



I. Call to Order and Adoption of Agenda

ACTION REQUESTED: Adopt agenda.
(1 minute Sig Hutchinson)

II. Draft Minutes - December 19, 2018

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

III. Hillsborough Train Station Funding Agreement

ACTION REQUESTED: Recommend the Board authorize the President/CEO to execute the Preliminary Engineering, Construction Funding and Maintenance Agreement.
(15 minutes Jeff Mann)

PE and Construction Agreement

IV. Vehicle Purchase Authorization

ACTION REQUESTED: Recommend that the Board authorize the President/CEO to execute a contract for the purchase of two (2) Battery Electric Proterra Buses with a maximum dollar amount of \$2,080,225.
(10 minutes Brian McLean)

V. FY19 Durham/Orange Operating Fund Budget Amendment

ACTION REQUESTED: Recommend Board approval of budget ordinance amendment 2019 0001.
(5 minutes Jennifer Keep)

Budget Amendment 2019 0001

VI. Regional Fare Study – Informational Update

ACTION REQUESTED: Recommend the Board receive a presentation on the Fare Study Recommendations and set a public hearing date for March 27, 2019.
(20 minutes Mary Kate Morookian)

Wake-Durham Fare Integration Study

VII. Wake Transit FY 2019 Q3 Proposed Amendment

ACTION REQUESTED: Recommend Board approval of the Wake Transit FY19 Q3 amendment.
(5 minutes Steven Schlossberg)

Wake Transit Q3 Amendment

VIII. FY 2018 Annual Bus Service Performance Report Follow-Up

(10 minutes Matthew Frazier)

IX. Adjournment
(*Sig Hutchinson*)

**GoTriangle Board of Trustees
Operations & Finance Committee Meeting Minutes
December 19, 2018**

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

Committee Members Present:

Sig Hutchinson	Russ Stephenson
Michael Parker, Committee Chair	Steve Schewel (by phone)

Committee Members Absent:

Ellen Reckhow (excused)	Andy Perkins Jr.
Valerie Jordan	

Other Board Members Present:

Will Allen III

Committee Chair Michael Parker called the meeting to order at 10:30 a.m.

I. Adoption of Agenda

Action: On motion by Hutchinson and second by Stephenson the agenda was adopted. The motion was carried unanimously.

II. Approval of Minutes

Action: On motion by Stephenson and second by Hutchinson the Committee approved the minutes of the November 28, 2018, meeting. The motion was carried unanimously.

III. Global Signal Acquisitions Easement

Gary Tober requested that the Committee recommend that the Board authorize the President/CEO to execute a grant of easement to Global Signal Acquisitions/ Crown Castle, the owner of a cell tower on the former Patterson Mill property where the ROMF will be built. He said the grant of easement will confirm the pre-existing easement on the property and will allow the release of the deposit to the land owner, which is currently on file with the Durham County Clerk of Court as a result of the eminent domain action initiated by GoTriangle last month.

Action: On motion by Stephenson and second by Hutchinson the Committee voted to recommend Board adoption of a resolution authorizing a Grant of Easement to Global Signal Acquisitions IV LLC (GSA IV). The motion was carried unanimously.

IV. Vanpool Subsidy

Shelly Parker stated that when GoTriangle selected Enterprise as its vehicle manager and provider in March, a vanpool subsidy was set at \$400 for groups traveling more than 35 miles daily and \$300 for 35 or fewer miles. She requested a \$50 increase per vehicle for both groups. Enterprise will match that amount for the first six months of operation and then provide a \$25 per month subsidy for an additional six months. Parker explained that Enterprise is subject to the vehicle rental tax which comes to GoTriangle and was not paid by GoTriangle.

Action: On motion by Hutchinson and second by Stephenson the Committee voted to recommend that the Board set a monthly vanpool subsidy at \$450 for vanpool groups traveling more than 35 daily commute miles and \$350 for vanpool groups traveling 35 or fewer daily commute miles. The motion was carried unanimously.

V. PMIS Procurement – e-Builder

Katharine Eggleston stated that this Project Management Information System is a software solution included in the management plan for the D-O LRT project. This software will help manage and administer the construction contracts for the project. The selection committee chose e-Builder, a large vendor of such software in use by a number of transit agencies and governments around the country. She said Charlotte used e-Builder to deliver the Blue Line Extension. Eggleston requested a contract with e-Builder for the one-time set up fee and the first year of the annual service agreement.

Parker asked if the software could be used for commuter rail. Eggleston responded that it could be used for other projects, but the service fee is based on the D-O LRT project. She explained that the fee is based on the dollar amount of the capital program so additional capital projects would require an additional fee but there also would be economies of using the same solution for multiple projects.

Allen noted the cost. He asked about the alternatives and their cost. Eggleston replied that the PMC did a detailed survey of all the products available and developed a list of several that could work for our project, which was narrowed to three. She said the team worked with those vendors to understand the appropriateness of their products for our program and e-Builder best suits our needs. She added that the cost of the systems that can support a program as large and complex as ours and do the things we need it to do for financial management, construction management and contract administration are in a similar range of costs. She said that without a software solution like this, the staff needed to manage the project would be overwhelming, something Charlotte learned on the first Blue Line project.

Parker asked about the cost in future years. Eggleston said the contract includes a cap on the increase of the annual fee - the greater of the consumer price index (CPI) plus two percent (2%), or five percent (5%) – which is their standard term for government contracts.

Action: On motion by Hutchinson and second by Stephenson the Committee voted to recommend that the Board authorize the President/CEO to approve the e-Builder Service Agreement for an amount not-to-exceed \$300,000. The motion was carried unanimously.

VI. Professional Services Contract Amendment – GEC Phase 3B

Katharine Eggleston presented a proposed amendment to the have GEC contract for the design of university-owned utility relocations. She said this work was known, but there was not certainty about who would do the work. During negotiations of the university cooperative agreements, it was determined that rather than having the universities do the design and relocation work, a more streamlined approach would be for our consultants to do the design and our contractors to do the relocations. The cost estimate for this work is \$900,000.

Parker asked how the amount breaks down between Duke and UNC. A representative from HDR responded perhaps 60/40.

President/CEO Mann commented that the concern with the universities doing the work was having to rely on their timeline.

Hutchinson asked about the cost. Mann responded that the Scope is more extensive than initially thought, and required far more outreach and coordination with the universities during the design process. Eggleston stated that the budget includes all the known utilities in the path of the D-O LRT project, but it is possible that some can be protected in place and will not require relocation.

Action: On motion by Stephenson and second by Hutchinson the Committee voted to recommend that the Board authorize the President/CEO to increase the not-to-exceed amount for the GEC Phase 3B Contract with HDR Engineering Inc. by \$900,000 for relocation design services for university-owned utilities. The motion was carried unanimously.

VII. Cost Sharing MOA for the Commuter Rail Portion of the Major Investment Study – Amendment One

Steven Schlossberg stated that the original cost share agreement selected Nelson Nygaard to conduct the major investment study for the CRT portion. This amendment will allow the utilization of other consultants and expands the scope beyond the MIS to add additional pre-project development work.

President/CEO Mann said the MIS looked at baseline conditions, high level ridership modeling, station planning and development of scenarios but the project is not ready for project development. This amendment will take the project from MIS to the project development phase and will refine the scenarios and perform railroad traffic controller modeling, high level capacity analysis modeling and ridership modeling. Additionally it will consider some scenarios beyond those in the Wake Transit Plan at the request of NCRR.

Parker asked about the management plan requested by the Board. Mann stated that would come in January.

Stephenson asked about the funding for the additional scenarios. Mann replied that NCRR has agreed to fund that.

Action: On motion by Hutchinson and second by Stephenson the Committee voted to recommend Board approval of Contract No. 17-079 – Amendment One, the Cost Sharing MOA for the Commuter Rail Portion of the Major Investment Study. The motion was carried unanimously.

VIII. Update on D-O LRT Professional Services Contracts

Katharine Eggleston's slides are attached and hereby made a part of these minutes. She stated that the GEC contract is tracking on plan with 57% paid to date. She noted several changes: Pettigrew Street which will require a substantive change to the design contract, Erwin Road, changes identified through value engineering changes and potentially additional environmental analysis required due to changes in the corridor.

DBE participation is at 10%, below the 14% target primarily due to one of two largest DBE sub consultants is no longer a DBE. She said that HDR is working to find another firm or DBE on the team that can get the participation to the goal. Eggleston also explained that the pace of the work and the number of changes to the project are difficult for smaller DBE firms to manage.

The PMC contract is tracking at 28% and slightly under for DBE, but will meet its target of 14%. She said that all three contracts (GEC, PMC and CMC) will have an added scope when construction begins.

Parker asked why spending for the PMC is at 28% and for the GEC, 57%. Eggleston responded that real estate is a big component of this contract and only acquisition for the ROMF has occurred at this point. She added that HNTB will help with the implementation of the e-Builder software and that could require a contract adjustment.

Eggleston noted that the PMC prepares independent bridge calculations on the GEC designs to provide us with confidence that the bridges are designed to appropriate criteria. She said the new box bridge design will require additional scope to the PMC contract.

Eggleston stated that the CMC contract spending is at 43%, with DBE participation tracking above the 15% goal. She said there is consideration for staffing adjustments to prepare for construction by bringing folks on earlier to get up-to-speed on the project and provide more insight upfront.

IX. Regional Fare Study – Informational Update

Mary Kate Morookian's presentation is attached and hereby made a part of these minutes. She said eight initial fare scenarios were developed, and the following is being recommended for implementation in two phases:

Summer 2019

1. A two-tiered region-wide fare structure.
2. Consistent region-wide discount and pass categories.
3. Region-wide discount ID.
4. Establish pass sales agreement and discount guidelines.
5. Pursue new sales partnerships.
6. Expand GoPass program.
7. Establish guidelines for fare adjustments.

Early 2020

- Mobile ticketing
- Fare capping
- Consider smartcards

Morookian noted that the Durham City Council is not interested in increasing its fare at this time, but was interested in fare capping technology.

X. Comprehensive Annual Financial Report

Ren Wiles' presentation is attached and hereby made a part of these minutes.

XI. FY18 Annual Bus Service Performance Report

Matthew Frazier's presentation is attached and hereby made a part of these minutes.

Hutchinson asked about GoPasses. Frazier stated they are generally constant, although there was a noticeable increase for Red Hat.

XII. Adjournment

Action: On motion by Hutchinson the meeting was adjourned at 12:00 p.m.

Michael Parker, Committee Chair

Attest:

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

Draft



Connecting all points of the Triangle

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Jeff Mann, President and CEO
DATE: January 7, 2019
SUBJECT: Hillsborough Train Station Funding Agreement

Strategic Objective or Initiative Supported

Action Requested

Recommend that the Board authorize the President/CEO to execute the enclosed Preliminary Engineering, Construction Funding and Maintenance Agreement between the town of Hillsborough, the North Carolina Department of Transportation and GoTriangle.

Background and Purpose

The Orange County Transit Plan includes a project to design and construct a new intercity (Amtrak) train station to be located on Orange Grove Road in Hillsborough. The Town of Hillsborough is taking the lead on implementation of the project, with assistance from the NCDOT Rail Division. As administrator for the tax district, GoTriangle will provide reimbursement from tax district funds and also project oversight and support. Funding for the project is as follows:

State	\$7.38 M
Tax District	\$.686 M
Town of Hillsborough	\$34 K
Total	\$8.1 M

State and Tax District funding is capped at the above amounts. Therefore, the Town of Hillsborough will be responsible for any cost overruns.

The project is anticipated to include a low level platform, station building (that may be designed to support other community uses) and park and ride facilities. If a high level platform and/or dedicated high level platform are required that parties agree to renegotiate and amend the reimbursement agreement.

Financial Impact

The project will be funded through existing funds that are included in the Orange County Transit Plan in the amount of \$686,000.

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Attachments

- Agreement

Staff Contact

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NORTH CAROLINA
ORANGE COUNTY

DATE: November 28, 2018

NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION

PRELIMINARY ENGINEERING,
CONSTRUCTION FUNDING AND
MAINTENANCE AGREEMENT

AND

TOWN OF HILLSBOROUGH

TIP: P-5701
WBS: 46395.1.1

AND

RESEARCH TRIANGLE REGIONAL PUBLIC
TRANSPORTATION AUTHORITY
d/b/a GOTRIANGLE

This **Preliminary Engineering and Construction Funding and Maintenance Agreement** ("Agreement") is made and entered into on the last date executed below and constitutes an agreement between the North Carolina Department of Transportation, an agency of the State of North Carolina (hereinafter referred to as the "Department"), the Town of Hillsborough, a local government entity (hereinafter referred to as "Municipality"), and the Research Triangle Regional Public Transportation Authority d/b/a GoTriangle, a public body politic and corporate of the State of North Carolina, (hereinafter referred to as "GoTriangle") (each individually hereinafter referred to as a "Party," and collectively as the "Parties") to describe the proposed actions to be taken by the Parties to govern the planning, design, construction, maintenance, and coordination efforts associated with a proposed new Hillsborough Train Station.

WITNESSETH:

WHEREAS, the Parties are interested in establishing a new train station which would encourage economic development for the Municipality, industrial/commercial facilities, and the surrounding communities (hereinafter referred to as the "Project"); and,

WHEREAS, the Parties hereby agree that it would be beneficial to the Parties to pursue the Project; and,

WHEREAS, North Carolina General Statutes ("N.C.G.S.") Sections 136-18, 136-20, and 136-44 provide the Department with the authority to participate in the planning and construction of railroad projects approved by the North Carolina Board of Transportation; and,

WHEREAS, the Department has performed all work associated with the preparation and approval of the environmental clearance documentation; and,

WHEREAS, the Parties to this Agreement fully understand that this Agreement is to provide for the completion of designs and plans for the Project, ("Preliminary Engineering"), and to provide for construction of the Project ("Project Work"), and maintenance of the completed project, and

to set out the respective responsibilities regarding funding and reimbursement for said Preliminary Engineering and Construction; and,

WHEREAS, the governing board of the Municipality has agreed to participate in certain costs and to assume certain responsibilities in the manner and to the extent as hereinafter set out; and,

WHEREAS, the governing board of GoTriangle has agreed to participate in certain costs to the extent as hereinafter set out; and,

WHEREAS, the Municipality and GoTriangle fully understand that the Department's funding for this Project is contingent upon and subject to the receipt and availability of the appropriate funds for the purpose set forth in this Agreement, and this Agreement shall automatically terminate if funds cease to be available.

NOW, THEREFORE, the Parties hereto, each in consideration of the promises and undertakings of the other as set forth herein, do hereby covenant and agree, each with the other, as follows:

1. SCOPE OF WORK

The Scope of Work shall generally consist of the planning, design, and construction of the proposed Hillsborough Train Station and eight (8) inch high Platform as shown on the site plan attached as "Exhibit A" and made a part of this Agreement. In addition, a conceptual plan will be developed for the construction of a dedicated passenger station track to include a forty-eight (48) inch high passenger platform.

If the construction of a High Platform and Dedicated Station Track is mandated by a Stakeholder or Authority Having Jurisdiction (AHJ), it is understood by all Parties that this Agreement may need to be renegotiated/amended by the Parties, as the funding amount denoted herein is insufficient to cover that additional scope.

The Parties recognize and agree that consultants and/or sub-consultants may perform all or any portion of the Preliminary Engineering and the Project Work subject to the approval and consent of Department. The Department's approval and consent to all Consultants or sub-consultants shall be obtained before the Department may issue a Notice to Proceed to the Municipality for any Preliminary Engineering or Project Work.

2. ALLOCATION OF PRELIMINARY ENGINEERING RESPONSIBILITIES

The Parties shall have the following responsibilities in connection with the Project Work, including, but not limited to:

- a. The Municipality, and/or its agent, shall:
 - i. Prepare the Project's plans, specifications, and a professional estimate of costs (PS&E package) needed to construct the Project. All work will be done in accordance with applicable State standards, specifications, policies and procedures. Project plans will be submitted to GoTriangle and the Department for review, comment, and approval. The Department and GoTriangle shall submit all comments in writing to the Municipality within sixty (60) days of receipt of the plans from the Municipality.

- ii. Prepare a conceptual plan for a High Platform and Dedicated Station Track for review by stakeholders and Authorities Having Jurisdiction (AHJ).
 - iii. Procure, if necessary, professional services for the design of the Project, in accordance with N.C.G.S. § 143-64, Parts 31 and 32, and the Department's *Policies and Procedures for Major Professional or Specialized Services Contracts*. Said policies and standards are incorporated into this Agreement by reference.
 - iv. Perform any additional work as required to complete the Preliminary Engineering.
- b. The Department, its agents and/or contractors, shall:
- i. Review and approve all Preliminary Engineering submitted by the Municipality.
 - ii. Pursue, to the extent feasible, additional funding for design and construction of any track and signal work for which this Agreement does not provide, including but not limited to a High Platform and Station Track pursuant to the above-referenced conceptual plan.
- c. GoTriangle, its agents and/or contractors, shall:
- i. Review and approve all Preliminary Engineering submitted by the Municipality.

3. NOTICE TO PROCEED

Upon execution of the Agreement, the Department shall issue a Notice to Proceed and the Municipality shall endeavor to commence its responsibilities under Section 2.a within forty-five (45) calendar days of the date of receipt of such notice.

4. ENVIRONMENTAL DOCUMENTATION AND PERMITTING

a. Environmental

The Department has prepared the Environmental Document in accordance with the State Environmental Policy Act (SEPA) or as required and defined pursuant to N.C.G.S. §113A-1 through §113A-13, National Environmental Policy Act, the National Historic Preservation Act, and the Uniform Relocation Assistance and Real Property Acquisition Act.

b. Permitting

The Municipality shall obtain all State and local regulatory approvals, permits, licenses, and inspections as are necessary for the construction of the Project.

c. Erosion Control

The Municipality shall be responsible for securing all erosion and sediment control permits for the Project using approved plans and documents.

5. RIGHT OF WAY (ROW)

It is understood that all work shall be contained within the existing right of way, and no additional right of way will need to be acquired for this Project.

If it is determined by the Municipality that right of way and/or property is needed for the Project, the Municipality shall be responsible for acquiring any additional right of way, at no cost or liability whatsoever to the Department, or GoTriangle. All right of way (ROW) activities, including acquisition of easement/property and relocation, shall be accomplished in accordance with N.C.G.S. §136-44.36; Chapter 133, Article 2, §§ 133-5 through 133-18 (Relocation Assistance); and the North Carolina Department of Transportation Right of Way Manual.

6. UTILITIES

In the event utility conflicts within the Project limits are discovered, the Municipality shall be solely responsible for relocation and adjustment of the utility, the cost of which shall be a project cost.

All utility work shall be performed in a manner satisfactory to and in conformance with State rules and regulations and the Department's approved Utility Relocation Policy. The Municipality shall make all necessary adjustments to service connections or services lying within the construction limits of the Project regardless of ownership of the connections or services.

7. ALLOCATION OF PROJECT WORK (CONSTRUCTION) RESPONSIBILITIES

- a. The Municipality, its agents and/or contractors, shall construct the Project in accordance with the approved Project plans and specifications, and all State policies and procedures.
- b. The Department shall be responsible for inspection, approval of change orders, and funding of the Project Work as set out herein.
- c. GoTriangle shall be responsible for inspection, approval of change orders, and funding of the Project Work as set out herein.

8. CONSTRUCTION

- b. CONSTRUCTION AUTHORIZATION. The Municipality shall submit the required final construction plans, specifications, and an estimate of Project costs (final PS&E package) to the Department and GoTriangle for review and approval.

Upon receipt of written authorization, in the form of an Authorization for Construction, from the Department, the Municipality shall construct, or cause to be constructed, the Project in accordance with the plans and specifications of said Project as filed with, and approved by, the Department and GoTriangle. Any work performed prior to written authorization to proceed from the Department will not be eligible for reimbursement.

- b. CONSTRUCTION PROCUREMENT. The Municipality shall comply with all relevant state statutes, rules, and regulations in procuring goods and services from third parties for construction of the Project. Third party contracts shall be approved by the Department prior to commencing Project work. Letting of contracts for construction and materials purchases shall be in accordance N.C.G.S. §143, Article 8 and N.C.G.S. §136-28.7.

- c. CONSTRUCTION SUBCONTRACTOR REQUIREMENTS. Any contract entered into with another party to perform work associated with the requirements of this Agreement shall contain appropriate provisions regarding the utilization of Minority and Women Businesses Enterprises (WBE/WBE), or as required and defined in or as required and defined in G.S. 136-28.4 and the North Carolina Administrative Code (N.C.A.C.) Title 19A Chapter 2, Subchapter D. These provisions are incorporated into this Agreement by reference.
- d. RIGHT TO INSPECT. The Department and GoTriangle shall have the right to inspect any portion of the work being performed by the Municipality or its contractors to ensure compliance with the provisions of this Agreement. Any deficiencies inconsistent with approved plans and specifications found during an inspection must be corrected by the Municipality.
- e. CONTRACTOR COMPLIANCE. The Municipality, and/or its agents, will be responsible for ensuring the compliance of its contractor(s) with all the terms of the contract, relevant provisions of this Agreement, and any instructions issued by the Department or GoTriangle as a result of any review or inspection.
- f. CHANGE ORDERS. If any changes in the Project plans are necessary, the Department must approve such changes prior to the work being performed.
- g. SIGNAGE. The Municipality shall provide and maintain adequate barricades, signs, flagmen, and other warning devices for the protection of the general public.
- h. E-VERIFY COMPLIANCE. E-Verify is the federal program operated by the United States Department of Homeland Security and other Federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to Federal law. The Parties each individually warrant for themselves that they and any subcontractor performing work pursuant to this Agreement do presently and at all relevant times shall: (i) use E-Verify if required to do so by North Carolina law; and (ii) otherwise comply with the requirements of N.C.G.S. Chapter 64, Article 2. A breach of this warranty by any Party will be considered a breach of this Agreement by such Party, which shall entitle the other Parties to terminate this Agreement, without penalty, upon notice to the breaching Party.
- i. CONSTRUCTION ENGINEERING. The construction engineering and supervision will be furnished by the Municipality. Reimbursement for construction administration costs cannot exceed fifteen percent (15%) of the actual construction contract cost. If the Municipality elects to procure a private consulting firm to conduct Project administration, the procurement shall be accomplished in accordance with the terms set out in Provision #2. a. iii of this Agreement. The Municipality, and/or its agent, shall perform Project administration in accordance with all Departmental policies and procedures.

9. TIMEFRAME

Project completion must occur within sixty (60) months after the execution of this Agreement. The Municipality will diligently pursue completion of its responsibilities on the Project. If, in the opinion of the Department, satisfactory progress has not been made within six (6) months after the execution of this Agreement the funds may be recalled by the Department. A thirty (30) day notice will be given prior to recall date. The Municipality may petition the Department at least sixty (60) days in advance of the expiration of this Agreement for an extension of the six (6) month period due to extenuating circumstances.

10. MAINTENANCE

Upon completion and acceptance of the Project Work, the Municipality shall be responsible for all maintenance and liability of the Project, at no cost or liability whatsoever to the Department or GoTriangle. The Municipality shall assure the station and platform are available for use by intercity and commuter trains and passengers for waiting and boarding.

11. FUNDING

The Estimated Cost of the Project is \$8,100,000.

The Department will be responsible for the cost of Preliminary Engineering and the Project Work in the total not to exceed amount of seven million three hundred eighty thousand dollars (\$7,380,000.00).

The Municipality will be responsible for the cost of Preliminary Engineering and the Project Work in an amount not to exceed thirty-four thousand dollars (\$34,000.00) as its initial guaranteed contribution plus 100% of all costs which exceed the Estimated Cost.

GoTriangle will be responsible for the cost of Preliminary Engineering and the Project Work in an amount not to exceed six hundred eighty-six thousand dollars (\$686,000.00).

It is understood by all Parties to this Agreement that the amounts dedicated to the Project are based upon an estimated cost of the Project.

12. REIMBURSEMENT

After the Municipality has exhausted its initial guaranteed contribution towards Project costs, The Department and GoTriangle shall reimburse the Municipality the amount of their contributions until the funds described herein are fully expended in accordance with Section 13 set out herein below.

13. INVOICING

The Municipality shall submit an invoice to the Department and GoTriangle separately. Invoices shall show responsibility for all costs to be paid by the parties sequentially. The Municipality shall be responsible for all initial costs until its initial guaranteed contribution is exhausted. Go Triangle shall reimburse the Municipality for costs incurred after the Municipal contribution is exhausted until the Go Triangle contribution is exhausted. The Department then shall reimburse the Municipality for all costs until the Department contribution is exhausted. Any additional costs shall be the responsibility of the Municipality.

- a. SUBMITTAL OF INVOICE TO THE PARTIES. The Municipality shall submit a monthly itemized invoice and requested documentation to the Department and to Go Triangle in the form of Exhibit B, attached hereto and made a part hereof, showing costs to the responsible Party as set out in the paragraph above. The monthly invoice shall include all cumulated costs up to the date of the invoice and show the amount(s) owed by the respected responsible Parties for the payment of costs shown. Attached to each invoice will be a cost detail report to support 100% of the actual cost. The Municipality shall be responsible for completeness and accuracy of the invoice.

- i. The request for reimbursement shall include, but not be limited to, the following: municipal invoices, contractor(s) invoices, materials invoices, proofs of payment of third-party invoices, equipment invoices, and any other invoices that support the invoiced amount.
 - ii. By submittal of the invoice to the Department and Go Triangle, the Municipality certifies that it has adhered to all applicable State laws, policies, rules, regulations and statutes as set forth in this Agreement. Payment to the Municipality shall be made upon review and approval of the invoice by the Department's Rail Division, Office of the Inspector General, and Financial Management Division.
- b. REIMBURSEMENT TERMS. The Department, within thirty (30) calendar days of approval of the Municipality's itemized invoice by the Office of Inspector General and Financial Management Division, shall submit the approved invoice amount to the Municipality.
- c. REIMBURSEMENT FOR FORCE ACCOUNT WORK. Force account work is only allowed when 1) there is a finding of cost effectiveness for the work to be performed by some method other than contract awarded by competitive bidding process, and 2) the force account work is in compliance with N.C.G.S § 143-135. Any work performed by Municipal force account must be preapproved in writing by the Department and must be demonstrated to be an amount less than can be otherwise procured. Subsequent invoices shall show a summary of labor, labor additives, equipment, materials and other qualifying costs in conformance with the standards for costs set forth in 2 C.F.R. 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", and 2 C.F.R. § 225 (2015). Payment shall be based on actual cost incurred with the exception of equipment owned by the Municipality. Payment for use of equipment owned by the Municipality cannot exceed the Department's rates in effect for the time period in which the work is performed. If work is performed by a contractor, said invoices shall show the contract cost.
- d. AUDITS. In accordance with 2 C.F.R. 200, subpart F, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", the Municipality shall arrange for an annual independent financial and compliance audit of its fiscal operations and grants administration. The Municipality shall furnish the Department with a copy of the annual independent audit report within thirty (30) days of completion of the report, but not later than nine (9) months after the Municipality's fiscal year ends, to include the years in which the Municipality expends funds and the years in which the Department pays funds to the Municipality.
- e. RECORD RETENTION. Pursuant to N.C.G.S. §147-64.7, the Department, the State Auditor, and their respective authorized employees or agents are authorized to examine all books, records, and accounts of the Municipality insofar as they relate to transactions with any department, board, officer, commission, institution, or other agency of the State of North Carolina pursuant to the performance of this Agreement or to costs charged to this Agreement. The Municipality shall retain any such books, records, and accounts for a minimum of three (3) years after the final date of payment under this Agreement and shall make them available at its office at reasonable times during the contract period and until the expiration of the term required by this paragraph for inspection and audit by the Department and the State Auditor.

- f. UNSUBSTANTIATED COSTS. The Municipality agrees that it shall bear all costs for which it is unable to substantiate actual costs.

14. OTHER PROVISIONS

a. Indemnification of Department

The Municipality agrees to indemnify and hold harmless the Department, and the State of North Carolina, to the extent allowed by law, for any and all judgments for payment, damages and/or liabilities of any nature, rendered against the Department in connection with the Project. The Department shall not be responsible for any damages which may be initiated by third parties.

b. Debarment Policy

It is the policy of the Department not to enter into any agreement with parties that have been debarred by any government agency (Federal or State). By execution of this Agreement, the Municipality and GoTriangle certify that neither it nor its agents or contractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State Agency or Department and that they will not enter into agreements with any entity that is debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction.

c. Agreement Modifications

Any modification to this Agreement will be agreed upon in writing by all Parties prior to being implemented.

d. Other Agreements

The Municipality is solely responsible for all agreements, contracts, and work orders entered or issued by the Municipality for the Project. GoTriangle is solely responsible for all agreements, contracts, and work orders entered or issued by GoTriangle for the Project.

e. Availability of Funds

All terms and conditions of the Agreement are dependent upon, and subject to, the allocation of funds for the purpose set forth in the Agreement and the Agreement shall automatically terminate if funds cease to be available.

f. Termination of Project

The Department shall have the right to end its participation in the Project Work at any time before the Municipality and GoTriangle have been called upon to perform any work or provide funding under the term of this Agreement.

If the Municipality terminates the Preliminary Engineering or the Project Work prior to completion and acceptance, the Municipality shall reimburse the Department one

hundred percent (100%) of all actual costs expended by the Department associated with the Project Work.

g. Complete Understanding

The Parties agree that this Agreement embodies the complete understanding of the Parties with respect to the Project and supersedes other prior or contemporaneous written or oral agreements, understandings, and negotiations with respect to the Project Work.

h. Severability

The Parties agree that if any part, term, or provision of this Agreement is held to be illegal or in conflict with any state or federal law or regulation, such provision shall be severable, and the remaining provisions will remain valid and enforceable.

i. Governing Law

North Carolina law shall govern interpretation and enforcement of this Agreement and any other matters relating to this Agreement (all without regard to North Carolina conflicts of law principles). Any legal actions or proceedings brought by a Party arising from this Agreement shall be brought in the courts of Orange County, North Carolina or Wake County, North Carolina and in accordance with the laws of North Carolina. By the execution of this Agreement, the Parties submit to the jurisdiction of said courts and hereby irrevocably waive any and all objections that they may have with respect to venue in any court sitting in Orange County, North Carolina or Wake County, North Carolina.

j. Authorization

The Parties acknowledge that the individual executing the Agreement on their respective behalves is authorized to execute this Agreement, on his/her behalf and to bind the respective entities to the terms contained herein, and that he/she has read this Agreement, conferred with his/her attorney, and fully understands its contents.

k. Signatures and Duplicates

A copy or facsimile copy of the signature of any Party shall be deemed an original with each fully executed copy of the Agreement as binding as an original, and the Parties agree that this Agreement can be executed in counterparts, as duplicate originals, with facsimile signatures sufficient to evidence an agreement to be bound by the terms of the Agreement.

l. Failure to Comply

Failure on the part of the Municipality or GoTriangle to comply with any of the provisions of this Agreement will be grounds for the Department to terminate participation in the costs of the Project and, if applicable, seek repayment of all cost expended by the Department, provided, however, that the Department shall first notify the Municipality and/or GoTriangle of such failure and provide the Municipality and/or GoTriangle the opportunity to cure same.

m. Use of Powell Bill Funds

In the event that the Department determines that the funds paid to the Municipality for this Project are not used in accordance with the terms of this Agreement, the Department reserves the right to deduct or withhold monies from the Municipality's Powell Bill Fund. Such determination by Department shall be made, either by audit and/or inspection of books, documents, papers, accounting records, and such other evidence as may be appropriate to substantiate costs.

n. Transfer of Responsibilities

The Department must approve any assignment or transfer of responsibilities of the Municipality and GoTriangle set forth in this Agreement to other entities.

15. DESIGNATED REPRESENTATIVE

Any notice, consent or other communication required or contemplated by this Agreement shall be in writing and shall be delivered by electronic mail to the intended recipient at the electronic mail address set forth below. Notice shall be effective upon the date of receipt by the intended recipient. Each Party may change its designated representative for notification purposes by giving the other Parties written notice of the new address and the date upon which it shall become effective.

Craig Newton, PE, shall serve as the Department's representative and project manager for the Project as set forth in this Agreement. All notices, correspondence, and questions should be directed to him at cmnewton@ncdot.gov or by calling (919) 707-4731.

Margaret Hauth, AICP, Planning Director, shall serve as the Municipality's representative and project manager for the Project Work as set forth in this Agreement. All notices, correspondence, and questions should be directed to her at Margaret.hauth@hillsboroughnc.org or by calling (919) 732-1270 ext. 86.

Jeffrey Mann, President and CEO, shall serve as GoTriangle's representative and project manager for this Project as set forth in this Agreement. All notices, correspondence, and questions should be directed to him at jmann@gotriangle.org or by calling (919) 485-7424.

16. PROPERTY CEASES TO BE USED FOR RAIL PURPOSES

If the property ceases to be used for rail passenger purposes as a result of the voluntary action of the Municipality, the Department may, at the discretion of the Secretary of Transportation, require reimbursement by Municipality to Department. This provision applies and shall survive for a period of twenty-five (25) years after the date on which the Department-funded portion of the Project is completed, as memorialized by the date of issuance of a Certificate of Occupancy (CO) by the permitting authority. The Department's initial investment shall be equal to the sum of all state funds paid to Municipality under the Project. The amount of the reimbursement shall be calculated by dividing the initial investment by the number of years of this project (twenty-five (25) years) and multiplying the result by the number of years between the cessation date and the day which is twenty-five (25) years from the CO issuance date. Reimbursement to the Department shall be made in one lump-sum payment within thirty (30) days of billing by the Department.

17. ETHICS PROVISION

By Executive Order 24, issued by Governor Perdue, and N.C.G.S. § 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Cultural Resources, Environment and Natural Resources, Health and Human Services, Public Safety, Revenue, Transportation, and the Office of the Governor).

IN WITNESS WHEREOF, this Agreement has been executed, in triplicate originals, the last day and year set out below, on the part of the Department, the Municipality, and GoTriangle by authority duly given.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this Agreement, you attest, for your entire organization and its employees or agents, that you are not aware that any gift in violation of N.C.G.S. § 133-32 and Executive Order 24 has been offered, accepted, or promised by any employees of your organization.

WITNESS

TOWN OF HILLSBOROUGH

BY: _____

BY: _____

NAME: _____

NAME: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____

MUNICIPAL SEAL

Approved by the Town of Hillsborough governing board as attested to by the signature of

Clerk of the Board of Commissioners

(Date)

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Municipal Finance Director

FEDERAL IDENTIFICATION NUMBER

Town of Hillsborough

MAILING ADDRESS

Town of Hillsborough
P.O. Box 429
Hillsborough, NC 27278-0429
Attn: _____

IN WITNESS WHEREOF, this Agreement has been executed, in triplicate originals, the last day and year set out below, on the part of the Department, the Municipality, and the Authority by authority duly given.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this Agreement, you attest, for your entire organization and its employees or agents, that you are not aware that any gift in violation of N.C.G.S. § 133-32 and Executive Order 24 has been offered, accepted, or promised by any employees of your organization.

WITNESS

Research Triangle Regional Public
Transportation Authority (d/b/a GoTriangle)

BY: _____

BY: _____

NAME: _____

NAME: Jeffrey G. Mann

TITLE: _____

TITLE: General Manager

DATE: _____

DATE: _____

This instrument has been pre-audited
in the manner required by the Local
Government Budget and Fiscal Control Act

FEDERAL TAX IDENTIFICATION NUMBER

561718037

Saundra Freeman, Director of Financial
And Administrative Services

Reviewed and approved as to legal form

MAILING ADDRESS
P.O. Box 13787
Research Triangle Park, NC 27709

Shelley Blake, General Counsel

ATTN: Jeffrey G. Mann

IN WITNESS WHEREOF, this Agreement has been executed, in triplicate originals, the last day and year set out below, on the part of the Department, the Municipality, and the Authority by authority duly given.

ATTEST

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

BY: _____

BY: _____

NAME: Elizabeth Smith

NAME: Julie White

TITLE: Processing Agent

TITLE: Deputy Secretary of Multi-Modal
Transportation

DATE: _____

DATE: _____

MAILING ADDRESS

North Carolina Department of Transportation
Rail Division, Operations and Facilities
Branch
1553 Mail Service Center
Raleigh, North Carolina 27699-1553
ATTN: Craig Newton, PE
Project Engineer, Rail Division

APPROVED BY BOARD OF TRANSPORTATION ITEM O: _____
(Date)

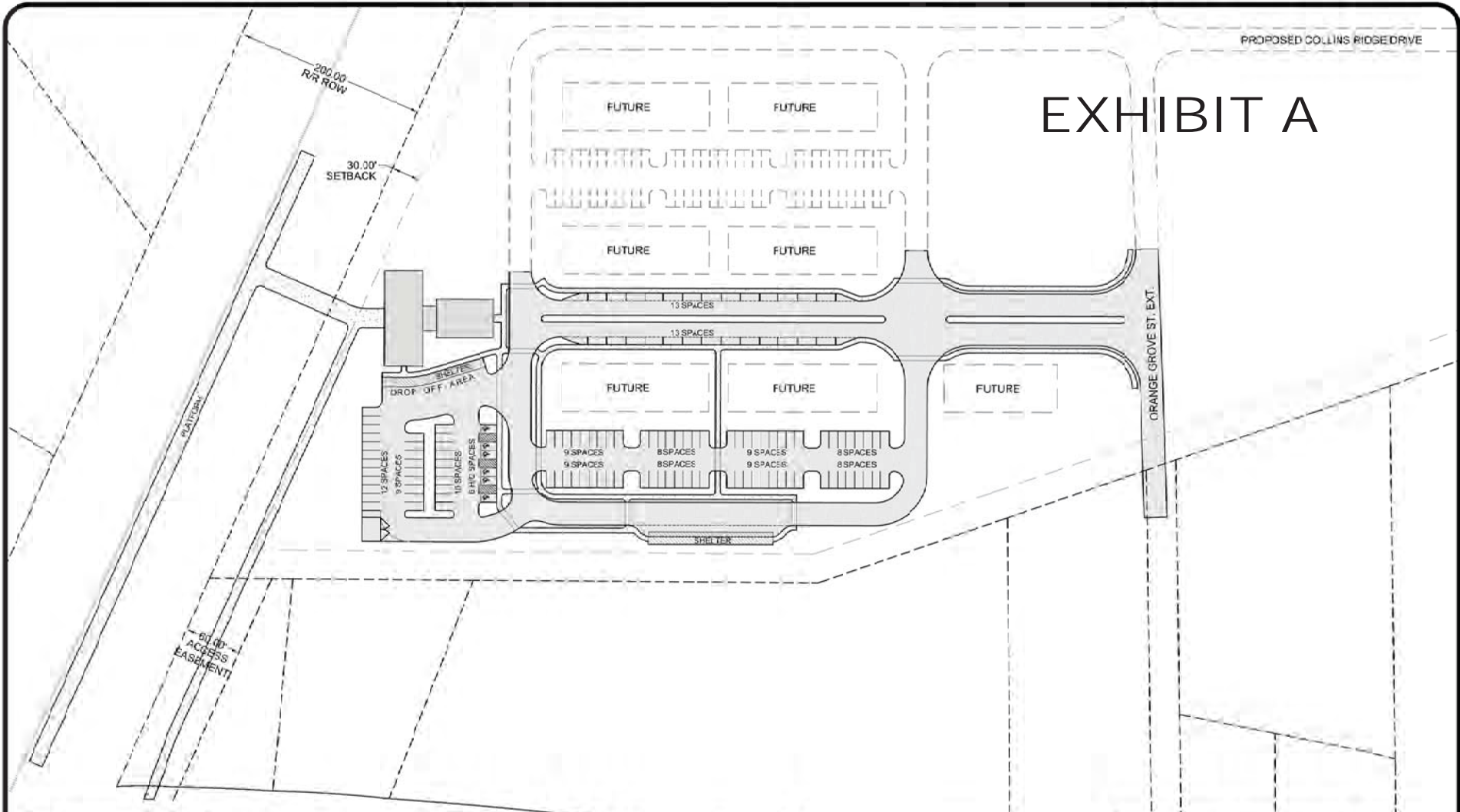


EXHIBIT A

SCALE
1"=100'

FIRST ISSUE DATE
ISSUE_DATE

PROJECT NO.
15-0297

SHEET NO.
BULLETIN

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DRAWING ALTERATION

IT IS A VIOLATION OF LAW FOR ANY PERSON
UNLESS ACTING UNDER THE DIRECTION OF
LICENSED ARCHITECT, PROFESSIONAL
ENGINEER, LANDSCAPE ARCHITECT, OR
LAND SURVEYOR TO ALTER ANY ITEM ON
THIS DOCUMENT IN ANY WAY. ANY LICENSEE
WHO ALTERS THIS DOCUMENT IS REQUIRED
BY LAW TO AFFIX HIS OR HER SEAL AND THE
NOTATION "ALTERED BY" FOLLOWED BY HIS
OR HER SIGNATURE AND SPECIFIC
DESCRIPTION OF THE ALTERATIONS.

**HILLSBOROUGH TRAIN
STATION**
ORANGE GROVE ROAD
HILLSBOROUGH, NC 27278

15-0297_CONCEPT

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HILLSBOROUGH TRAIN STATION FUNDING SUMMARY

2016 PE	\$ 150,000	TTA & TOWN (\$116k & \$34k)
2017 PE	\$ 375,000	NCDOT
2018 PE	\$ 375,000	NCDOT
2019 CON	\$3,315,000	NCDOT
2019 CON	\$ 285,000	TTA
2020 CON	\$3,315,000	NCDOT
<u>2020 CON</u>	<u>\$ 285,000</u>	<u>TTA</u>
TOTAL	\$8,100,000	

NCDOT	\$7,380,000
TTA	\$ 686,000
<u>TOWN</u>	<u>\$ 34,000</u>
TOTAL	\$8,100,000

**State of North Carolina
Department of Transportation
Subcontractor Payment Information**

EXHIBIT B-2

Submit with Invoice To: Invoice Coordinator
North Carolina Department of Transportation
Rail Division
1553 MSC
Raleigh, NC 27699-1553

Invoice No. Reference _____
NCDOT PO / Contract Number _____
WBS No. (State Project No.) _____
Date of Invoice _____
Signed _____

Invoice Line Item Reference	Payer Name	Payer Federal Tax Id	Subcontractor / Subconsultant/ Material Supplier Name	Subcontractor / Subconsultant / Material Supplier Federal Tax Id	Amount Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice
Total Amount Paid to Subcontractor Firms					\$ _____	

NOTE: - These documents are scanned into our Fiscal program. Please do not highlight or shade the figures.

I certify that this information accurately reflects actual payments made and the dates the payments were made to Subcontractors/
Subconsultants/Material Suppliers on the above referenced project.

Signature _____

Title _____

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Transit Operations
DATE: January 7, 2019
SUBJECT: Vehicle Purchase Authorization

Strategic Objective or Initiative Supported

Action Requested

Staff requests that the Committee recommend that the Board authorize the President/CEO to execute a contract for the purchase of two (2) Battery Electric Proterra Buses for fixed route service with a maximum dollar amount of \$2,080,225.

Background and Purpose

Transit Operations is seeking approval to purchase two (2) buses total. Board authorization will result in GoTriangle receiving the buses eight (8) months from placing the order. These buses will be replacing two (2) of our existing Gillig buses 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.

GoTriangle is committed to transition some of the existing fleet vehicles to a cleaner vehicle technology. The procurement of the Proterra buses will be the first step in this direction. The Proterra buses are battery electric zero-emission, which will reduce air pollution and create a better environment for the community.

Financial Impact

The total cost to purchase two (2) buses and associated maintenance equipment is \$2,080,225 with federal low or no emission grant contributions of \$943,000, Wake Transit Plan contribution of \$832,290, GoTriangle contribution of \$254,935, and Private participation from Duke Progress Energy contributions of \$50,000. Buses will be purchased with funds that are approved in the Bus Capital Project Budget. The funding for the local match is GoTriangle's General Fund.

Staff Contact

- Brian McLean, 919-485-7472, bmclean@gotriangle.org

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Finance
DATE: January 14, 2019
SUBJECT: **FY19 Budget Ordinance Amendment**

Strategic Objective or Initiative Supported

This item supports initiative 1.2, “pursue service improvements and expansion opportunities.”

Action Requested

Staff requests that the Committee recommend approval of the FY19 budget amendment to the GoTriangle Board of Trustees at the January 23, 2019, meeting.

The above action will be presented for approval to the Durham County Staff Working Group and the Orange County Staff Working Group on January 16, 2019.

Background and Purpose

1. The City of Durham estimated their fiscal year 2018 Q4 invoice for transit services \$28,804.91 less than the actual cost. In order to reimburse the City of Durham for this additional expense, the fiscal year 2019 budget needs to be increased by \$28,804.91. Budget can be increased using the City of Durham’s fiscal year 2018 carryover balance totaling \$944,898.
2. DCHC MPO submitted their fiscal year 2018 Q4 invoice for Durham County staff working group administrator (SWG Admin) expenses in early fiscal year 2019. The reimbursement request invoice was paid in fiscal year 2019 instead of in fiscal year 2018. Thus, \$9,879.53 of DCHC MPO’s fiscal year 2018 carryover balance totaling \$13,277.89 for Durham County SWG Admin needs to be carried forward to fiscal year 2019 budget to cover this reimbursement.
3. DCHC MPO submitted their fiscal year 2018 Q4 invoice for Orange County staff working group administrator (SWG Admin) expenses in early fiscal year 2019. The reimbursement request invoice was paid in fiscal year 2019 instead of in fiscal year 2018. Thus, \$9,879.53 of DCHC MPO’s fiscal year 2018 carryover balance totaling \$13,277.89 for Orange County SWG Admin to be carried forward to fiscal year 2019 budget to cover this reimbursement.

Financial Impact

The proposed Budget Ordinance Amendment provides access to fiscal year 2018 carryover funds needed for the following fiscal year 2018 operating expense reimbursements paid in fiscal year 2019:

1. The City of Durham – Increase fiscal year 2019 budget by \$28,804.91 using fiscal year 2018 carryover funds to cover the \$28,804.91 fiscal year 2018 operating expenses paid in fiscal year 2019.
2. DCHC MPO Durham County – Increase fiscal year 2019 budget by \$9,879.53 using fiscal year 2018 carryover to cover the \$9,879.53 fiscal year 2018 operating expenses paid in fiscal year 2019.
3. DCHC MPO Orange County – Increase fiscal year 2019 budget by \$9,879.53 using fiscal year 2018 carryover to cover the \$9,879.53 fiscal year 2018 operating expenses paid in fiscal year 2019.

Attachments

- Budget Ordinance Amendment 2019 0001

Staff Contact(s)

- Jennifer Keep, 919-485-7418, jkeep@gotriangle.org
- Sandra Freeman, 919-485-7475, sfreeman@gotriangle.org



2019 0001

**GOTRIANGLE
FISCAL YEAR 2019
TRIANGLE TAX DISTRICT – DURHAM/ORANGE 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 Durham/Orange Operating Fund** for the fiscal year beginning July 1, 2018, and ending June 30, 2019:

	Original	Revised
Article 43 ½ Cent Sales Tax	\$ 38,064,437	\$ 38,064,437
Vehicle Rental Tax	1,942,705	1,942,705
\$7 County Vehicle Registration Tax	2,552,635	2,552,635
\$3 Vehicle Registr Transfer from Dur/Orange		
Special Tax District	1,093,970	1,093,970
Grants/Others	445,410	445,410
Prior Year Appropriation Reallocated in Current Year	11,021,882	11,070,446
Reserve Balance Appropriation	<u>44,859,285</u>	<u>44,859,285</u>
Total	\$ 99,980,324	\$ 100,028,888

Section 2. The following amounts hereby are appropriated in the **Triangle Tax District Durham/Orange Operating Fund** for the fiscal year beginning July 1, 2018, and ending June 30, 2019:

	Original	Revised
Durham Transit Services	\$ 4,870,975	\$ 4,909,659
Orange Transit Services	3,701,438	3,711,318
Transfer Other Capital to Triangle Tax District - Durham/Orange Capital Fund	84,646,187	84,646,187
Transfer Prior Year Capital Appropriation Reallocated in Current Year to Triangle Tax District - Durham/Orange Capital Fund	<u>6,761,724</u>	<u>6,761,724</u>
Total	\$ 99,980,324	\$ 100,028,888

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 23RD DAY OF JANUARY 2019.

Ellen Reckhow, Board of Trustees Chair

ATTEST:

Michelle C. Dawson, Clerk to the Board

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Regional Services Development
DATE: January 14, 2019
SUBJECT: Regional Fare Study – Informational Update

Strategic Objective or Initiative Supported

Action Requested

Recommend the Board receive a presentation on the Fare Study Recommendations and set a public hearing date for March 27, 2019.

Background and Purpose

As part of the Wake Transit Bus Plan, GoTriangle, GoRaleigh, GoCary, and GoDurham participated in a regional fare study to evaluate existing conditions and fare trends, research peer agencies and their fare policies, evaluate opportunities for a standardized fare structure for the region, develop a series of fare scenarios to understand ridership and revenue impacts, and draft a preferred recommendation.

Agencies identified the following goals for the Fare Study:

- Improve Pass Distribution and Sales
- Balance Revenue and Ridership Goals
- Improve Passenger Experience
- Improve Regional Coordination
- Make Transit an Affordable Option
- Explore New Fare Technologies

Fare Scenarios

The study tested ridership and revenue impacts of the following scenarios, respectively:

1. Region-Wide Flat Fare
2. Region-Wide Tiered Fare
3. Optimize to Increase Ridership
4. Maximize Farebox Recovery
5. Align Discount Fare Policies
6. Offer Fare Capping
7. Offer Low-Income Fare Category
8. Offer Low-Income Fare Category with General Fare Increase

Peer Agencies

Based on agency size, demographics, and regional coordination, six transit areas/agencies were chosen as peers for the Fare Study: Seattle, Portland, Denver, Phoenix, Boston, and Charlotte. In most cases, peer agencies offered fewer pass types, had fewer discount categories, and had a wider pass distribution network than Triangle transit providers.

Final Recommendations

Based on the peer study and fare scenario impact testing, the final recommendation includes:

1. A two-tiered region-wide fare structure
2. Consistent region-wide discount and pass categories
3. Region-wide discount ID
4. Establish pass sales agreement and discount guidelines
5. Implement fare-capping technology with mobile ticketing and/or smart card technology

Financial Impact

Attachments

- Attachment A, Fare Study Presentation
- Attachment B, Fare Study Final Report

Staff Contact

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





Fare Integration Study

GoCary, GoDurham, GoRaleigh, and GoTriangle

Final Report

November 2018



FARE INTEGRATION STUDY

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Executive Summary

The Wake and Durham County Fare Integration Study provides a comprehensive review of the current fare system and policies for four agencies operating in the region—GoCary, GoDurham, GoRaleigh, and GoTriangle. Across the region, opportunities exist for more common fare purchase and collection procedures, as well as standardization of some fare policies among the different providers. Analysis as part of this planning effort was conducted to help the region better understand how various policy and fare changes will impact the ridership and revenue of individual agencies and the region as a whole.

This study included a comprehensive evaluation of the existing fare structure, pricing and policies, a review of peer agencies and fare-related best practices, and input from stakeholders through a series of Fare Working Group¹ meetings held from April through October 2018.

Study Goals

The Fare Integration Study includes a review of the existing fare policies in Wake and Durham County, fare structures currently in place at peer agencies, best practices for fare structures, bulk pass programs, low-income programs, potential impacts of modeled fare scenarios, and fare and policy recommendations. The overall goals of the Fare Integration Study include:

- **Improve Pass Distribution and Sales.** Pass options, pricing, and discounts on pass products impact pass sales. Aligning fares and pass pricing and making all passes consistently available at the same locations would simplify the passenger experience.
- **Balance Revenue and Ridership Goals.** There is general agreement between agencies that increasing ridership is a priority of adjusting fares and integrating service; however, balancing revenue and ensuring financial sustainability also remain important.
- **Improve Passenger Experience.** Consistent fare pricing, discount policies, and fare media availability improves the passenger experience and makes the process as intuitive and seamless as possible.
- **Improve Regional Coordination.** Improve cooperation between agencies while maintaining a degree of autonomy.
- **Make Transit an Affordable Option.** Investigate feasibility of fare capping, low-income fares, and additional reduced fare categories.
- **Explore New Fare Technologies.** Pursue regional approach to smartcards and mobile ticketing to help understand the fare structure needs for adopting new technologies.

¹ The Fare Working Group was comprised of representatives from GoCary, GoDurham, GoRaleigh, GoTriangle, Wake County, City of Raleigh, and the Capital Area Metropolitan Planning Organization (CAMPO).



FARE INTEGRATION STUDY

Existing Conditions and Background

The analysis of existing conditions reviews the existing fare structure and policies for GoTriangle, GoDurham, GoRaleigh, and GoCary to assess discrepancies between agency policies and identify potential opportunities for regional coordination and policy integration. This analysis also summarizes trends for farebox revenue within the region from 2011 to 2016, as well as fare media usage to determine opportunities for modifications to fare policies and structure. Key findings include the following:

- **Base fare pricing is inconsistent.** Regional and Express service is priced in two tiers (\$2.25 and \$3.00), while local service is priced at a single tier for each agency. Each local service provider charges a different base fare—\$1.00, \$1.25, or \$1.50. Simplifying the fare structure and aligning fares would simplify the customer experience.
- **There is an opportunity to align regional discount policies.** All of the agencies in the region offer the same discount for youth riders; however, discount policies for seniors and people with disabilities vary. Aligning these policies and pursuing a regional discount ID accepted by all service providers would improve the customer experience.
- **The pass distribution network is inconsistent.** Pass availability is limited in the existing pass distribution network. Pass availability varies by type of pass and by agency, which may be confusing for passengers.

Peer Review and Best Practices

The peer review and best practices analysis presents a comparison of the Wake-Durham region's fare structure and policies—including pass distribution network, base fares, pass multipliers, discount policies, farebox recovery rate, average cost per trip, average fare paid per trip, and average subsidy per trip—with peer agencies around the country. This chapter also assesses best practices for several policies and fare technologies, including electronic smartcards, fare capping, low-income fare programs, bulk pass programs, transfer policies, and fare free service. Key findings include the following:

- **Wake-Durham local fares are less expensive than peer agencies.** Local fares in the Wake-Durham region are between \$0.50 and \$1.75 less expensive than peer agency fares. Express fares are generally consistent with peer agencies.
- **Pass multipliers are consistent with peer agencies.** There is some variability between peer agency pass multipliers, but Wake-Durham agency multipliers are within the acceptable range of peer agencies.
- **Peer agency pass distribution networks are more robust and consistent.** The Wake-Durham region would benefit from improving the pass distribution network to align with peer agencies.
- **Mobile ticketing can be a cost-effective technology improvement that has the potential to be implemented quickly.** Implementing mobile ticketing can be less costly than electronic smartcards and can accommodate fare capping and incorporating other discount programs. Peer agencies have invested in mobile ticketing infrastructure.
- **Fare capping can improve equity and reduce upfront costs for low-income passengers.** Incorporating fare capping through mobile ticketing and/or smartcards is a



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method for reducing high out-of-pocket payments required for low-income riders to purchase monthly pass products.

- **Low-income fare categories can improve equity and increase the affordability of transit for vulnerable populations.** However, low-tech strategies can be burdensome to the passenger, and high-tech strategies may be expensive or burdensome to the agency. The pros and cons of such a program should be considered before implementing.
- **Expanding pass programs can increase transit ridership and revenue for the agency.** As more passengers have expanded options for cost effective use of the transit system, ridership potential increases.

Fare Recommendations

Fare and policy recommendations for GoCary, GoDurham, GoRaleigh, and GoTriangle are based on findings from the existing conditions analysis, peer review and best practices, fare modeling, and refining concepts with the Fare Working Group. The first phase of implementation is anticipated to occur in Summer 2019, with additional recommendations anticipated for implementation in early 2020.

- **Phase 1: Fare structure, discount policies, and pricing should be aligned across the region.** Beginning in the Summer of 2019, it is recommended that the region implement a tiered fare structure (\$1.25/\$2.50) with consistent discount policies.
- **Phase 2: Fare capping, smartcards, and mobile ticketing should be pursued in early 2020.** After the fare structure and discount policies are aligned, the region should pursue the implementation and integration of mobile ticketing, fare capping, and smartcards.

The recommended fare structure is provided in Figure ES-1, and Figure ES-2 provides a summary of recommendations developed as part of the Fare Integration Study.



FARE INTEGRATION STUDY

Figure ES-1 Recommended Regional Fare Structure

Fares/Multipliers	Local	Regional/ Express
Base	\$1.25	\$2.50
Day Pass	\$2.50	\$5.00
7-Day Pass	\$12.00	\$24.00
31-Day Pass	\$40.00	\$80.00
Base Discount	\$0.60	\$1.25
Discount Day Pass	\$1.25	\$2.50
Discount 7-Day Pass	\$6.00	\$12.00
Discount 31-Day Pass	\$20.00	\$40.00

Figure ES-2 Fare Recommendations Summary

Type	Recommendation
Fare Structure Recommendations (Implementation in Summer 2019)	<ul style="list-style-type: none"> ▪ Implement two-tiered region-wide fare structure with a local base fare of \$1.25 and regional/express base fare of \$2.50 ▪ Offer consistent discounts/categories <ul style="list-style-type: none"> – Youth 12 and Under – Free – Youth 13 to 18 – Free with Youth GoPass, otherwise 50% discount – Seniors 65+ – Free – People with Disabilities – 50% discount ▪ Offer \$2.50/\$5.00 paratransit base fare ▪ Provide consistent products/discounts <ul style="list-style-type: none"> – Offer 15% discount for Day Pass bundles – Continue to offer Value Cards – Eliminate GoDurham 5-Day Pass – Sell only Day Passes on-board
Near-Term Fare Policies (Implementation in Summer 2019)	<ul style="list-style-type: none"> ▪ Establish pass sales agreement and discount guidelines ▪ Pursue new sales partnerships ▪ Expand GoPass program ▪ Establish guidelines for fare adjustments ▪ Implement region-wide discount ID
Mid-Term Fare Policies (Implementation in Early 2020)	<ul style="list-style-type: none"> ▪ Pursue mobile ticketing ▪ Pursue fare capping ▪ Consider implementation of smartcards

1 Introduction

The Wake and Durham County Fare Integration Study provides a comprehensive review of the current fare system and policies for four agencies operating in the region—GoCary, GoDurham, GoRaleigh, and GoTriangle. Across the region, opportunities exist for more common fare purchase and collection procedures, as well as standardization of some fares among different providers. Analysis as part of this planning effort was conducted to help the region better understand how policy and fare changes will impact the ridership and revenue of individual agencies and the region as a whole.

This study included a comprehensive evaluation of the existing fare structure, pricing, and policies, a review of peer agencies and fare-related best practices, and input from stakeholders through a series of Fare Working Group¹ meetings. This report provides recommendations for fare pricing and structure, fare policy changes, and fare-related technology for the four agencies.

Key recommendations from the study include: adjustments to base fare and pass pricing, aligning regional fares and discount policies, offering a new technology options, offering fare capping on daily and monthly products, establishing new policies, and expanding the GoPass program to employers of all sizes in the region.

STUDY GOALS

The Fare Integration Study includes a review of the existing fare policies in Wake and Durham County, fare structures currently in place at peer agencies, best practices for fare structures, pass programs, low-income programs, potential impacts of modeled fare scenarios, and fare and policy recommendations. The overall goals of the fare integration study include:

- **Improve Pass Distribution and Sales.** Pass options, pricing, and discounts on pass products impact pass sales. Aligning fares and pass pricing and making all passes consistently available at the same locations would simplify the passenger experience.
- **Balance Revenue and Ridership Goals.** There is general agreement between agencies that increasing ridership is a priority of adjusting fares and integrating service; however, balancing revenue and ensuring financial sustainability also remain important.
- **Improve Passenger Experience.** Consistent of fare pricing, discount policies, and fare media availability improves the passenger experience and make the process as intuitive and seamless as possible.
- **Improve Regional Coordination.** Improve cooperation between agencies while maintaining a degree of autonomy.

¹ The Fare Working Group was comprised of representatives from GoCary, GoDurham, GoRaleigh, GoTriangle, Wake County, City of Raleigh, and the Capital Area Metropolitan Planning Organization (CAMPO). The work group met monthly from April through October 2018.

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- **Make Transit an Affordable Option.** Investigate feasibility of fare capping, low-income fares, and additional reduced fare categories.
- **Explore New Fare Technologies.** Regional approach to smartcards and mobile ticketing to help understand the fare structure needs for adopting new technologies.

Figure 1-1 Fare Integration Study Goals



REPORT ORGANIZATION

The report is organized into four chapters in addition to this Introduction—existing conditions and background, peer agency findings, fare scenarios, and recommendations.

- **Chapter 02 Existing Conditions and Background.** This chapter highlights the regional pass distribution network, fare policies, pricing, fare structure, and revenue and ridership trends.
- **Chapter 03 Peer Review and Best Practices.** This chapter provides an overview of each peer agency's key information and current fare structure and policies. Performance indicators are compared for the region and each peer agency. This chapter also explores best practices and lessons learned for low-income fare programs, fare capping, pass programs, and fare free transit service.
- **Chapter 04 Fare Scenarios.** This chapter summarizes the eight fare scenarios that were modeled and highlights the associated ridership and revenue impacts.
- **Chapter 05 Recommendations.** This chapter builds on the fare scenarios and peer agency findings by identifying priority outcomes and combining scenarios into a single preferred recommendation. There is additional discussion of policy recommendations for consideration and incorporation by the agencies.

2 Existing Conditions and Background

This chapter reviews the existing fare structure and policies for GoCary, GoDurham, GoRaleigh, and GoTriangle to assess discrepancies between agencies and identify potential opportunities for regional coordination and policy integration. This chapter also summarizes trends for farebox revenue within the region from 2011 to 2016, as well as fare media usage to determine opportunities for modifications to fare policies and structure.

KEY FINDINGS

Fare Structure and Pricing

- **Base fare pricing is inconsistent.** Regional and Express service is priced in two tiers (\$2.25 and \$3.00), while local service is priced at a single tier for each agency. Each local service provider charges a different base fare—\$1.00, \$1.25, or \$1.50. Simplifying the fare structure and aligning fares would simplify the customer experience.
- **Fare pass multipliers are relatively consistent.** Pass multipliers for day passes, 7-day passes, and 31-day passes, as a function of base fare price, are relatively consistent between the four agencies. Day passes are consistent at 2x, 7-day passes range from 7x to 10x, and 31-day passes range from 34x to 36x.
- **There is an opportunity to align regional discount policies.** All of the agencies in the region offer the same discount for youth riders; however, discount policies for seniors and people with disabilities vary. Aligning these policies and pursuing a regional discount ID accepted by all service providers would improve the customer experience.
- **The pass distribution network is inconsistent.** Pass availability is limited in the existing pass distribution network. Pass availability varies by type of pass and by agency.

Revenue Trends

- **Farebox recovery rate in the region is decreasing.** During the period of 2011 to 2016, farebox recovery rates in the region have generally been decreasing, and all agencies are currently at recovery rate under 20%. Falling farebox recovery rates can indicate an opportunity to look at fare adjustments.
- **Subsidy per trip in the region is increasing.** Related to operating costs per trip and fares paid per trip, the average subsidy per trip in the region has generally increased from 2011 to 2016. This also may be indicative of a need to adjust fare pricing and policies.
- **Passes are used more frequently than cash fares.** Fares are paid in cash for fewer than 25% of trips in the region and are most common on GoDurham routes. Express passes are also used much less frequently than regional or local passes.



FARE STRUCTURE AND PRICING

Fare Structure

Fare structures are similar across the agencies; however, there are key differences in fare pricing and pass multipliers, as shown in Figure 2-1 and Figure 2-2. One key structural difference is that GoTriangle service is priced in two tiered categories for regional and express service, while GoDurham, GoRaleigh, and GoCary only offer one tier of local service, although the base price for local service is different for each of these agencies. Each agency offers cash fares, local and regional day-passes, local and regional 7-day passes, local and regional 31-day passes, and stored value cards. Each agency also offers discount fares for a number of fare categories. GoDurham is unique in also offering 5-day passes.

Pricing

Base fares range from as low as \$1.00 for GoDurham service to as high as \$3.00 for GoTriangle Express service. Local service is priced at \$1.00, \$1.25, and \$1.50 for GoDurham, GoRaleigh, and GoCary, respectively. GoTriangle Regional and Express service are more expensive than local service, priced at \$2.25 and \$3.00, respectively.

Pass multipliers are the number of single trips that a rider must purchase in order to “break even” on the cost of a given pass product. For example, a day pass with a 2x multiplier means that a passenger would need to ride transit twice in a day to break even. Pass multipliers can be adjusted to make passes more attractive fare options for riders or to raise additional revenue for the agency.

Pass multipliers for day passes and 31-day passes are generally consistent across the agencies, with day-passes at 2x and 31-day passes between 34x and 36x; however, 7-day passes range from roughly 7x for GoTriangle, 10x for GoRaleigh and GoCary, and 12x for GoDurham. These differences present an opportunity to make pass multipliers consistent across the region.

Figure 2-1 Agency Fare Structures

	GoRALEIGH		GoCARY		GoTRIANGLE Regional		GoTRIANGLE Express		GoDURHAM	
	Full Fare	Reduced Fare	Full Fare	Reduced Fare	Full Fare	Reduced Fare	Full Fare	Reduced Fare	Full Fare	Reduced Fare
Cash Fare	\$1.25	\$0.60	\$1.50	\$0.75	\$2.25	\$1.00	\$3.00	\$1.25	\$1.00	\$0.50
Local Day Pass	\$2.50	\$1.25	\$3.00	\$1.50	N/A	N/A	N/A	N/A	\$2.00	\$1.00
Regional Day Pass	\$4.50	\$2.00	\$4.50	\$2.00	\$4.50	\$2.00	\$6.00	\$2.50	\$4.50	\$2.00
Local 7-Day Pass	\$12.00	\$6.00	\$14.50	\$7.25	N/A	N/A	N/A	N/A	\$12.00	\$7.00
Regional 7-Day Pass	\$16.50	\$7.50	\$16.50	\$7.50	\$16.50	\$7.50	\$22.00	\$9.25	\$16.50	\$7.50
Local 31-Day Pass	\$45.00	\$22.50	\$54.00	\$27.00	N/A	N/A	N/A	N/A	\$36.00	\$18.00
Regional 31-Day Pass	\$76.50	\$34.00	\$76.50	\$34.00	\$76.50	\$34.00	\$102.00	\$42.50	\$76.50	\$34.00
\$25 Stored Value Card* Sold in \$50, \$25, and \$13.50 increments	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00

Regional Passes: allow riders to travel on all routes across all providers with the exception of GoTriangle Express Routes.

Express Passes: allow riders to travel on all routes across all providers without exception.

Figure 2-2 Agency Pass Multipliers

	GoRALEIGH		GoCARY		GoTRIANGLE Regional		GoTRIANGLE Express		GoDURHAM	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Base Fare	\$1.25	\$0.60	\$1.50	\$0.75	\$2.25	\$1.00	\$3.00	\$1.25	\$1.00	\$0.50
Day Pass Multiplier	2	2.1	2	2	2	2	2	2	2	2
7-Day Pass Multiplier	9.6	10	9.6	9.6	7.3	7.5	7.3	7.4	12	14
31-Day Pass Multiplier	36	37.5	36	36	34	34	34	34	36	36



FARE INTEGRATION STUDY

Discount Policies

Discount policies also vary between the agencies, as shown in Figure 2-3. Generally, there is an opportunity to standardize discount policies by aligning discounts offered for students/youth, seniors, and people with disabilities.

There is also an opportunity to standardize discount ID policies between the agencies, especially for seniors and people with disabilities. Existing policies are described further below. Recent implementation of the Youth GoPass program has created a standard ID policy for riders age 13-18 across all agencies.

Youth

All Wake-Durham agencies currently offer free service for children and youth ages 18 and younger. Children 0-12 ride free with no pass or ID required. Youth age 13-18 are able to ride free with a Youth GoPass but are charged a fare if they do not have one. This is a recent policy change that was implemented in Summer 2018.

Seniors

GoRaleigh and GoDurham both offer free service for seniors age 65 and older. GoTriangle offers a 58% discount for seniors age 65 and older, while GoCary offers a 50% discount for seniors age 60 and older. Integrating senior policy in terms of the discount provided and the age group considered under the discount policy would enhance interagency cooperation and the rider experience, particularly for seniors transferring between agencies.

Existing ID policies for seniors include the following:

- GoRaleigh riders must present GoRaleigh ID
- GoCary accepts GoCary Door to Door ID or valid government ID
- GoTriangle accepts discount ID issued by GoTriangle, GoCary, GoDurham, or GoRaleigh or Medicare ID
- GoDurham riders must present GoDurham ID or government-issued photo ID

Disabilities

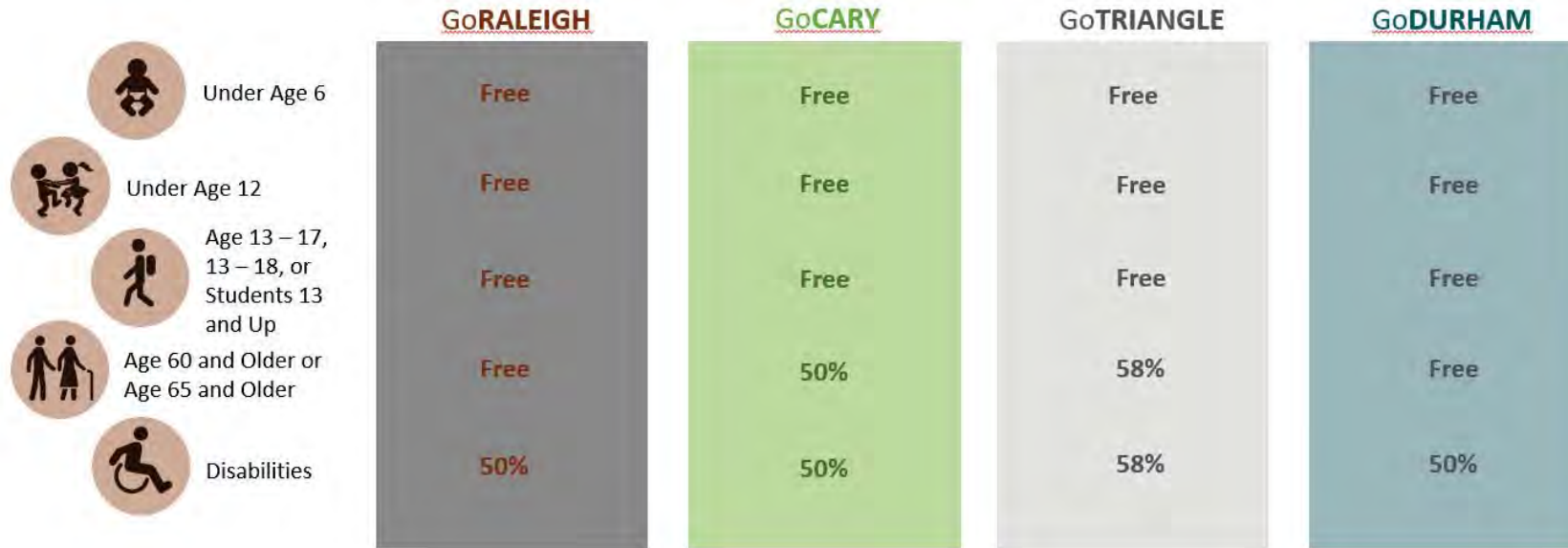
All agencies offer a 50% discount for passengers with disabilities except GoTriangle, which offers a 58% discount. This policy is generally consistent among the agencies. GoTriangle's discount percentage is currently set to round their discount fares to the nearest quarter. This percentage should be reevaluated whenever base fares for the agency are altered.

Existing ID policies for people with disabilities include the following:

- GoRaleigh riders must present GoRaleigh ID
- GoCary accepts GoCary Door to Door ID or valid government ID
- GoTriangle accepts discount ID issued by GoTriangle, GoCary, GoDurham, or GoRaleigh; Braille Institute ID card; Veterans Health ID card; or proof of ADA eligibility from another transit system
- GoDurham accepts GoDurham ID or Medicare card

FARE INTEGRATION STUDY

Figure 2-3 Fare Discounts Available



FARE INTEGRATION STUDY

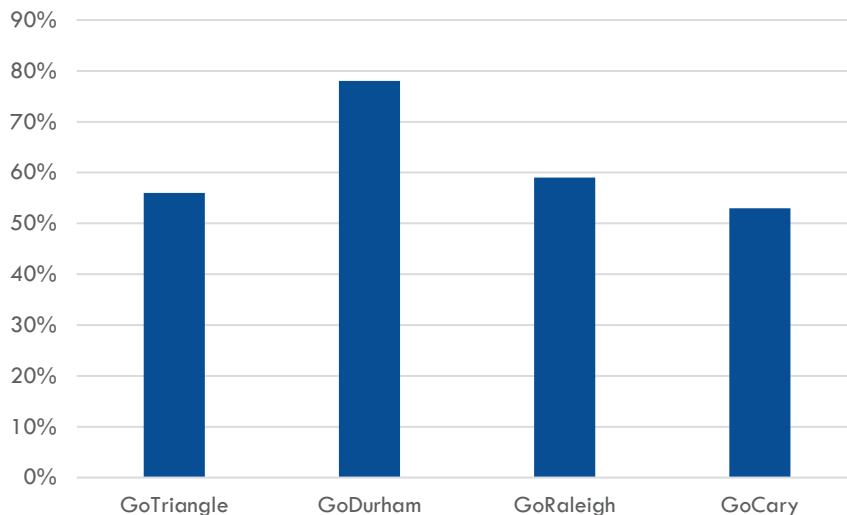
Transfers

There is significant potential to make transfer policies more consistent among the Wake-Durham agencies. Currently, riders using an express pass can transfer between local, regional, or express bus, as well as across providers for free. Riders using a regional pass can transfer between local and regional buses—regardless of provider—for free, but cannot transfer to an express bus without paying an upcharge.

Using local passes or cash payments, GoDurham, GoCary, and GoRaleigh do not offer any free local transfers. All one-way bus boardings for these agencies require full fare payment.

In the Wake-Durham region, many one-way trips require a transfer, and this may become more prevalent in the future as the network is modified, creating a financial burden for some riders. Currently, more than 50% of trips for each agency require a transfer to complete their trip, as shown in Figure 2-4. In the future, an alternative approach to consider instead of offering transfers is to create a two-hour pass policy that allows unlimited use of the transit network for that amount of time.

Figure 2-4 One-Way Trips Requiring More than One Bus



Fare Policies

Unique fare policies between the agencies can add confusion for customers. Policies should be made consistent for all agencies if possible. These policies include:

- GoRaleigh offers 15% bundle discount on six or more Day Passes.
- Prepaid Value Cards are available to purchase one way fares and day passes at a 20% discount and are accepted at the fareboxes of all four agencies.
- GoRaleigh and GoDurham have free fares for seniors but charge ADA-eligible riders half price.
- GoCary issues change cards at the farebox that expire after one year; GoRaleigh issues change cards that work across regional agencies.
- All GoCary passes sold on board are activated immediately.



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- GoTriangle currently offers transfers to other GoTriangle regional routes with a transfer card issued on board and express routes with a \$0.75 upcharge; GoTriangle is also seeking to eliminate transfers but has not yet done so.
- GoDurham, GoCary, and GoRaleigh do not offer free local transfers.
- GoWake Access fares are only paid onboard.

General discounts offered for making upfront purchases would be more effective if they were consistent across all agencies. For example, a 15% discount for purchasing at least six day passes and a 20% discount for purchasing value cards worth \$13.50, \$25, or \$50 could be made available at all regional agencies to encourage additional ridership.

Pass Distribution

The existing pass distribution network, shown in Figure 2-5, varies by pass type and agency, presenting challenges for passengers. The pass distribution network is generally inconsistent among the agencies. All four agencies offer day passes onboard their vehicles; however, GoCary is unique in also offering 7-day passes and 31-day passes onboard.

GoTriangle is the only agency that allows riders to purchase passes online. Almost every pass option in the region is available in a transit or government building with the exception of GoCary, which only offers the 31-day pass in transit or government buildings. GoRaleigh is the only agency to offer passes at ticket vending machines (TVMs) or third-party retail locations. All GoRaleigh pass options are available at TVMs, while only 7-day passes and 31-day passes are available at third-party retail locations, including select Harris Teeter locations in Raleigh.

There is opportunity to develop a consistent, regional pass distribution network which offers the same passes at the same locations for all agencies in the Wake-Durham region. Such a distribution network would enhance the customer experience by allowing for purchase of all pass types in a greater variety of locations.

FARE INTEGRATION STUDY
Figure 2-5 Existing Pass Distribution Network

Agency	Fare Type	Onboard	Online	Transit/ Government Building	In Stores	TVM
GoRaleigh	Day Pass	✓		✓		✓
	7-Day Pass			✓	✓	✓
	31-Day Pass			✓	✓	✓
GoCary	Day Pass	✓				
	7-Day Pass	✓				
	31-Day Pass	✓		✓		
GoTriangle	Day Pass	✓	✓	✓		
	7-Day Pass		✓	✓		
	31-Day Pass		✓	✓		
GoDurham	Day Pass	✓		✓		
	7-Day Pass			✓		
	31-Day Pass			✓		



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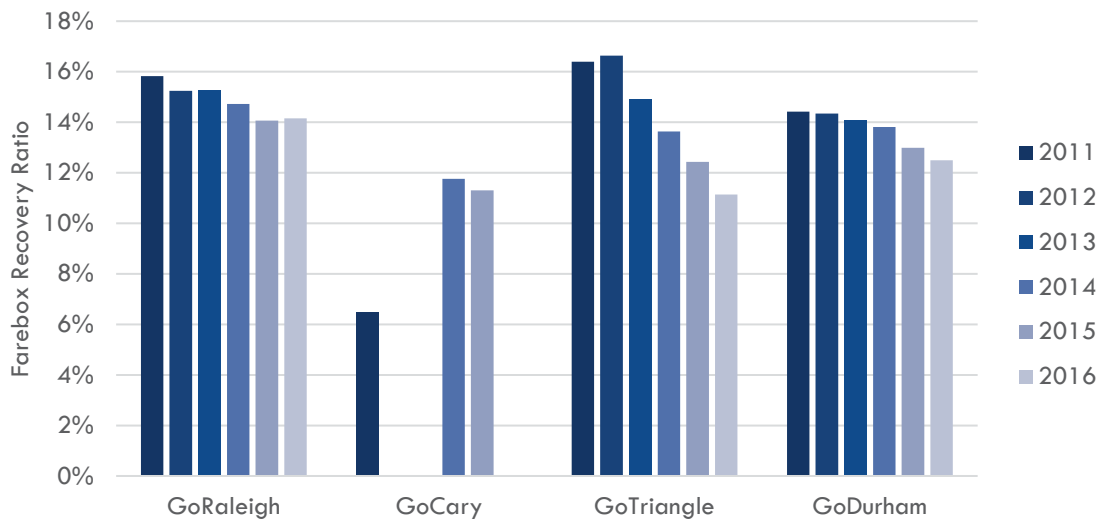
REVENUE TRENDS

Farebox Recovery Rate

Farebox recovery is a measure of the percentage of agency operating funds that come from fare-paying customers. Currently, there are no farebox recovery goals established for any of the agencies in the Wake-Durham region. Farebox recovery rates for each agency from 2011 to 2016 are shown in Figure 2-6.

In general, farebox recovery rates have been declining across the agencies since 2011.¹ The average farebox recovery for the four agencies is below 20%. While increasing ridership is a goal of this fare study, it is also imperative to balance this with farebox recovery to ensure agency financial sustainability.

Figure 2-6 Farebox Recovery Rate Trends (2011-2016)



Operating Cost per Trip

Operating cost per trip is a metric used to determine the average operating cost to the agency for each passenger trip in the system. The average operating cost per trip for the four agencies in 2016 is shown in Figure 2-7. Average operating cost per trip ranges from \$3.09 for GoDurham service to \$9.09 for GoTriangle service.

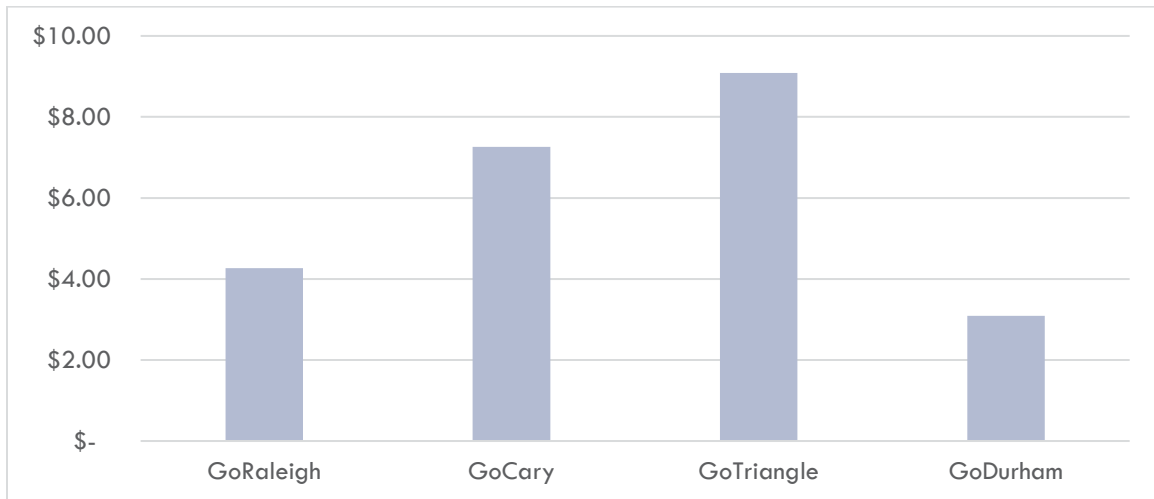
GoTriangle provides regional service over a larger area than the other agencies, resulting in a higher operating cost per trip. The operating cost per trip for GoCary (\$7.26) is relatively high compared to the other local services, likely due to GoCary’s smaller size.

¹ Data was not available for GoCary in 2012 or 2013



FARE INTEGRATION STUDY

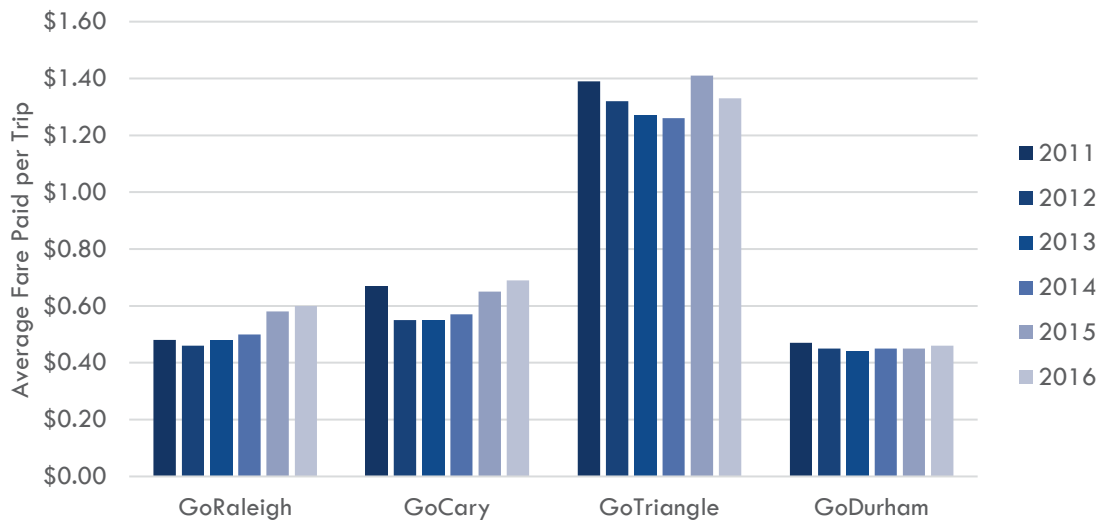
Figure 2-7 Average Operating Cost per Trip (2016)



Fares Paid per Trip

Due to discount policies, fare pass discounts, and fare evasion, the full base fare for service is not always paid for every trip—instead, the actual fare paid per trip is often lower. Figure 2-8 shows the average fares paid per trip for each agency between 2011 and 2016. Average fares paid per trip generally follow the same pattern as the listed base fares for each agency—GoDurham has the lowest fares paid, followed by GoRaleigh, GoCary, and GoTriangle with the highest. Average fares paid range from a low of \$0.44 for GoDurham to \$1.41 for GoTriangle. The fares paid per trip vary from year to year, but fluctuations are relatively small (within \$0.15 per trip).

Figure 2-8 Average Fares Paid per Trip (2011-2016)

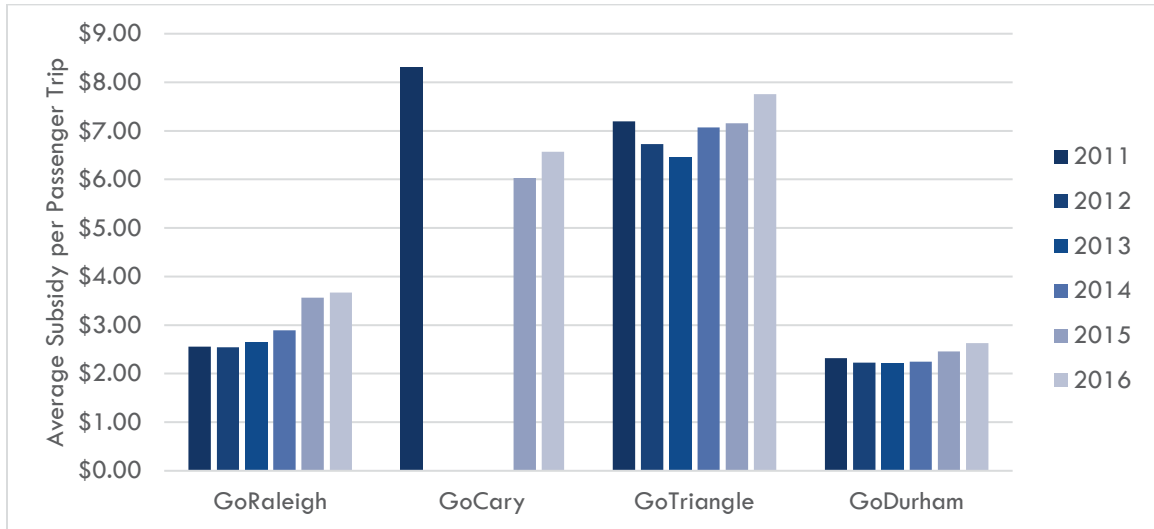


FARE INTEGRATION STUDY

Subsidy per Trip

By subtracting the average cost per trip by the average fare paid per trip, it is possible to calculate the average subsidy per trip. In general, the average subsidy per trip, shown in Figure 2-9, ranged from a low of \$2.63 per trip for GoDurham to a high of \$7.76 per trip for GoTriangle. GoTriangle subsidies have increased since 2013, growing by more than \$1.00 in a three-year period. GoCary had an average subsidy per trip of \$8.32 in 2011, but that number decreased to \$6.57 in 2016.

Figure 2-9 Average Subsidy per Trip (2011-2016)



Fare Media

The fare media used at regional agencies is shown in Figure 2-10. In general, all four agencies primarily rely on passes for the bulk of their fare media. Passes are used for 75% of GoDurham riders, 70% of GoCary riders, 77% of GoTriangle riders, and 64% of GoRaleigh riders.

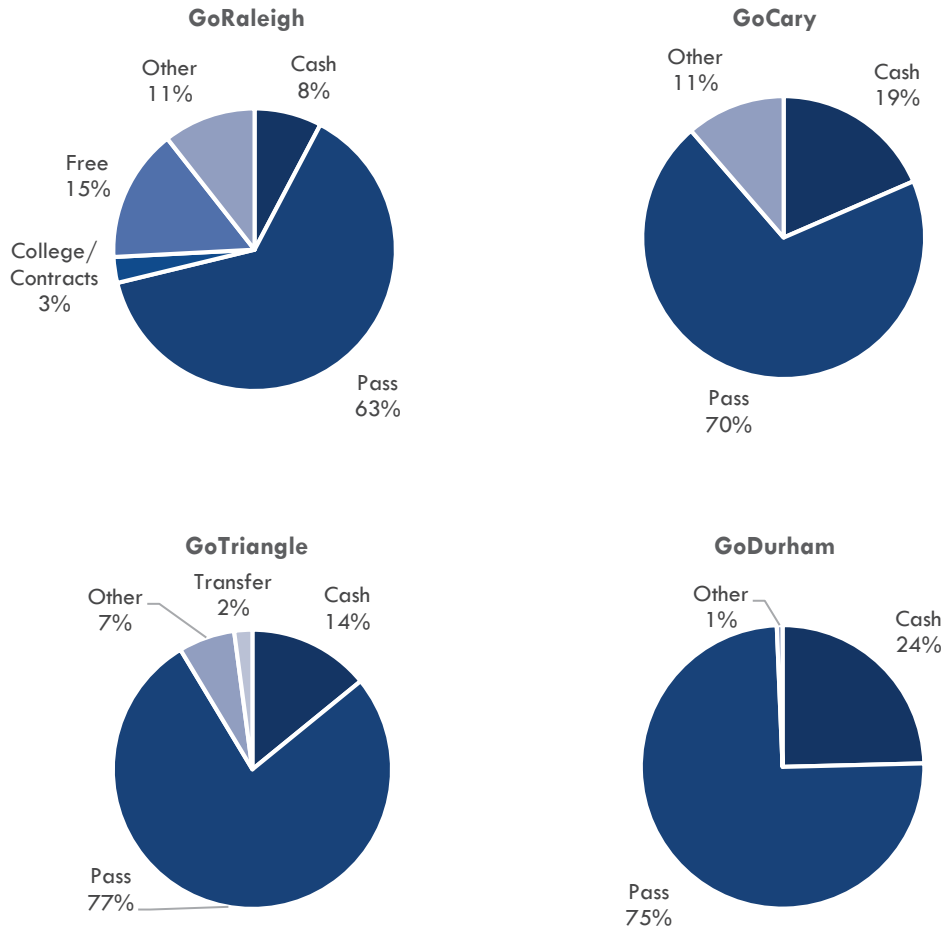
Cash payments account for less than 25% of boardings across the agencies, with 24% of GoDurham riders, 19% of GoCary riders, 14% of GoTriangle riders, and 8% of GoRaleigh riders paying cash.

The type of passes used for each agency are shown in Figure 2-11. Generally, Express Passes are not widely used, accounting for less than 5% of all pass usage. GoTriangle (64%) and GoDurham (22%) have higher GoPass usage than the other agencies. GoTriangle (32%) and GoCary (31%) also have higher Regional Pass usage than the other agencies. The majority of pass use for GoDurham (73%), GoRaleigh (90%), and GoCary (63%) are local passes.

This indicates that changes to Express Passes are unlikely to have large impacts, while changes to Regional Passes are likely to have a greater impact for GoTriangle and GoCary. Similarly, changes to the GoPass structure will have greater impacts to GoTriangle and GoDurham. Changes to local passes will likely have a significant impact for all local service agencies.

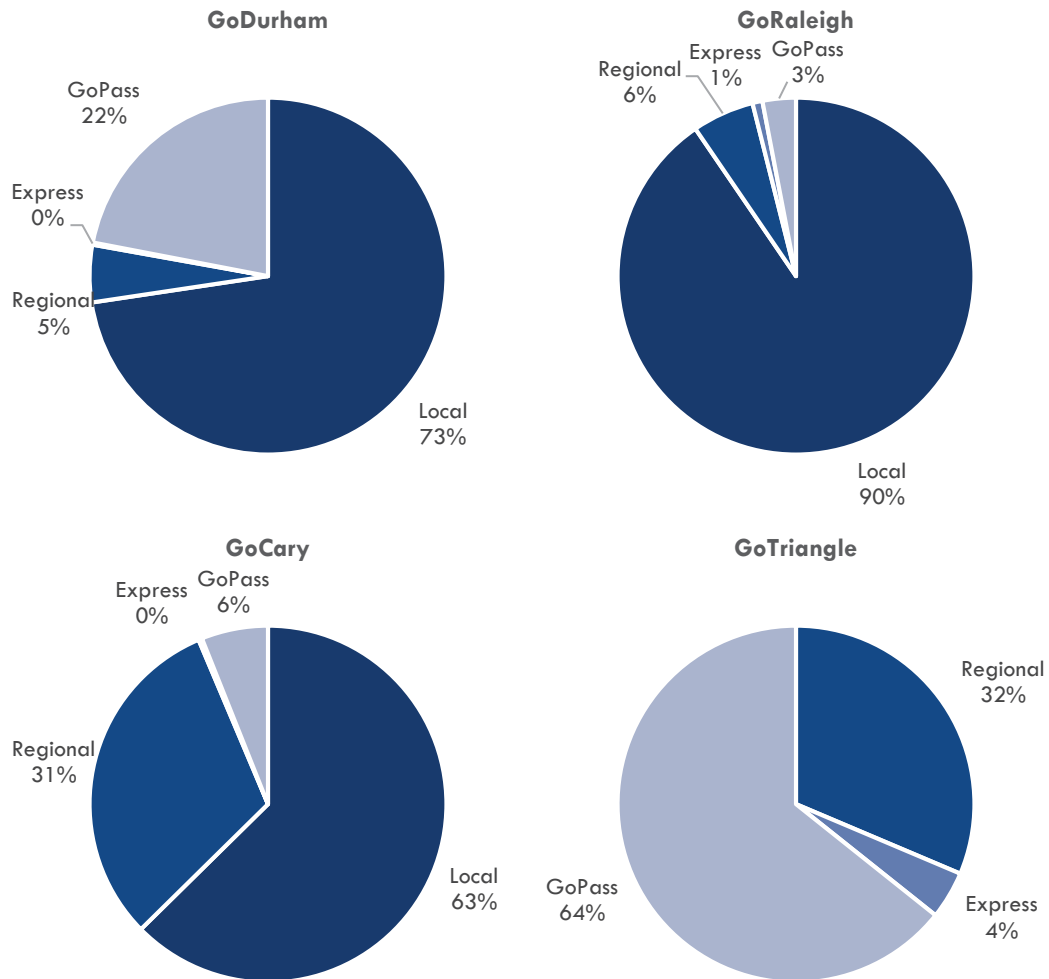
FARE INTEGRATION STUDY

Figure 2-10 Fare Media Used by Agency



FARE INTEGRATION STUDY

Figure 2-11 Pass Type by Agency



GOPASS PROGRAM

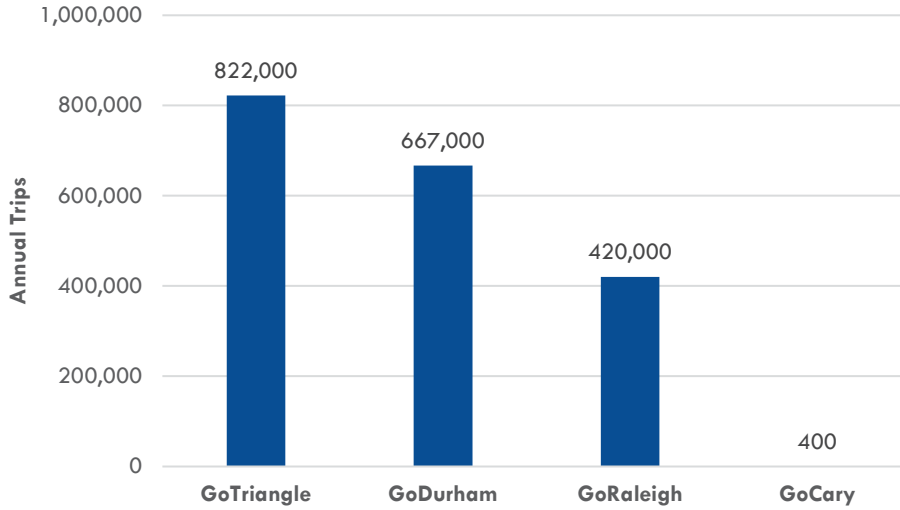
In the Wake-Durham region, the GoPass Program is available through numerous employers and universities. GoPass use varies by agency and passenger demographics. The annual GoPass use for each agency in the region is shown in Figure 2-12. Generally, GoPasses are used by commuters employed by universities and government agencies. Eligible employees have the option of purchasing or using an employer-provided GoPass, and employers participating in the GoPass program are billed by the transit agency based on pass usage.

In this section, GoPass use is analyzed in greater detail for each agency, with the exception of GoCary. GoPass use for GoCary is sufficiently small that detailed data from the agency was not available.



FARE INTEGRATION STUDY

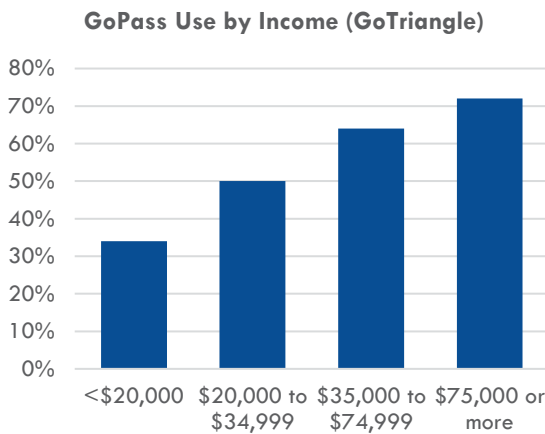
Figure 2-12 Annual GoPass Use by Agency



GoTriangle

The majority of GoTriangle riders (53%) use a GoPass. Additionally, 85% of GoPass use on GoTriangle routes is by riders affiliated with a university. Higher incomes are also correlated with higher GoPass use, indicating that high-income commuters are more likely to have access to the program.

Figure 2-13 GoPass Use by Income and by University Affiliation for GoTriangle Riders



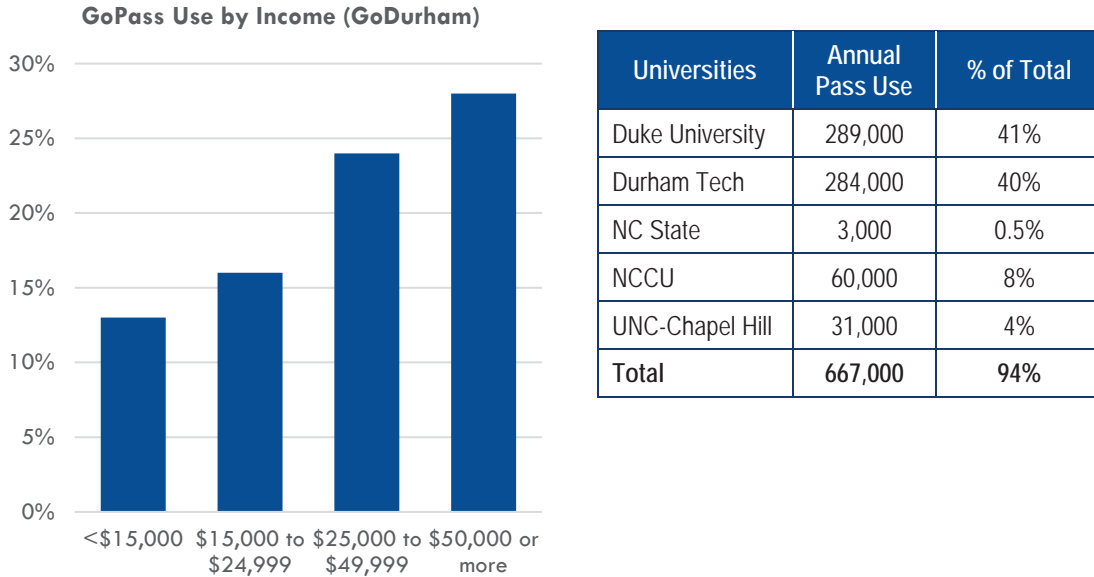
Universities	Express	Regional	% of Total
Duke University	72,000	106,000	22%
Durham Tech	1,800	25,000	3%
NC State	38,000	56,000	11%
NCCU	500	5,000	0.6%
UNC-Chapel Hill	56,000	335,000	48%
Total	168,000	527,000	85%

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GoDurham

GoPass use is significantly lower for GoDurham than for GoTriangle, with only 16% of GoDurham riders utilizing GoPass. The majority of GoPass use on GoDurham routes is by university-affiliated riders, accounting for 94% of all GoPass use for the agency. Higher incomes are also correlated with higher GoPass use, but less significantly than for GoTriangle.

Figure 2-14 GoPass Use by Income and by University Affiliation for GoDurham Riders



GoRaleigh

GoPass use for GoRaleigh is similar to GoDurham, with 14% of GoRaleigh riders utilizing GoPass. Similar to GoDurham and GoTriangle, GoPass use for GoRaleigh is primarily through university-affiliated riders; however, there is also a large share of government employees using GoPass on GoRaleigh service. Income data was not available for GoRaleigh for inclusion in this analysis.

Figure 2-15 GoPass Use by Organization/Employer Affiliation for GoRaleigh Riders

Organization	Annual Pass Use	% of Total
NC State	184,000	44%
Wake Tech	78,000	19%
State Gov.	55,000	13%
Shaw Univ.	32,000	8%
City of Raleigh	20,000	5%
Total	369,000	89%

3 Peer Review and Best Practices

This chapter presents a comparison of the Wake-Durham region's fare structure and policies—including pass distribution network, base fares, pass multipliers, discount policies, farebox recovery rate, average cost per trip, average fare paid per trip, and average subsidy per trip—with peer agencies around the country. This chapter also assesses best practices for several policies and fare technologies, including electronic smartcards, fare capping, low-income fare programs, pass programs, transfer policies, and fare free service. These topics expand beyond the listed peer agencies and regions to explore relevant case studies for applicable policies and programs.

KEY FINDINGS

Fare Structure

- **Wake-Durham local fares are less expensive than peer agencies.** Local fares in the Wake-Durham region are between \$0.50 and \$1.75 less expensive than peer agency fares. Express fares are generally consistent with peer agencies.
- **Pass multipliers are consistent with peer agencies.** There is some variability between peer agency pass multipliers, but Wake-Durham agency multipliers are within the acceptable range of peer agencies.
- **Peer agency pass distribution networks are more robust and consistent.** The Wake-Durham region would benefit from improving the pass distribution network to align with peer agencies.
- **The Wake-Durham region offers more free service categories than peer agencies.** Discount categories are relatively similar between the peer agencies, but Wake-Durham agencies provide free service to youth under 18, while most peers offer discounted service to youth under 18 and free service to children under 6 only.

Revenue Trends

- **The Wake-Durham region has lower farebox recovery rates than peer agencies.** Lower fares and more free service categories in the region are a likely contributing factor to this trend.
- **GoTriangle and GoCary have higher average costs and average subsidy per trip.** GoDurham and GoRaleigh are comparable to peer agencies, but GoTriangle and GoCary have higher average costs and average subsidy per trip.

Policies and Programs

- **Mobile ticketing can be a cost-effective technology improvement that has the potential to be implemented quickly.** Implementing mobile ticketing can be less



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costly than electronic smartcards and can accommodate fare capping and incorporating other discount programs. Peer agencies have invested in mobile ticketing infrastructure.

- **Fare capping can improve equity and reduce upfront costs for low-income passengers.** Incorporating fare capping through a mobile ticketing flash pass or smartcard provide methods for reducing out of pocket payments required for low-income riders.
- **Low-income fare categories can improve equity and increase the affordability of transit for vulnerable populations.** However, low-tech strategies can be burdensome to the passenger, and high-tech strategies may be expensive or burdensome to the agency. The pros and cons of such a program should be considered before implementing.
- **Expanding bulk pass programs can increase transit ridership and revenue for the agency.** As more passengers have expanded options for cost-effective use of the transit system, ridership potential increases.
- **Fare free operation can be transformative for a transit agency but requires creative funding partnerships.** Fare free systems typically experience significant ridership growth after eliminating fares. Replacing lost fare revenue while meeting growing ridership demand may be challenging without establishing supportive financial partnerships.

INTRODUCTION

Peer reviews are a useful technique to understand the “state of the practice” with regard to fare levels, structures, and policies. The purpose of this peer review is to provide current and accurate information about fare structures and policies at other comparable transit agencies. The peer agencies were selected based on various attributes, including service area, service population, operating characteristics, implementation of innovative fare policies and/or technology, and feedback from the Fare Working Group. The six agencies/regions in this peer review are:

- **Seattle, WA** (King County Metro and Sound Transit)
- **Portland, OR** (TriMet)
- **Phoenix, AZ** (Valley Metro)
- **Denver, CO** (RTD)
- **Charlotte, NC** (CATS)
- **Boston, MA** (MBTA)

These peer regions are shown in Figure 3-1. Data for this peer review was collected from the most recently available data from the National Transit Database (NTD, 2016), agency websites, and other agency-related materials.

Figure 3-1 Map of Peer Agencies



FARE STRUCTURE

Fares by Service Type

Fares by service type for each of the peer agencies are shown in Figure 3-1. In general, local service for peer agencies is more expensive than in the Wake-Durham region. Peer agency base fares vary from \$2.00 to \$2.75, compared to \$1.00 to \$1.50 in the Wake-Durham region. Express service fares are in line with fares in other peer agencies, which range from \$2.50 in Portland to \$5.00 in Boston. Commuter/regional fares in Wake-Durham are on the low side compared to peers, which are generally in the \$4.00 to \$7.00 range. Trip length and fares for demand response service are also in line with peer agencies.

Other findings from peer agency fare structures include:

- Portland offers a flat fare across all modes.
- Phoenix and Charlotte charge the same fare for light rail and local bus.
- Seattle charges the same fare for Bus Rapid Transit (BRT) and local bus.
- Denver and Boston offer discounts for using a smartcard compared to cash and magnetic tickets.
- Wake-Durham premiums are 50% to 300% for local versus regional/express service.
 - Phoenix and Denver charge a 62.5% and 73% premium for regional service.
 - Boston charges a 150%-250% premium for express service.
- Zone-based and peak fares are not common.



Figure 3-2 Peer Agency Base Fares by Service Type

Region	Local Fare	Express	Commuter/ Regional	BRT/Rapid Bus	LRT	Demand Response
Wake/Durham (Multiple)	\$1.00-\$1.50	\$3.00 (GoTriangle)	\$2.25 (GoTriangle)	N/A	N/A	\$2.50 (Access)
Seattle (Multiple)	\$2.75 (Metro)	\$2.75-\$3.75 (ST)	\$1.75-\$5.75 (Sounder)	\$2.75 (Metro)	\$2.25-\$3.25 (ST)	\$1.75 (Access)
Portland (TriMet)	\$2.50	\$2.50	\$2.50	N/A	\$2.50	\$2.50 (LIFT)
Phoenix (Valley Metro)	\$2.00	\$3.25	\$3.25	\$3.25	\$2.00	\$1.00-\$4.00
Denver (RTD)	\$2.35-\$2.60 (Pass-Cash)	N/A	\$4.25-\$4.50 (Pass-Cash)	N/A	\$2.35-\$4.50 (Pass-Cash)	\$2.60 (Call-n-Ride)
Boston (MBTA)	\$1.70-\$2.00 (Pass-Cash)	\$4.00-\$5.00 (Pass-Cash)	\$5.25-\$7.00 (Pass-Cash)	\$1.70-\$2.00 (Pass-Cash)	\$2.25-\$2.75 (Pass-Cash)	\$3.15-\$5.25 (RIDE)
Charlotte (CATS)	\$2.20	\$3.00	\$4.40	N/A	\$2.20	\$3.50 (STS)

Pass Multipliers

As described in Chapter 2, pass multipliers are the number of single trips that a rider must purchase in order to break even on the cost of a given pass product. For example, a day pass with a 2x multiplier means that a passenger would need to ride transit twice in a day to break even. Pass multipliers can be adjusted to make them more attractive fare options for riders or to raise additional revenue for the agency.

Pass multipliers for peer agencies are shown in Figure 3-3. Agencies in Wake and Durham County are generally in line with other peer agencies in terms of pass multipliers for local bus service.

- **Day pass** multipliers for peer agencies are relatively consistent, between 2 and 2.9, and are in line with Wake-Durham's multiplier of 2.
- **7-day pass** multipliers for peer agencies range from 9.6 to 12.3. The Wake-Durham region is again in line with peer agencies, with multipliers varying from 9.6 to 12.
- **Monthly passes** in peer agencies have the most variability of all pass multipliers, ranging between 27.5 in Boston and 40 in Portland. Wake-Durham monthly passes are set with a multiplier of 36, placing it in line with peers, though toward the higher end.

Figure 3-3 Peer Agency Local Bus Fare Pass Multipliers

Region	Cash Fare	Day Pass	10-Ride Pass	7-Day Pass	Monthly Bus Pass
Wake/Durham (Multiple)	\$1.00-\$1.50	2	N/A	9.6 - 12	36
Seattle (Multiple)	\$2.75	2.3 - 2.9	N/A	N/A	36
Portland (TriMet)	\$2.50	2	N/A	N/A	40
Phoenix (Valley Metro)	\$2.00	2	N/A	10	32
Denver (RTD)	\$2.60	2	N/A	N/A	38
Boston (MBTA)	\$2.00	N/A	N/A	10.6	27.5
Charlotte (CATS)	\$2.50	N/A	13.6% discount	12.3	35.2

Pass Distribution

Peer agencies have a wider distribution network than the Wake-Durham agencies. All pass types are available online, in transit/government agency buildings, at social service providers, and in third party retail stores. Additionally, there are fewer pass products available onboard transit vehicles, with day passes being the only available fare media for purchase. The peer pass distribution network is summarized in Figure 3-4.

Figure 3-4 Peer Agency Pass Distribution Network

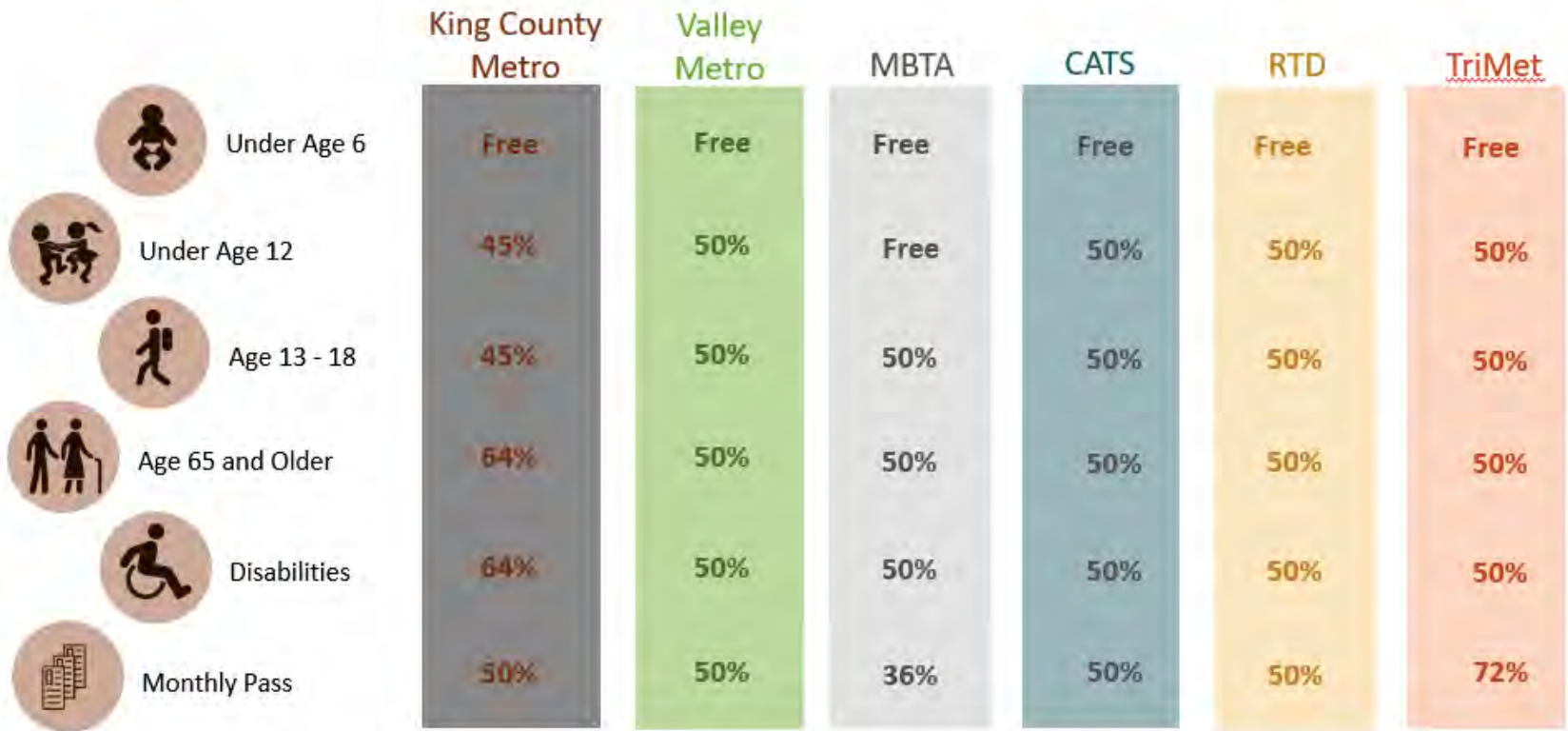
Agency	Fare Type	Onboard	Online	Transit/ Government Building	Social Services	In Stores	TVM
King County Metro	Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
TriMet	Day Pass	✓	✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
Valley Metro	Day Pass	✓	✓	✓	✓	✓	✓
	7-Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
RTD	Day Pass	✓	✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
CATS	7-Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
MBTA	7-Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓

Discount Policies

Peer agency discount policies as of Spring 2018 are shown in Figure 3-5. Discounts are generally consistent among the peer agencies; however, the Wake-Durham region offers more free services than the peer agencies. Boston offers free service to children under 12, while other peers offer free service only to children under 6. All agencies in Wake/Durham offer free service to children and youth ages 18 and under. Additionally, GoDurham and GoRaleigh offer free service to seniors over 65, and GoCary offers a 50% discount for seniors over 60.

Peer agencies also offer additional discount categories not offered in the Wake/Durham region, including free fare to active-duty military in Boston and Denver and a 45% discount for low-income adults in Seattle.

Figure 3-5 Peer Agency Discount Policies



Additional Notes:

MBTA: Free fare also applies to active-duty military, police officers, and firefighters

RTD: Active-duty military also ride free

King County Metro: Low income adults pay 55% of standard fare

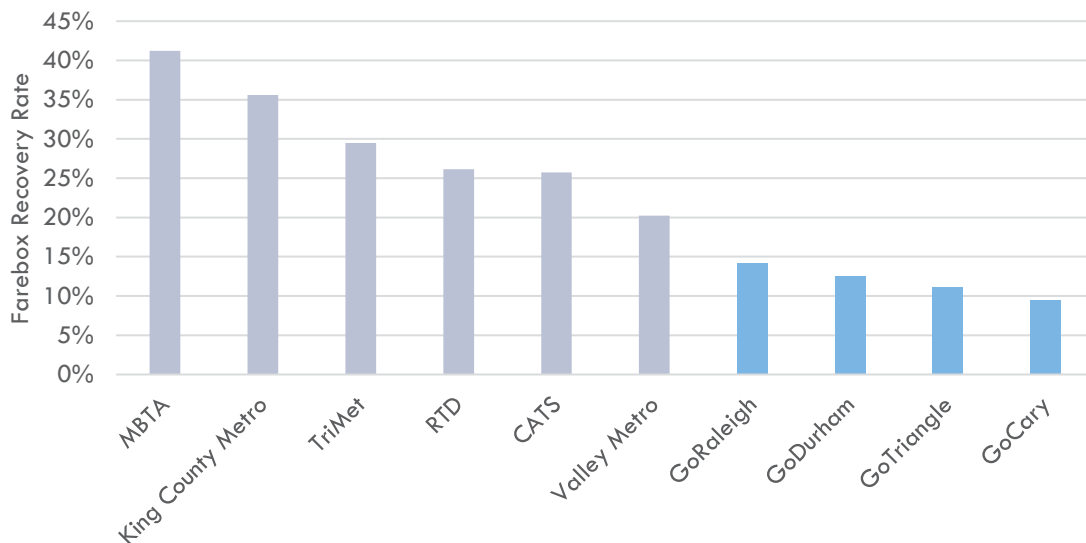
REVENUE TRENDS

Revenue trends between the Wake-Durham region and other peer agencies—with indicators such as farebox recovery rate, average operating cost, average fare paid per trip, and average subsidy per passenger—may indicate a need for updated fare policies to improve competitiveness and stay in line with the financial sustainability of peers. This section highlights revenue trends at peer agencies.

Farebox Recovery

Farebox recovery rates for peer agencies are shown in Figure 3-6. Peer agencies generally have a higher farebox recovery rate than agencies in the Wake-Durham region. All of the peer agencies have a recovery rate of at least 20%, with Boston recovering more than 40%. The highest farebox recovery rate in the Wake-Durham region is 14.2% for GoRaleigh, with a low of 9.5% for GoCary. This suggests that there is room to improve the farebox recovery rate in the region to become more competitive with peer agencies.

Figure 3-6 Farebox Recovery Rate for Peer Agencies (2016)



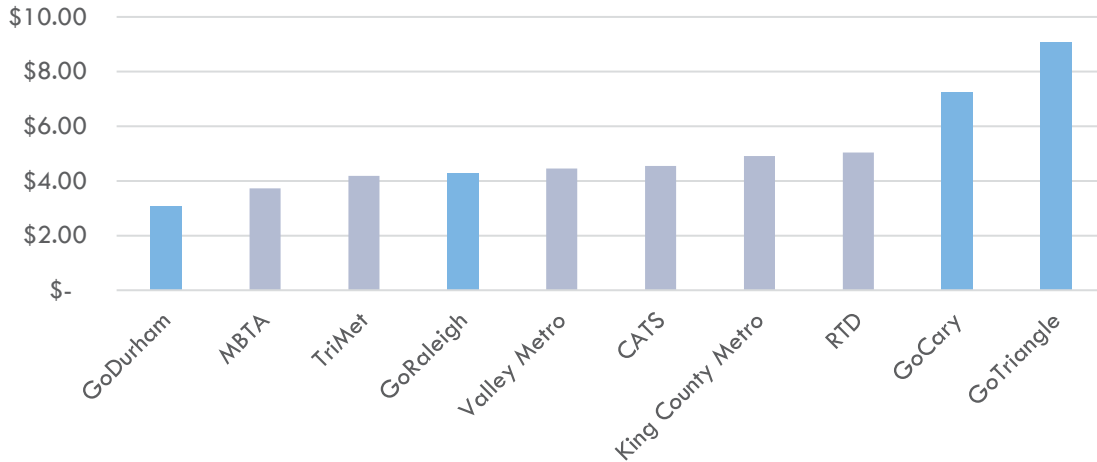
Source: NTD

Average Operating Cost per Trip

The average operating cost per trip varies among the peer agencies and is shown in Figure 3-7. Among peer agencies, GoDurham has the lowest average operating cost, GoRaleigh is about average, and GoCary and GoTriangle have highest operating costs per trip. Peer agency operating costs per trip range between \$3.72 in Boston to \$5.04 in Denver. The \$3.09 and \$4.27 cost per trip for GoDurham and GoRaleigh, respectively, are in line with peers; however, the \$7.26 and \$9.09 cost per trip for GoCary and GoTriangle respectively are significantly higher than other peer agencies.

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Figure 3-7 Average Operating Cost per Trip for Peer Agencies (2016)

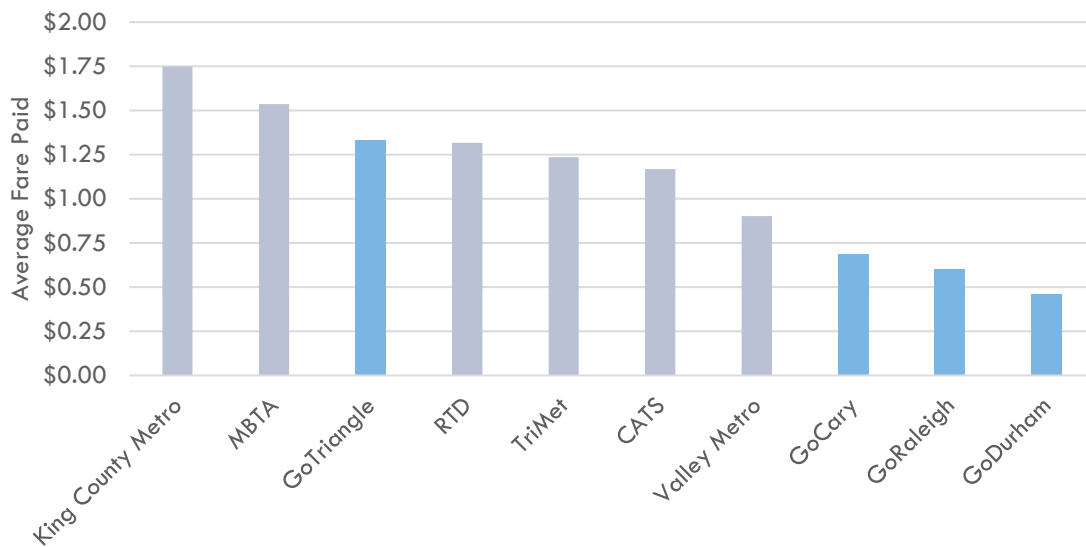


Source: NTD

Average Fare Paid per Trip

The average fare paid per trip for peer agencies is shown in Figure 3-8. In general, peer agencies have higher average fares paid per trip than agencies in the Wake/Durham region, with the exception of GoTriangle. Average fares paid for peer agencies range from \$0.90 for Phoenix to \$1.75 for Seattle. GoTriangle is in line with peers at \$1.33; however, GoCary, GoRaleigh, and GoDurham have lower fares paid, ranging from \$0.46 to \$0.69. This difference is likely due to lower base fares and more generous discount policies in the Wake-Durham region and suggests that altering the fare structure could improve financial competitiveness.

Figure 3-8 Average Fare Paid per Trip for Peer Agencies (2016)



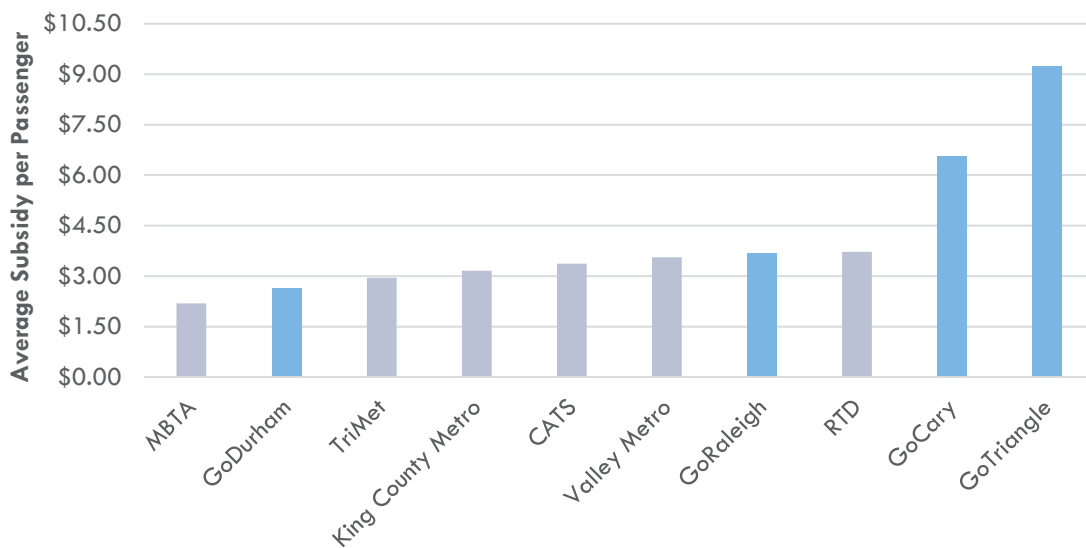
Source: NTD

Average Subsidy per Passenger

The average subsidy per passenger for peer agencies is shown in Figure 3-9. The average subsidy per passenger follows a similar trend as the average operating cost per trip for peer agencies. GoDurham and GoRaleigh are in line with peer agency subsidies; however, GoCary and GoTriangle have higher subsidies per passenger than the other agencies.

Peer agency subsidies range from \$2.19 for Boston to \$3.72 for Denver. GoDurham and GoRaleigh are both in line with this range, with subsidies of \$2.63 and \$3.67, respectively. GoCary and GoTriangle have significantly higher subsidies than peer agencies at \$6.57 and \$9.22, respectively.

Figure 3-9 Average Subsidy per Passenger for Peer Agencies (2016)



Source: NTD

PEER AGENCY POLICIES AND PROGRAMS

In addition to fare structures, discount policies, and revenue trends, unique policies and programs at peer agencies were also evaluated. These policies include the use of technology and unique fare categories, including electronic smartcards, mobile ticketing, regional policy integration, fare capping, low-income fare programs, pass programs, and fare free service.

Electronic Smart Cards and Mobile Ticketing

Advances in fare payment technology, including mobile payment systems and electronic smartcards, are moving riders away from cash payments. General trends in the transit industry support fare incentives for passengers to move to pass products instead of cash. Reducing the use of cash on transit vehicles has numerous benefits, included decreased dwell time, reduced potential for conflicts with operators, and simpler accounting procedures. It also raises potential equity considerations as disadvantaged rider populations may be more reliant on cash fares. This section discusses peer fare media offerings and approaches to reducing cash payments through pricing and other incentives and disincentives.

TriMet, RTD, King County Metro, and MBTA all currently use smartcard systems and mobile ticketing. Valley Metro has a smartcard called the Platinum Pass that is available to employers only; however, they are looking into an expansion to make the pass available to the general public. CATS is planning to introduce smart cards in 2018-2019.

King County Metro

King County Metro currently offers cash, paper tickets, mobile tickets, and smartcard (ORCA) fare media options. More than 30% of King County Metro riders pay fares with cash. The agency is planning to conduct studies on cash fare payments and farebox replacement or elimination, potentially looking at commuter routes with high smartcard usage for possible cashless routes. The agency is also interested investigating if a more attractive low-income fare or program could increase smartcard usage.



The ORCA Program provides seamless transfers between seven different transit agencies in the region. The ORCA Program greatly improves the customer experience, but the fare reconciliation process is complicated for the agencies. Through the shared smartcard, revenue is transferred between agencies based on proportional ridership data, with revenue being allocated based on the cash fare if each leg of the trip were taken independently.

Best practices and lessons learned from the ORCA Program include:

- Standardizing fares across service types is recommended.
- Standardizing the fare change process at a regional level is helpful to facilitate a coordinated process.
- Use an open system if possible; closed-loop systems make it difficult to designate new passenger or fare types.
- Significant coordination is needed between partner agencies to deliver a quality product.

King County Metro is preparing for the next generation of ORCA cards and ticket vending machines in the upcoming years, and they are hoping to expand the card's abilities and increase the retail distribution network.

TriMet

TriMet offers cash, mobile ticketing, smartcards (Hop Fastpass) and mobile payment systems (Apple or Android) fare media options. The agency began phasing out paper tickets in mid-2018 and are replacing ticket vending machines with Hop stations, which allow customers to load funds onto their Hop card. TriMet also offers employer and school pass programs, which are being moved to the Hop card.

TriMet has about 30%-35% cash fare riders and is using a phased approach to increasing non-cash fare payments. With new technology and smartcard options, the agency is trying to address



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the two main groups using cash: those who are paying cash because it's more convenient and don't ride frequently, or those who can only afford one fare at a time. There is no surcharge for cash use, but the agency thinks that riders understand the benefit of lost card protection, card replacement, and pass earnings, which will incentivize them to move away from cash fares.

TriMet's current challenge is marketing the variety of options and programs to various markets. The agency is hopeful that all types of riders will see the benefits of using smartcards over cash or paper media. As the Wake-Durham regional agencies begin making long-term policy decisions, a cost-benefit analysis should be conducted regarding smartcards, mobile ticketing, and required farebox upgrades.

Regional Discount Policies and Smart Cards

Standardized discount policies and ID throughout the region improve the customer experience and facilitate regional integration. The Puget Sound Regional Reduced Fare Permit (RRFP) offers a best practice example for a reduced fare program for seniors and people with disabilities in the Puget Sound, WA region. RRFP entitles senior riders aged 65 and older, riders with a disability, and Medicare cardholders to reduced fares on 13 different transit agencies throughout the region.

Fare Capping

Fare capping is an emerging trend for some of the peer agencies in which individual trips are tracked and fares are capped after reaching certain thresholds (i.e., two trips in a day or 30 trips in a month). Benefits of fare capping include increased affordability of passes, increased fare equity, and increased simplicity. Fare capping is particularly beneficial for low-income riders who may not have the cash on hand to purchase a 31-day pass and end up paying more in cash fares over the course of the month. Fare capping can be introduced through electronic smartcards, which track fare payments through an internal database, or through mobile ticketing, which tracks fare payments and automatically provides riders a pass once the payment threshold has been reached.

TriMet introduced fare capping in conjunction with a new electronic smart card in 2018, and King County Metro is exploring fare capping as a part of the next generation of ORCA cards. Additionally, agencies in the San Francisco Bay Area offer a similar day pass accumulator program on Clipper cards.

Key considerations for fare capping include:

- Programs require the use of an electronic fare collection system (smart cards or mobile ticketing) capable of tracking paid trips.
- It can be difficult to implement a fare cap in systems with multiple service types (e.g., local and regional).
- There is potential for revenue loss on daily or monthly passes.

Regional Reduced Fare Permit for Senior and Disabled Persons



Low-Income Fare Programs

Low-income fare programs are currently being used by King County Metro, TriMet, and the San Francisco Municipal Transportation Agency (SFMTA) to provide discounted service for eligible adults making up to 200% of the federal poverty level. Low-income programs may be “high-tech,” requiring electronic smartcards and upgraded farebox infrastructure to verify rider identity and maintain discounts, or “low-tech,” which are more commonly photo ID cards to prevent fraud combined with magnetic swipe card technology. Low-tech options are cheaper and faster to implement but require greater administrative costs, while high-tech options could require costly upgrades to farebox infrastructure and may not be feasible in the short-term.

High-Tech Options

ORCA Lift

The ORCA Lift program in the Puget Sound region requires in-person verification with proof of income. ORCA Lift riders receive ORCA cards that look and work just like a regular ORCA card, but that contains the low-income rider designation within the internal system database. These ORCA cards can be obtained from more than 40 different locations and are valid for two years before participants must reapply. While riders are permitted to have multiple ORCA cards, only one ORCA Lift card may be registered to a single person at any given time to prevent fraud. If someone attempts to register two ORCA Lift cards, the first card is automatically deactivated.



Promoting low-income programs through engagement with social service providers and community groups has been effective for marketing the ORCA Lift program. Social service agencies were involved with structuring the program from the outset and helped make recommendations to the agency about the program structure. These agencies also provide income verification services and help enroll qualifying riders who are applying for other benefits. In King County, for example, the Department of Social and Health Services (DSHS) offered ORCA Lift applications to applicants for EBT services, which resulted in increased enrollment. DSHS is planning to increase their role in Pierce and Snohomish Counties as well.

Cardholders pay \$1.50 for most one-way trips or may purchase discounted monthly passes for \$54 (regularly \$99). Fare value and passes can be renewed online, similar to other ORCA pass products.

Not everyone who is eligible uses the program, but ridership is expected to increase as a result of the program. Out of the approximately 160,000 riders eligible for the ORCA Lift program, there were 60,000 participants as of March 2018. Additional funding may be necessary to offset revenue loss associated with these programs. The ORCA Lift program costs were offset by a fare increase for the general public.

TriMet Low-Income Hop Pass

TriMet’s program is relatively new and has not yet released enrollment data, but during the planning phase, the agency projected 45,000 users out of 120,000 eligible riders and an annual

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ridership increase of 1-2% (2 million trips). The program is funded by a state transportation package that provides \$12.5 million annually through a payroll tax increase.

After in-person income verification, Low-Income Hop Pass program participants receive a special Hop card with their photo on the front in order to discourage fraud. This Hop card is valid for two years before participants must reapply. Program participants have multiple fare options including \$1.25 for a single ride, \$2.50 for a day pass, and \$28 for a 31-day pass. These fares represent a discount between 50% and 72% compared to standard base fares.

Low-Tech Options

SFMTA Lifeline Pass

The Lifeline Pass is a low-income pass program implemented in San Francisco in 2005 to reduce the impacts of planned fare increases on low-income riders. Any San Francisco County resident at or below 200% of the federal poverty line is eligible for the program. Applicants must submit government-issued identification, proof of income eligibility, and proof of residency to the San Francisco Human Services Agency to verify eligibility every two years.



The Lifeline Pass is not a smartcard; instead, it is a photo ID that requires monthly validation stickers that cost \$38 per month (50% of a regular monthly pass). Participants use their card as a flash pass to board the vehicle and don't pay any additional fare. Riders have to purchase their validation stickers every month in person at one of eight locations throughout the city of San Francisco. This validation sticker component is more burdensome to the user than smartcard-based programs.

Out of approximately 159,000 eligible riders, 45,000 have enrolled in Lifeline and 20,000 were actively purchasing passes in 2017.

Dallas Area Rapid Transit TANF Program

Dallas Area Rapid Transit (DART) offers a low-income monthly pass for TANF recipients using magnetic swipe card technology. This program requires riders to purchase monthly passes at the transit center or select pass outlet locations. TANF recipients are able to use their benefits to directly purchase the transit pass at a reduced rate. Using TANF benefits to purchase transit passes serves as an income verification process. This program provides less flexibility than other low-income programs since participants are limited to monthly passes and cannot receive a discounted day pass or single ride fare.

Pinellas Suncoast Transit Authority Transportation Disadvantaged Program

Pinellas Suncoast Transit Authority (PSTA) in Pinellas County, FL, offers a low-tech low-income fare program for residents of Pinellas County with a documented household income not exceeding 150% of the poverty level as one component of the agency's Transportation Disadvantaged (TD)

Program. The TD program is state-funded and paid for through vehicle registration fees. The TD Program does not offer a reduced fare cash option—instead, qualified riders can purchase 10-day passes for \$5 per month (regularly \$50) and 31-day unlimited passes for \$11 per month (regularly \$70).

Applicants for the TD Program self-certify their residency and lack of alternative transportation options, but are required to verify their income level with acceptable documentation. The program currently requires passengers to certify their income annually. Passes are sold at PSTA vending locations only, not through any other agreements or third-party retail locations. Passengers must show government-issued photo ID to receive their pass. Administrative staff access a database which includes name, date of birth, address, and phone number to verify the passenger's identity and eligibility.

The annual TD Program budget for reduced passes is approximately \$350,000 at 150% of the poverty level. Previously, the program used 200% as the poverty level threshold, but it caused the program to exceed available budget, so the poverty level was adjusted down. The program requires approximately 1.5 FTEs dedicated to handling eligibility verification and database management.

The TD Program had a negative impact on PSTA's farebox recovery, but meets the agency's goal of allowing those who need it most to be able to use the service more often. The in-person pass purchasing process is burdensome for users but is necessary until there is a more streamlined ID verification or high-tech system in place.

PASS PROGRAMS

In recent years, growing numbers of transit agencies have teamed with universities, employers, or residential neighborhoods to provide bulk transit passes. These passes typically provide unlimited rides on local or regional transit providers for low monthly fees, often absorbed entirely by the employer, school, or developers.

A bulk pass program provides a participating organization free or deeply discounted transit rides for a financial guarantee. These programs are slightly different than pass sales since they often assume that 100% of an organization's members are eligible for the program whether or not they regularly use public transportation. The benefit to major institutions is that a well-designed program provides a simple, packaged solution to help solve transportation access issues to their organization. These types of programs can be implemented in different ways, but the most common financial contribution approaches include the following:

- Contribution determined by current employees, residential units, students, etc. as reported by the participating organization
- Contribution determined by ridership



- Annual fixed fee (same price, regardless of institution size or usage)

Bulk transit passes provide multiple benefits, as discussed in Figure 3-10. While pass programs tend to be affiliated with bus service, in most cases they are part of a broader multi-modal transportation strategy that includes improved bike programs, car share programs, carpooling/vanpooling strategies, and often, increased parking rates.

Figure 3-10 Bulk Pass Program Benefits

Beneficiary	Bulk Pass Benefit
Transit Riders	Free access to transit
	Rewards existing riders, attracts new ones
	For employees who drive, making existing transit free can effectively create convenient park-and-ride shuttles to existing underused remote parking areas
Transit Agencies	Provides a stable source of income
	Increases transit ridership, helping to meet agency ridership goals
	Can help improve cost recovery, reduce agency subsidy, and/or fund service improvements
Communities	Reduces traffic congestion and increases transit ridership
	Reduces existing, unmet, and future growth in parking demand
Developers	Bulk pass programs can benefit developers if implemented concurrently with reduced parking requirements, which consequently lower construction costs
	Providing free cost transit passes for large developments provides an amenity that can help attract renters or home buyers as part of a lifestyle marketing campaign appealing to those seeking a "new urban lifestyle"
Employees/ Employers	Reduces demand for parking on-site
	Provides a tax-advantaged transportation benefit that can help recruit and retain employees

Source: City of Pasadena Traffic Reduction Strategies Study, 2007

RTD EcoPass (Denver, CO)

Denver RTD's Business EcoPass provides unlimited usage of RTD services and is an annual transit pass purchased by a company and its employees or a collection of residences. Companies purchase the EcoPass for all full-time employees with an option to include part-time employees. Transit service levels are also accounted for through a tiered pricing structure (Figure 3-11). Pricing for businesses is determined by two factors—location of the business (and corresponding level of service for that area) and total number of full-time employees or total number of full/part-time employees on the payroll. Contract minimum rates apply for businesses with a per-person rate that equals less than the contract minimum. The resulting discount per employee per year ranges from 71% to 97% off the retail price.¹

Additionally, Boulder County offers a multi-year EcoPass discount (60% off of the first year's purchase price, 30% off of the second year's contract price) to all businesses and neighborhoods

¹ Calculated based on July 2018 Valupass pricing of \$1,881 for regional/airport service.



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signing up for their initial EcoPass contract. EcoPass is tax deductible to employers and tax free to employees.

As of Summer 2018, RTD is currently investigating making changes to the existing EcoPass program to charge per use. If updated policies are implemented, employers would continue to be grouped by location and number of employees, but fees per EcoPass use would be charged based on tier categories. RTD is still considering fees per tier, level of discounts provided, and potential adjustments to tier size as part of the revised program structure.

Figure 3-11 Denver RTD Business EcoPass Pricing Structure (2016)

Cost per Employee per Year (2016)							
Service Level Area	Number of Employees	Contract Minimum Per Year	1-24 Employees	25-249 Employees	250-999 Employees	1,000-1,999 Employees	2,000+ Employees
A: Outer Suburban	1-10	\$1,150	\$98	\$85	\$75	\$64	\$60
	11-20	\$2,300					
	21+	\$3,448					
B: Major Transit Centers	1-10	\$2,108	\$209	\$189	\$173	\$160	\$151
	11-20	\$4,215					
	21+	\$6,322					
C: Downtown Denver CBD	1-10	\$2,874	\$532	\$493	\$470	\$459	\$434
	11-20	\$5,748					
	21+	\$8,621					
D: DIA and home businesses	1-10	\$2,874	\$544	\$522	\$483	\$470	\$445
	11-20	\$5,748					
	21+	\$8,621					

Source: Denver RTD

FARE FREE SYSTEMS

The majority of public transit systems charge a fare for passengers to access the system; however, some agencies provide fare free, or prepaid, service with no fare charged at the point of access. Fare free transit service is generally funded by other means than collected fares, including partnerships with local universities, non-profit organizations, or community groups, which can make up lost farebox revenue.

Transitioning to fare free service can be a transformative way to increase public transit use, with potential benefits including:

- Increasing ridership between 30-40%²
- Improving speed and reliability
- Reducing administrative costs
- Eliminating cost to maintain and upgrade fareboxes
- Reducing fare disputes
- Environmental benefits including carbon reduction and reduced parking requirements

² According to experiences from systems include Chapel Hill Transit and Mountain Line (Missoula, MT)

Case Study: Chapel Hill Transit

Chapel Hill Transit (CHT) serves as a local case study to identify potential impacts and best practices for transitioning to fare free service in the Wake-Durham region. Key impacts to the CHT system include a significant increase in ridership and demand for service, an increase in service to accommodate new ridership demand, and the need to offset operating cost increases with revenue other than fares.

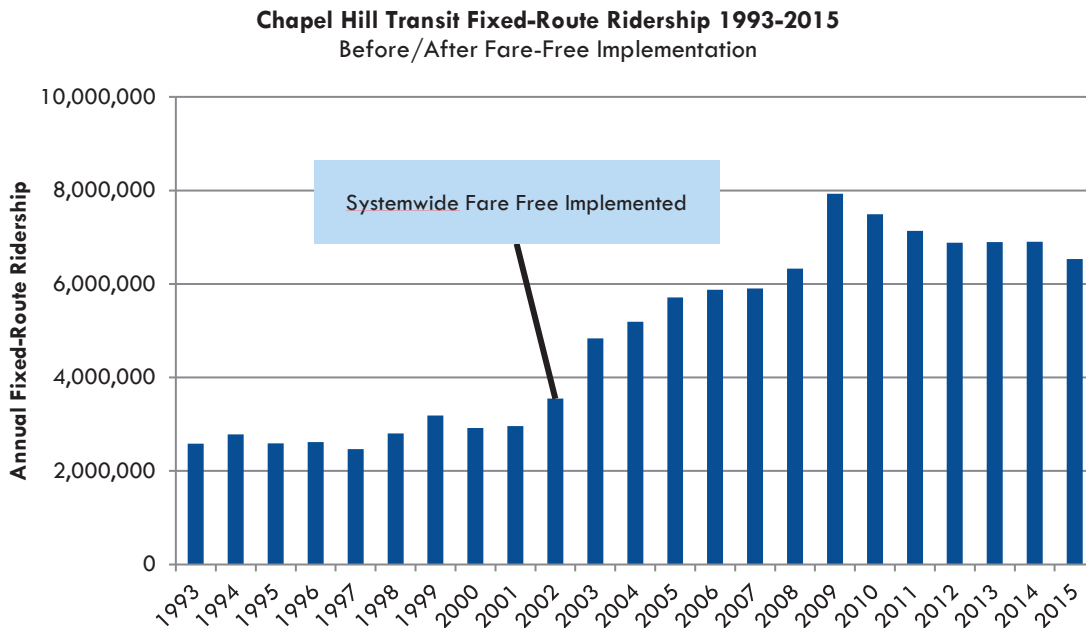
Ridership and Operations Trends

After eliminating fares in 2002, ridership on CHT doubled over the next 10 years. To accommodate increased ridership demand, CHT has increased service by 28% between 2002 and 2015. As CHT revenue hours increased, the cost per revenue hour of providing service has also continued to increase—76% between 2002 and 2015. These increased operating costs appear to be primarily driven by inflationary changes, as well as the cost of fuel and employee benefits.

A key consideration before transition to fare free service is the associated increased demand for paratransit service. Legally, 100% of paratransit demand must be met and fare free paratransit is attractive to the rider but costly for the agency. After moving to a fare free system, Chapel Hill Transit experienced a 20% increase in demand response ridership, though overall demand response ridership is currently declining.

These trends are shown in Figure 3-12 through Figure 3-15.

Figure 3-12 Chapel Hill Transit Fare Free Ridership Impacts



FARE INTEGRATION STUDY

Figure 3-13 Chapel Hill Transit Demand Response Ridership Trends

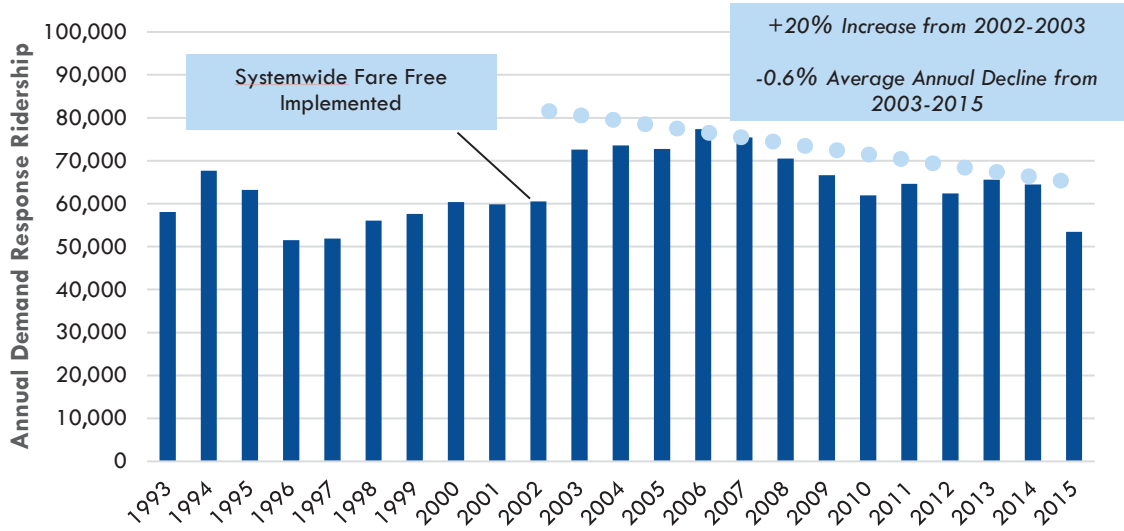
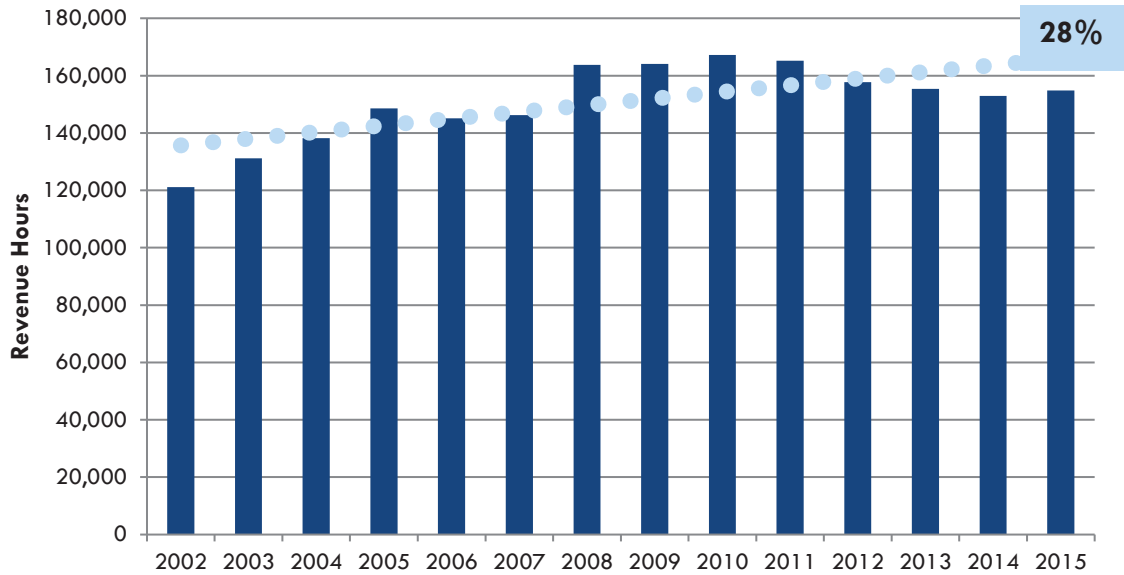
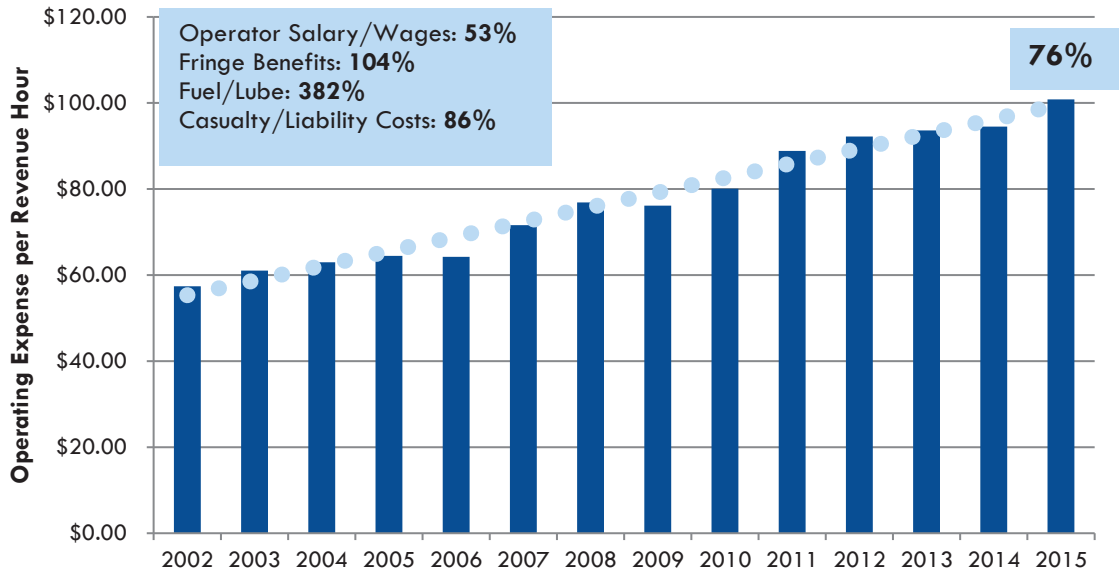


Figure 3-14 Chapel Hill Transit Revenue Hours Trends



FARE INTEGRATION STUDY

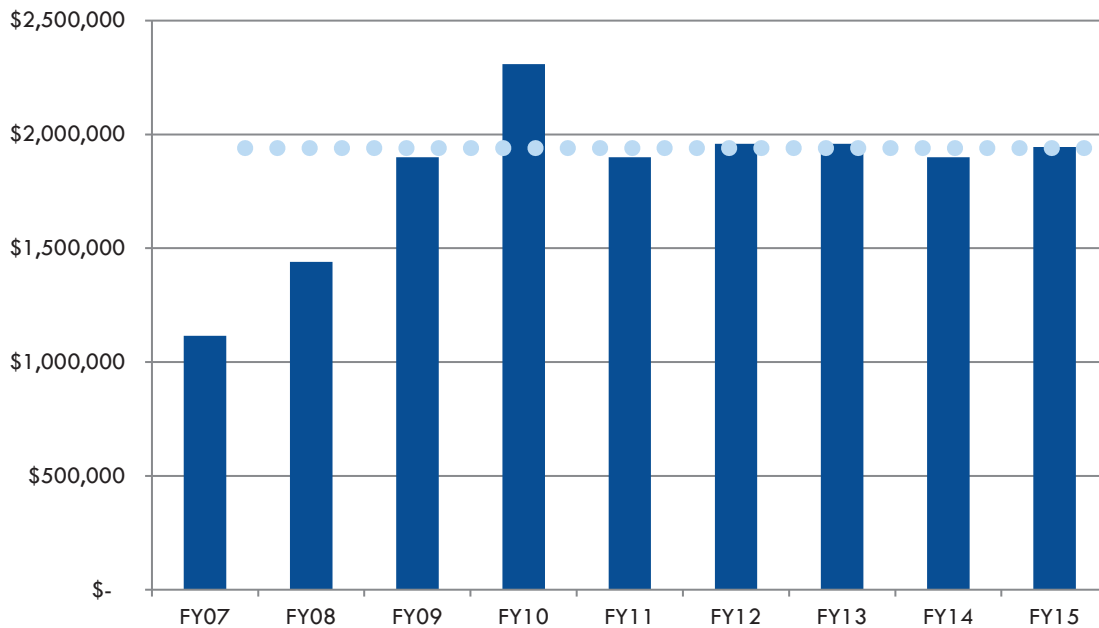
Figure 3-15 Chapel Hill Transit Cost per Revenue Hour Trends



Funding Trends

After eliminating fares, federal formula funding for CHT increased before leveling off in 2011 and has been relatively flat since. While federal funding has been consistent, state funding for CHT service declined 26% between 2007 and 2015. CHT has made up for this decrease in state funding with partner contributions from UNC-Chapel Hill, the Town of Chapel Hill, and the Town of Carrboro. These funding trends are shown in Figure 3-16 through Figure 3-18.

Figure 3-16 Chapel Hill Transit Federal Formula Funding Trends



FARE INTEGRATION STUDY

Figure 3-17 Chapel Hill Transit State Funding Trends

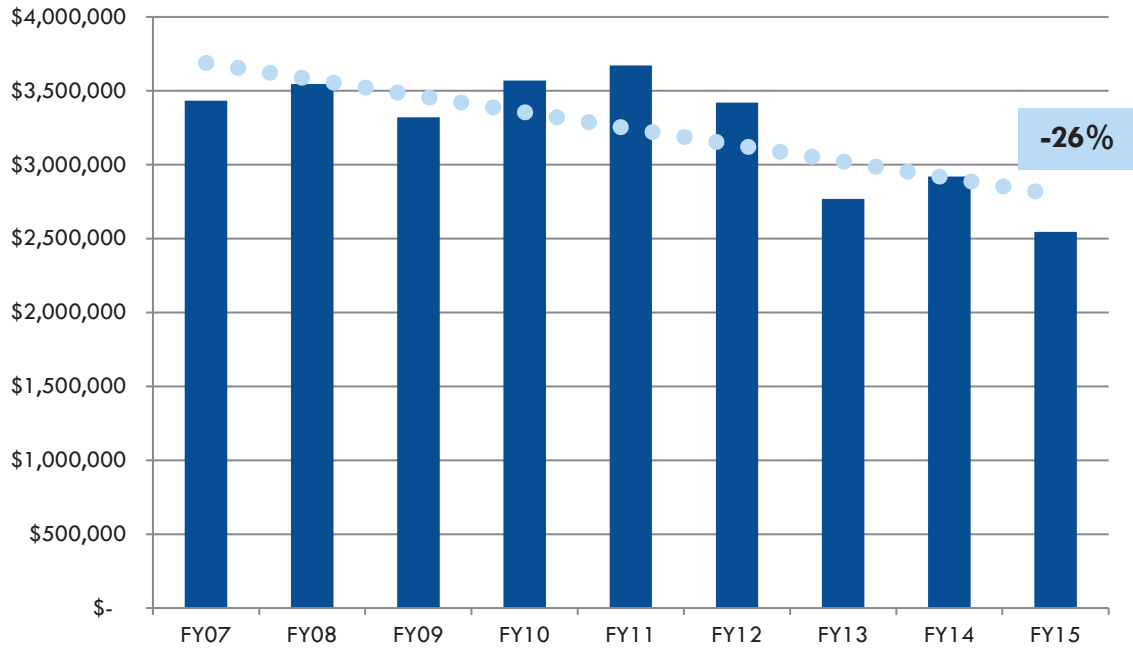
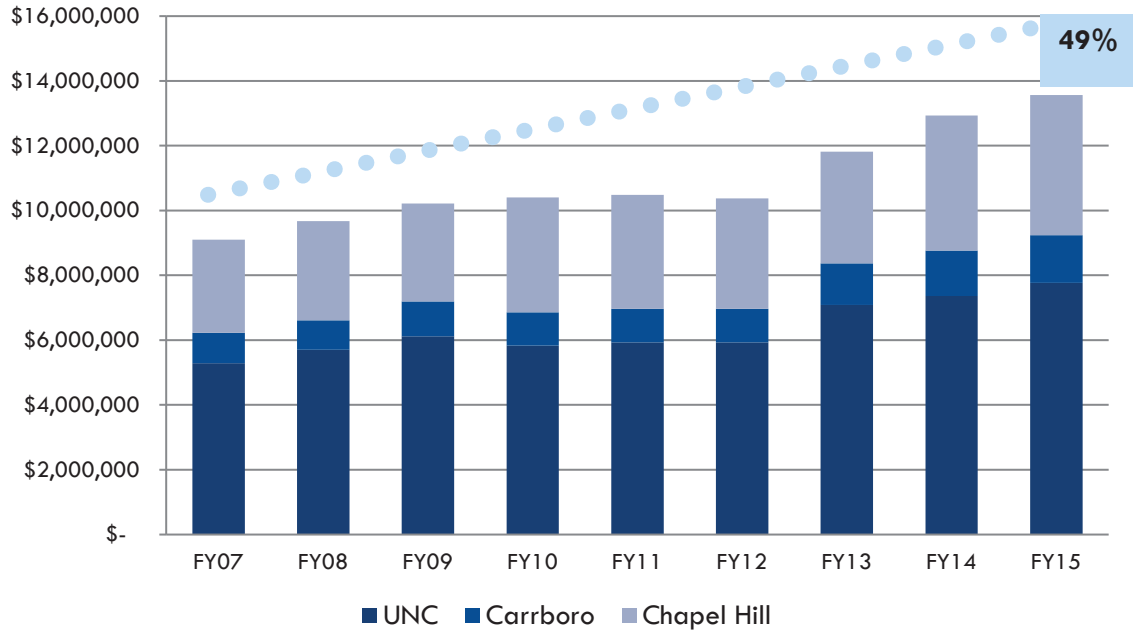


Figure 3-18 Chapel Hill Transit Partner Funding Trends



Fare Free Best Practices and Lessons Learned

There are numerous costs and benefits associated with providing fare free service. Potential benefits include increased ridership, simplified administration, and travel time/dwell time savings. After eliminating fares, CHT experienced significant ridership growth and adjusted their service accordingly. This growth has stabilized and remained steady since 2010; however, the impacts of growth and expansion are still being felt as CHT continues to increase service and the operating cost per revenue hour continues to increase. These cost increases largely reflect inflation but are still important considerations for transit agencies before implementing fare free service.

As costs generally increased, the funding mechanism used to provide the service also fundamentally changed. Federal funding remained relatively consistent, while state funding declined significantly. This funding gap was bridged through the partnership between CHT, UNC-Chapel Hill, the Town of Chapel Hill, and the Town of Carrboro to provide increased funding for service.

Local partnerships are imperative for ensuring adequate funding to both maintain the existing level of service and gradually increase service to meet expected increases in ridership demand.

4 Fare Scenarios

This chapter presents a summary of the fare scenarios that were modeled and evaluated to assess ridership and revenue impacts. Scenarios were identified based on potential to address the study goals and approved by the Fare Working Group.

FARE MODEL DEVELOPMENT

The fare model developed for this project is based on existing ridership and revenue data (FY 2017) and assumptions on average fare per passenger for each fare product. This information is then used as a baseline to understand order of magnitude changes to fare revenues and ridership as a result of pricing or structural changes.

Consumption of transit, like other goods and services, reacts to cost. Significant research over time has examined the sensitivity of transit ridership to fare increases. In transit, the standard measurement of sensitivity to fare changes means that for every 10% increase in fares, ridership will decrease by 3% (and vice-versa).

As such, elasticity factors are common in fare modeling, as they define the price sensitivity of riders to fare changes. An elastic factor suggests a larger change in ridership relative to a fare change. An inelastic factor suggests a relatively small change in ridership relative to a fare change. The model accounts for two elasticity factors¹:

- A relatively inelastic factor (-0.33), which is consistent with industry standards for regular fares
- A “reduced” elasticity factor (-0.21) to account for observations associated with student, elderly, and disabled patrons

Using these elasticity factors, ridership changes (on a fare product basis) are determined from the proposed fare increase or decrease. A new average fare for each fare product is also calculated from the percentage change in the fare product price. Finally, multiplying the new ridership estimate by the new average fare produces a revenue estimate for that fare product.

It should be cautioned that any estimation model is an approximation based on a set of assumptions and is highly dependent on accurate data inputs to ensure quality outputs. The fare model bases ridership and revenue changes strictly on price variation. Qualitative factors such as customer simplicity or other factors are not considered here, but are certainly factors in reality that influence ridership and revenue levels. Based on the perceived simplicity gains, it is likely that ridership benefits in each scenario are understated. As a result, the findings from this analysis are simply estimates but offer a valuable means to compare different scenarios against one another.

¹ Source: TCRP Report 95, Chapter 12, *Transit Pricing and Fares*.



FARE INTEGRATION STUDY

KEY FINDINGS

- **Tiered fares may align regional fare structures and increase revenue for the region with limited impacts to ridership.** Aligning fares throughout the region, a stated goal of the study, would result in an expected revenue increase of 3.5% and ridership decrease of 2.0%.
- **Low-income programs may be costly.** Implementing a low-income program with an eligibility threshold of 200% of the regional poverty line would result in an expected revenue loss of 6.7% with a ridership increase of 1.2%.
- **Fare capping may improve fare equity without a significant revenue decrease.** Implementing a fare capping policy resulted in a small ridership increase of 0.2% and revenue decrease of 1.9%. This option may improve fare equity and affordability with a smaller revenue loss than a low-income program.

FARE SCENARIOS

Eight fare scenarios were developed and modeled to test impacts of fare structure and discount policy changes to the region as a whole and to individual agencies. Identifying the individual impacts of a specific change allows for informed decision-making about the likely effects of implementing new fare policies, as well as helping agencies better plan for the associated changes in ridership and revenue. The fare scenarios that were modeled and analyzed in the study include:

1. Region-Wide Flat Fare
2. Region-Wide Tiered Fares
3. Optimize Fares to Increase Ridership
4. Maximize Farebox Recovery
5. Align Discount Fare Policies
6. Offer Fare Capping
7. Offer Low-Income Fare Category
8. Offer Low-Income Fare Category with General Fare Increase

Scenario 1: Region-Wide Flat Fare

The goal of the region-wide flat fare scenario is to provide a simplified fare structure in which all four agencies in the region charge the same flat rate fare, regardless of service type. In this scenario, multiple base fare levels were tested in Scenario 1a (\$1.00), Scenario 1b (\$1.25), and Scenario 1c (\$1.50). Pass multipliers for all three scenario iterations were left constant, with day passes at 2x, 5-day passes at 8x, 7-day passes at 10x, and 31-day passes at 32x. The simplified fare structure in Scenario 1 would bolster a regional transit system approach.

The three pricing levels in Scenario 1 result in large swings between ridership and revenue, shown in Figure 4-1. Scenario 1b (\$1.25) is the most balanced result of the three options, with small reductions in ridership and revenue (less than 2%). The agency-specific impacts of a region-wide flat fare set at \$1.25 are shown in Figure 4-2. There are significant revenue impacts for GoTriangle and GoCary, with decreases of 17.0% and 9.2% respectively, as both agencies would have to reduce their fares substantially in this scenario. GoDurham would have a revenue increase of 9.1% accompanied by a ridership decrease of 4.8%.



FARE INTEGRATION STUDY

While a region-wide flat fare would simplify the customer experience and improve a regional approach to transit, the steep financial impacts to GoTriangle and GoCary may be prohibitive for this approach.

Figure 4-1 Region-Wide Flat Fare Ridership and Revenue Impacts

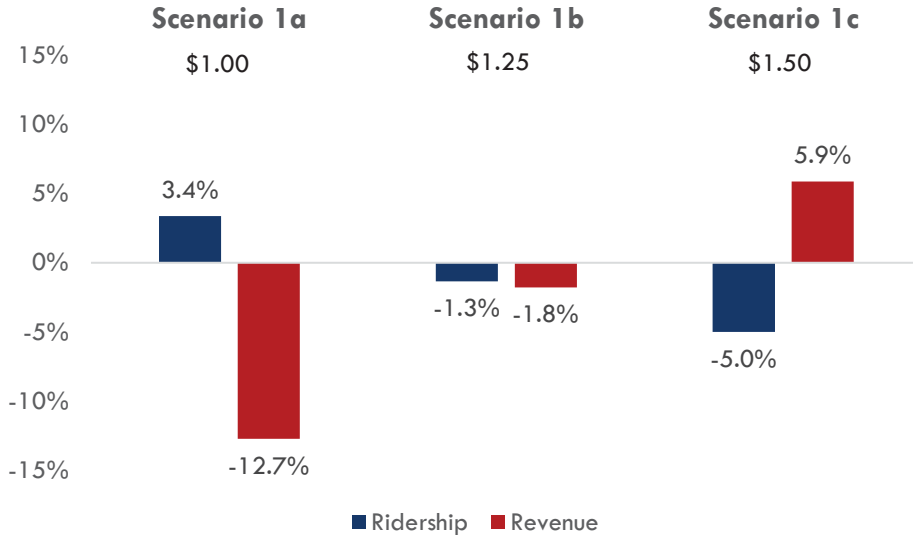
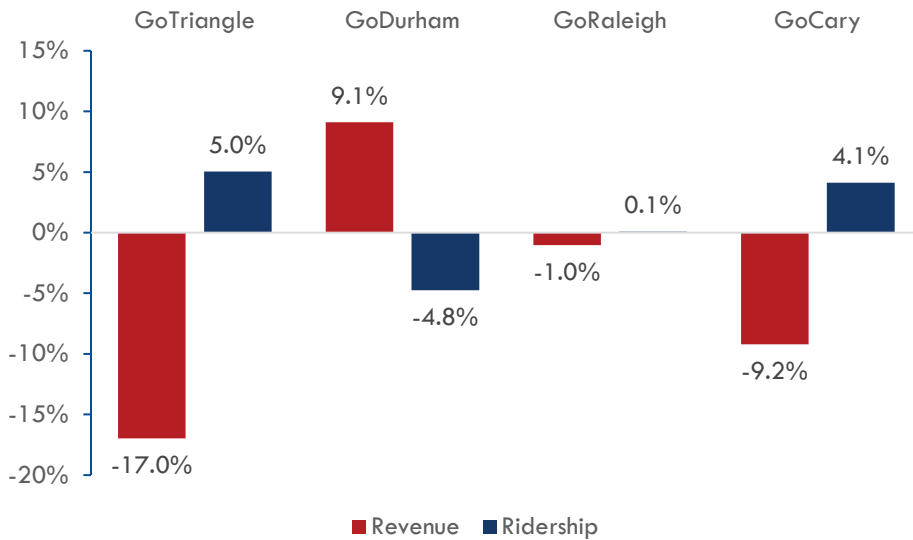


Figure 4-2 Region-Wide Flat Fare - \$1.25 Ridership and Revenue Impacts for Agencies





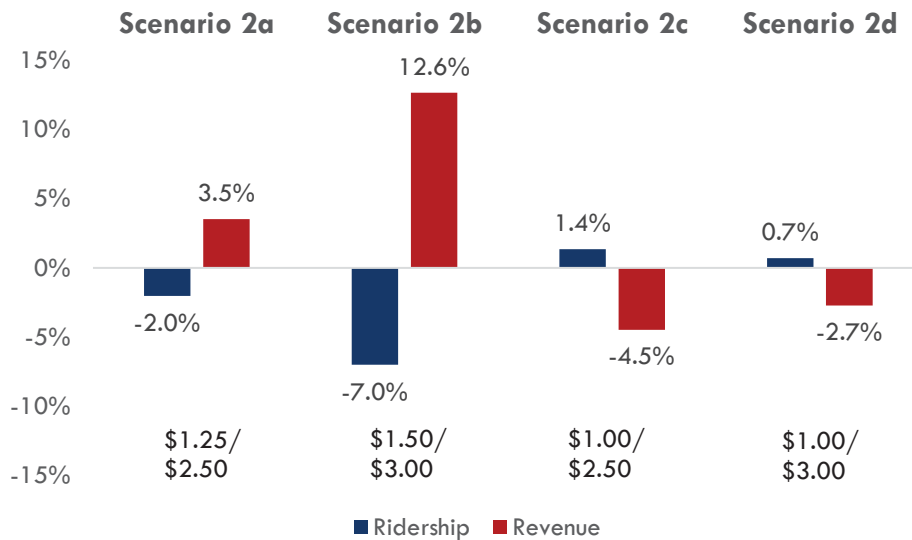
FARE INTEGRATION STUDY

Scenario 2: Region-Wide Tiered Fare

A region-wide tiered fare would simplify the regional fare structure, while allowing regional and express service offered by GoTriangle to continue charging a higher rate than local service. In this scenario, GoDurham, GoRaleigh, and GoCary are considered local services, and all GoTriangle services are considered regional/express. In this scenario, multiple fare tiers were tested in Scenario 2a (\$1.25/\$2.50), Scenario 2b (\$1.50/\$3.00), Scenario 2c (\$1.00/\$2.50), and Scenario 2d (\$1.00/\$3.00). The ridership and revenue impacts of the four tiered alternatives in Scenario 2 are shown in Figure 4-3. Scenario 2a is the most balanced of these alternatives, with a slight decrease in ridership (2.0%) and increase in revenue (3.5%).

The agency-specific ridership and revenue impacts for a region-wide tiered fare set at \$1.25 for local service and \$2.50 for regional/express service are shown in Figure 4-4. This fare structure would have small impacts for GoTriangle and GoRaleigh, but much more significant impacts for GoDurham and GoCary. GoDurham would be projected to increase revenue by 10.5% and decrease ridership by 4.4%, while GoCary is expected to decrease revenue by 15.6% and increase ridership by 2.2%. While this is a large percent decrease in revenue for GoCary, it accounts for an annual loss of approximately \$26,000. The 10.5% increase in revenue for GoDurham accounts for approximately \$278,000, more than ten times as much.

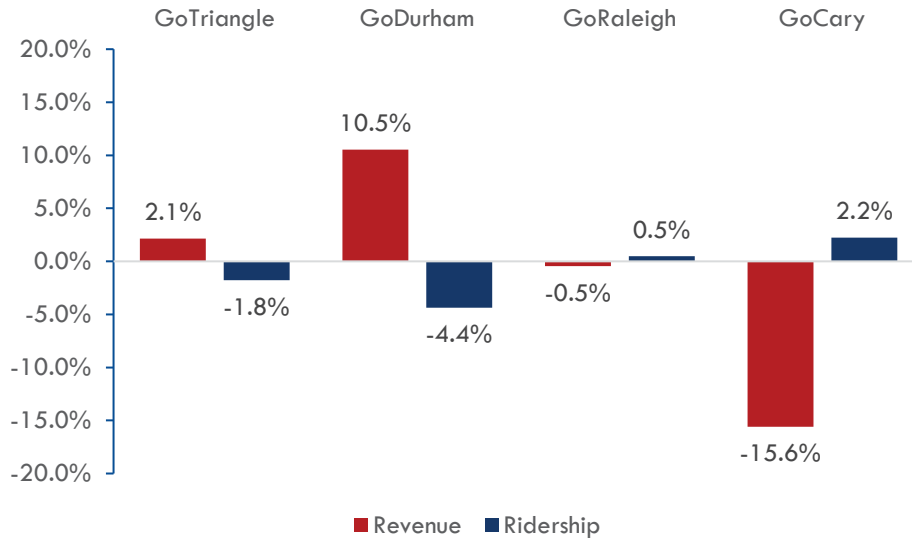
Figure 4-3 Region-Wide Tiered Fare Ridership and Revenue Impacts





FARE INTEGRATION STUDY

Figure 4-4 Region-Wide Tiered Fare \$1.25/\$2.50 Ridership and Revenue Impacts for Agencies



Scenario 3: Optimize Fares to Increase Ridership

This scenario takes an iterative approach to adjusting fares and pass multipliers until prices are such that ridership is maximized and no longer increases with subsequent decreases in fare price. This scenario also assumes that fares would not be reduced so low as to provide fare free service and that pass multipliers must remain within peer agency best practices. Ultimately, the optimized fare rate was established as a region-wide flat fare of \$0.75, with a discount fare rate of \$0.25 and pass multipliers of 2x for day passes, 4x for 5-day passes, 10x for 7-day passes, and 32x for monthly passes.

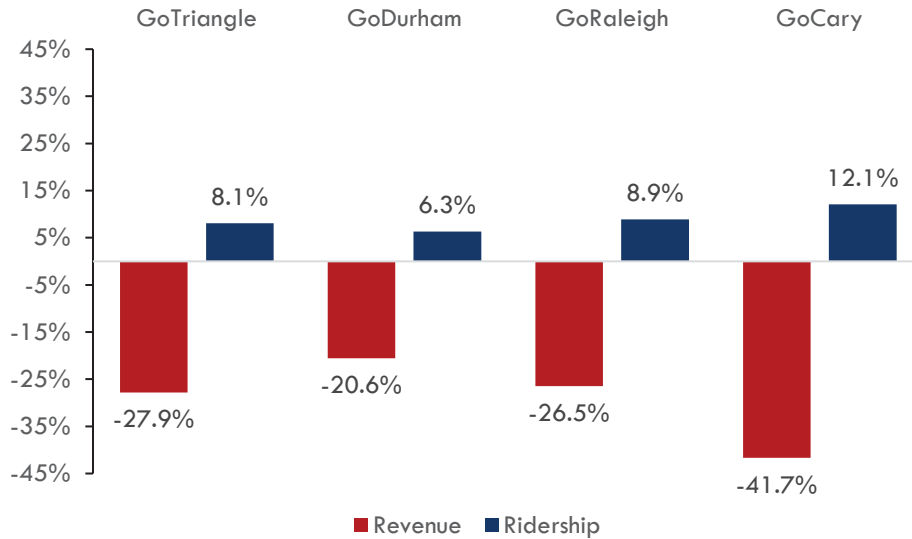
The agency-specific ridership and revenue impacts for Scenario 3 are shown in Figure 4-5. These impacts show large decreases in revenue and increases in ridership for all four agencies. Ridership increases range from 6.3% for GoDurham to 12.1% for GoCary. Revenue decreases range from 20.6% for GoDurham to 41.7% for GoCary.

This scenario is not intended to be a potential approach for new fare pricing; instead, it identifies the potential maximum ridership increase related to fare changes for each agency.



FARE INTEGRATION STUDY

Figure 4-5 Optimized to Increase Ridership, Revenue and Ridership Impacts for Agencies



Scenario 4: Maximize Farebox Recovery

Similar to Scenario 3, this scenario takes an iterative approach to adjusting fares and pass multipliers until prices are such that farebox recovery rate is maximized and no longer increases with subsequent increases in fare price. The maximized fare for this scenario was established as a region-wide tiered fare charging \$2.25 for local service and \$4.00 for regional/express service, with discounted fares set at 50% of the base fare. Pass multipliers also remained within the range of peer agency best practices, 2x for day passes, 8x for 5-day passes, 10x for 7-day passes, and 36x for monthly passes.

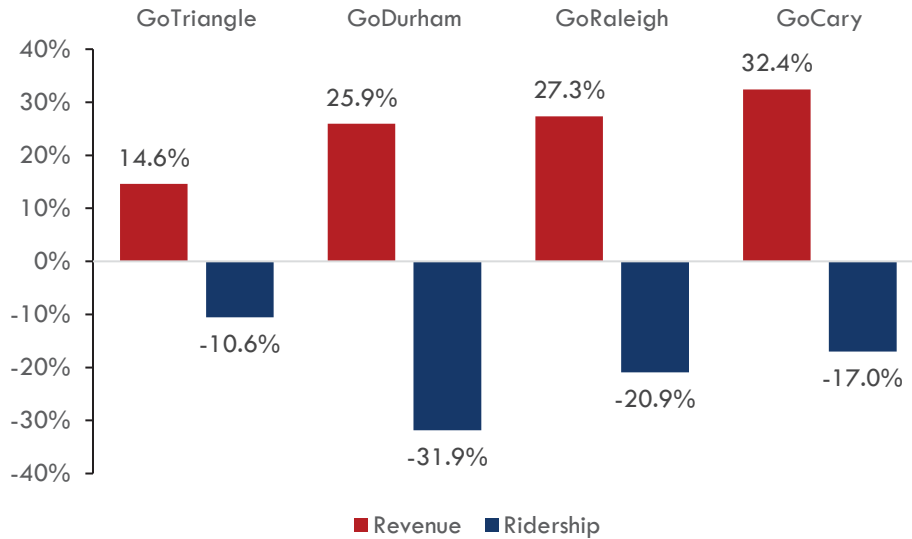
The agency-specific ridership and revenue impacts for Scenario 4 are shown in Figure 4-6. These impacts show large increases in revenue and large decreases in ridership for all four agencies. Ridership decreases range from 10.6% for GoTriangle to 31.9% for GoDurham. Revenue increases range from 14.6% for GoTriangle to 32.4% for GoCary.

This scenario is not intended to be a potential approach for new fare pricing; instead, it identifies the potential maximum revenue increase related to fare changes for each agency.



FARE INTEGRATION STUDY

Figure 4-6 Maximized Farebox Recovery Ridership and Revenue Impacts for Agencies



Scenario 5: Align Regional Discount Fare Policies

This scenario assumes that all existing base fares and pass multipliers remain consistent with existing conditions, but discount policies will be aligned for the agencies. Discount categories for the agencies analyzed in this scenario include:

- Seniors (aged 65 and older)
- Youth (aged 18 and younger)
- People with disabilities

Youth fares were recently made free for all agencies in the region through the Youth GoPass program, and these scenario alternatives assume this policy would continue. The existing category for seniors in GoCary is set at age 60 and older, and this scenario would separate out those aged 60-64 and only apply the senior discount to those aged 65 and older.

This scenario tests four different alternatives for aligning discount policies, including Scenario 5a (Reduced: Seniors, People with Disabilities), Scenario 5b (Free: Seniors; Reduced: People with Disabilities), Scenario 5c (Free: People with Disabilities; Reduced: Seniors), Scenario 5d (Free: Seniors, People with Disabilities). Ridership and revenue impacts for these alternative discount policies are shown in Figure 4-7.

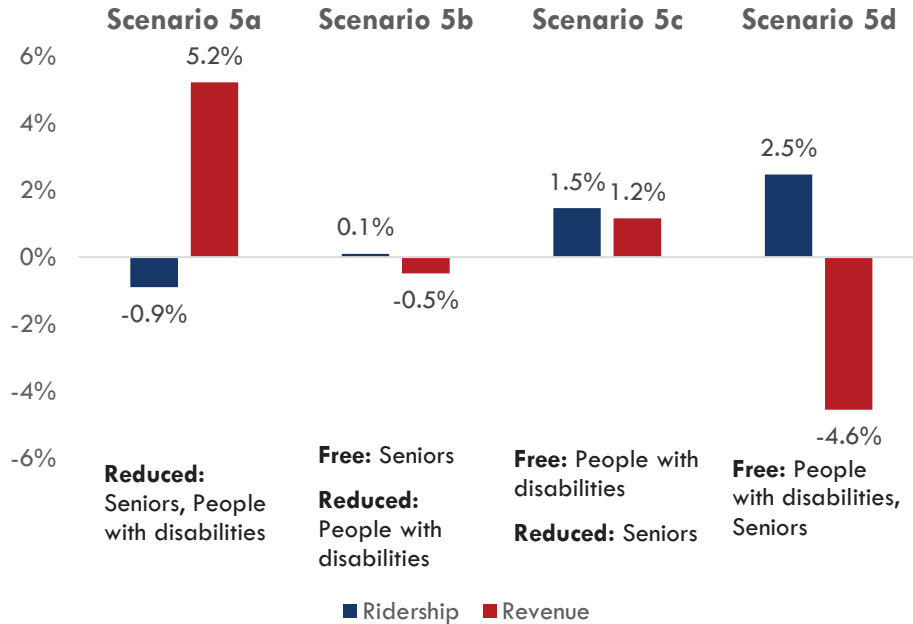
The results of these scenario alternatives present a range of ridership and revenue impacts, all of which may be feasible discount policies. Ridership impacts range from a 0.9% decrease in Scenario 5a to a 2.5% increase in Scenario 5d. Revenue impacts range from a 4.6% decrease in Scenario 5d to a 5.2% increase in Scenario 5a. Scenario 5b and Scenario 5c have more balanced impacts than the other two alternatives.

Agency-specific ridership and revenue impacts for these scenario alternatives are shown below in Figure 4-8 through Figure 4-11.



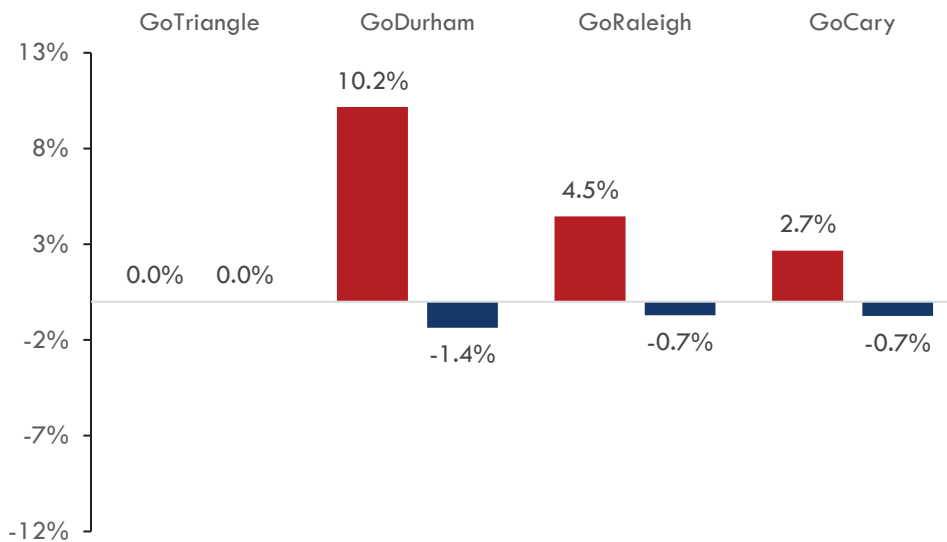
FARE INTEGRATION STUDY

Figure 4-7 Align Regional Discount Policies Ridership and Revenue Impacts



There is no change to ridership or revenue for GoTriangle in Scenario 5a, but there are significant revenue increases and small ridership decreases for the other agencies. GoDurham and GoRaleigh currently offer free service to seniors over aged 65, so instituting a fare on this discount category accounts for this increase in revenue and decrease in ridership (Figure 4-8). GoCary currently provides a discounted fare for seniors aged 60 and older. Altering this category to include only seniors aged 65 and older provides a small increase in revenue and decrease in ridership.

Figure 4-8 Scenario 5a Agency-Specific Ridership and Revenue Impacts

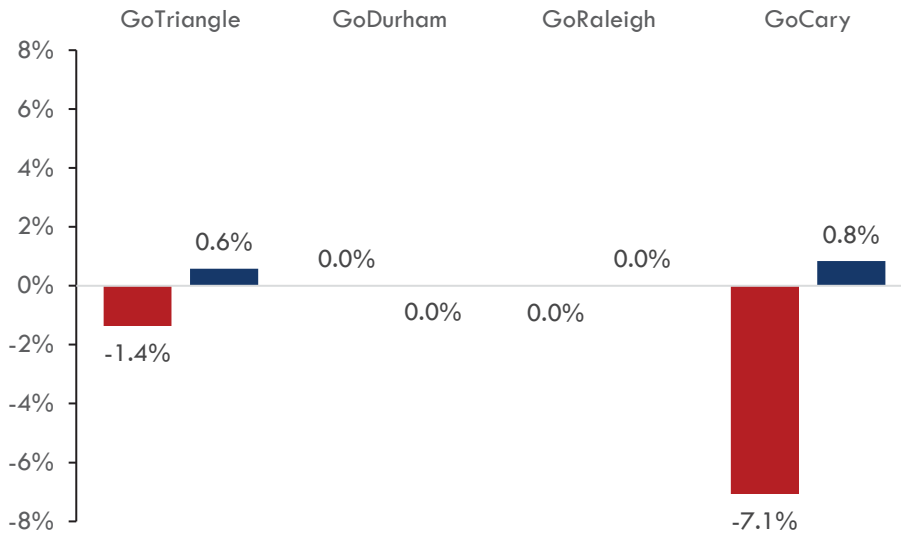




FARE INTEGRATION STUDY

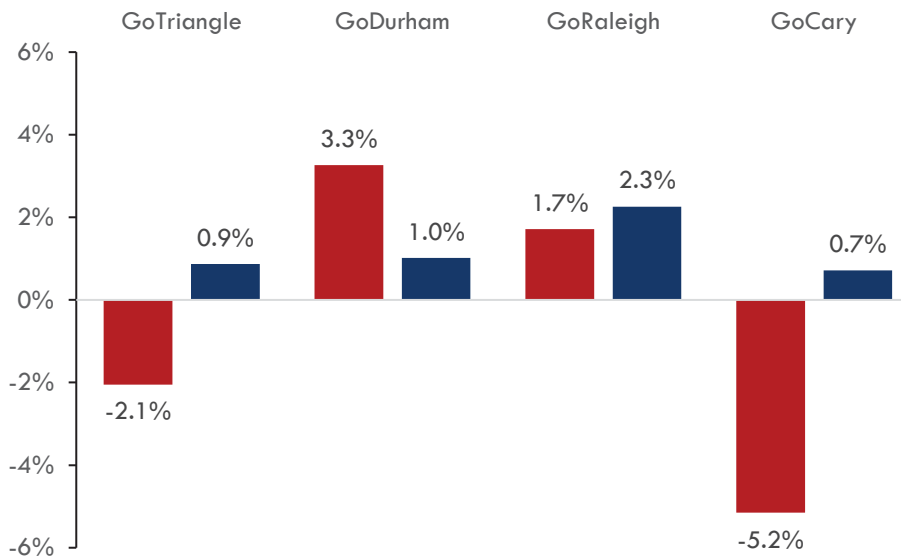
Providing free service to seniors and discounted service to people with disabilities results in no ridership or revenue changes for GoDurham or GoRaleigh (Figure 4-9). Providing free service for seniors results in a small increase in ridership for GoTriangle and GoCary, but a decrease in revenue. The 1.4% decrease in revenue for GoTriangle equates to approximately \$27,000 annually, while the 7.1% decrease in revenue for GoCary would be approximately \$12,000 annually.

Figure 4-9 Scenario 5b Agency-Specific Ridership and Revenue Impacts



Providing free service for people with disabilities but charging a discounted fare for seniors results in a small overall increase in ridership and revenue—1.5% and 1.2%, respectively (Figure 4-10). At the agency level, ridership would increase for all four agencies; however, revenue impacts would be mixed. Revenue for GoDurham and GoRaleigh would increase by 3.3% and 1.7% respectively, while revenue for GoTriangle and GoCary would decrease by 2.1% and 5.2%.

Figure 4-10 Scenario 5c Agency-Specific Ridership and Revenue Impacts

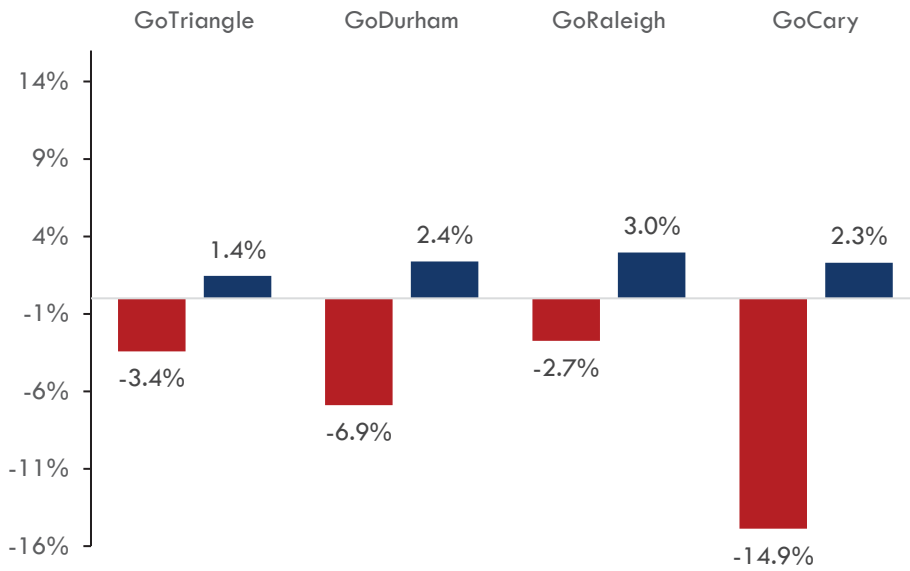




FARE INTEGRATION STUDY

Providing free service for all discount categories (youth, seniors, and people with disabilities) results in varying levels of increased ridership and decreased revenues for each agency (Figure 4-11). Overall, there would be a 2.5% increase in ridership and a 4.6% decrease in revenue across the region. Ridership increases range from 1.4% for GoTriangle to 3.0% for GoRaleigh, while revenue decreases range from 2.7% for GoRaleigh to 14.9% for GoCary. While this alternative has the largest ridership increase, it also comes with the largest revenue decrease. These priorities must be weighed and taken into account while developing and implementing new fare structures and discount policies.

Figure 4-11 Scenario 5d Agency-Specific Ridership and Revenue Impacts





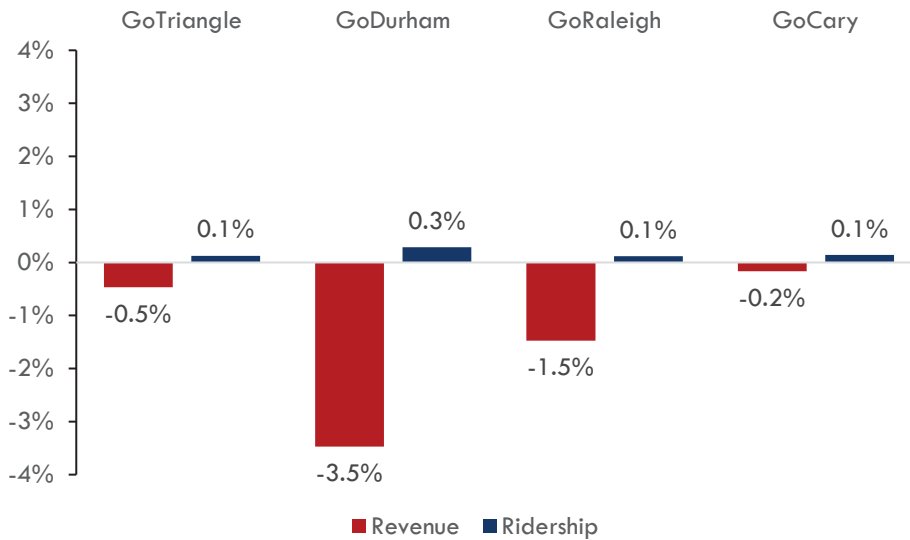
FARE INTEGRATION STUDY

Scenario 6: Offer Fare Capping

Fare capping is an emerging trend to make transit an affordable option and reduce the fare burden for cash riders. Fare capping works by allowing transit riders to pay for trips with smartcards cards or mobile ticket as they ride on a per-trip basis, but will stop charging them after reaching specific thresholds. In this scenario, fare capping would occur after two trips in a single day and 32 trips in a single month. Investing in fare capping policy requires implementing an electronic fare collection system such as smartcards and/or mobile ticketing.

Ridership and revenue impacts for individual agencies are shown in Figure 4-12. Overall, fare capping would result in a 1.9% decrease in revenue and a 0.2% increase in ridership across the region. The largest impacts of fare capping would be for GoDurham, which would experience a 3.5% decrease in revenue and a 0.3% increase in ridership.

Figure 4-12 Fare Capping Agency Specific Ridership and Revenue Impacts





FARE INTEGRATION STUDY

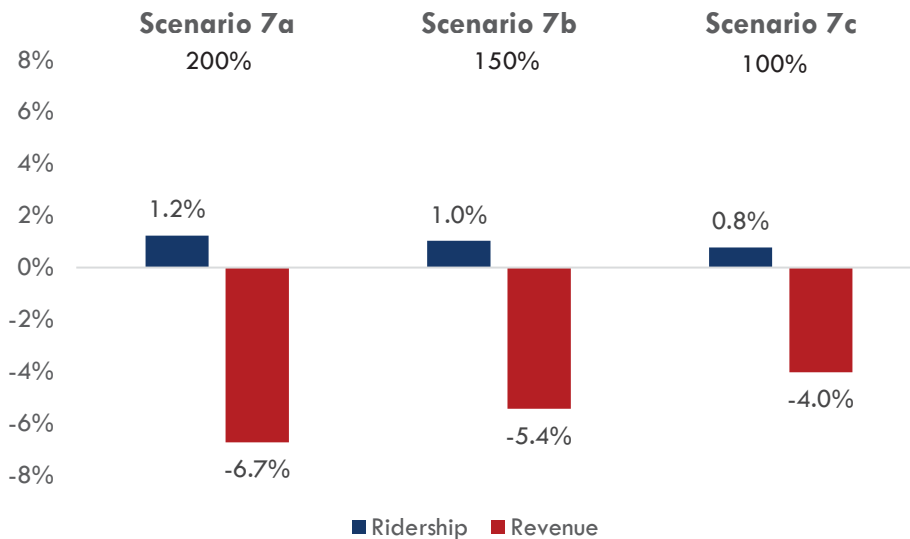
Scenario 7: Offer a Low-Income Fare Category

Offering a low-income fare category is another method for making transit a more affordable transportation option. This scenario analyzes the impacts of offering a discount to eligible adults making up to 200%, 150%, and 100% of the federal poverty level. This scenario assumes that 35% of eligible riders would actually use the low-income fare program—the observed usage rate for the ORCA Lift low-income fare program in Seattle, WA and in line with the projected usage rate for TriMet in Portland, OR.

Offering a low-income discount program with a threshold at 200% of the federal poverty line has the largest impacts to ridership and revenue and is the current industry standard, although 150% of the federal poverty line is also being used. These thresholds coincide with eligibility for a number of other public benefit programs and may reduce administrative costs through streamlined income verification.

Agency-specific impacts of a low-income fare category at 200% of the federal poverty line are shown in Figure 4-14. Ridership increases for the program range between 0.7% for GoTriangle and 1.6% for GoCary; conversely, revenue decreases range between 4% for GoTriangle and 9.4% for GoCary. While this is a large percent difference for GoCary, the 9.4% decrease in revenue equates to approximately \$16,000 while the 4% decrease for GoTriangle is equal to approximately \$78,000.

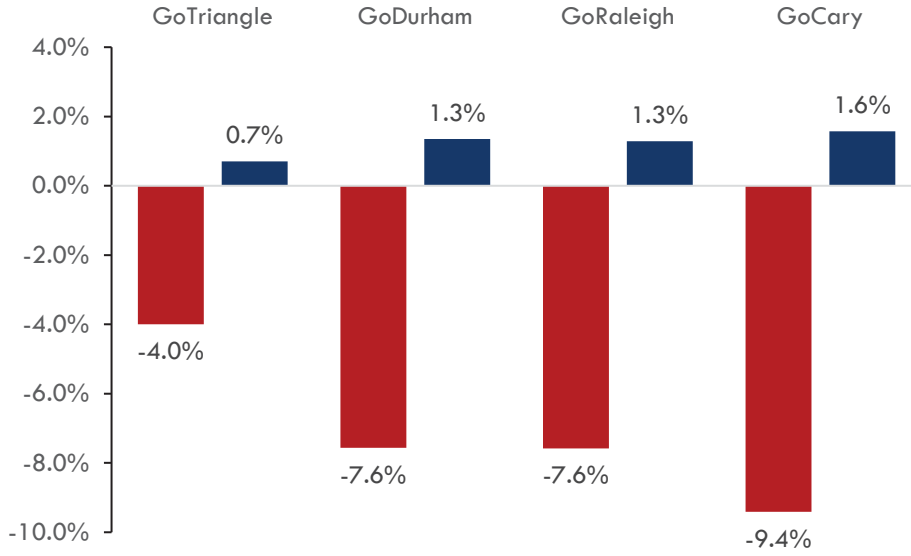
Figure 4-13 Low-Income Fare Category Ridership and Revenue Impacts





FARE INTEGRATION STUDY

Figure 4-14 Low-Income Fare Category at 200% of the Federal Poverty Line Impacts





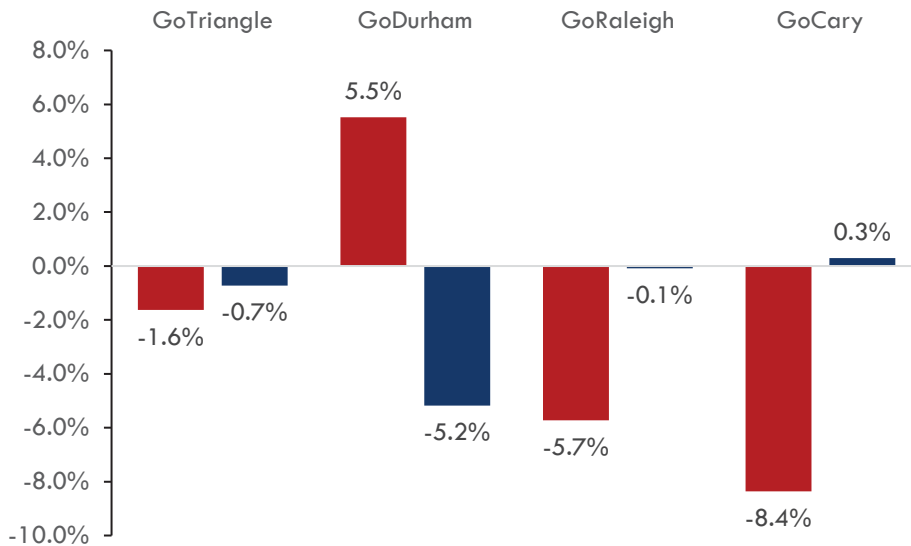
FARE INTEGRATION STUDY

Scenario 8: Offer a Low-Income Fare Category and a General Fare Increase

Pairing a low-income fare category with a general fare increase can help offset some lost revenue, but would also reduce ridership. Building from Scenario 7a, which would establish a low-income fare category at 200% of the federal poverty line, Scenario 8 would increase all base fares by \$0.25 and provide 50% discounts for low-income passengers.

Overall, Scenario 8 would result in a 2.5% decrease in ridership and a 1% decrease in revenue. Agency-specific ridership and revenue impacts are shown in Figure 4-15. GoDurham is the only agency with a revenue increase in this scenario. The ridership impacts for GoTriangle, GoRaleigh, and GoCary are generally small; however, GoDurham ridership is projected to decrease by 5.2%.

Figure 4-15 Ridership and Revenue Impacts For a Low-Income Fare Category and General Fare Increase





FARE INTEGRATION STUDY

INITIAL FARE SCENARIO RESULTS

The relative ridership and revenue changes region-wide for each scenario are shown in Figure 4-16 and Figure 4-17. The fare structure and resulting ridership and revenue impacts for each scenario are described in further detail below.

- Scenario 1b, which proposes charging all passengers the same flat fare of \$1.25 and a discounted rate of \$0.50, regardless of local, regional, or express service type, resulted in small ridership and revenue decreases (less than 2% each).
- Scenario 2a, which proposes a tiered fare structure in which fares for regional and express service are set at \$2.50 and local fares are aligned at \$1.25, resulted in a relatively small ridership decrease of 2% and a 3.5% revenue increase.
- Scenario 3 reduced fares to maximize ridership and resulted in a 7.7% increase in ridership with a 25.2% revenue loss. This scenario represents the theoretical maximum ridership increase.
- Scenario 4 increased fares to maximize farebox recovery and resulted in a revenue increase of 23.8% with a 24.3% revenue loss. This scenario represents the theoretical maximum revenue increase.
- Scenario 5b, which aligned regional discount policies in order to provide free service to youth under the age of 18 and seniors over the age of 65 and discounted service to people with disabilities, resulted in very small changes to ridership (0.1% increase) and revenue (0.5% decrease).
- Scenario 6 offers fare capping after passengers purchase two trips in one day and 32 trips in one month. This scenario resulted in a small ridership increase of 0.2% and a revenue decrease of 1.9%.
- Scenario 7a established a low-income fare category set at 200% of the federal poverty line and had the largest revenue decrease, aside from scenario 3. In this scenario, ridership is expected to increase by 1.2% and revenue is expected to decrease by 6.7%.
- Scenario 8 expands on Scenario 7a by coupling the low-income fare program with a general fare increase to offset revenue loss. This scenario assumes the low-income program is set at 200% of the federal poverty line and each agency's base fare is increased by \$0.25. This scenario resulted in small ridership and revenue decreases—2.5% and 1%, respectively.

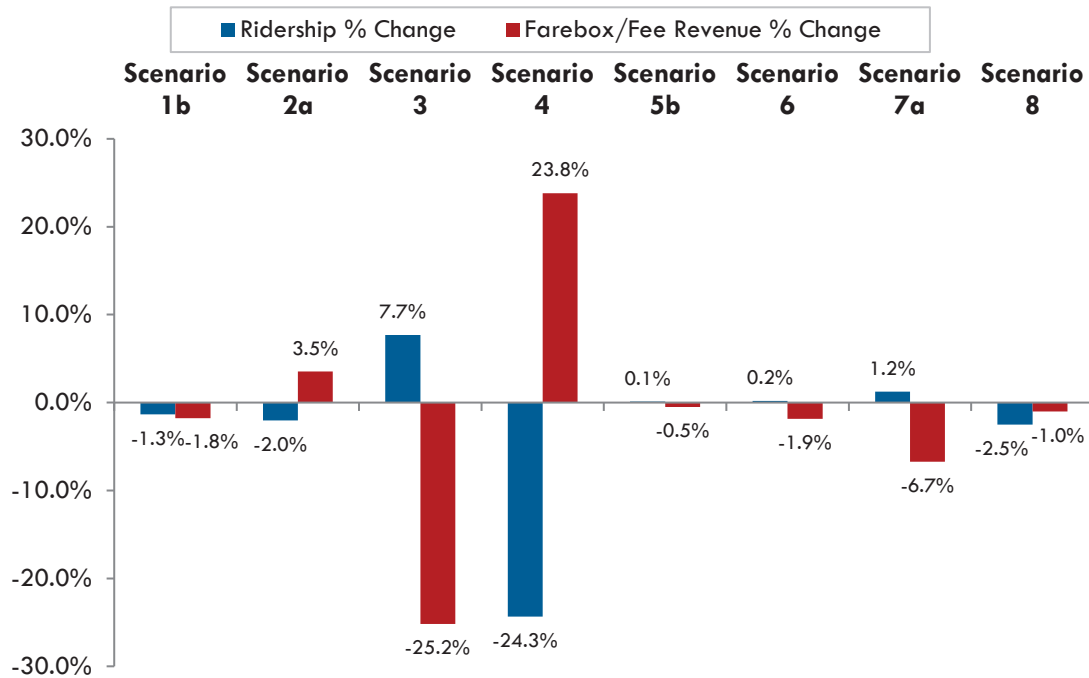


FARE INTEGRATION STUDY

Figure 4-16 Initial Fare Scenarios Ridership and Revenue Change

	Change in Ridership	Ridership % Change	Change in Revenue	Revenue % Change
1. Region-Wide Flat Fare	-154,000	-1.3%	-\$141,000	-1.8%
2a. Region-Wide Tiered Fares	-234,000	-2.0%	\$279,000	3.5%
3. Optimize Fares to Increase Ridership	887,000	7.7%	-\$1,994,000	-25.2%
4. Maximize Farebox Recovery	-2,815,000	-24.3%	\$1,887,000	23.8%
5b. Align Discount Fare Policies	11,000	0.1%	-\$39,000	-0.5%
6. Offer Fare Capping	23,000	0.2%	-\$147,000	-1.9%
7a. Offer Low-Income Fare Category	143,000	1.2%	-\$533,000	-6.7%
8 Offer Low-Income Fare Category with General Fare Increase	-289,000	-2.5%	-\$81,000	-1.0%

Figure 4-17 Initial Fare Scenarios Ridership and Revenue Percent Change



5 Recommendations

This chapter culminates the findings from the existing conditions analysis, peer review and best practices, and fare modeling effort to establish a set of fare policy, pricing, and product recommendations for the Wake-Durham region. The following fare recommendations incorporate results from reviewing national best practices, evaluation of fare scenarios, and refining concepts with the Fare Working Group.

The recommendations in this section are divided into two categories:

- **Fare Structure Recommendations:** Recommendations to specific fare products offered to the riding public and pricing of those products.
- **Fare Policy Recommendations:** Recommendations related to internally-adopted policies or procedures such as fare collection, as well as revised or new fare policies such as fare capping, mobile ticketing, and pass sales.

Additionally, it is anticipated that recommendations from this study will be implemented in two phases:

- **Phase 1: Fare structure, discount policies, and pricing should be aligned across the region.** Beginning in the Summer of 2019, it is recommended that the region implement a tiered fare structure (\$1.25/\$2.50) with consistent discount policies.
- **Phase 2: Fare capping, smartcards, and mobile ticketing should be pursued in early 2020.** After the fare structure and discount policies are aligned, the region should pursue the implementation and integration of mobile ticketing, fare capping, and smartcards.

FARE STRUCTURE RECOMMENDATIONS

The recommended fare structure is provided in Figure 5-1. The recommended fare structure takes into account experience across the transit industry, fare study goals, as well as fare pricing at peer agencies. To improve regional coordination between the four agencies, it is recommended that fares, pass options, and discount policies are all made consistent. The recommended approach would be to establish a tiered regional fare structure with aligned discount policies, consistent pass options, and fare capping.

The recommended fare structure and discount policies are proposed for implementation in Summer 2019. The recommended fare structure incorporates the following:

- **Discount Policies:**
 - Youth 12 and Under – Free
 - Youth 13 to 18 – Free with Youth Go Pass, otherwise 50% discount
 - Seniors 65 and Older – Free
 - People with disabilities – 50% discount
- **Pass Options:**
 - Day Pass
 - 7 -Day Pass
 - 31 -Day Pass
- **Paratransit:**
 - Fare twice base fare (\$2.50/\$5.00)
 - Offer 11-ticket booklet for the price of 10 (\$25.00/\$50.00)
- **Fare Capping (to be implemented in early 2020):**
 - Fares would be capped after purchasing two rides in one day and 32 rides in one month

To improve consistency throughout the regional agencies, it is recommended that GoDurham eliminate 5-day passes, all agencies adopt a 15% discount for day pass bundles, and all agencies continue allowing magnetic stored value cards as an additional fare media option for passengers.

Figure 5-1 Recommended Regional Fare Structure

Fares/Multipliers	Local	Regional/ Express
Base	\$1.25	\$2.50
Day Pass	\$2.50	\$5.00
7-Day Pass	\$12.00	\$24.00
31-Day Pass	\$40.00	\$80.00
Base Discount	\$0.60	\$1.25
Discount Day Pass	\$1.25	\$2.50
Discount 7-Day Pass	\$6.00	\$12.00
Discount 31-Day Pass	\$20.00	\$40.00

Ridership and Revenue Impacts

As discussed in Chapter 4, consumption of transit—like other goods and services—reacts to cost. Significant research over time has examined the sensitivity of transit ridership to fare increases. In transit, the standard measurement of sensitivity to fare changes means that for every 10% increase in fares, ridership will decrease by 3% (and vice-versa). As such, elasticity factors are common in fare modeling and can help determine anticipated ridership and revenue changes from the proposed fare increase or decrease, and the fare modeling effort conducted as part of this study helped identify anticipated impacts of the suggested fare structure.

The ridership and revenue impacts for each agency are shown in Figure 5-2 and Figure 5-3.¹ Region-wide, the recommended scenario would reduce ridership by approximately 240,000 passengers (2.1%) and increase revenue by approximately \$94,000 (1.2%).

- Impacts to GoTriangle are relatively small, with ridership decreasing by 9,000 passengers (0.6%) and revenue decreasing by \$11,000 (0.6%).
- Impacts to GoDurham are much larger, including a ridership decrease of 247,000 (4.7%) and a revenue increase of \$192,000 (7.3%) as a result of an increase to the existing base fare.
- GoRaleigh ridership would increase by 11,000 (0.2%) passengers and revenue would decrease by \$55,000 (1.7%).
- The impacts to GoCary are significant as a percentage, but the absolute numbers appear less severe. Ridership would increase by 5,000 (2.5%) and revenue would decrease by \$31,000 (18.6%).

The farebox recovery rate for each agency is shown in Figure 5-4. Region-wide, the recommended scenario would have a small impact on farebox recovery rates, increasing by 0.2%; however, there are more significant impacts for individual agencies. GoDurham is the only agency to improve farebox recovery, increasing from 15.9% to 17.1%. GoTriangle's farebox recovery rate would decrease very slightly (0.1%), GoRaleigh would decrease by 0.3%, and GoCary would have a more significant decrease (1.7%).

¹ Since the Youth GoPass was implemented prior to completion of this study, no impacts were assumed related to this fare product.

FARE INTEGRATION STUDY

Figure 5-2 Total Ridership and Revenue Impacts of Recommended Fare Structure

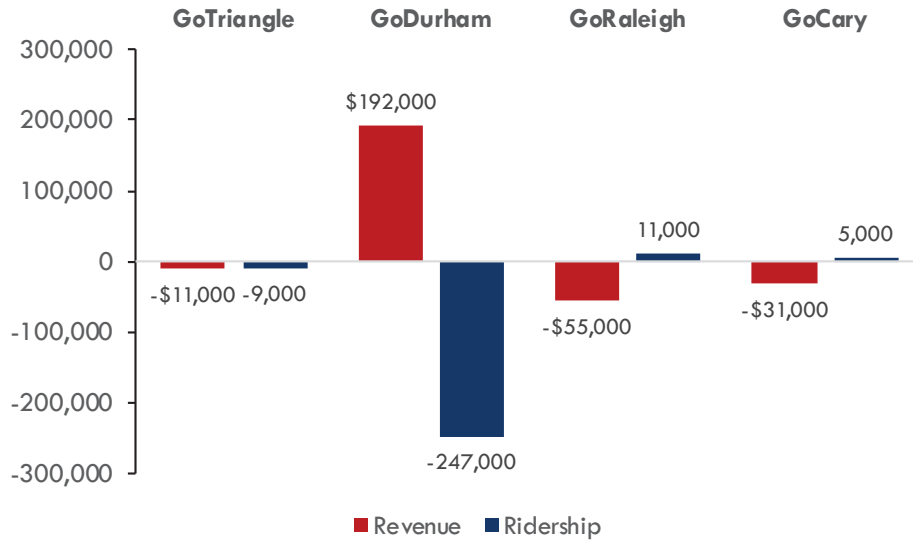
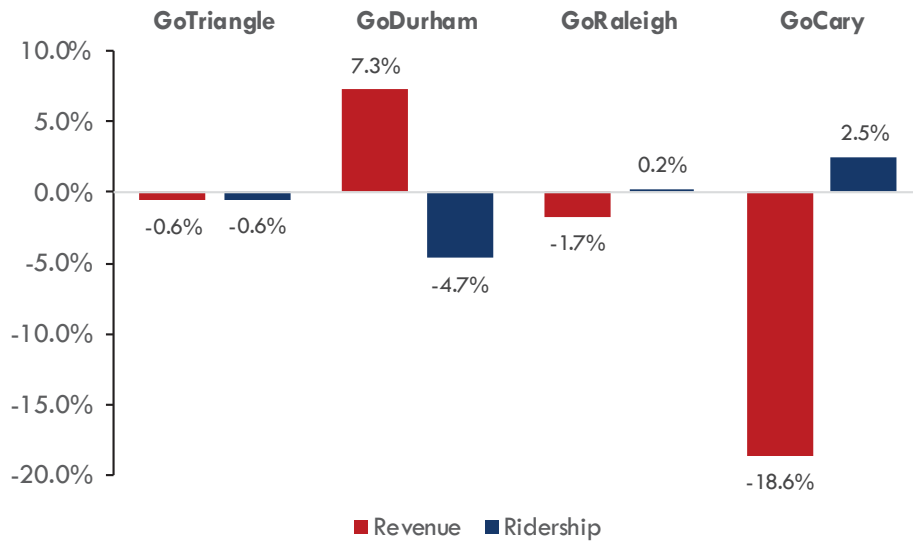
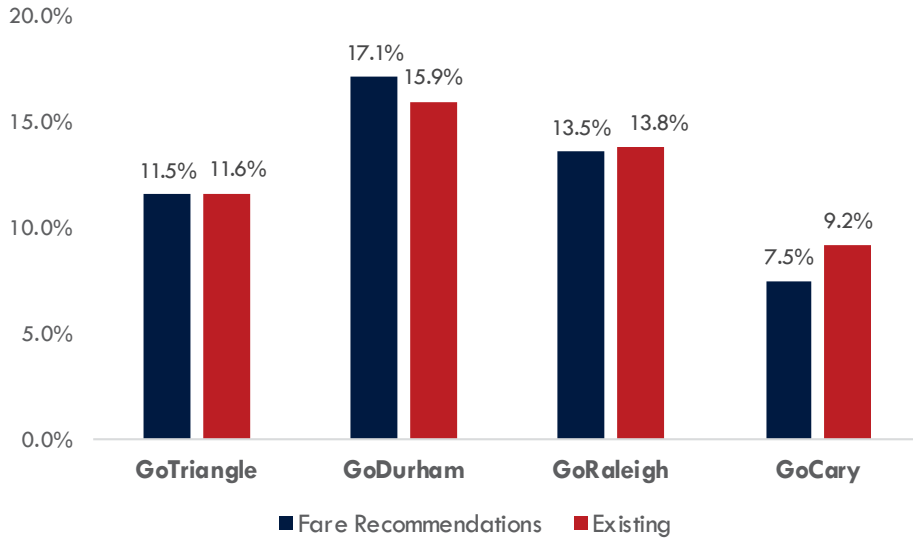


Figure 5-3 Percent Ridership and Revenue Impacts of Recommended Fare Structure



FARE INTEGRATION STUDY

Figure 5-4 Farebox Recovery Rate Impacts of Recommended Fare Structure





FARE INTEGRATION STUDY

POLICY RECOMMENDATIONS

Phase 1 Policy Recommendations

In conjunction with fare structure recommendations, several policy recommendations are also suggested for implementation in summer 2019.

Establish Pass Sales Agreement and Standardized Discount Policies

There is an opportunity to formalize and expand third-party retail sales of passes by establishing pass sales agreements. This would allow the agencies to standardize retailer and social service agency discount policies region-wide. It is also recommended that all pass types be made available in all locations, with the exception of day passes, which would be the only pass offered onboard. Improving availability of passes improves the rider experience, raises visibility of the agencies, and further facilitates regional integration.

Expand GoPass Program

There are several opportunities to expand and improve the GoPass program including:

- Expand GoPass program to employers of any size
- Offer neighborhood pass option for passengers without an employer GoPass
- Consider implementing tiered pricing structure based on employer/neighborhood size

It is recommended that the cost of the GoPass program be based on the number of trips taken by pass holders and the pre-determined cost per trip. Agreements should be formalized with a contract to ensure that agencies are adequately reimbursed for ridership. At the same time, the partner entity can be confident that they benefit from the relationship through improved access to service for employees and discounted rates associated with a pre-paid fare. Agencies should consider the following in developing pricing structures and contracts:

- **Discounted per trip rates:** Programs like GoPass almost always offer a discounted trip rate. The amount of the discount must balance the benefit of a large, bulk purchase with the actual cost of providing the service.
- **Actual trips taken by bulk pass holders:** The number of trips taken together with the fare determines the cost of the program, and thus agreement on how the number of trips taken is measured is critical. Depending on the type of fare collection system used by a transit agency, pass usage may be easily measured at the farebox. In other cases, trip levels can be measured through surveys.
- **Escalation rates:** Programs like GoPass are nearly always effective in increasing transit ridership. Consequently, program costs can increase substantially over time. Transit agencies and universities often negotiate escalation rates to ensure program cost increases are manageable for end users, especially in the early years of the program. Contracts should allow for periodic adjustment of pricing according to changes in ridership, operating cost, and level of service provided.
- **Program marketing:** For these types of programs to be successful, they must be successfully marketed. Marketing should capitalize on the cost benefits to riders and the environmental benefits associated with the program and should include information about how to use transit and/or other transportation programs.



FARE INTEGRATION STUDY

Establish Formal Guidelines for Fare Adjustments

Several factors need to be considered when raising fares, ranging from how fares are perceived by the transit-riding public, whether they are in line with peer agencies, to what is the appropriate ratio between passenger fares and operating costs. In the future, the Wake-Durham region should consider a transparent fare increase policy that enables more regular fare increases to stay in line with inflation and other revenue related trends.

The following guidelines are provided for each agency's consideration:

- On an annual basis, the average fare, subsidy per passenger, and farebox recovery ratio should be reviewed when developing the annual operating budget. If all three ratios are declining and costs to operate the service are increasing, consider a fare adjustment.
- The local consumer price index should be monitored; if increases are greater than 5% in any given year, consider increasing fares to keep pace with inflation.
- Monitor and track use of all passes and if there is a significant drop in sales with any fare product, consider a fare adjustment for that product. Similar to underperforming routes, underperforming fare products should be evaluated for adjustments or elimination.
- For all future fare increases, pass product prices should be rounded to the nearest dollar. Single-ride prices and/or day pass products should be rounded to the nearest quarter.
- A cross-the-board fare increases are simple and transparent, but will often create disproportionate impacts. These types of fare increases should be avoided unless supported by evidence that the strategy meets specific goals at the time of evaluation.
- Services that offer a competitive time or comfort advantage over vehicle or transit alternatives should be priced at a higher level to differentiate the product.

These guidelines assume that service levels would remain constant. Fare increases paired with service level increases may be warranted assuming support exists for both. Fare increases paired with service cuts should be avoided when possible.

Establish Region-wide Discount ID

Along with aligning regional discount policies, standardizing acceptable discount IDs would facilitate additional regional integration. Each agency is currently issuing some form of discount ID; however, this policy recommends developing and issuing one standardized ID that would be accepted by all agencies. Additional policies could be established for accepting other forms of ID (e.g., Medicare card).



FARE INTEGRATION STUDY

Phase 2 Policy Recommendations

Additional policy recommendations are suggested for implementation in early 2020, after the short-term recommendations are in effect, as well as to allow each agency a adequate time for procurement of fare technology and farebox upgrades.

Pursue Mobile Ticketing

Mobile ticketing (payment using a smartphone) offers an increase in customer convenience over paper or smartcard payment, as well as potential operational savings. Smartphone payments eliminate the need for customers to procure and carry a physical fare payment media, may reduce delay in fare payment (by reducing cash in the system), and reduce the volume of passes that must be processed by the farebox (potentially lowering maintenance costs).

In this day and age of nearly ubiquitous smartphone adoption, mobile ticketing can make booking and paying for transit a seamless experience for many riders and help lower the barrier of entry for new transit users. However, while digital options like mobile ticketing are an easy option for some riders, it can be intimidating or a non-option for others. Thus, it is recommended that agencies in the Wake-Durham region continue to offer traditional ticketing options to accommodate all riders—particularly those with disabilities, older adults, and low-income residents without smartphones.

Pursue Fare Capping

As discussed in Chapter 3, fare capping is an emerging trend with benefits including increased affordability of passes, increased fare equity, and increased simplicity. Fare capping is particularly beneficial for low-income riders who may not have the cash on hand to purchase a 31-day pass and end up paying more in cash fares over the course of the month. Fare capping can be introduced through electronic smartcards, which track fare payments through an internal database, or through mobile ticketing, which tracks fare payments and automatically provides riders a pass once the payment threshold has been reached.

Implementing fare capping in conjunction with mobile ticketing and/or smartcards is recommended to improve the affordability of transit service for riders.

Consider Implementation of Smartcards

Investing in smartcard infrastructure is costly, but improves the customer experience and available pass options. Transitioning to smartcards would require upgrading the farebox infrastructure on buses throughout the region and ensuring regional coordination on fare products and accounting to accommodate interagency transfers. While mobile ticketing could provide a number of these benefits at a reduced cost, electronic smart cards are common among peer agencies and should continue to be explored for implementation in early 2020 to provide additional rider benefits and maintain regional competitiveness.

FARE INTEGRATION STUDY

FARE RECOMMENDATIONS SUMMARY

Fare recommendations for Go Cary, Go Durham, Go Raleigh, and Go Triangle are comprised of fare structure changes and policy recommendations. The first phase of implementation is anticipated to occur in Summer 2019, with additional recommendations anticipated for implementation in early 2020. Figure 5-5 provides a summary of recommendations developed as part of the Fare Integration Study.

Figure 5-5 Fare Recommendations Summary

Type	Recommendation
Fare Structure Recommendations (Implementation in Summer 2019)	<ul style="list-style-type: none"> ▪ Implement two-tiered region-wide fare structure with a local base fare of \$1.25 and regional/express base fare of \$2.50 ▪ Offer consistent discounts/categories <ul style="list-style-type: none"> – Youth 12 and Under – Free – Youth 13 to 18 – Free with Youth GoPass, otherwise 50% discount – Seniors 65+ – Free – People with Disabilities – 50% discount ▪ Offer \$2.50/\$5.00 paratransit base fare ▪ Provide consistent products/discounts <ul style="list-style-type: none"> – Offer 15% discount for Day Pass bundles – Continue to offer Value Cards – Eliminate GoDurham 5-Day Pass – Sell only Day Passes on-board
Phase 1 Policy Recommendations (Implementation in Summer 2019)	<ul style="list-style-type: none"> ▪ Establish pass sales agreement and discount guidelines ▪ Pursue new sales partnerships ▪ Expand GoPass program ▪ Establish guidelines for fare adjustments ▪ Implement region-wide discount ID
Phase 2 Policy Recommendations (Implementation in Early 2020)	<ul style="list-style-type: none"> ▪ Pursue mobile ticketing ▪ Pursue fare capping ▪ Consider implementation of smartcards

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Finance & Administrative Services
DATE: January 15, 2019
SUBJECT: **Wake Transit FY 2019 Q3 Proposed Amendment**

Strategic Objective or Initiative Supported

Implement the wake transit plan with transit planning advisory committee.

Action Requested

Staff requests that the Committee recommend Board approval of the Wake Transit FY19 Q3 amendments.

Background and Purpose

Four (4) amendments have been submitted for approval. Three (3) major amendments and one (1) minor amendment. The amendments are listed below:

Major Amendment – 3 Amendments

1. Commuter Rail Environmental Planner
2. Commuter Rail Manager of Rail Design
3. Multi-Year Bus Service Implementation Plan and Community Funding Area Program Management Plan

Minor Amendment – 1 Amendment

4. Sunday Service (TO004-A)

As a part of the packet presented with this memorandum, the committee will find:

- Memorandum from TPAC Administrator
- Proposed FY 2019 Q3 Amendment List
- Detailed Individual Project Amendment Request
- TPAC Budget & Finance committee Disposition Memo & Table Summary

At the time of the Committee receiving this item, TPAC will have already reviewed and recommended the amendments to both the CAMPO Executive Board and the GoTriangle Board of Trustees. The CAMPO Executive Board is expected to review the recommendation from TPAC

during the February 20th Executive Board meeting and provide a decision on the recommended amendments.

Financial Impact

The proposed amendments, if approved, will increase the FY19 Wake Transit Work Plan by \$352,000 compared to the FY19 adopted budget.

Attachments

- TPAC FY 2019 Q3 Amendment Packet

Staff Contacts

- Steven Schlossberg, (919) 485-7590, sschlossberg@gotriangle.org
- Sandra Freeman, (919) 485-7415, sfreeman@gotriangle.org



GO FORWARD
A COMMUNITY INVESTMENT IN TRANSIT
WAKE COUNTY

From: Bret Martin, Wake Transit Program Manager, Capital Area MPO

To: Wake County Transit Planning Advisory Committee (TPAC)

Date: 1/14/2019

Re: Summary of Requested FY 2019, 3rd Quarter Work Plan Amendments

Four (4) amendments to the Fiscal Year (FY) 2019 Wake Transit Work Plan have been submitted for consideration of approval in the 3rd quarter of FY 2019. The four (4) amendment requests were each reviewed by CAMPO staff to determine their appropriate amendment type classifications (major versus minor) as outlined in the Wake Transit Work Plan Amendment Policy. Technical information related to the requests' portrayals as amendments were also reviewed.

There was one (1) Major Amendment requests submitted involving Projects TO002-G and TO002-K (Multi-Year Bus Service Implementation Plan and Community Funding Area Program Management Plan). There were two (2) Major Amendment requests for two new staffing projects. Reasons for these amendments based on criteria outlined in the adopted amendment policy are:

- Amendment requests as proposed would require a change in budgeted reserves or fund balance (all requested Major Amendments);
- Amendment request involves a significant change in scope for the project (Amendment request for Projects TO002-G AND TO002-K); and
- Amendment request is a project requested to be added to the Work Plan (Amendment requests for two staffing projects).

There was one (1) Minor Amendment submitted involving Project TO004-A (GoCary Sunday Service on All Routes, Expanded Paratransit & Holiday Hours). The reason for the amendment, based on criteria outlined in the adopted amendment policy, is the amendment request involves a change in scope that does rise to the level of being a Major Amendment.

Both amendment requests were released for public comment on December 19, 2018. The public comment period closed for the Minor Amendment on January 2, 2019. The public comment period for the Major Amendment closes on January 18, 2019. No public comments were received for the Minor Amendment request, and no public comments have been received to date for the Major Amendment request.

Attached to this memorandum are the following:

- Proposed FY 2019 Q3 Amendment List
- Completed Amendment Request Forms
- Joint Budget & Finance/Planning and Prioritization Subcommittees Disposition Memo and Voting Record

These requested amendments will be considered for recommendation of approval to the Wake Transit governing boards by the TPAC at its January 22nd meeting.

FY 2019, Quarter 3, Requested Wake Transit Work Plan Amendments

Requested Major Amendments							
Project ID #	Agency	Project Title	FY18 Original Funding Allocation	FY19 Original Funding Allocation	FY19 Requested Funding Allocation	FY19 Funding Impact	Reason for Major/Minor Amendment Status
Transit Plan Administration							
TBD	GoTriangle	FTE for Commuter Rail Environmental Planner	\$ -	\$ -	\$ 75,000.00	\$ 75,000.00	1) Project requested to be added to the Work Plan AND 2) Requires a change in budgeted reserves or fund balance
TBD	GoTriangle	FTE for Manager of Commuter Rail Design	\$ -	\$ -	\$ 75,000.00	\$ 75,000.00	1) Project requested to be added to the Work Plan AND 2) Requires a change in budgeted reserves or fund balance
TO002-G and TO002-K (FY 2018 Work Plan projects)	GoTriangle/ CAMPO	Multi-Year Bus Service Implementation Plan (TO002-G) and Community Funding Area Program Management Plan (TO002-K)	\$ 1,467,000.00	\$ 500,000.00	\$ 702,000.00	\$ 202,000.00	1) Requires a change in budgeted reserves or fund balance AND 2) Is a significant change in scope of a project
Requested Minor Amendment							
Bus Operations							
TO004-A	Town of Cary	Sunday Service All Routes, Expanded Paratransit & Holiday Hours	\$ 476,182.00	\$ 575,285.00	\$ 575,285.00	\$ -	Any change that does not meet any of the criteria of a major amendment - Project scope change does not rise to the level of being significant. Project scope changing from Sunday service on all GoCary routes in existence in FY 2018, which originally included Routes 1 and 2 (Maynard Loop routes), to Sunday Service on all GoCary routes with a new Crossroads Plaza route replacing Routes 1 and 2.

FY 2019 Original Funding Allocation Amount for Project TO002-G is amount encumbered from FY 2018 to carry over to FY 2019

Distributed for Public Comment - 12/19/2018

Major Amendment - Public Comments Accepted through January 18, 2019

Minor Amendment - Public Comments Accepted through January 2, 2019

Submit all comments to Bret Martin, Wake Transit Program Manager - Bret.Martin@campo-nc.us or 919-996-4410

Wake Transit Project ID #
TBD

FY 2019
Wake Transit Work Plan
Project Amendment Request Form
Operating and/or Capital

FY START DATE	Page 11 of 121
1/1/2019	

Type of Amendment **Minor** **Major**

Minor amendment – Required when there is:
Less than a 20% change to budget appropriations for projects equal to or over \$500,000.
Less than \$100,000 to a budget ordinance appropriation for projects less than \$500,000.
Any change that does not meet any criteria of a major amendment.

Major amendment - Required when there is:
A project requested to be added to the Work Plan
A project requested to be removed from the Work Plan
A cardinal change in scope as defined by the Federal Transit Administration
A transfer between budget ordinance appropriations that requests or requires equal to or more than a 20% change to a budget appropriation for projects equal to or over \$500,000
A transfer between budget ordinance appropriations that requests or requires equal to or more than a \$100,000 change to a budget appropriation for projects less than \$500,000
Any change that requires a change in budgeted reserves or fund balance

New/Amended Project Name	Requesting Agency	Project Contact	Estimated Operating Cost	
TBD	GoTriangle	Jeff Mann jmann@gotriangle.org	Base Year	\$ 75,000
			Recurring	\$ 958,161
Estimated Start Date	Estimated Completion	Notes	Estimated Capital Cost	
1/1/2019	6/30/2019	Requested position is associated with the Project Management Approach Document for the Greater Triangle Commuter Rail	Base Year	\$ -
			Cumulative	\$ -
Project Description				
Enter below a summary of the project amendment and impact on approved plan.				
In preparation for the Project Development application and movement into the New Starts program with a Commuter Rail project the project team must complete the NEPA process within 24 months. To accomplish this goal, an Environmental Planner dedicated to Commuter Rail will be needed. This position will report to the current GoTriangle lead Environmental Planner. Recruitment for this position should take place in early 2019 to meet the desired deadlines.				

1. Enter Wake Transit Project ID(s) to Increase					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
NEW	Commuter Rail Environmental Planner	Transit Plan Administration	\$ 75,000	\$ 150,000	The Greater Triangle Commuter Rail Project - Project Management Approach highlighted three (3) positions that are critical for the early stages of the Commuter Rail. The CRT Environmental Planner is included as one of the three positions.
TOTAL			\$ 75,000	\$ 150,000	

2. Wake Transit Project ID(s) to Reduce					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
			\$ -		
TOTAL			\$ -	\$ -	

3. Impact on Transit Plan Project Costs				
From above, indicate whether amounts impact operating or capital budgets in Wake Transit Plan.		Estimated Operating Cost	Current Year	\$ -
			Recurring	\$ -
		Estimated Capital Cost	Base Year	\$ -
			Cumulative	\$ -

Project Justification / Business Case Provide responses to **EACH** of the questions below. Answer the questions as fully as possible. Enter Non-Applicable (N/A) as appropriate.

4. Is this New/Amended project Operating, Capital or Both? **Operating** **Capital** **Both**

5. What is the timeframe for the request? Are you requesting a full year of funds or a partial year to be annualized in future fiscal years?

Partial Funds for FY19 and Full funds for future years

Requested funds will allow the Commuter Rail project to proceed towards meeting the deadlines and goals outlined in the program management plan.

7. List below the Key Performance Indicators (deliverables) while this project is in progress. These performance measures will be reported quarterly. Are these the same measures as currently being reported?

a) Status of Hire

8. List any other relevant information not addressed.

9. Please enter estimated appropriations to support expenses identified above. Enter FY 2018 and the estimated annualized cost in FY 2019 using the 2.5% growth factor, if applicable. The spreadsheet will calculate 2020 and beyond by 2.5%. If your project is not expected to have recurring costs in FY 2020 and/or beyond, delete the calculation(s) in columns E-H.

Cost Break Down of Project Request							
OPERATING COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Growth Factors		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary & Fringes	75,000	150,000	153,750	157,594	161,534	165,572	169,711
Contracts			-	-	-	-	-
Bus Operations:							
Estimated Hours			-	-	-	-	-
Cost per Hour			-	-	-	-	-
Estimated Operating Cost	-	-	-	-	-	-	-
Bus Leases			-	-	-	-	-
Park & Ride Lease			-	-	-	-	-
Other			-	-	-	-	-
Other			-	-	-	-	-
Subtotal: Bus Operations	-	-	-	-	-	-	-
Other: Administrative	-	-	-	-	-	-	-
Other: Database Hosting			-	-	-	-	-
Other: Supplies and Materials			-	-	-	-	-
TOTAL OPERATING COSTS	75,000	150,000	153,750	157,594	161,534	165,572	169,711

10. Please enter estimated appropriations to support contractual commitments and other expenses related to proposed capital projects identified above.

CAPITAL COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Design and/or Construction	-	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Land - Right of Way	-	-	-	-	-	-	-
TOTAL CAPITAL COSTS	-	-	-	-	-	-	-

Assumptions for Costs and Revenues Above:

11. Please state any assumption(s) used to calculate the capital and operating dollars and revenues shown above.

The above FY19 assumes half-year hire of Salary, Benefits and Expenses.

Wake Transit Project ID #
TBD

FY 2019
Wake Transit Work Plan
Project Amendment Request Form
Operating and/or Capital

FY START DATE
1/1/2019

Type of Amendment Minor Major

Minor amendment – Required when there is:
Less than a 20% change to budget appropriations for projects equal to or over \$500,000.
Less than \$100,000 to a budget ordinance appropriation for projects less than \$500,000.
Any change that does not meet any criteria of a major amendment.

Major amendment - Required when there is:
A project requested to be added to the Work Plan
A project requested to be removed from the Work Plan
A cardinal change in scope as defined by the Federal Transit Administration
A transfer between budget ordinance appropriations that requests or requires equal to or more than a 20% change to a budget appropriation for projects equal to or over \$500,000
A transfer between budget ordinance appropriations that requests or requires equal to or more than a \$100,000 change to a budget appropriation for projects less than \$500,000
Any change that requires a change in budgeted reserves or fund balance

New/Amended Project Name	Requesting Agency	Project Contact	Estimated Operating Cost	
TBD	GoTriangle	Jeff Mann	Base Year	\$ 75,000
		jmann@gotriangle.org	Recurring	\$ 958,161
Estimated Start Date	Estimated Completion	Notes	Estimated Capital Cost	
1/1/2019	6/30/2019	Requested position is associated with the Project Management Approach Document for the Greater Triangle Commuter Rail	Base Year	\$ -
			Cumulative	\$ -
Project Description		Enter below a summary of the project amendment and impact on approved plan.		
In preparation for entering Project Development, the Manager of Rail Design in consultation and collaboration with the project team, will manage the day-to-day work of the consultant team to progress the overall design, including establishing the technical working groups that will assist in moving the project forward. Recruitment for this position should take place in early 2019 to meet the desired deadlines.				
1. Enter Wake Transit Project ID(s) to Increase				

Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
NEW	Commuter Rail Manager of Rail Design	Transit Plan Administration	\$ 75,000	\$ 150,000	The Greater Triangle Commuter Rail Project - Project Management Approach highlighted three (3) positions that are critical for the early stages of the Commuter Rail. The CRT Design Manager is included as one of the three positions.
TOTAL			\$ 75,000	\$ 150,000	

2. Wake Transit Project ID(s) to Reduce					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
				\$ -	
TOTAL			\$ -	\$ -	

3. Impact on Transit Plan Project Costs			
From above, indicate whether amounts impact operating or capital budgets in Wake Transit Plan.	Estimated Operating Cost	Current Year	\$ 75,000
		Recurring	\$ 150,000
	Estimated Capital Cost	Base Year	\$ -
		Cumulative	\$ -

Project Justification / Business Case Provide responses to EACH of the questions below. Answer the questions as fully as possible. Enter Non-Applicable (N/A) as appropriate.

4. Is this New/Amended project Operating, Capital or Both? Operating Capital Both

5. What is the timeframe for the request? Are you requesting a full year of funds or a partial year to be annualized in future fiscal years?

Partial Funds for FY19 and Full funds for future years

Requested funds will allow the Commuter Rail project to proceed towards meeting the deadlines and goals outlined in the program management plan.

7. List below the Key Performance Indicators (deliverables) while this project is in progress. These performance measures will be reported quarterly. Are these the same measures as currently being reported?

a) Status of Hire

8. List any other relevant information not addressed.

9. Please enter estimated appropriations to support expenses identified above. Enter FY 2018 and the estimated annualized cost in FY 2019 using the 2.5% growth factor, if applicable. The spreadsheet will calculate 2020 and beyond by 2.5%. If your project is not expected to have recurring costs in FY 2020 and/or beyond, delete the calculation(s) in columns E-H.

Cost Break Down of Project Request							
OPERATING COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Growth Factors		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary & Fringes (Design Manager)	75,000	150,000	153,750	157,594	161,534	165,572	169,711
Bus Operations:							
Estimated Hours			-	-	-	-	-
Cost per Hour			-	-	-	-	-
Estimated Operating Cost	-	-	-	-	-	-	-
Bus Leases			-	-	-	-	-
Park & Ride Lease			-	-	-	-	-
Other			-	-	-	-	-
Other			-	-	-	-	-
Subtotal: Bus Operations	-	-	-	-	-	-	-
Other: Administrative	-	-	-	-	-	-	-
Other: Database Hosting	-	-	-	-	-	-	-
Other: Supplies and Materials	-	-	-	-	-	-	-
TOTAL OPERATING COSTS	75,000	150,000	153,750	157,594	161,534	165,572	169,711

10. Please enter estimated appropriations to support contractual commitments and other expenses related to proposed capital projects identified above.

CAPITAL COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Design and/or Construction	-	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Land - Right of Way	-	-	-	-	-	-	-
TOTAL CAPITAL COSTS	-	-	-	-	-	-	-

Assumptions for Costs and Revenues Above:

11. Please state any assumption(s) used to calculate the capital and operating dollars and revenues shown above.

The above FY19 assumes half-year hire of Salary, Benefits and Expenses.

Wake Transit Project ID #
TO002-G and TO002-K (FY 2018 Work Plan Projects)

**FY 2019
Wake Transit Work Plan
Project Amendment Request Form
Operating and/or Capital**

FY START DATE
7/1/2018

Type of Amendment Minor Major

Minor amendment – Required when there is:

- A transfer of funds between budget ordinance appropriations but requires less than a 20% change to a project appropriation for projects equal to or greater than \$500,000
- A transfer of funds between budget ordinance appropriations bus requires less than a \$100,000 change to a project appropriation for projects less than \$500,000
- Any change that does not meet any criteria of a major amendment

Major amendment - Required when there is:

- A project requested to be added to the Work Plan
- A project requested to be removed from the Work Plan
- Significant changes in scope of funded project
- A transfer between budget ordinance appropriations that requires equal to or greater than a 20% change to a project appropriation for projects greater than \$500,000
- A transfer between budget ordinance appropriations that requires equal to or greater than a \$100,000 change to a project appropriation for projects less than \$500,000
- Any change that requires a change in budgeted reserves or fund balance

New/Amended Project Name	Requesting Agency	Project Contact	Estimated Operating Cost	
Multi-Year Bus Service Implementation Plan and Community Funding Area Program Management Plan	GoTriangle/CAMPO	Steve Schlossberg, GoTriangle; Bret Martin, CAMPO Sschlossberg@gotriangle.org ; bret.martin@campo-nc.us	Base Year	\$ 702,000
			Recurring	\$ -
Estimated Start Date	Estimated Completion	Notes	Estimated Capital Cost	
07/01/2017	06/30/2019		Base Year	\$ -
			Cumulative	\$ -
Project Description	Enter below a summary of the project amendment and impact on approved plan.			
The requested amendment to two projects included in the FY 2018 Work Plan, for which funding was encumbered to carry over as an appropriation in the FY 2019 Work Plan, can be described as follows: 1) Projects TO002-G (\$1,292K) and TO002-K (\$175K) for a total of \$1,467K should be collapsed into a single line and single project, with the respective scopes of each included as authorized scope for the new single project; 2) Expand scope of new single project to include expenditures for the Wake Transit implementation staffing plan and Wake Transit implementation public engagement policy; and 3) Add \$202,000 that should have been encumbered with the \$500,000 that was originally encumbered from FY 2018 to FY 2019 for Project TO002-G to bring the total amount of funds appropriated to the new single project to \$702,000. The total project cost is expected to actualize at approximately \$1,200K compared to an original budget of \$1,467K.				
1. Enter Wake Transit Project ID(s) to Increase				

Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TO002-G	Multi-Year Bus Service Implementation Plan	Transit Plan Admin	\$ 702,000	\$ -	Requesting increase to amount originally encumbered from FY 2018 to FY 2019. The increase does not require additional funding beyond the amount originally budgeted for the impacted projects. However, it does require an increase above what was encumbered from FY 2018 to FY 2019 for TO002-G.
TOTAL			\$ 702,000	\$ -	

2. Wake Transit Project ID(s) to Reduce					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TOTAL			\$ -	\$ -	

3. Impact on Transit Plan Project Costs			
From above, indicate whether amounts impact operating or capital budgets in Wake Transit Plan.	Estimated Operating Cost	Current Year	\$ 702,000
		Recurring	\$ -
	Estimated Capital Cost	Base Year	\$ -
		Cumulative	\$ -

Project Justification / Business Case Provide responses to *EACH* of the questions below. Answer the questions as fully as possible. Enter Non-Applicable (N/A) as appropriate.

4. Is this New/Amended project Operating, Capital or Both? Operating Capital Both

5. What is the timeframe for the request? Are you requesting a full year of funds or a partial year to be annualized in future fiscal years?

This request applies to FY 2019 only. The project cost does not recur after FY 2019.

The expected outcome is that we will be able to finish paying the consultant responsible for producing the range of on-call transit planning services ordered by the TPAC and contracted by GoTriangle, CAMPO and the City of Raleigh, including the Wake Bus Plan, Community Funding Area Program Management Plan, Staffing Plan, and Public Engagement Policy. If the request is not funded, CAMPO, GoTriangle and City of Raleigh will not be able to meet their contract liability to the consultant. The scope of work for the new project needs to be expanded to include all of the services originally ordered by the TPAC and the three noted clients.

7. List below the Key Performance Indicators (deliverables) while this project is in progress. These performance measures will be reported quarterly. Are these the same measures as currently being reported?

- a) Same as project TO002-G
- b)
- c)

8. List any other relevant information not addressed.

9. Please enter estimated appropriations to support expenses identified above. Enter FY 2018 and the estimated annualized cost in FY 2019 using the 2.5% growth factor, if applicable. The spreadsheet will calculate 2020 and beyond by 2.5%. If your project is not expected to have recurring costs in FY 2020 and/or beyond, delete the calculation(s) in columns E-H.

Cost Break Down of Project Request							
OPERATING COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Growth Factors		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary & Fringes			-	-	-	-	-
Contracts	702,000		-	-	-	-	-
Bus Operations:							
Estimated Hours			-	-	-	-	-
Cost per Hour			-	-	-	-	-
Estimated Operating Cost	-	-	-	-	-	-	-
Bus Leases			-	-	-	-	-
Park & Ride Lease			-	-	-	-	-
Other			-	-	-	-	-
Other			-	-	-	-	-
Subtotal: Bus Operations	-	-	-	-	-	-	-
Other: Administrative							
Other: Database Hosting							
Other: Supplies and Materials							
TOTAL OPERATING COSTS	702,000	-	-	-	-	-	-

10. Please enter estimated appropriations to support contractual commitments and other expenses related to proposed capital projects identified above.

CAPITAL COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Design/NEPA	\$ -	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Land - Right of Way	-	-	-	-	-	-	-
TOTAL CAPITAL COSTS	-	-	-	-	-	-	-

Assumptions for Costs and Revenues Above:

11. Please state any assumption(s) used to calculate the capital and operating dollars and revenues shown above.

The additional \$202,000 above what was originally encumbered was calculated based on projected remaining contract liability to the consultant. The original \$500,000 encumbered was a portion of unspent funds and the desire at the time was to proactively free up operating expense and return to fund balance. The calculation was an estimate at the time and after conversations with the consultant, \$702,000 should have been encumbered (compared to \$500,000).

Wake Transit Project ID #
TO004-A

**FY 2019
Wake Transit Work Plan
Project Amendment Request Form
Operating and/or Capital**

FY START DATE Page 1 of 121
7/1/2018

Type of Amendment **Minor** **Major**

Minor amendment – Required when there is:
 Less than a 20% change to budget appropriations for projects equal to or over \$500,000.
 Less than \$100,000 to a budget ordinance appropriation for projects less than \$500,000.
 Any change that does not meet any criteria of a major amendment.

Major amendment - Required when there is:
 A project requested to be added to the Work Plan
 A project requested to be removed from the Work Plan
 A cardinal change in scope as defined by the Federal Transit Administration
 A transfer between budget ordinance appropriations that requests or requires equal to or more than a 20% change to a budget appropriation for projects equal to or over \$500,000
 A transfer between budget ordinance appropriations that requests or requires equal to or more than a \$100,000 change to a budget appropriation for projects less than \$500,000
 Any change that requires a change in budgeted reserves or fund balance

New/Amended Project Name	Requesting Agency	Project Contact	Estimated Operating Cost	
Sunday Service	GoCary	Kevin Wyrach	Base Year	\$ -
		kevin.wyrach@townofcary.org	Recurring	\$ -
Estimated Start Date	Estimated Completion	Notes	Estimated Capital Cost	
05/01/2019	01/01/2027	Geographic change of GoCary Route 1 and 2 alignment	Base Year	\$ -
			Cumulative	\$ -
Project Description	Enter below a summary of the project amendment and impact on approved plan.			
Included in the FY19 Adopted Wake Transit Work Plan is \$575,285 for Sunday service on all six GoCary routes. Recommended service adjustments identified in the Western Wake Comprehensive Operations Analysis include modifying the current GoCary Routes 1 and 2 to provide more direct service to Crossroads Plaza. This geographic re-alignment includes a reduction of service along certain segments of Maynard Rd.				
1. Enter Wake Transit Project ID(s) to Increase				

Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TOTAL			\$ -	\$ -	

2. Wake Transit Project ID(s) to Reduce					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TOTAL			\$ -	\$ -	

3. Impact on Transit Plan Project Costs			
From above, indicate whether amounts impact operating or capital budgets in Wake Transit Plan.	Estimated Operating Cost	Current Year	\$ -
		Recurring	\$ -
	Estimated Capital Cost	Base Year	\$ -
		Cumulative	\$ -

Project Justification / Business Case Provide responses to EACH of the questions below. Answer the questions as fully as possible. Enter Non-Applicable (N/A) as appropriate.

4. Is this New/Amended project Operating, Capital or Both? **Operating** Capital Both

5. What is the timeframe for the request? Are you requesting a full year of funds or a partial year to be annualized in future fiscal years?

Partial year to be annualized in future fiscal years.

The scope change will allow GoCary to implement recommended changes identified in the Western Wake Comprehensive Operations Analysis. Failure to amend the project scope will result in continued operation of inefficient service with an impact to overall system performance metrics.

7. List below the Key Performance Indicators (deliverables) while this project is in progress. These performance measures will be reported quarterly. Are these the same measures as currently being reported?

- a)
- b)
- c)

8. List any other relevant information not addressed.

N/A

9. Please enter estimated appropriations to support expenses identified above. Enter FY 2018 and the estimated annualized cost in FY 2019 using the 2.5% growth factor, if applicable. The spreadsheet will calculate 2020 and beyond by 2.5%. If your project is not expected to have recurring costs in FY 2020 and/or beyond, delete the calculation(s) in columns E-H.

Cost Break Down of Project Request							
OPERATING COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Growth Factors		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary & Fringes			-	-	-	-	-
Contracts			-	-	-	-	-
Bus Operations:							
Estimated Hours			-	-	-	-	-
Cost per Hour			-	-	-	-	-
Estimated Operating Cost	-	-	-	-	-	-	-
Bus Leases			-	-	-	-	-
Park & Ride Lease			-	-	-	-	-
Other			-	-	-	-	-
Other			-	-	-	-	-
Subtotal: Bus Operations	-	-	-	-	-	-	-
Other: Administrative							
Other: Database Hosting							
Other: Supplies and Materials							
TOTAL OPERATING COSTS	-	-	-	-	-	-	-

10. Please enter estimated appropriations to support contractual commitments and other expenses related to proposed capital projects identified above.

CAPITAL COSTS	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Design/NEPA	\$ -	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Land - Right of Way	-	-	-	-	-	-	-
TOTAL CAPITAL COSTS	-	-	-	-	-	-	-

Assumptions for Costs and Revenues Above:

11. Please state any assumption(s) used to calculate the capital and operating dollars and revenues shown above.

Costs are consistent with FY19 Adopted Wake Transit Work Plan.

GO FORWARD

A COMMUNITY INVESTMENT IN TRANSIT

Wake County Transit Planning Advisory Committee

Joint Meeting of the Budget and Finance/Planning and Prioritization Subcommittees

Voting Record for Work Plan Amendment Requests Projects TO002-G, TO002-K, TO004-A, and Two Projects Requested to be Added

Following is the voting record from the joint January 3, 2019, meeting of the Budget & Finance and Planning & Prioritization Subcommittees, where the requested amendments to the FY 2019 Work Plan were reviewed.

Voting Member Agencies in Attendance for Planning & Prioritization Subcommittee:

CAMPO
City of Raleigh
Town of Cary
Wake County

GoTriangle
Town of Rolesville
Town of Garner
Town of Fuquay-Varina

Voting Member Agencies in Attendance for Budget and Finance Subcommittee:

CAMPO
City of Raleigh
GoTriangle
Wake County

Town of Cary
Town of Rolesville
Town of Garner
Town of Fuquay-Varina

Amendment Requests Reviewed:

- **Major Amendment** – Multi-Year Bus Service Implementation Plan (TO002-G) and Community Funding Area Program Management Plan (TO002-K)
- **Major Amendment** – New Project: FTE for Commuter Rail Environmental Planner
- **Major Amendment** – New Project: FTE for Manager of Commuter Rail Design
- **Minor Amendment** – Sunday Service on All Routes, Expanded Paratransit & Holiday Hours

The amendment requests reviewed were unanimously recommended by both subcommittees. It was noted by Budget and Finance Subcommittee that the amendment request for the Commuter Rail-related FTEs would need to be cost allocated between Wake and Durham Counties. It was also noted by the Planning and Prioritization Subcommittee that an approval of an amendment request for staffing related to a Commuter Rail project does not pre-suppose the outcome of what any additional pre-project development planning work yields for next steps associated with Commuter Rail implementation.

January 3, 2019

GO FORWARD

A COMMUNITY INVESTMENT IN TRANSIT

Wake County Transit Planning Advisory Committee Budget Finance and Planning Prioritization Subcommittees

Joint Position for FY 2019 Work Plan Amendment Request Projects TO002-G, TO002-K, TO004-A, and Two Projects Requested to be Added

Per the Wake Transit Work Plan Amendment Policy, the TPAC Budget & Finance and Planning & Prioritization Subcommittees are tasked with jointly reviewing the quarterly Work Plan draft amendment list and amendment request forms when a Major Amendment request is submitted. The subcommittees consider appropriateness of changes in scope and, if applicable, financial choices and trade-offs associated with proposed amendments, creating a disposition for TPAC consideration.

Upon review of the disposition and related amendment request, the TPAC will make recommendations to the GoTriangle Board of Trustees and CAMPO Executive Board for approval or disapproval of requested amendments to the Work Plan.

Amendments Reviewed:

Major Amendment – Multi-Year Bus Service Implementation Plan (TO002-G) and Community Funding Area Program Management Plan (TO002-K)

The requested amendment to the two (2) projects included in the FY 2018 Work Plan, for which funding was encumbered to carry over as an appropriation in the FY 2019 Work Plan, can be described as follows: 1) Projects TO002-G (\$1,292K) and TO002-K (\$175K) for a total of \$1,467K should be collapsed into a single line and single project, with the respective scopes of each included as authorized scope for the new single project; 2) Expand scope of new single project to include expenditures for the Wake Transit Implementation Staffing Plan and Wake Transit Implementation Public Engagement Policy; and 3) Add \$202,000 that should have been encumbered with the \$500,000 that was originally encumbered from FY 2018 to FY 2019 for Project TO002-G to bring the total amount of funds appropriated to the new single project to \$702,000. The total project cost is expected to actualize at approximately \$1,200K compared to an original budget of \$1,467K.

There is a one-time financial impact from transferring \$202,000 in funds held by the tax district in reserve to the project sponsor. However, this requested transfer is a result of an underestimation of funding that should have been encumbered to carry over from FY 2018 to FY 2019. With the requested transfer, the total project cost is still less than the original FY 2018 appropriation for the impacted projects. No scope issues have been identified with this amendment request as the request only expands scope to capture all of the contracted planning activities under the on-call transit planning services program deployed by GoTriangle, CAMPO, and the City of Raleigh.

Major Amendment – New Project: FTE for Commuter Rail Environmental Planner

In preparation for a Commuter Rail Project Development application and movement into the Federal Transit Administration New Starts program, GoTriangle must complete the National Environmental Policy Act (NEPA) process within 24 months from the time an application is submitted to the FTA. To accomplish this goal, an Environmental Planner dedicated to Commuter Rail will be needed. This position will report

January 3, 2019

to the current GoTriangle lead Environmental Planner. Recruitment for this position should take place in early 2019 to meet the desired deadlines. Six months of funding is requested for FY 2019.

The total FY 2019 cost of the FTE is \$75,000. However, the cost of the FTE would be split between Wake County (67% share) and Durham County (33% share) for a total FY 2019 impact to Wake Transit funds of \$50,025. This would result in an FY 2019 annualized recurring impact of \$100,050 held by the tax district in reserve being transferred to the project sponsor. The financial model includes a line for other operating costs that anticipates staffing and other operating items that have not yet been appropriated. The position is accommodated within the model. No scope issues have been identified with this amendment request. It was noted by the Planning and Prioritization Subcommittee that the approval of an amendment request for staffing related to a Commuter Rail project does not pre-suppose the outcome of what any additional pre-project development planning work yields for next steps associated with Commuter Rail implementation.

Major Amendment – New Project: FTE for Manager of Commuter Rail Design

In preparation for entering Project Development for a Commuter Rail project, the Manager of Rail Design, in consultation and collaboration with a GoTriangle project team, will manage the day-to-day work of a consultant team to progress the overall design, including establishing the technical working groups that will assist in moving the project forward. Recruitment for this position should take place in early 2019 to meet the desired deadlines. Six months of funding is requested for FY 2019.

The total FY 2019 cost of the FTE is \$75,000. However, the cost of the FTE would be split between Wake County (67% share) and Durham County (33% share) for a total FY 2019 impact to Wake Transit funds of \$50,025. This would result in an FY 2019 annualized recurring impact of \$100,050 held by the tax district in reserve being transferred to the project sponsor. The financial model includes a line for other operating costs that anticipates staffing and other operating items that have not yet been appropriated. The position is accommodated within the model. No scope issues have been identified with this amendment request. It was noted by the Planning and Prioritization Subcommittee that the approval of an amendment request for staffing related to a Commuter Rail project does not pre-suppose the outcome of what any additional pre-project development planning work yields for next steps associated with Commuter Rail implementation.

Minor Amendment – Sunday Service on All Routes, Expanded Paratransit & Holiday Hours

The FY 2019 Adopted Wake Transit Work Plan includes \$575,285 for Sunday service on all six GoCary routes. Recommended service adjustments identified in the Western Wake Comprehensive Operations Analysis include modifying the current GoCary Routes 1 and 2 to provide more direct service to Crossroads Plaza. This geographic re-alignment includes a reduction of service along certain segments of Maynard Road. These service changes are not considered significant changes in the project scope and fall under a minor amendment: a change that does not meet any of the criteria for a major amendment.

This amendment request has no financial impact. There were no scope issues identified with this amendment request.

January 3, 2019