project sheet, locate its number in the first column of the table below. Read across for the future route number and the project sheet's page number. Click a page or route number to jump to the corresponding project sheet. If there is not a page listed, there are no changes proposed.

Route #	Name	Operator	Future Route #	Page #
100	Raleigh-RDU-RTC	GoTriangle	100	4
102	Raleigh-Garner	GoRaleigh	20, 20L	*
105	Raleigh-RTC	GoTriangle	105	6
201	North Raleigh-RTC	GoTriangle	NRX	34
300	RTC-Cary-Raleigh	GoTriangle	300, 310	10
301	Cary-Raleigh	GoRaleigh, GoCary	9 9B	* *
305	Apex-Raleigh	GoTriangle	305	8
310	RTC-Cary	GoTriangle	310	10
311	Apex-RTC	GoTriangle	311	12
400	Durham-Chapel Hill	GoTriangle	400	14
405	Durham-Chapel Hill-Carrboro	GoTriangle	405	16
420	Hillsborough-Chapel Hill	GoTriangle	420	18
700	Durham-RTC	GoTriangle	700	20
800	Chapel Hill-RTC	GoTriangle	800	22
800S	Chapel Hill-Southpoint	GoTriangle	800S	24
805	Chapel Hill-Woodcroft-RTC	GoTriangle	805	26
CRX	Chapel Hill-Raleigh Express	GoTriangle	CRX	28
DRX	Durham-Raleigh Express	GoTriangle	DRX	30
FRX	Fuquay-Varina - Raleigh Express	GoRaleigh	FRX	
KRX	Knightdale-Raleigh Express	GoRaleigh	33	
ODX	Orange-Durham Express	GoTriangle	ODX	32
NRX	North Raleigh Express	GoTriangle	NRX	34
WRX	Wake Forest-Raleigh Express	GoRaleigh	WRX	
ZWX	Zebulon-Wendell-Raleigh Express	GoRaleigh	ZWX	
North Durham/ Rougemont Vanpool Services				36
GoTriangle Future Bus Network				37



How to read a project sheet

These “project sheets” contain maps and information designed to help you understand the changes proposed in the GoTriangle Short-Range Transit Plan. This page helps you understand what each item means.

Route number and name

GO Triangle Short-Range Transit Plan

800 Chapel Hill-Southpoint-Regional Transit Center (RTC) **FY20**

Route type:
CORE REGIONAL

Operator:
GoTriangle

Project overview: Route 800 provides core regional service between Chapel Hill and RTC via Southpoint. The path of the eastern portion of the route varies by time of day and day of week, traveling via I-40 between Southpoint and RTC on weekdays during rush hours, but via NC-54 at other times. This proposal would revise the routing to use I-40 at all times, providing a fast, consistent connection that is easier to understand. Service on NC-54 would still be available during weekday rush hours on Route 805 Chapel Hill-Woodcroft-RTC

FY17 performance: **AVERAGE**

Major destinations: Chapel Hill, UNC Hospitals, Southpoint retail area

Connection points: Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals, RTC

Fiscal year of implementation

The GoTriangle Short-Range Transit Plan is expressed in fiscal years (FY) that run from July 1 through June 30. For example, FY20 starts on July 1, 2019 and ends on June 30, 2020.

Route type:

- FREQUENT** High-capacity services that operate along densely developed primary arterials and offer a high level of frequency, forming the “backbone” of the service network. Frequent service runs every 15 minutes, 7 days a week.
- LOCAL** Relatively frequent, simple and direct service operating along primary arterials, but in areas of less dense development patterns, and with stops spaced so people don’t have to walk too far to get to the route. Local service runs every 30-60 minutes, 7 days a week.
- CORE REGIONAL** Longer-distance service connecting the major activity centers across jurisdictions and providing the backbone of the region’s transit network. Core regional routes have limited stops to provide fast travel times and use highways where appropriate. Core regional service runs every 30-60 minutes, 7 days a week.
- EXPRESS** Services specifically designed to bring people from residential areas to employment centers. They operate during peak commute periods and make few stops, often at park & ride facilities or transit centers, before traveling non-stop to the destination via highways. Express service runs Monday-Friday during rush hours and at other times if warranted.

Project overview: This section describes the route, what is changing (if anything), and why the project is being proposed.

FY17 performance:

HIGH

AVERAGE

LOW

These badges indicate how well a route is doing compared to other routes in the system in terms of ridership. “High” generally means a route is in the top quarter of routes in the system, “low” generally means a route is in the bottom quarter of routes in the system, and “average” routes are in between. Different operators may score routes differently, so this measure is meant to give you a quick gauge of an existing route’s success.

Major destinations: List of major activity centers served by the route.

Connection points: List of transit centers, transfer points, and park-and-ride locations where riders can connect to the route.



How to read a project sheet, continued

The table on the bottom half of the front page describes how service looks before (“Existing”) and after (“Proposed”) the project is implemented. If service is completely new, the “Existing” column will be blank.

Span of Service

Span refers to the time that service starts and ends on weekdays (Monday-Friday), Saturdays, and Sundays.

Frequency tells you how often a bus is scheduled to run (in minutes). Weekdays are divided into different time periods*:

AM Peak: typically 6:00 – 9:00 AM

Midday: typically 9:00 AM – 3:00 PM

PM Peak: typically 3:00 – 6:00 PM

Evening: typically 6:00 – 10:00 PM, but sometimes later

*Time periods may vary by route.

	Existing	Proposed
Span of Service:		
Weekday	6:00 AM – 11:10 PM	6:00 AM – 11:10 PM
Saturday	6:45 AM – 11:30 PM	6:45 AM – 11:30 PM
Sunday	6:45 AM – 9:20 PM	6:45 AM – 9:20 PM
Frequency:		
Weekday		
AM Peak	30 minutes	30 minutes
Midday	30	30
PM Peak	30	30
Evening	45	45
Saturday	30-40	30-40
Sunday	60	60

Related capital investments:

- Regional Transit Center (proposed): potential relocation of RTC will be evaluated in FY19-20.

Related service investments:

- GoTriangle Route 105 Raleigh-RTC is proposed for a schedule change that moves express service between Raleigh and RTC to the middays. The proposal for Route 900 will be implemented together with the change to Route 105 to leverage faster midday speeds along the entire I-40 corridor between Raleigh and Chapel Hill.
- GoDurham will continue to provide local service on NC-54 between Fayetteville Street and NC-55.

meWARN

Related capital investments: Facilities that will be built or improved as part of the GoTriangle Short-Range Transit Plan and that will be served by the route are listed here. Some capital projects may open after the start of bus service.

- A **Transit Center** is a major transfer facility designed to accommodate passenger travel between multiple routes. It usually has restrooms, enhanced waiting areas, and other amenities such as real-time arrival information and ticket/pass sales.
- An **Enhanced Transfer Point** is a “super stop” served by multiple routes with enhanced passenger amenities such as larger shelters, lighting, and real-time passenger information.

Related service investments: This section lists any other routes or other changes to the bus service that will be implemented at or near the same time and that affect connectivity and access for riders.

How to read the full-page map

The project sheet also contains a detailed map showing the route or routes included in the project.



Area No Longer Served: A dashed magenta line displays portions of existing route(s) that will no longer be served.

Area Newly Served: A solid line outlined in black displays portions of the route(s) that will have service but are not provided with existing service.

Park & rides, transit centers, and transfer points, whether existing or proposed, are shown on the map using their respective icons.

The map also includes **key points of interest**, such as universities and RDU Airport.



100 Raleigh-Airport-RTC

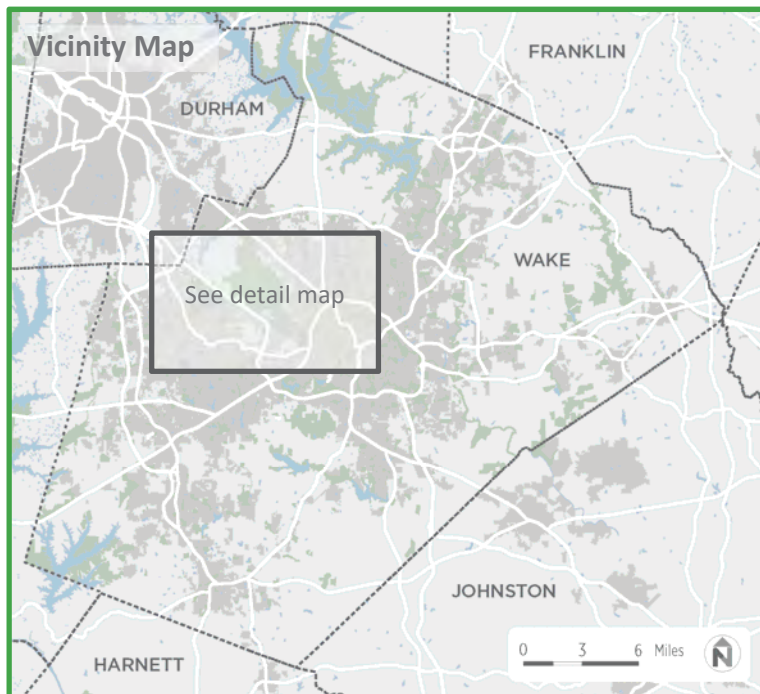
FY22

Route type:

CORE REGIONAL

Operator:

GoTriangle



Project overview: Route 100 provides daily service between Raleigh, the RDU Airport, and the Regional Transit Center (RTC) at RTP.

The Wake Transit Plan increases service on Route 100 by starting the service earlier in the morning and ending it later in the evening. The frequency of service is also improved to every 30 minutes on Sundays.

FY17 performance:

AVERAGE

Major destinations: Downtown Raleigh, NC State University, RDU Airport, RTC

Connection points: GoRaleigh Station; Hillsborough/I-440 Park & Ride (proposed); enhanced transfer points at Hillsborough Street and Oberlin Road, Gorman Street, and State Fairgrounds (all proposed); RTC

	Existing	Proposed
	<i>100 Raleigh-Airport-RTC</i>	<i>100 Raleigh-Airport-RTC</i>
Span of Service		
Weekday	6:10 AM – 11:15 PM	5:00 AM – 12:00 AM
Saturday	6:40 AM – 11:15 PM	5:00 AM – 12:00 AM
Sunday	6:40 AM – 7:15 PM	7:00 AM – 12:00 AM
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	30	30
PM Peak	30	30
Evening	60	60
Saturday	30 base / 60 evening	30 base / 60 evening
Sunday	60	30 base / 60 evening

Related capital investments:

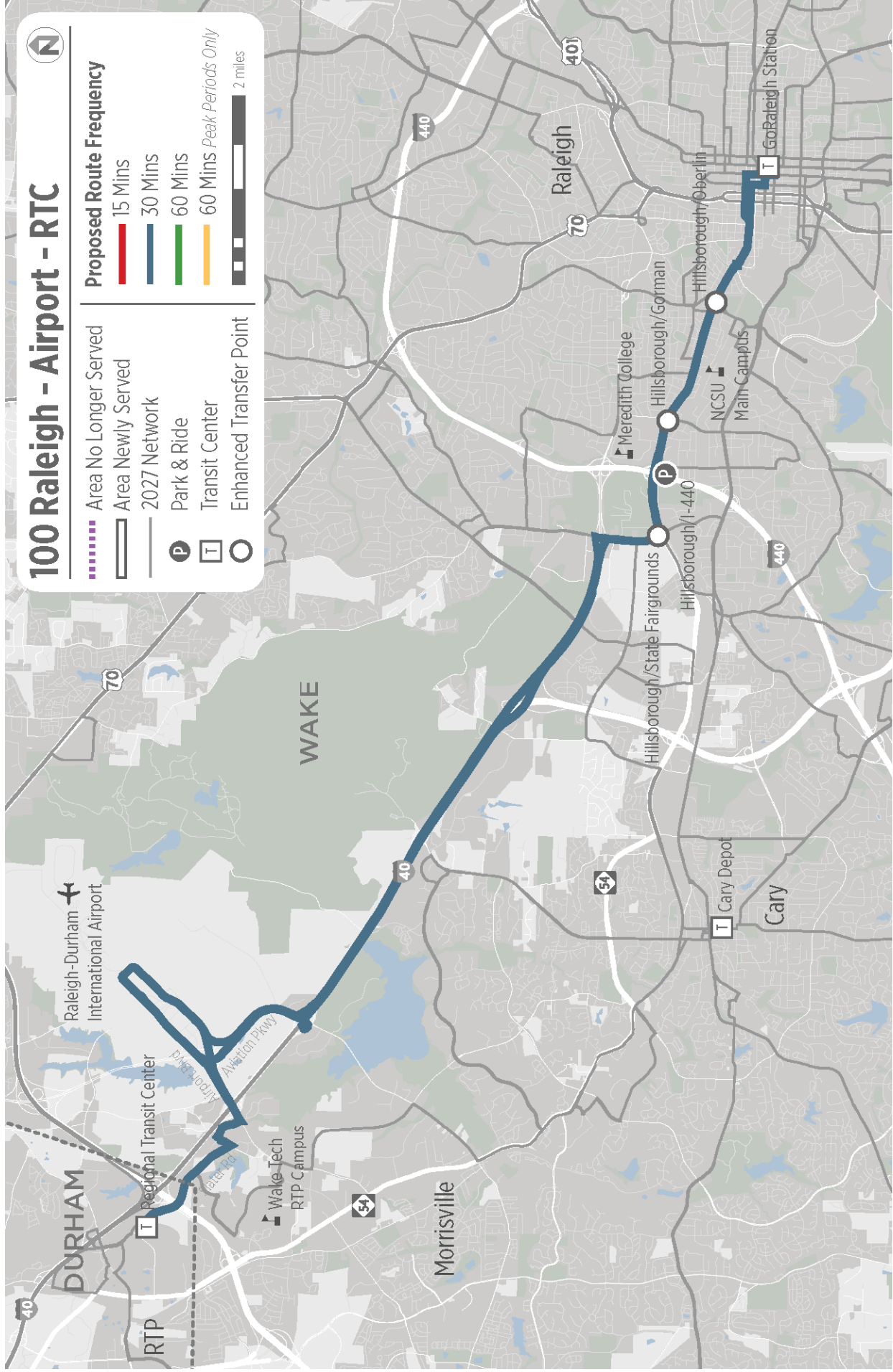
- Hillsborough/I-440 Park & Ride (proposed FY21): new parking capacity and passenger amenities
- Enhanced transfer points at Hillsborough/Oberlin, Hillsborough/Gorman, and Hillsborough/State Fairgrounds: improved shelters, lighting, and passenger information

Related service investments:

- N/A



Wake Bus Plan





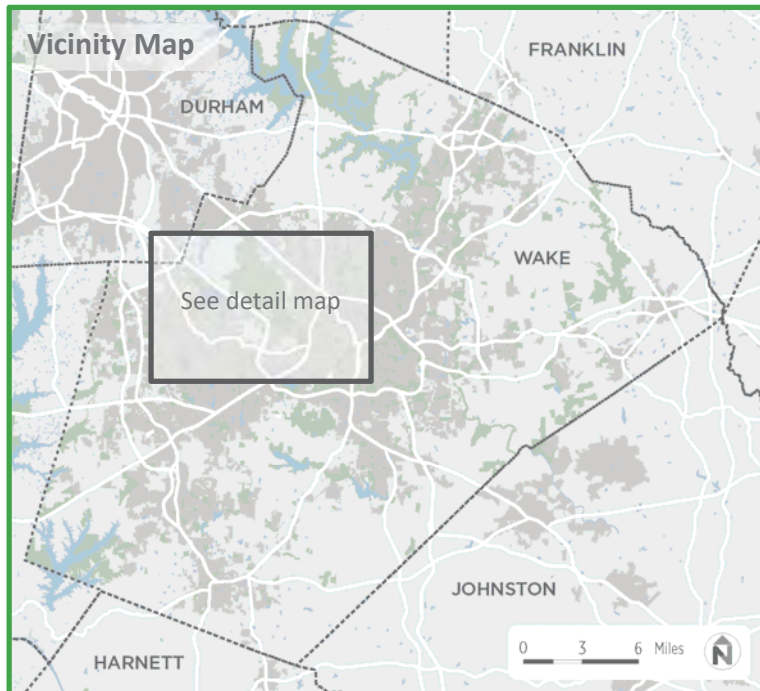
105 Raleigh-RTC

Route type:

EXPRESS

Operator:

GoTriangle



Project overview: Route 105 provides weekday peak express service between downtown Raleigh and the Regional Transit Center (RTC). There are no proposed changes to this service.

FY17 performance: AVERAGE

Major destinations: Downtown Raleigh, NC State University, RTC

Connection points: GoRaleigh Station; Hillsborough/I-440 Park & Ride (proposed); enhanced transfer points at Hillsborough Street and Oberlin Road, Gorman Street, and State Fairgrounds (all proposed); RTC

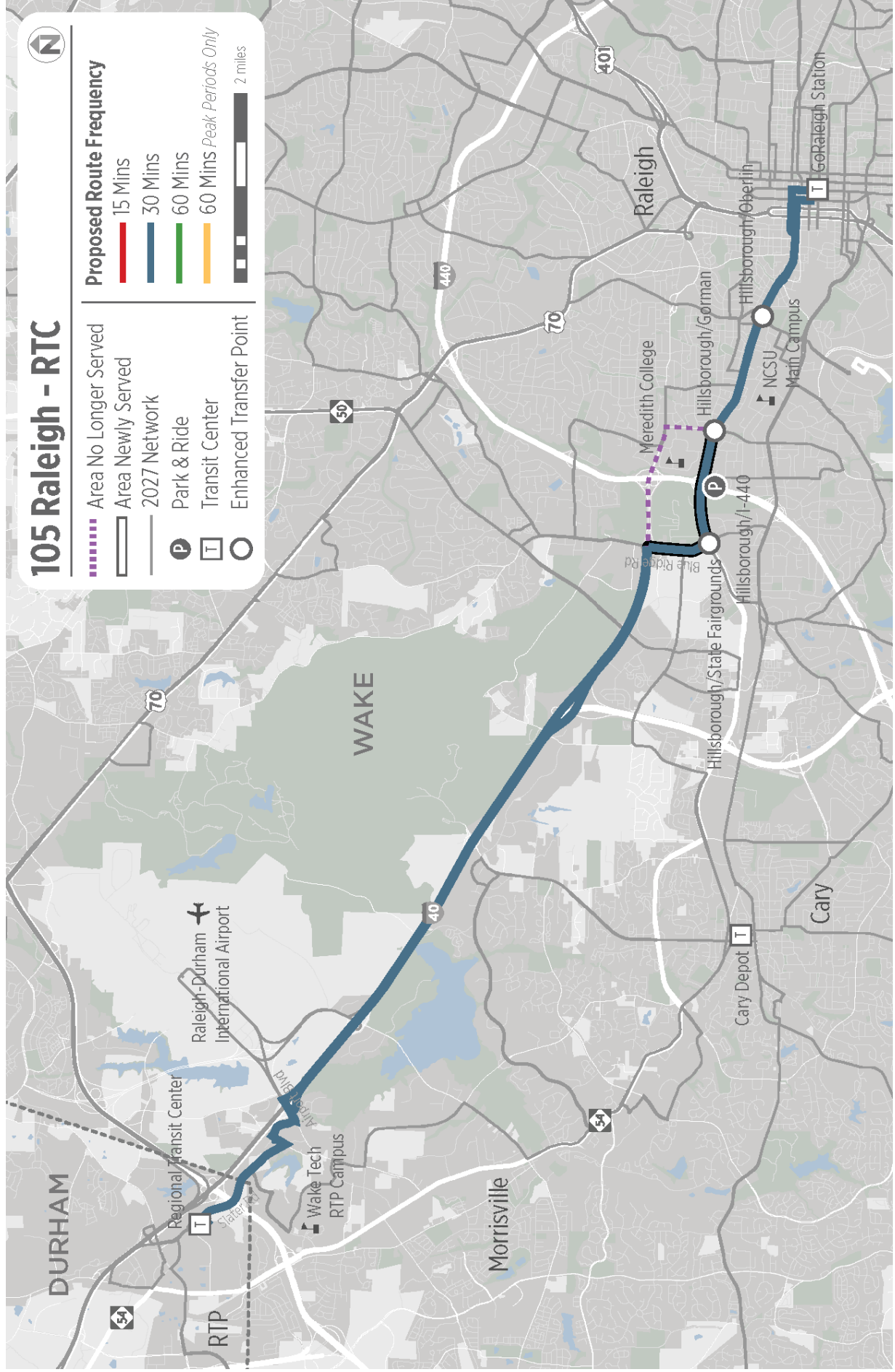
	Existing	Proposed
	<i>105 Raleigh-RTC</i>	<i>105 Raleigh-RTC</i>
Span of Service		
Weekday	5:55 – 9:35 AM, 3:15 – 7:05 PM	5:55 – 9:35 AM, 3:15 – 7:05 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	-
PM Peak	30	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- Hillsborough/I-440 Park & Ride (proposed FY21): new parking capacity and passenger amenities
- Enhanced transfer points at Hillsborough/Oberlin, Hillsborough/Gorman, and Hillsborough/State Fairgrounds: improved shelters, lighting, and passenger information

Related service investments:

- N/A





305 Apex-Raleigh

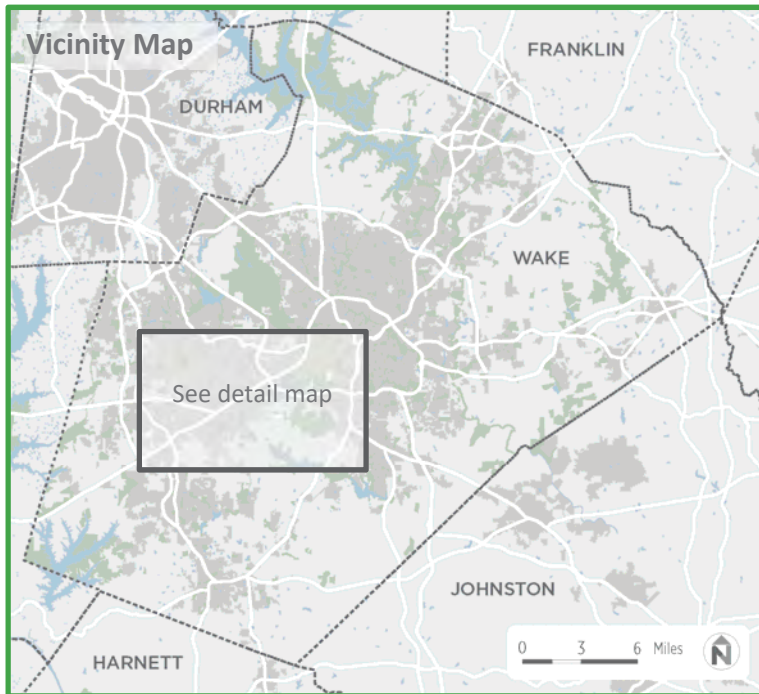
FY21

Route type:

CORE REGIONAL

Operator:

GoTriangle



Project overview: Route 305 is a regional route providing weekday peak commuter service between the Lake Pine area and Raleigh with three to four trips in each direction in the morning and afternoon on weekdays.

The Wake Transit Plan will extend Route 305 southwest into Apex. In addition, the Wake Transit Plan will expand Route 305 by adding: 1) 30-minute service during the peak; 2) hourly service during the midday; 3) extended service in the evening and 4) all day hourly service on Saturdays and Sundays.

FY17 performance:

LOW

Major destinations: Apex, Cary Crossroads, NC State University, downtown Raleigh

Connection points: Downtown Apex enhanced transfer point (proposed), Compare Foods P&R, Lake Pine Plaza P&R, Hillsborough/Jones Franklin enhanced transfer point (proposed), GoRaleigh Station

	Existing	Proposed
	305 Lake Pine-Cary-Raleigh	305 Apex-Raleigh
Span of Service		
Weekday	6:10 – 9:54 AM, 4:00 – 7:00 PM	5:30 AM – 8:30 PM
Saturday	-	5:30 AM – 8:30 PM
Sunday	-	7:00 AM – 7:00 PM
Frequency		Buses depart every:
Weekday		30 minutes
AM Peak	4 trips in each direction	60
Midday	-	30
PM Peak	4 westbound trips, 3 eastbound trips	60
Evening	-	60
Saturday	-	60
Sunday	-	60

Related capital investments:

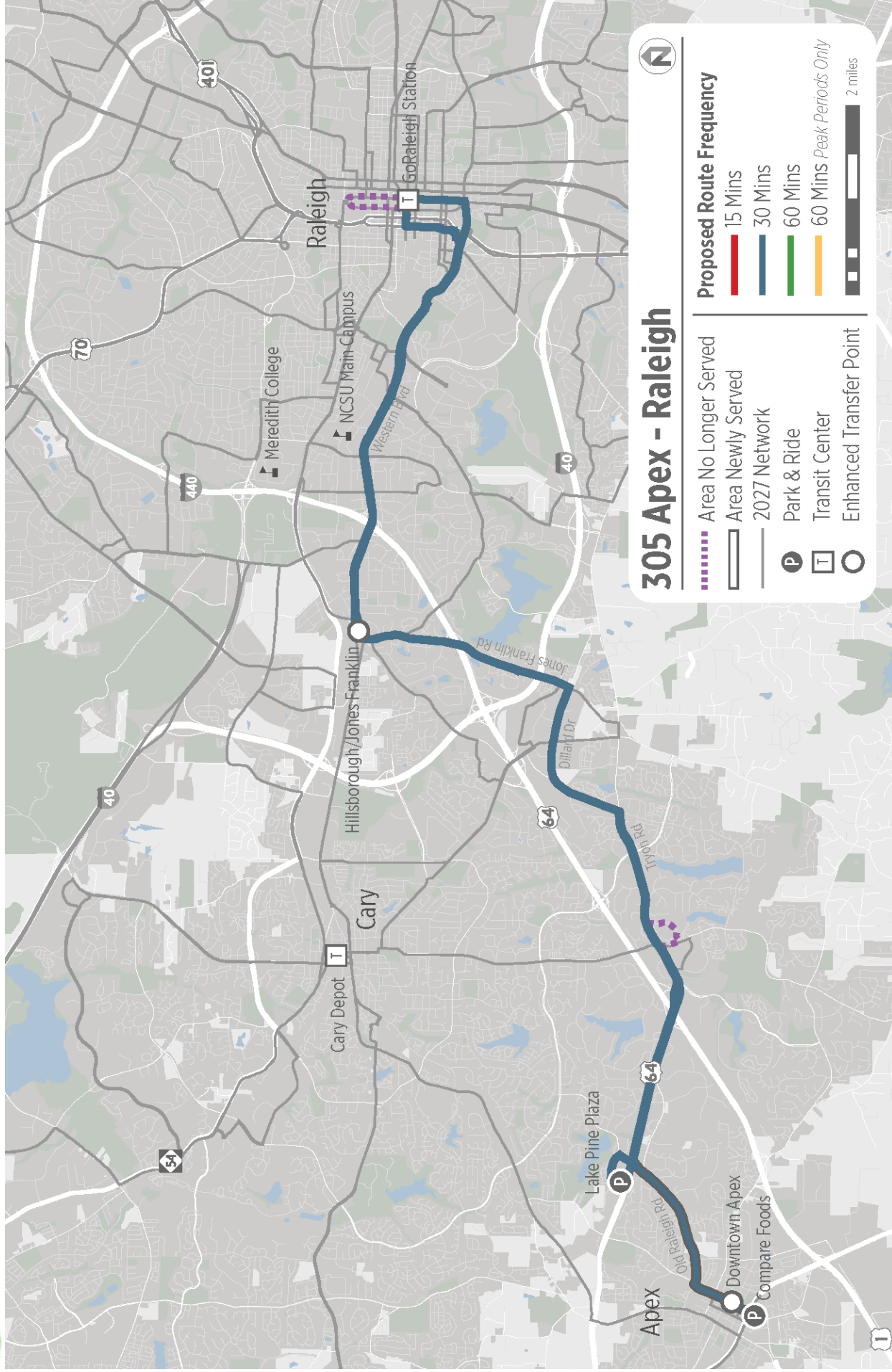
- Hillsborough/Jones Franklin enhanced transfer point (proposed FY20): improved passenger shelter, lighting, information
- Downtown Apex enhanced transfer point (proposed FY20): improved passenger shelter, lighting, information
- Lake Pine Plaza/Apex Park & Ride: additional parking capacity and improved passenger amenities

Related service investments:

- N/A



Wake Bus Plan





310 RTC-Cary (interim)

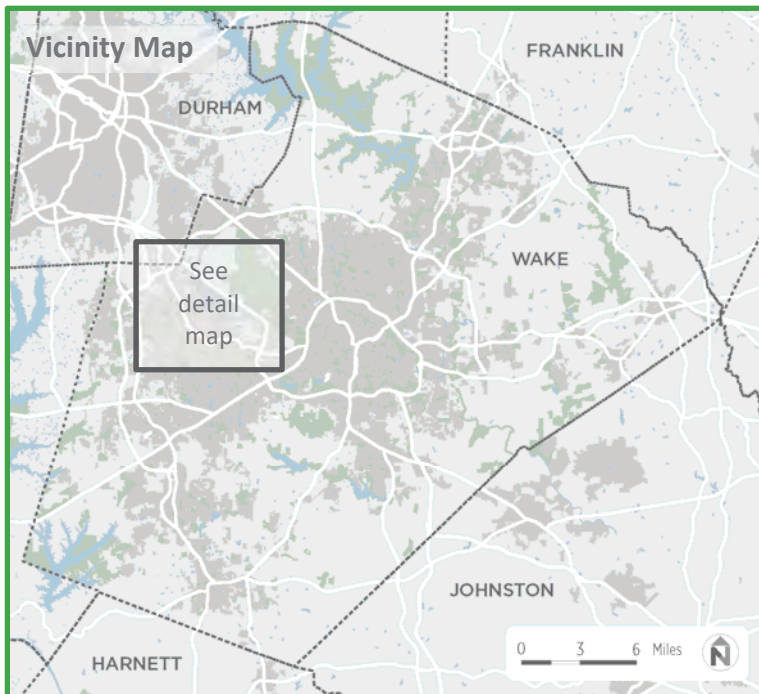
FY20

Route type:

CORE REGIONAL

Operator:

GoTriangle



Project overview: Route 310 is the new name for the portion of Route 300 between Cary and the Regional Transit Center (RTC), which is currently served on weekdays during rush hours only. This proposal adds hourly midday service to the route and introduces new routing via NC-54 instead of I-40 to serve Morrisville and the Wake Tech RTP Campus. GoCary Route 3 would continue to provide service on Harrison Avenue. The Wake Transit Plan includes improvements to Route 310 in FY25, including all-day service, seven days per week at 30-minute frequencies.

No changes are proposed on the Raleigh to Cary portion of Route 300.

FY17 performance:

AVERAGE

Major destinations: RTC, Wake Tech RTP Campus, Morrisville, downtown Cary

Connection points: RTC, Cary Depot

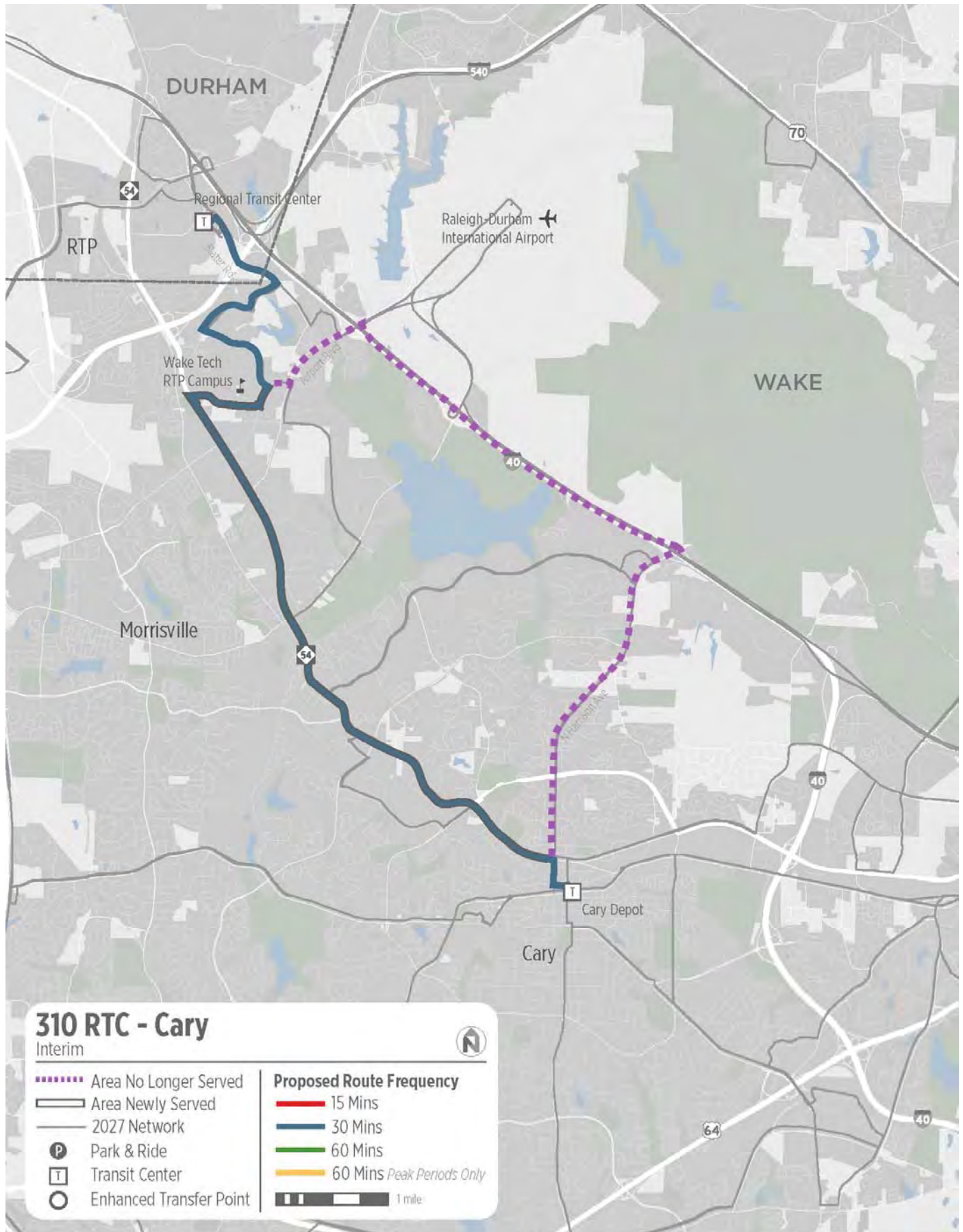
	Existing	Proposed
	300 RTC-Cary portion	310 RTC-Cary (interim)
Span of Service		
Weekday	6:30 – 9:25 AM, 3:30 – 7:25 PM	6:30 AM – 7:25 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	60
PM Peak	30	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- New bus stops along NC 54 in Morrisville and Cary to be determined in coordination with NCDOT and the Towns of Morrisville and Cary.



Wake Bus Plan





311 Apex-RTC

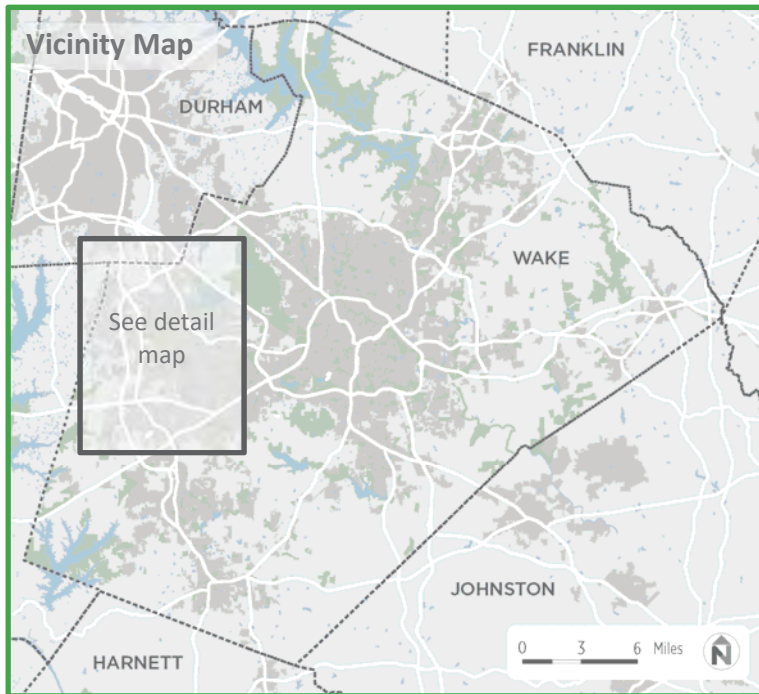
FY20

Route type:

EXPRESS

Operator:

GoTriangle



Project overview: Route 311 provides weekday peak commuter service between Apex and the Regional Transit Center (RTC) via NC-55 with trips about every 30 minutes in FY18. The Wake Transit Plan continues to invest in Route 311 but with at a lower frequency than is currently provided. This change brings service levels in line with very low demand in this corridor and provides a similar service profile to other peak commuter services in Wake County. The proposed routing also includes more direct service to Kit Creek Road and Davis Drive in RTP. This change will be implemented in combination with the addition of peak commuter service between Holly Springs, Apex, and Cary, providing additional connections to and from western Wake County.

FY17 performance:

LOW

Major destinations: Apex, Research Triangle Park (RTP)

Connection points: Downtown Apex enhanced transfer point (proposed), Compare Foods P&R, Regional Transit Center (RTC)

	Existing	Proposed
	311 Apex-RTC	311 Apex-RTC
Span of Service		
Weekday	5:47 – 9:10 AM, 3:41 – 7:10 PM	6:00 – 9:00 AM, 3:30 – 6:30 PM
Saturday	-	-
Sunday	-	-
Frequency		
Weekday		
AM Peak	6 trips in each direction	3 northbound trips, 1 southbound trip
Midday	-	-
PM Peak	6 trips in each direction	3 southbound trips, 1 northbound trip
Evening	-	-
Saturday	-	-
Sunday	-	-

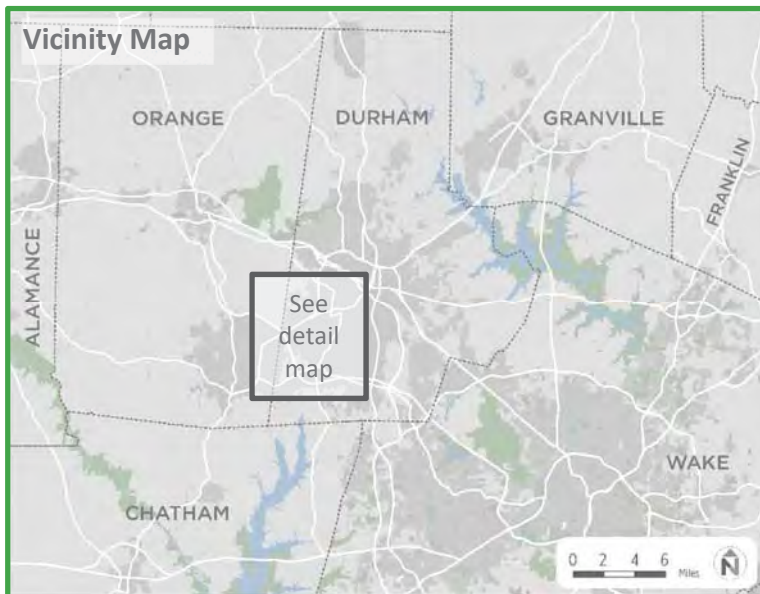
Related capital investments:

- Downtown Apex enhanced transfer point (proposed FY20): improved passenger shelter, lighting, information

Related service investments:

- GoCary HSX Holly Springs-Apex-Cary Express
- GoTriangle Go OnDemand Shuttles provide service to areas of RTP where service will be eliminated.

400 Durham-Chapel Hill

FY20
Route type:
CORE REGIONAL
Operator:
GoTriangle


Project overview: Route 400 provides core regional service between Durham and Chapel Hill. A peak-period deviation providing service to Old Chapel Hill Road and SW Durham Drive is proposed for elimination. The removal of this deviation would reduce route complexity, making this service faster and easier to understand. Combined with changes to Route 405 Durham-Chapel Hill-Carrboro, this improvement would allow for consistent, all-day service in the 15-501 corridor between Durham and Chapel Hill, with service every 15 minutes during weekday morning and afternoon rush hours.

FY17 performance: AVERAGE

Major destinations: Downtown Durham, Duke University and Duke/VA Hospitals, Chapel Hill, UNC Hospitals

Connection points: Durham Station, Patterson Place, Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals

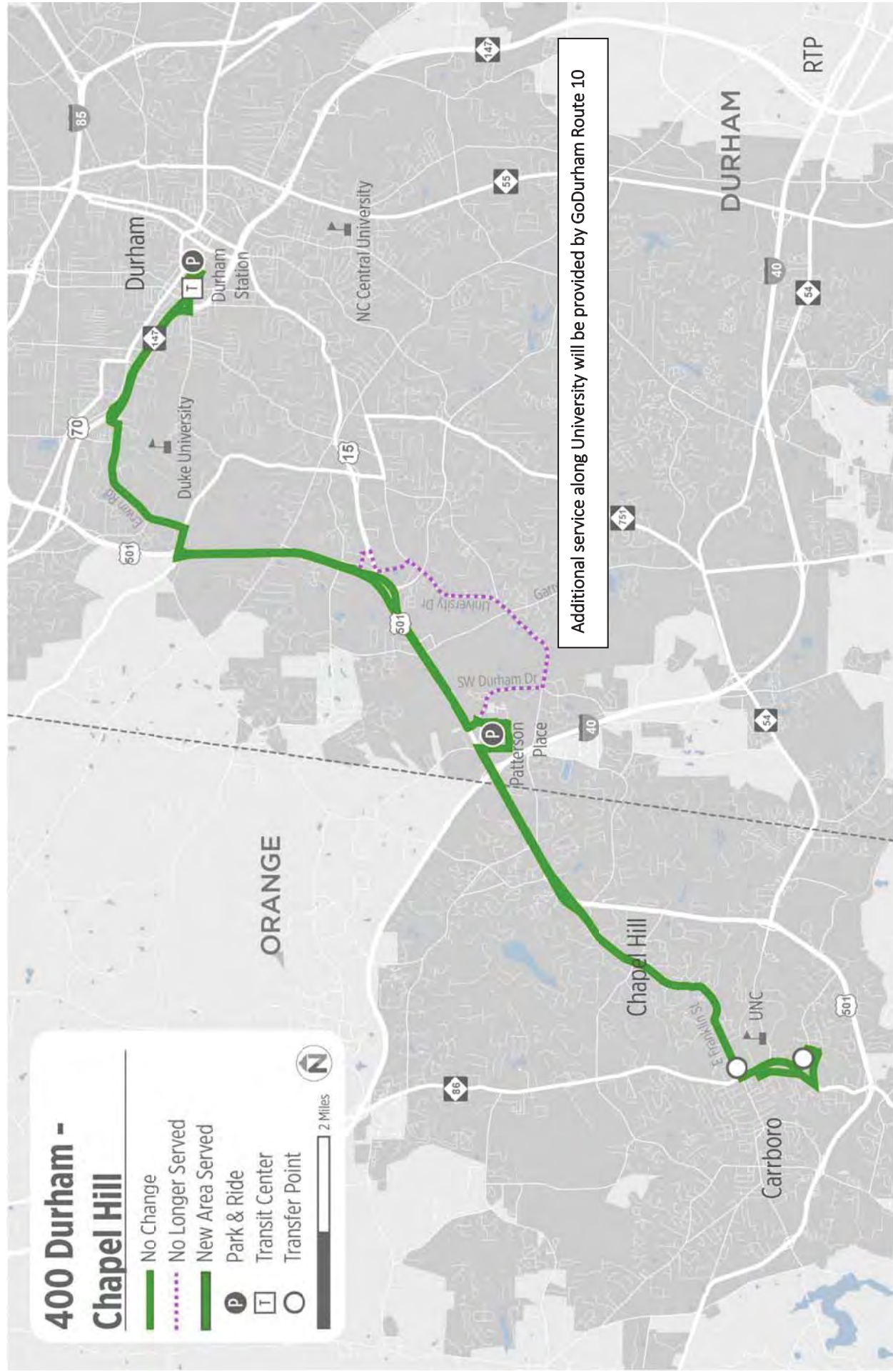
	Existing	Proposed (NO CHANGE)
	400 Durham-Chapel Hill	400 Durham-Chapel Hill
Span of Service		
Weekday	6:15 AM – 10:55 PM	6:15 AM – 10:55 PM
Saturday	7:00 AM – 10:55 PM	7:00 AM – 10:55 PM
Sunday	7:00 AM – 8:55 PM	7:00 AM – 8:55 PM
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	30	30
PM Peak	30	30
Evening	60	60
Saturday	30-60	30-60
Sunday	60	60

Related capital investments:

- N/A

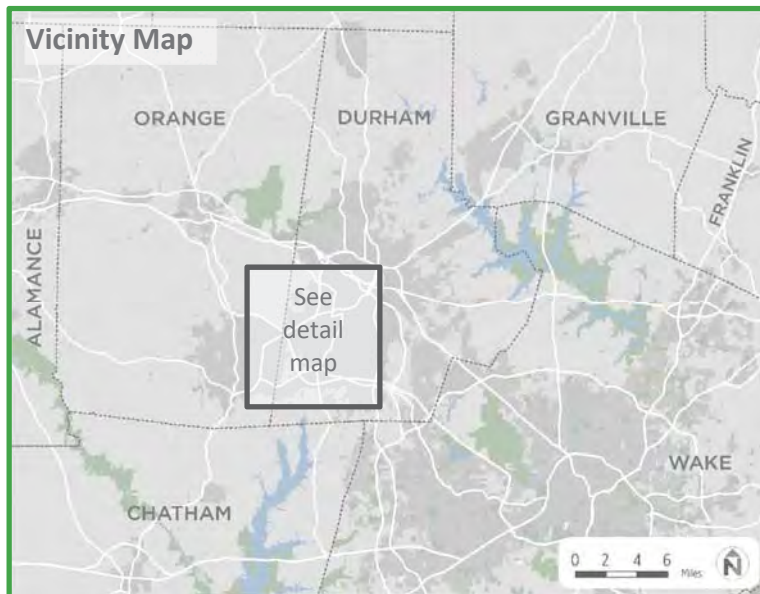
Related service investments:

- 405 Durham-Chapel Hill-Carrboro: add stop at Patterson Place
- Local services would provide connections between SW Durham Drive and Patterson Place



405 Durham-Chapel Hill-Carrboro

FY20

Route type:
EXPRESS
Operator:
GoTriangle


Project overview: Route 405 provides weekday peak regional service between Durham, Chapel Hill, and Carrboro. The proposal adds a mid-route stop at Patterson Place in southwest Durham, adding park-and-ride capacity to this route. Combined with changes to Route 400 Durham-Chapel Hill, this improvement would allow for consistent service every 15 minutes during weekday morning and afternoon rush hours in the 15-501 corridor between Durham and Chapel Hill.

FY17 performance:
HIGH

Major destinations: Downtown Durham, Duke University and Duke/VA Hospitals, Chapel Hill, UNC Hospitals, Carrboro

Connection points: Durham Station, Patterson Place, Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals

	Existing	Proposed (NO CHANGE)
	405 Durham-Chapel Hill-Carrboro	405 Durham-Chapel Hill-Carrboro
Span of Service		
Weekday	5:45 – 9:50 AM, 3:10 – 7:17 PM	5:45 – 9:50 AM, 3:10 – 7:17 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	-
PM Peak	30	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

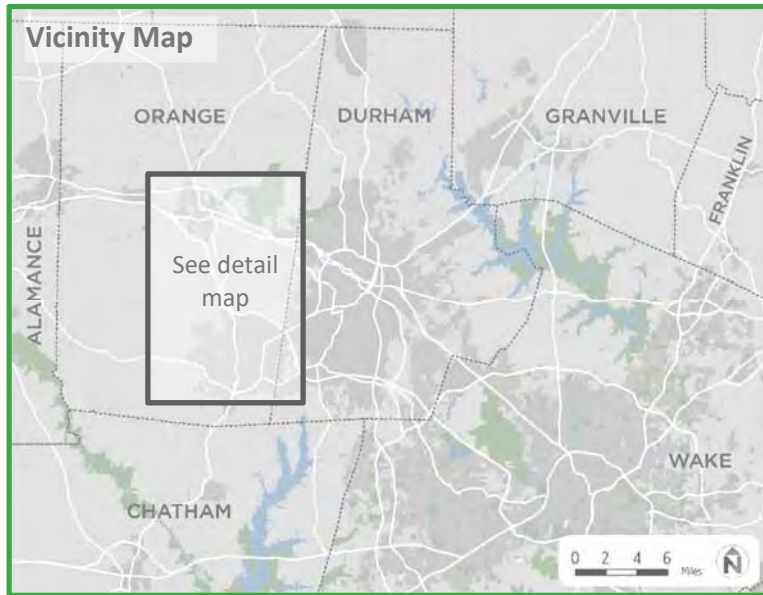
- N/A

Related service investments:

- 400 Durham-Chapel Hill: remove peak deviation to Old Chapel Hill Rd and SW Durham Drive to provide consistent, 15-minute peak service between Durham, Patterson Place, and Chapel Hill.



420 Hillsborough-Chapel Hill

FY20
Route type:
EXPRESS
Operator:
Chapel Hill Transit


Project overview: Route 420 provides weekday peak service between Hillsborough and Chapel Hill. The proposal would move the route to I-40 between Chapel Hill and Hillsborough instead of NC-86 and use Churton Street instead of NC-86 and US-70 Business in Hillsborough. This change will improve on-time performance and provide more direct service between Hillsborough and Chapel Hill.

FY17 performance: AVERAGE

Major destinations: Hillsborough, Durham Tech Orange County Campus, Chapel Hill, UNC Hospitals

Connection points: Churton St at Police Station (Hillsborough), Durham Tech OCC Park & Ride, Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals

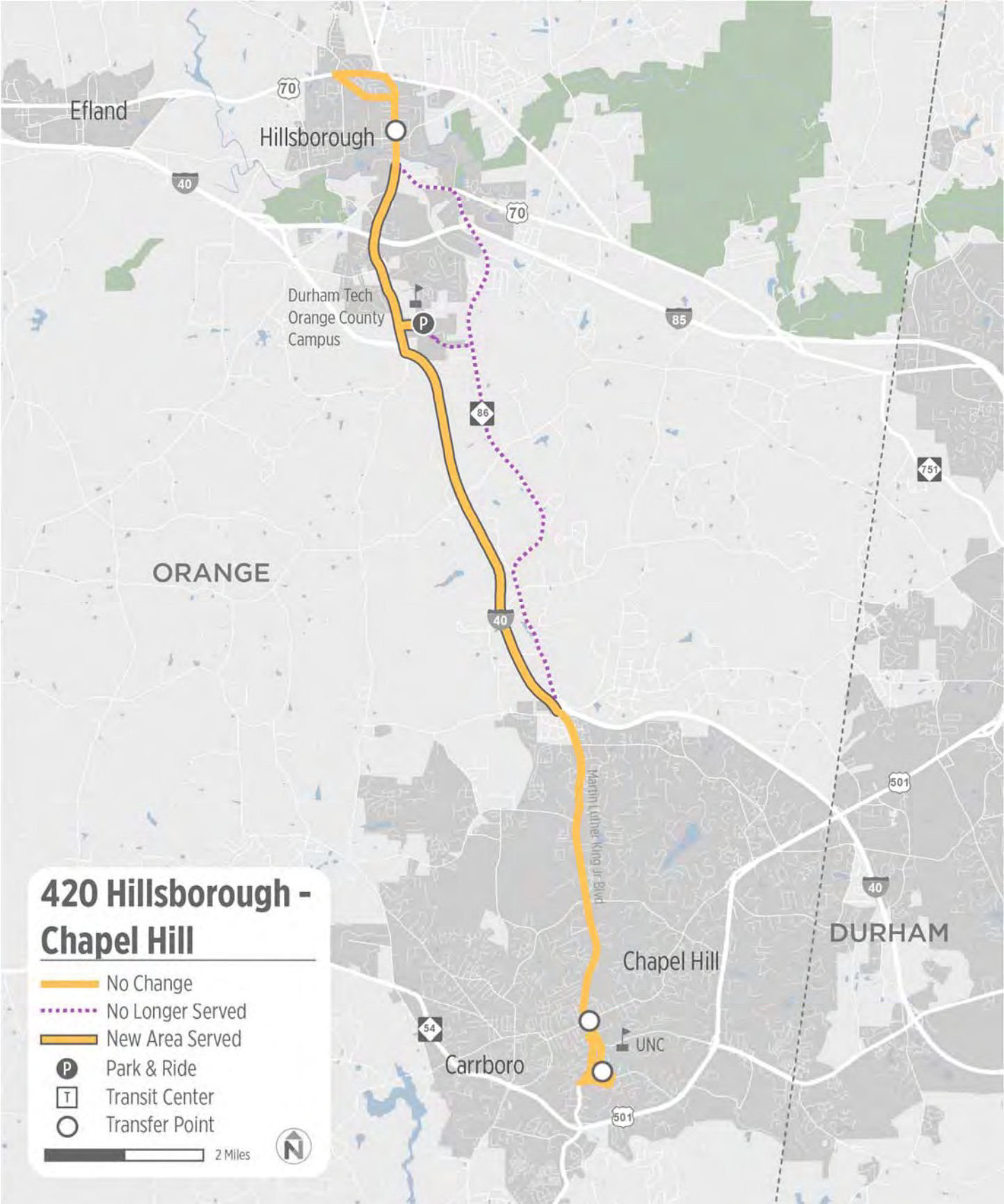
	Existing	Proposed (NO CHANGE)
	<i>420 Hillsborough-Chapel Hill</i>	<i>420 Hillsborough-Chapel Hill</i>
Span of Service		
Weekday	6:00 – 9:15 AM, 3:40 – 6:55 PM	6:00 – 9:15 AM, 3:40 – 6:55 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	-
PM Peak	30	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- N/A

Related service investments:

- Orange Public Transportation (OPT) Orange-Chapel Hill Connector provides midday service between Hillsborough and Chapel Hill via NC-86.



700 Durham-Regional Transit Center (RTC)

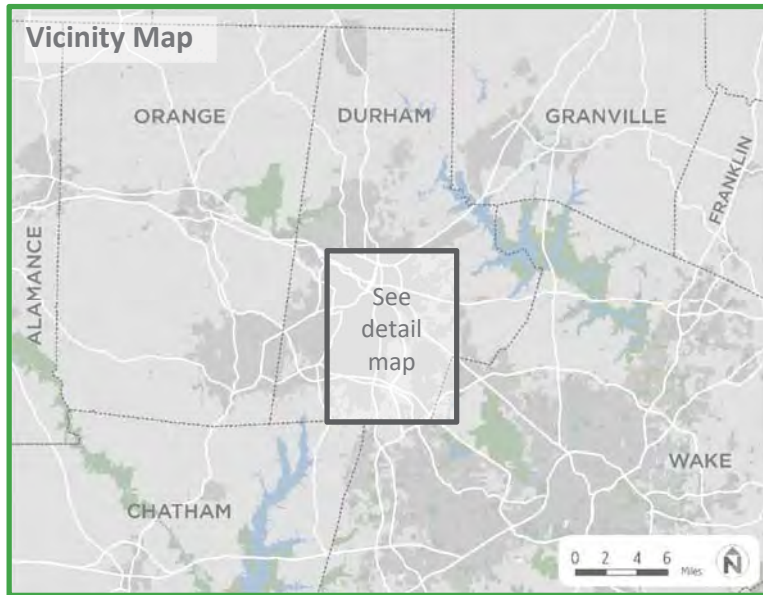
FY20

Route type:

CORE REGIONAL

Operator:

GoTriangle



Project overview: Route 700 provides core regional service between downtown Durham and the Regional Transit Center near RTP. This proposal would permanently implement the construction reroute put into place in 2016 due to construction on the Durham Freeway and Alston Avenue. Route 700 performance has been high using the construction reroute, which provides fast, direct service between Durham and the RTC, where connections to Raleigh, Cary, Southpoint, and Chapel Hill can be made.

FY17 performance:

HIGH

Major destinations: Downtown Durham

Connection points: Durham Station, American Tobacco Campus Park & Ride, RTC

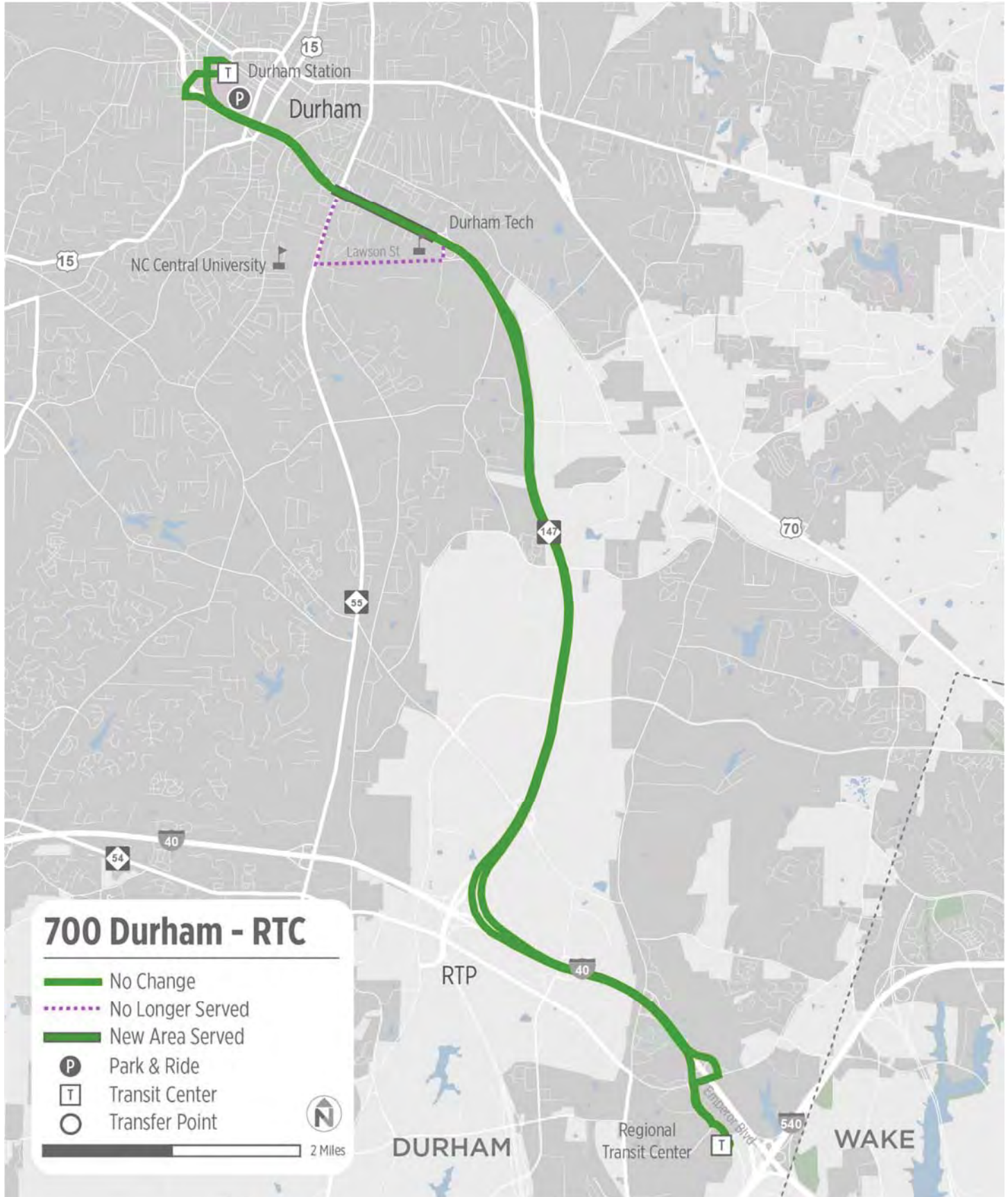
	Existing	Proposed (NO CHANGE)
	700 Durham-RTC	700 Durham-RTC
Span of Service		
Weekday	6:00 AM – 10:55 PM	6:00 AM – 10:55 PM
Saturday	7:05 AM – 10:55 PM	7:05 AM – 10:55 PM
Sunday	7:05 AM – 8:55 PM	7:05 AM – 8:55 PM
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	30	30
PM Peak	30	30
Evening	60	60
Saturday	30-60	30-60
Sunday	60	60

Related capital investments:

- Regional Transit Center (proposed): potential relocation of RTC will be evaluated in FY19-20.

Related service investments:

- N/A



800 Chapel Hill-Southpoint-Regional Transit Center (RTC)

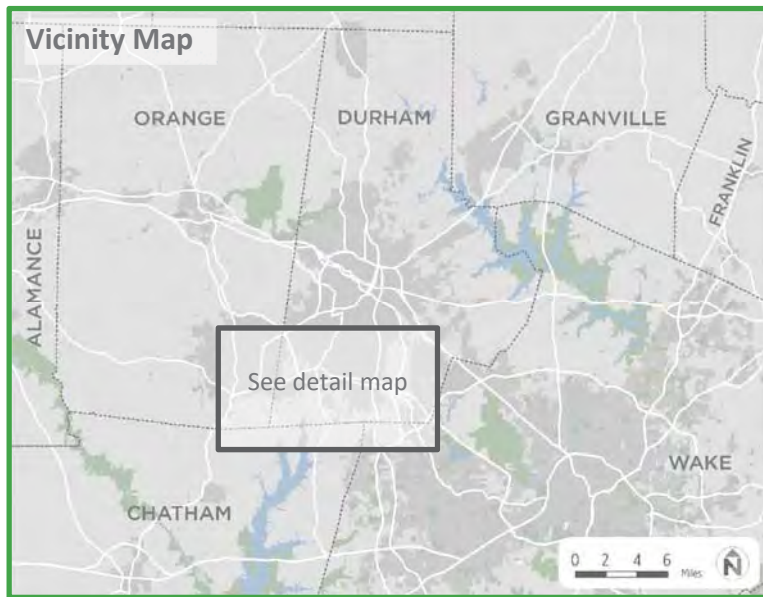
FY20

Route type:

CORE REGIONAL

Operator:

GoTriangle



Project overview: Route 800 provides core regional service between Chapel Hill and RTC via Southpoint. The path of the eastern portion of the route varies by time of day and day of week, traveling via I-40 between Southpoint and RTC on weekdays during rush hours, but via NC-54 at other times. This proposal would revise the routing to use I-40 at all times, providing a fast, consistent connection that is easier to understand. Service on NC-54 would still be available during weekday rush hours on Route 805 Chapel Hill-Woodcroft-RTC

FY17 performance:

AVERAGE

Major destinations: Chapel Hill, UNC Hospitals, Southpoint retail area

Connection points: Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals, RTC

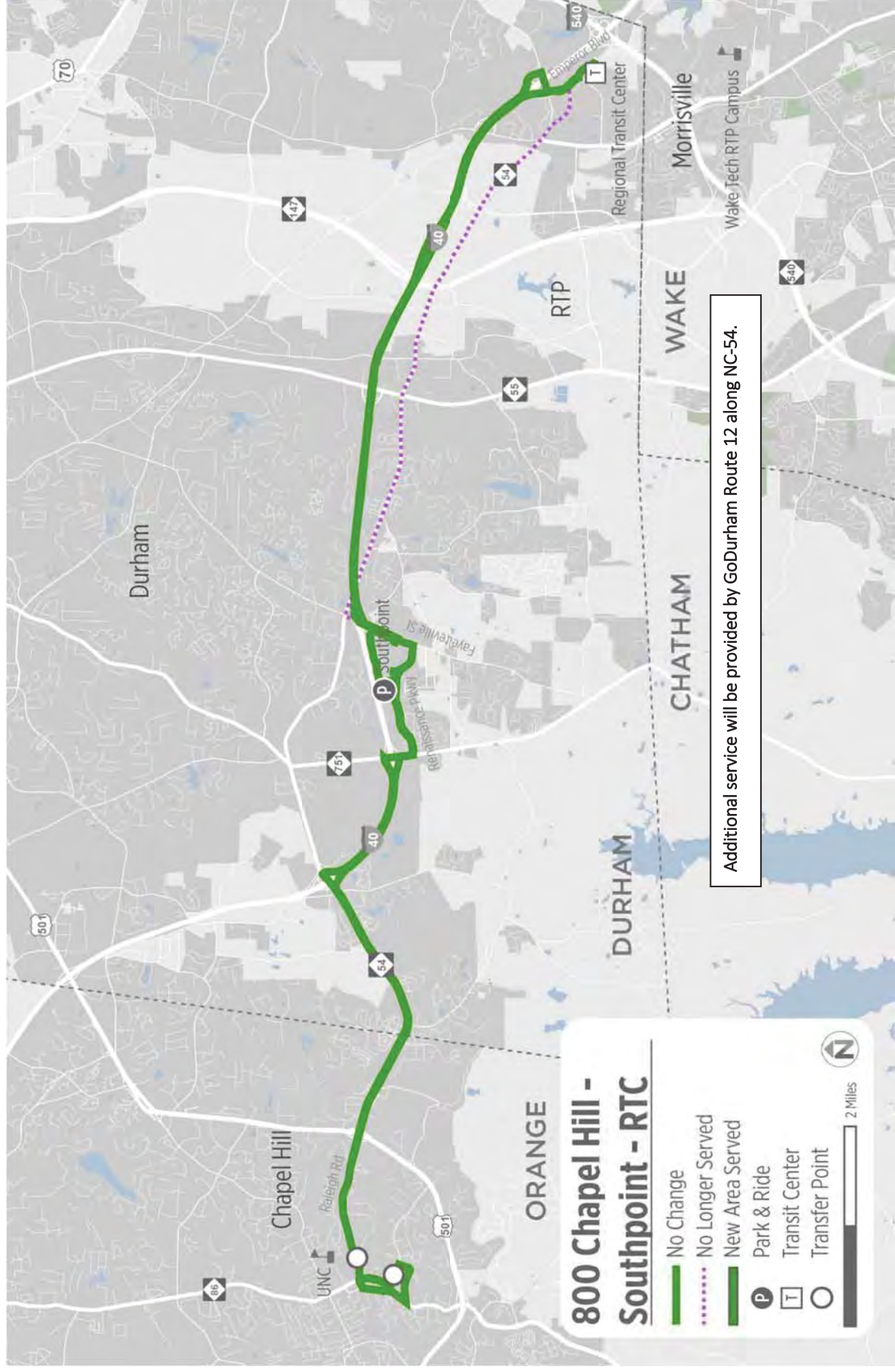
	Existing	Proposed
	800 Chapel Hill-Southpoint-RTC	800 Chapel Hill-Southpoint-RTC
Span of Service		
Weekday	6:00 AM – 11:10 PM	6:00 AM – 11:10 PM
Saturday	6:45 AM – 11:20 PM	6:45 AM – 11:20 PM
Sunday	6:45 AM – 9:20 PM	6:45 AM – 9:20 PM
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	30	30
PM Peak	30	30
Evening	60	60
Saturday	30-60	30-60
Sunday	60	60

Related capital investments:

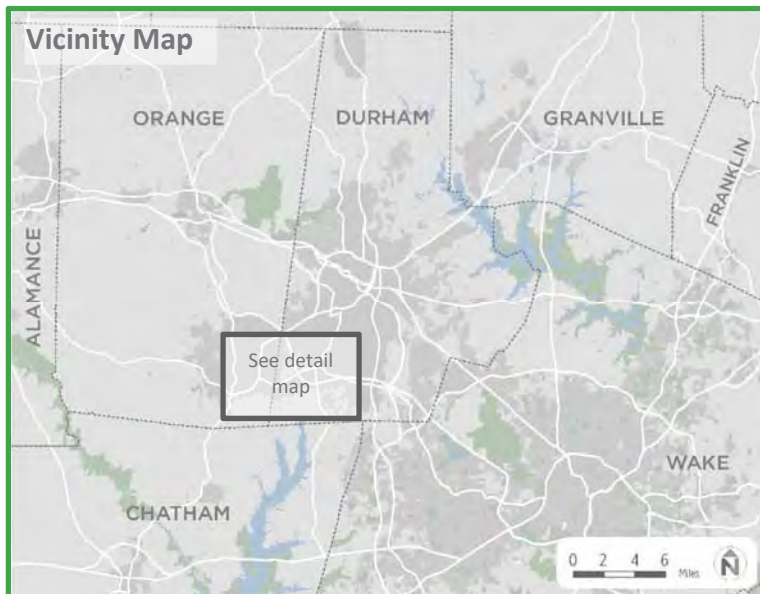
- Regional Transit Center (proposed): potential relocation of RTC will be evaluated in FY19-20.

Related service investments:

- GoTriangle Route 105 Raleigh-RTC is proposed for a schedule change that moves express service between Raleigh and RTC to the middays. The proposal for Route 800 will be implemented together with the change to Route 105 to leverage faster midday speeds along the entire I-40 corridor between Raleigh and Chapel Hill.
- GoDurham will continue to provide local service on NC-54 between Fayetteville Street and NC-55.



800S Chapel Hill-Southpoint

FY20
Route type:
CORE REGIONAL
Operator:
GoTriangle


Project overview: Route 800S supplements core regional Route 800 with additional service between Chapel Hill and Southpoint during weekday rush hours. No changes are proposed to this route.

FY17 performance: HIGH

Major destinations: Chapel Hill, UNC Hospitals, Southpoint shopping area

Connection points: Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals, Southpoint at Renaissance Pkwy (proposed)

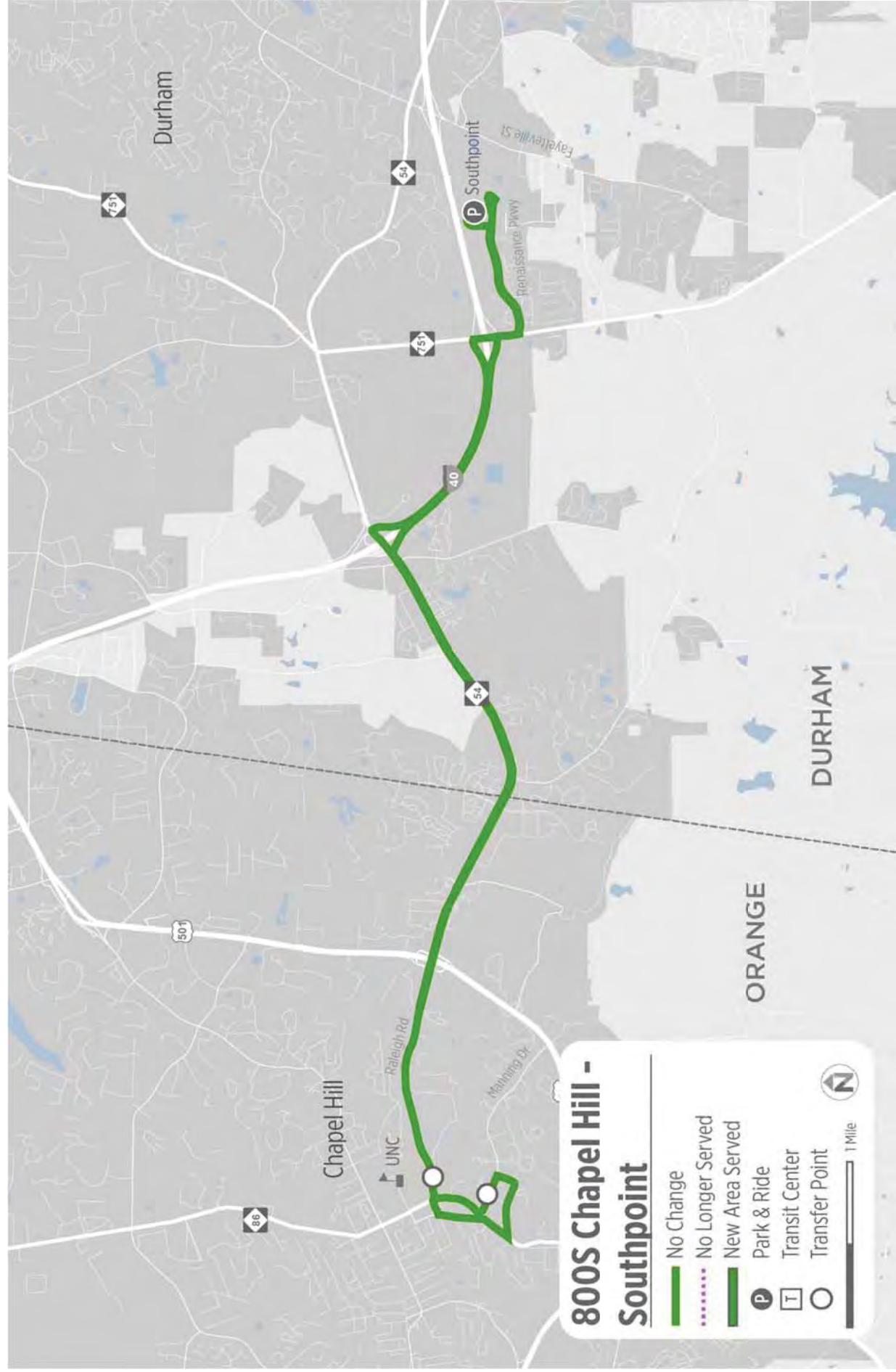
	Existing	Proposed (NO CHANGE)
	<i>800S Chapel Hill-Southpoint</i>	<i>800S Chapel Hill-Southpoint</i>
Span of Service		
Weekday	6:58 – 9:55 AM, 2:55 – 5:54 PM	6:58 – 9:55 AM, 2:55 – 5:54 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	-
PM Peak	30	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- N/A

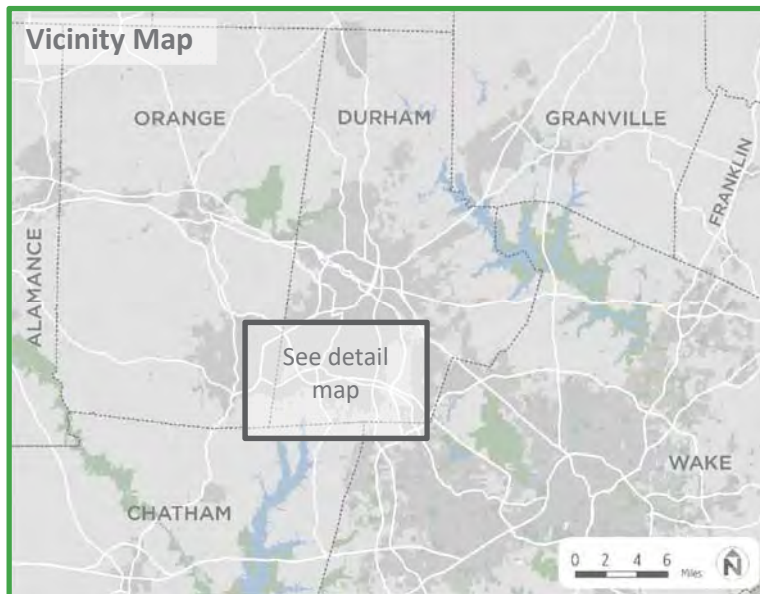
Related service investments:

- N/A



805 Chapel Hill-Woodcroft-Regional Transit Center (RTC)

FY20

Route type:
REGIONAL
Operator:
GoTriangle


Project overview: Route 805 provides weekday rush hour service between the RTC, the Woodcroft neighborhood in south Durham, and Chapel Hill/UNC Hospitals. This proposal eliminates underutilized trips in the reverse-peak direction (eastbound 6:27 & 8:40 AM, westbound 6:30 PM)

FY17 performance: AVERAGE

Major destinations: Chapel Hill, UNC Hospitals, Woodcroft, RTC

Connection points: Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals, RTC

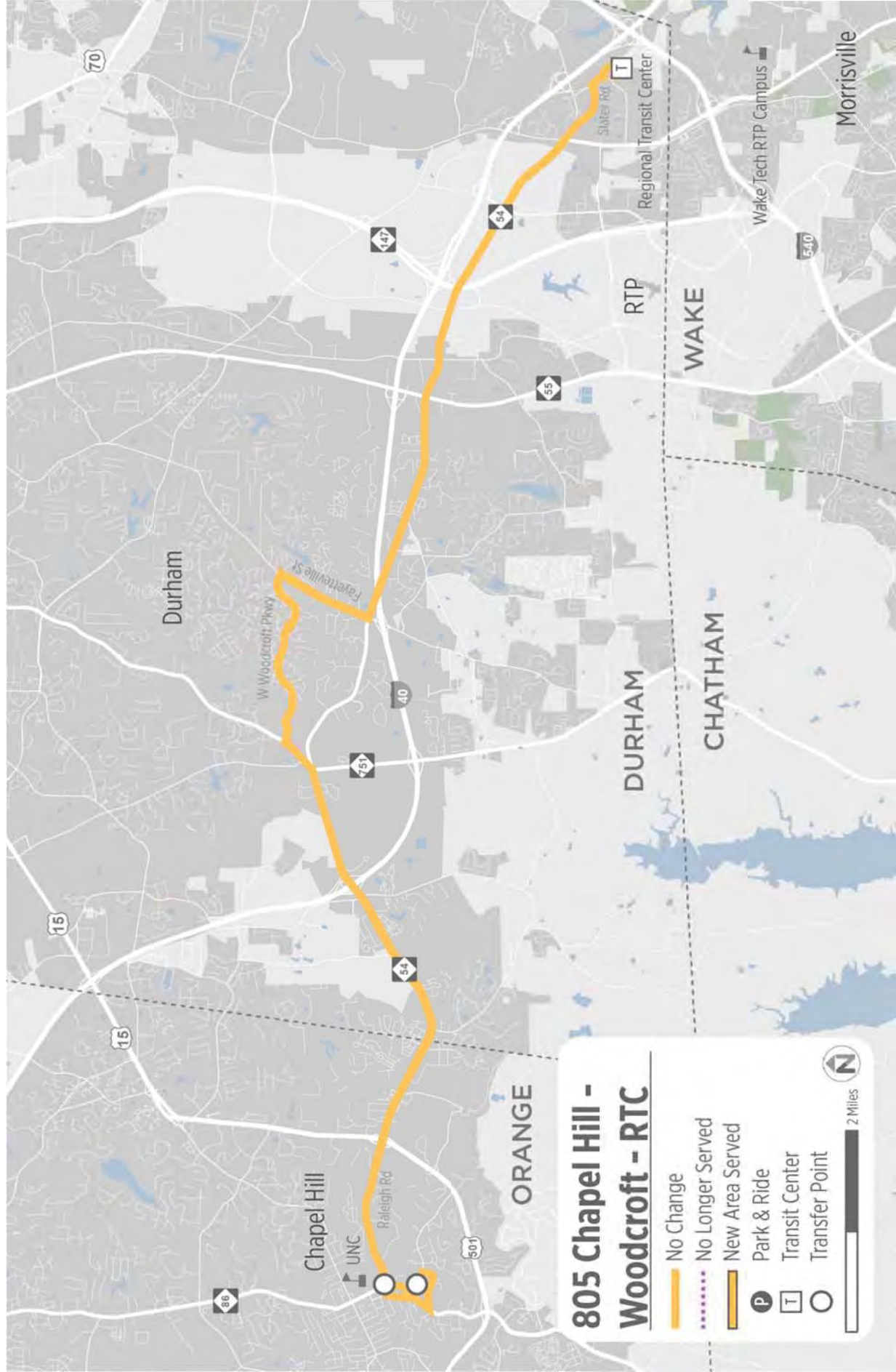
	Existing	Proposed (NO CHANGE)
	805 Chapel Hill-Woodcroft-RTC	805 Chapel Hill-Woodcroft-RTC
Span of Service		
Weekday	6:00 – 9:55 AM, 3:10 – 7:25 PM	6:00 – 9:55 AM, 3:10 – 7:25 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	30 minutes	30 minutes
Midday	-	-
PM Peak	30	30-60
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

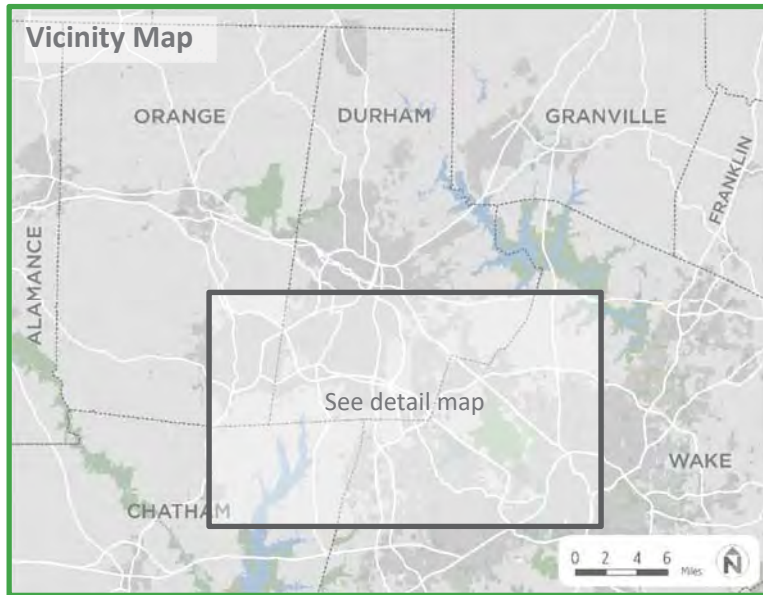
- N/A

Related service investments:

- Route 800 Chapel Hill-Southpoint-RTC is proposed to have service removed from NC-54 between Southpoint and RTC, so the only service in that corridor would be provided via Route 805.



CRX Chapel Hill-Raleigh Express

FY20
Route type:
EXPRESS
Operator:
GoTriangle


Project overview: Route CRX provides weekday rush hour express service between Chapel Hill and Raleigh. No changes are proposed to this route.

FY17 performance: **HIGH**

Major destinations: Downtown Raleigh, NC State University, Chapel Hill, UNC Hospitals

Connection points: GoRaleigh Station, District Drive Park & Ride, Franklin St at Columbia St (Chapel Hill), Manning Dr at UNC Hospitals, Eubanks Rd Park & Ride

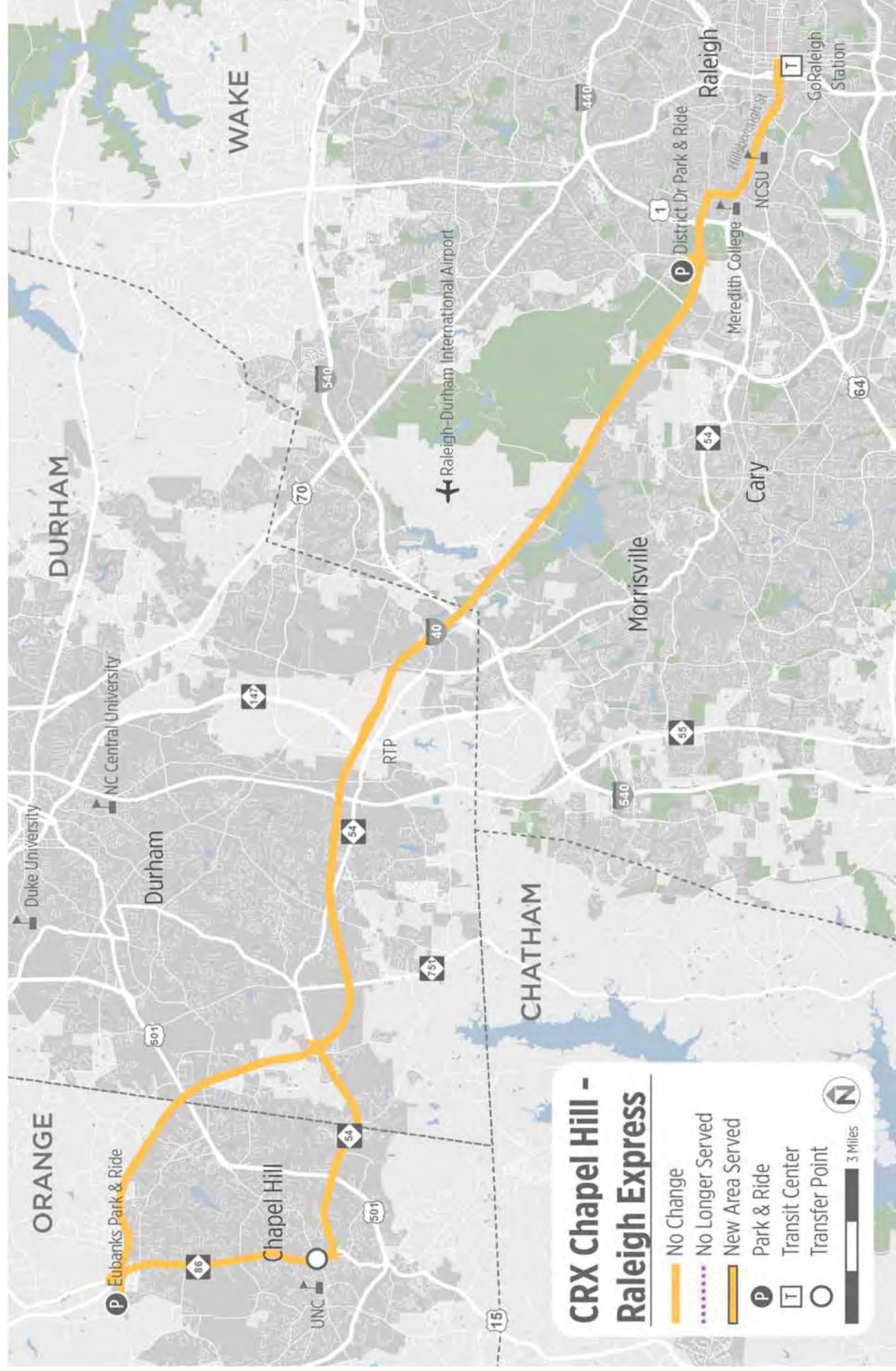
	Existing	Proposed (NO CHANGE)
	<i>CRX Chapel Hill-Raleigh Express</i>	<i>CRX Chapel Hill-Raleigh Express</i>
Span of Service		
Weekday	5:55 – 9:50 AM, 3:30 – 7:40 PM	5:55 – 9:50 AM, 3:30 – 7:40 PM
Saturday	-	-
Sunday	-	-
Frequency		
Weekday		
AM Peak	6 eastbound / 7 westbound trips	6 eastbound / 7 westbound trips
Midday	-	-
PM Peak	7 eastbound / 6 westbound trips	7 eastbound / 6 westbound trips
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

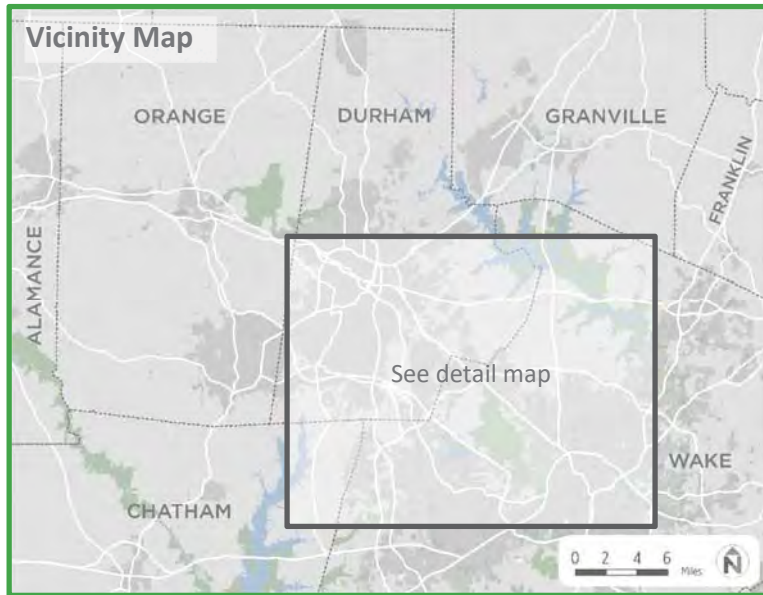
- N/A

Related service investments:

- Route 105 Raleigh-RTC is proposed to shift from weekday rush hours to service every 30 minutes midday on weekdays. This will provide a faster way for CRX passengers to return to Raleigh and Chapel Hill via connections at the RTC with Route 800 Chapel Hill-Southpoint-RTC.



DRX Durham-Raleigh Express

FY20
Route type:
EXPRESS
Operator:
GoTriangle


Project overview: Route DRX provides weekday rush hour express service between Durham and Raleigh. No changes are proposed to this route.

FY17 performance: HIGH

Major destinations: Downtown Raleigh, NC State University, downtown Durham, Duke University, Duke/VA Hospitals

Connection points: GoRaleigh Station, Carter-Finley Park & Ride, Durham Station, American Tobacco Campus Park & Ride

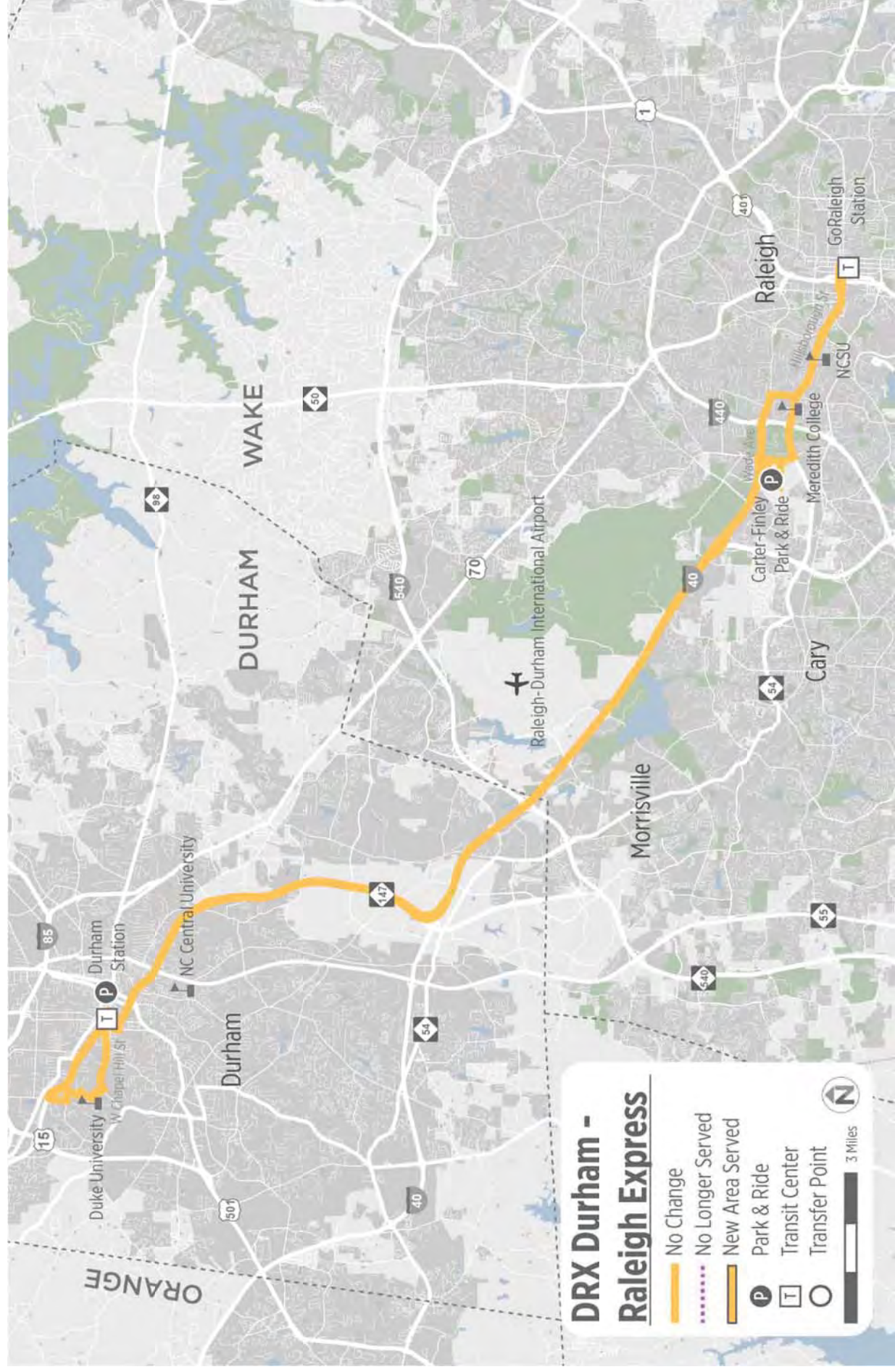
	Existing	Proposed (NO CHANGE)
	<i>DRX Durham-Raleigh Express</i>	<i>DRX Durham-Raleigh Express</i>
Span of Service		
Weekday	5:50 – 9:50 AM, 3:00 – 8:10 PM	5:50 – 9:50 AM, 3:00 – 8:10 PM
Saturday	-	-
Sunday	-	-
Frequency		
Weekday		
AM Peak	8 eastbound / 9 westbound trips	8 eastbound / 9 westbound trips
Midday	-	-
PM Peak	9 eastbound / 8 westbound trips	9 eastbound / 8 westbound trips
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

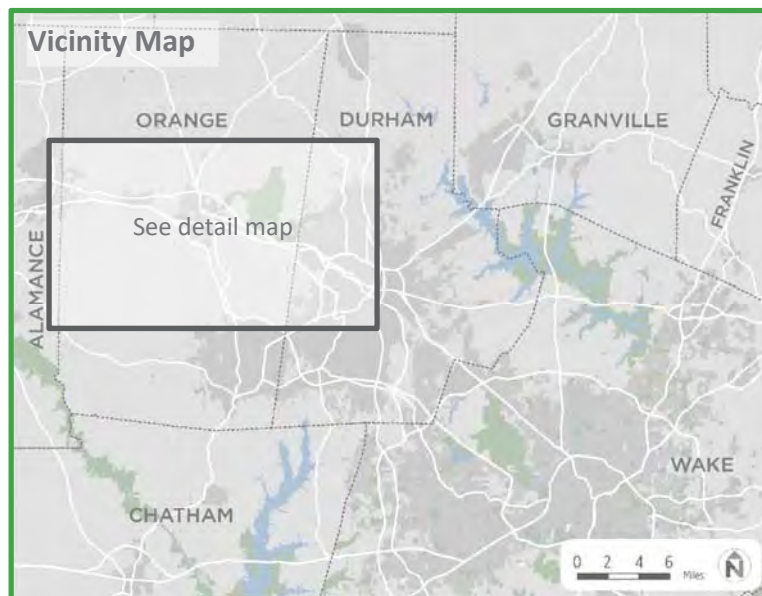
- N/A

Related service investments:

- Route 105 Raleigh-RTC is proposed to shift from weekday rush hours to service every 30 minutes midday on weekdays. This will provide a faster way for DRX passengers to return to Raleigh and Durham via connections at the RTC with Route 700 Durham-RTC.



ODX Orange-Durham Express

FY21
Route type:
EXPRESS
Operator:
GoTriangle


Project overview: Route ODX provides weekday rush hour express service between Efland, Mebane, Hillsborough, Duke/VA Hospitals, and downtown Durham. This proposal will increase the frequency of the route from every 60 minutes to every 30 minutes. The proposal also removes out-of-direction travel between downtown Hillsborough, Efland and downtown Mebane, providing streamlined service between Mebane Cone Park & Ride, Durham Tech Orange County Campus, and Durham.

FY17 performance:
AVERAGE

Major destinations: Mebane, Durham Tech OCC, Duke University, Duke/VA Hospitals, downtown Durham

Connection points: Mebane Cone Park & Ride, Durham Tech OCC Park & Ride, Durham Station

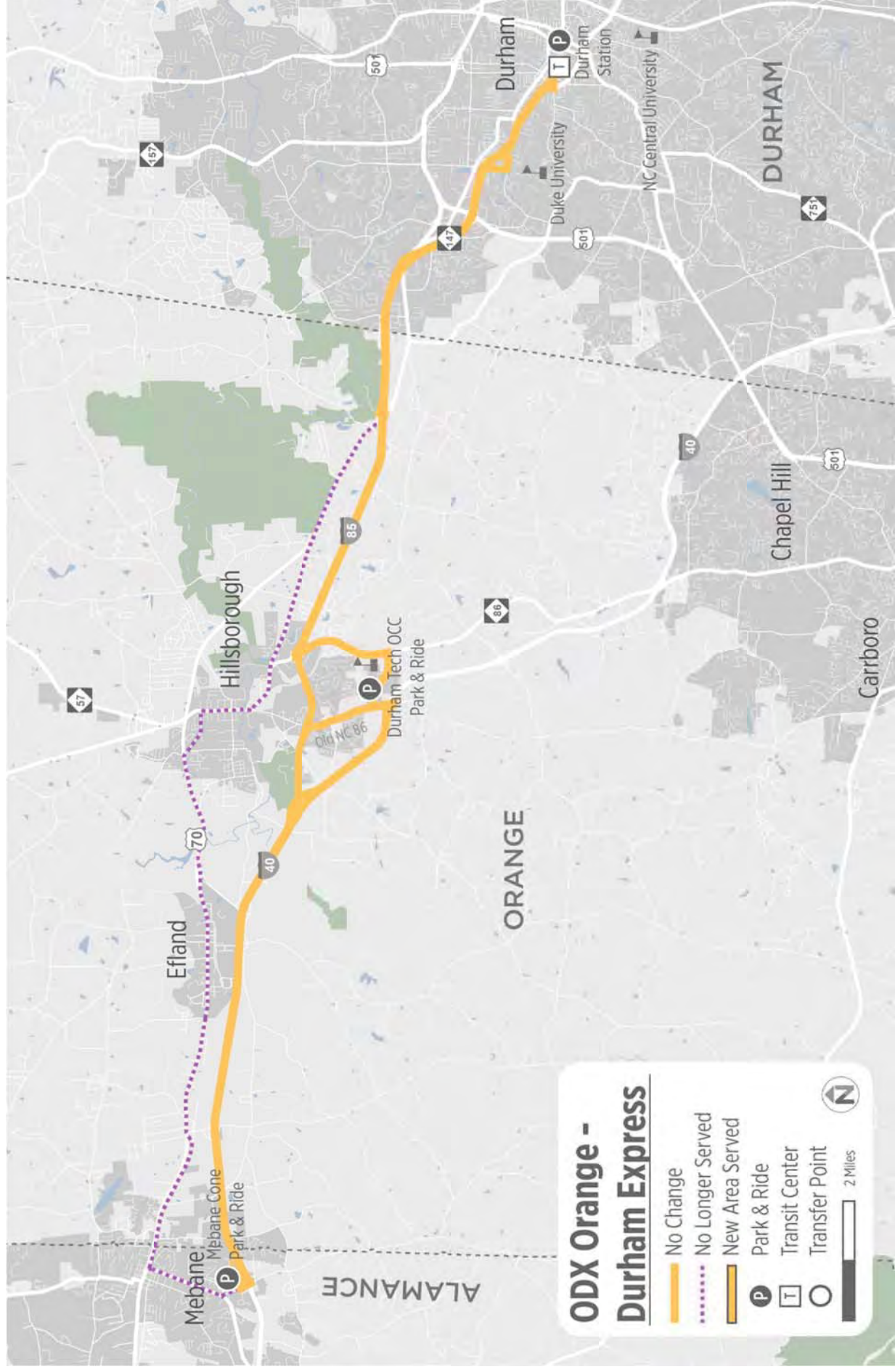
	Existing	Proposed
	<i>ODX Orange-Durham Express</i>	<i>ODX Orange-Durham Express</i>
Span of Service		
Weekday	5:45 – 8:45 AM, 4:00 – 7:10 PM	5:30 – 8:55 AM, 3:30 – 6:45 PM
Saturday	-	-
Sunday	-	-
Frequency	Buses depart every:	Buses depart every:
Weekday		
AM Peak	60 minutes	30 minutes
Midday	-	-
PM Peak	60	30
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- N/A

Related service investments:

- Orange Public Transportation (OPT) Orange-Alamance Connector (proposed) would provide connecting service between Hillsborough, Efland, and Mebane. The proposal for Route ODX should be implemented together with the Orange-Alamance Connector to maintain connections for riders in Hillsborough, Efland, and Mebane.





NRX North Raleigh Express (interim)

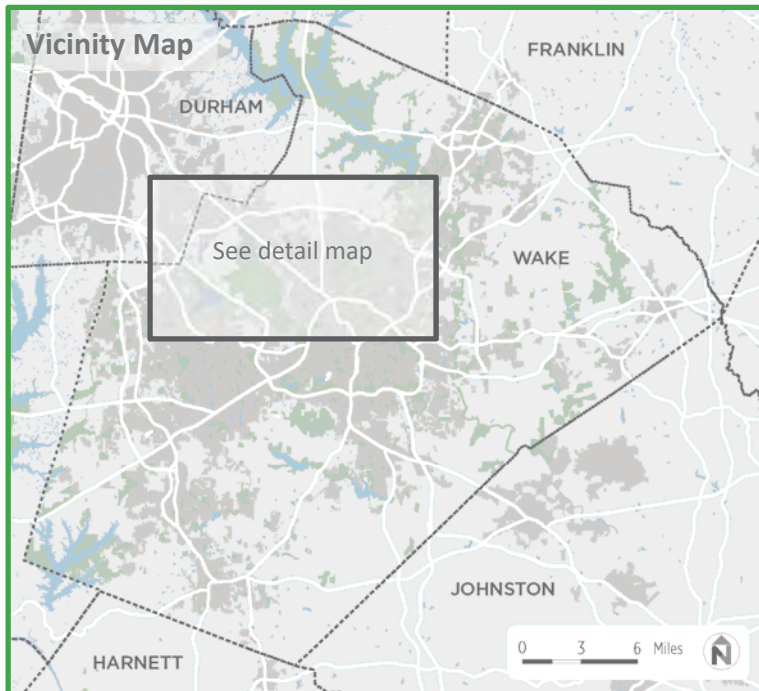
FY20

Route type:

EXPRESS

Operator:

GoTriangle



Project overview: Route NRX would replace existing Route 201 North Raleigh-Regional Transit Center (RTC). The eastern portion of the route, which travels on Spring Forest Road and Millbrook Road in north Raleigh, would be eliminated and instead would use I-540, beginning and ending at Triangle Town Center, which has park & ride access. The Wake Transit Plan recommends investment in this corridor along with capital investment in additional park-and-ride locations. This project implements the I-540 alignment of Route NRX in advance of future park-and-ride development. The route would be adjusted to serve new park-and-ride location(s) upon their completion.

FY17 performance (Route 201):

LOW

Major destinations: Triangle Town Center, RTC

Connection points: RTC, Triangle Town Center Park & Ride

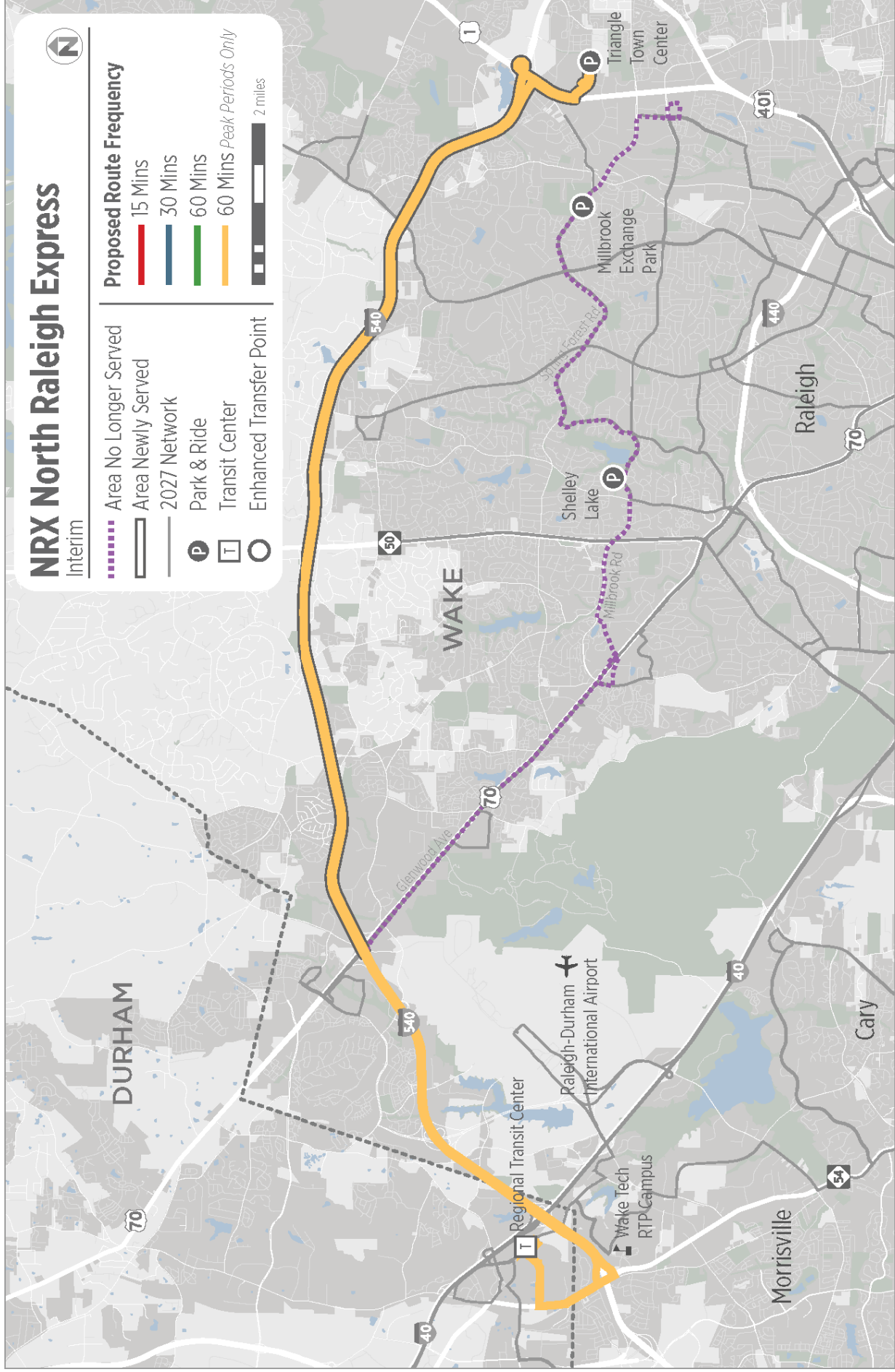
	Existing	Proposed
	201 North Raleigh-RTC	NRX North Raleigh Express
Span of Service		
Weekday	6:05 – 8:25 AM, 4:30 – 7:25 PM	6:00 – 9:00 AM, 4:00 – 7:00 PM
Saturday	-	-
Sunday	-	-
Frequency		
Weekday		
AM Peak	4 westbound trips	3 westbound trips
Midday	-	-
PM Peak	4 eastbound trips	3 eastbound trips
Evening	-	-
Saturday	-	-
Sunday	-	-

Related capital investments:

- Potential future park & ride(s) to be added at I-540 and Falls of Neuse and/or Creedmoor (FY21)
- Potential future park & ride improvements at Triangle Town Center (FY22)

Related service investments:

- N/A



Northern Durham/Rougemont Vanpool Services

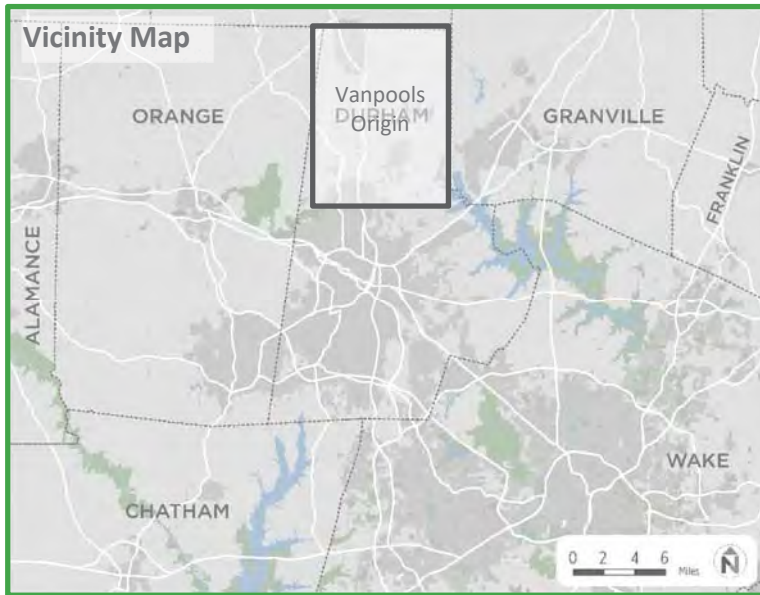
FY20

Route type:

N/A

Operator:

GoTriangle



Project overview: Subsidized vanpools serving North Durham County/Rougemont. Similar to a carpool, but GoTriangle provides the vans, insurance, and maintenance – all for a low, monthly cost. These costs will be further subsidized to encourage vanpool usage. Customers operate the vans. For more information on vanpools, visit Gotriangle.org/rideshare

Connection points: Beginning in Rougemont/North Durham County and serving respective work destinations within the larger region, including Duke, UNC, NCSU, RTP, and area hospitals.

	Existing	Proposed
	None	Vanpool Services
Span of Service Weekday Saturday Sunday		Vehicles are used when needed.
Frequency Weekday AM Peak Midday PM Peak Evening Saturday Sunday		Vehicles are used when needed.

Related capital investments:

- N/A

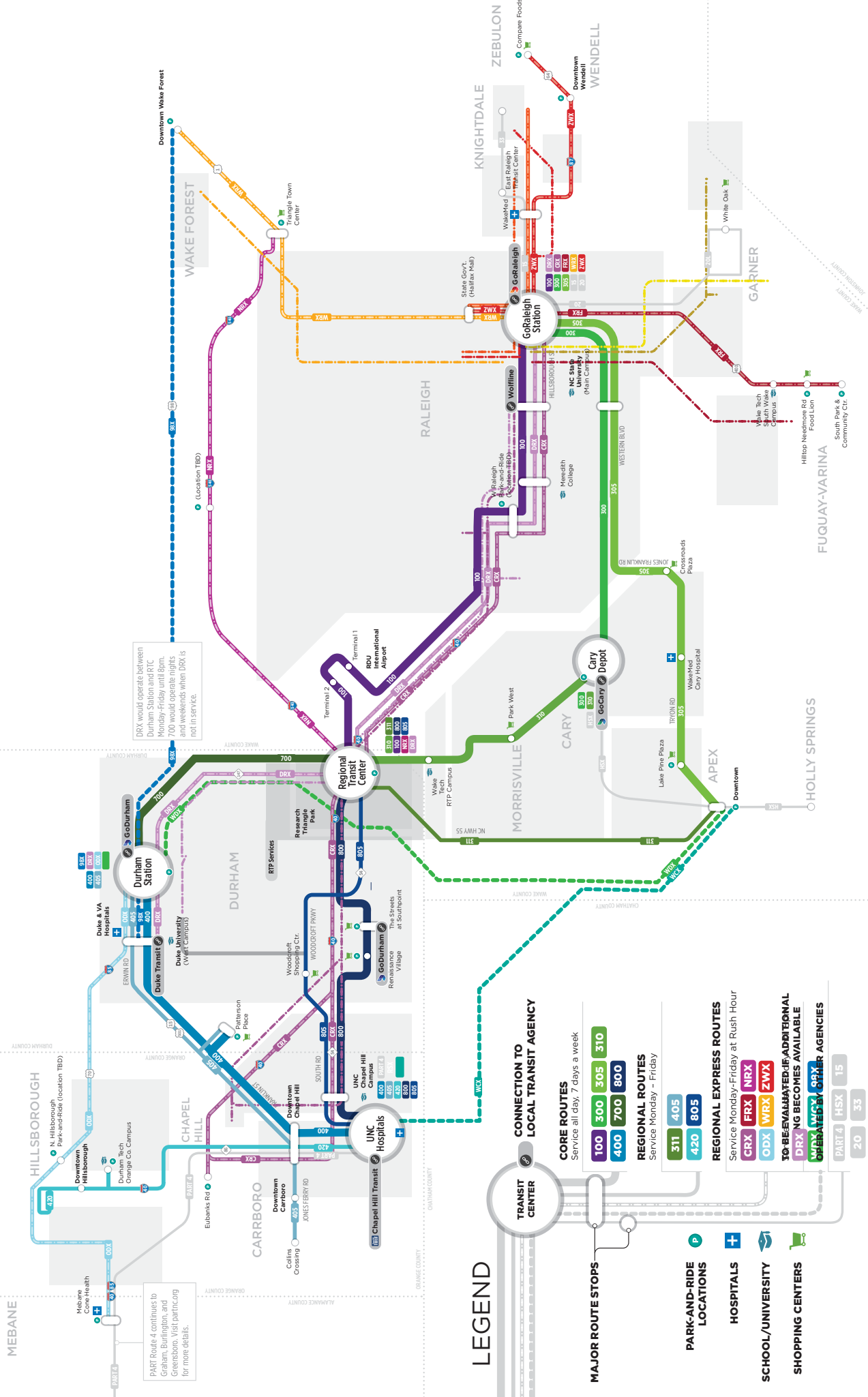
Related service investments:

- N/A

GoTriangle Future Bus Network

BEFORE LIGHT RAIL, COMMUTER RAIL, AND BUS RAPID TRANSIT

Page 59 of 64



DRX would operate between Durham Station and RTC Monday-Friday until 8pm. 7:00 would operate on Saturdays and holidays when DRX is not in service.

PART 4 continues to Graham, Burlington, and Greensboro. Visit participating for more details.

LEGEND

TRANSIT CENTER

MAJOR ROUTE STOPS

CONNECTION TO LOCAL TRANSIT AGENCY

CORE ROUTES
Service all day, 7 days a week

100	300	305	310
400	700	800	

REGIONAL ROUTES
Service Monday - Friday

311	405
420	805

REGIONAL EXPRESS ROUTES
Service Monday-Friday at Rush Hour

CRX	FRX	NRX
ODX	WRX	ZWX

TO BE EVALUATED IF ADDITIONAL DRXING BECOMES AVAILABLE

WRX	WCX	88X
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OPERATED BY OTHER AGENCIES

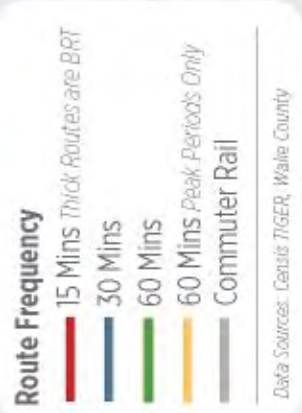
PART 4	HSX	15
20	33	

PARK-AND-RIDE LOCATIONS

HOSPITALS

SCHOOL/UNIVERSITY

SHOPPING CENTERS





SHORT RANGE TRANSIT PLAN SUMMARY

Below are the proposed changes to GoTriangle services in the near-term years.
Additional details can be found in the GoTriangle Short-Range Transit Plan.

Route #	Name	Operator	Future Route #	Proposal	Start Year
100	Raleigh-RDU-RTC	GoTriangle	100	Later night service and 30-minute service on Sundays	FY22
102	Raleigh-Garner	GoRaleigh	20, 20L	Service will be transferred to GoRaleigh and expanded to provide all day service	FY20
105	Raleigh-RTC	GoTriangle	105	No changes	
201	North Raleigh-RTC	GoTriangle	NRX	Realign the Route 201 to become an express route between Triangle Town Center in North Raleigh and the RTC	FY20
300	RTC-Cary-Raleigh	GoTriangle	300, 310	No change to pattern between Raleigh and Cary. New Route 310 between Cary and the RTC	
301	Cary-Raleigh	GoRaleigh, GoCary	9, 9B	Route 301 will be eliminated once new services provided by GoRaleigh and GoCary are provided.	FY21
305	Apex-Raleigh	GoTriangle	305	All day weekday service between Apex and Raleigh, with 30 minutes at peak and hourly during the middle of the day and on weekends	FY21
310	RTC-Cary	GoTriangle	310	Replaces Route 300 between Cary and the RTC with all day service, 30 minutes at peak and hourly during the day. Service along NC 54 instead of I-40, with stops in Morrisville and Wake Tech RTP	FY20
311	Apex-RTC	GoTriangle	311	Frequency would be reduced from 30 minutes at peak to hourly at peak	FY20
400	Durham-Chapel Hill	GoTriangle	400	More direct, faster service between Durham and Chapel Hill. Service to SW Durham Dr would be removed. Other providers would cover that section. Along with Route 405, 15 minute service at peak	FY20
405	Durham-Chapel Hill-Carrboro	GoTriangle	405	Would serve Patterson Place. Along with Route 400, 15 minute service at peak	FY20
420	Hillsborough-Chapel Hill	GoTriangle	420	Service would move from NC-86 to I-40 between Chapel Hill and Hillsborough and use Churton Street instead of NC-86 and US-70 Business.	FY20
700	Durham-RTC	GoTriangle	700	Direct service between Durham Station and RTC	FY20
800	Chapel Hill-Southpoint-RTC	GoTriangle	800	A consistent pattern would be provided. Route 800 would take I-40 at all times and not use NC 54 in the middle of the day, nights, and weekends. Service on NC 54 would be provided by Route 805 and GoDurham services	FY20
800S	Chapel Hill-Southpoint	GoTriangle	800S	No changes	
805	Chapel Hill-Woodcroft-RTC	GoTriangle	805	Some underutilized reverse-peak direction trips will be removed	FY20
CRX	Chapel Hill-Raleigh Express	GoTriangle	CRX	No changes	
DRX	Durham-Raleigh Express	GoTriangle	DRX	No changes	
FRX	Fuquay-Varina-Raleigh Express	GoRaleigh	FRX	No changes	
KRX	Knightdale-Raleigh Express	GoRaleigh	KRX	This route will be transferred to GoRaleigh and will be converted to an all-day service between Knightdale and Wake Med that provides connections with the GoRaleigh Route 15 on weekdays.	FY20
ODX	Orange-Durham Express	GoTriangle	ODX	Increased frequency from hourly to 30 minute at peak and a streamlined pattern using I-85 and I-40 instead of US-70	FY21
NRX	North Raleigh Express	GoTriangle	NRX	A new express route will be in place between Triangle Town Center in North Raleigh and the RTC. This will replace the Route 201.	FY20
WRX	Wake Forest-Raleigh Express	GoRaleigh	WRX	No changes	FY20
ZWX	Zebulon-Wendell-Raleigh Express	GoRaleigh	ZWX	No changes	
North Durham/Rougemont Vanpool Services				Vanpool services to serve Northern Durham	FY20

*Connecting all points of the Triangle*

MEMORANDUM

TO: GoTriangle Operations & Finance Committee
FROM: Bus Operations
DATE: September 17, 2018
SUBJECT: Transit Operations Vehicle Purchase Authorization

Strategic Objective or Initiative Supported

Action Requested

Staff requests that the Operations & Finance Committee recommend that the Board authorize the CEO to execute a contract for the purchase of five (5) Low floor diesel Gillig Buses from Gillig Corporation for fixed route service with a maximum dollar amount of \$2,488,215.

Background & Purchase

Transit Operations is seeking approval to purchase five (5) buses total. Board authorization will result in GoTriangle receiving the buses fourteen (14) months from placing the order. Five (5) of these buses are for replacement due to the recommended useful life of 500,000 miles/12 years, per Federal Transit Administration guidelines for replacement. In addition to the recommended FTA guidelines, the Transit Division has experienced an increase in repair costs in maintaining these buses.

Financial Impact

The total cost to purchase five (5) buses and associated maintenance equipment is \$2,488,215 with federal grant contributions of \$1,194,343, Wake Transit Plan contribution of \$995,286, state grant contributions of \$149,293, and GoTriangle contribution of \$149,293. Buses will be purchased from the City of Durham IFB# 16-009 with funds that are approved in the Bus Capital Project Budget. The funding for the local match is GoTriangle's General Fund and the Wake Tax Districts.

Staff Contacts

- Brian McLean, 919-485-7472, bmclean@gotriangle.org
- David Moore, 919-485-7559, dmoore@gotriangle.org



PO Box 13787
Research Triangle Park, NC 27709
P: 919.485.7510 | F: 919.485.7547

www.gotriangle.org

*Connecting all points of the Triangle*

MEMORANDUM

TO: GoTriangle Operations & Finance Committee
FROM: Bus Operations
DATE: September 17, 2018
SUBJECT: Light Transit Vehicle (LTV) Purchase

Strategic Objective or Initiative Supported

Action Requested

Staff requests that the Operations & Finance Committee recommend that the Board authorize the President/CEO to approve the purchase of four (4) light transit vehicles (LTVs) from Creative Bus Sales per the City of Fayetteville Joint Procurement Solicitation at a maximum price of \$263,648.

Background and Purpose

The Paratransit Division needs to replace four (4) LTVs that have exceeded the recommended useful life of 100,000 miles/4 years, per Federal Transit Administration guidelines for replacement.

All four (4) vehicles have been maintained and repaired to extend the useful life of the vehicles; however, we have reached the point where they are no longer dependable. The Paratransit Division has experienced an increase in breakdowns, repair costs, and operational issues related to safety and vehicle availability. Due to the multiple issues associated with the current vehicles, it is more cost effective to purchase new vehicles.

The Paratransit Division intends to purchase four (4) 22-Foot LTVs with the following features: wheelchair accessible/ADA compliant, back-up camera, seating capacity of 12 ambulatory passengers and 2 wheelchair passengers with a gas engine.

Financial Impact

The total contract amount is \$263,648 for the purchase of the light transit vehicles with federal grant contributions of \$210,918, state grant contribution of \$26,365, and GoTriangle will contribute \$26,365 as the local match.

Staff Contact

Brian McLean, 919-485-7472, bmclean@gotriangle.org
David Moore, 919-485-7559, dmoore@gotriangle.org



PO Box 13787
Research Triangle Park, NC 27709
P: 919.485.7510 | F: 919.485.7547

www.gotriangle.org



PO Box 13787
Research Triangle Park, NC 27709
P: 919.485.7510 | F: 919.485.7547

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