



GoTriangle  
Board of Trustees  
Wed, May 22, 2019 12:00 pm-2:30 pm

I. Call to Order and Adoption of Agenda

**ACTION REQUESTED:** Adopt agenda with any changes requested.  
(1 minute *Ellen Reckhow*)

II. Recognition

- A. Introduction of New Hires  
(1 minute *Jeff Mann*)
- B. Announcement of Promotions  
(1 minute *Jeff Mann*)
- C. Presentation of Service Awards  
(5 minutes *Christy Winstead*)
- D. NCDOT Recognition of Hurricane Florence Relief Efforts  
(5 minutes *Jeff Mann*)

III. Public Hearing - Proposed FY20 Budget

IV. Public Comment

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

(*Ellen Reckhow*)

V. Consent Agenda

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

**ACTION REQUESTED:** Approve consent agenda.  
(1 minute *Ellen Reckhow*)

A. Minutes

**ACTION REQUESTED:** Approve draft minutes.

April 24, 2019 - Budget Work Session

April 24, 2019 - Regular Session

April 24, 2019 - Closed Session A

April 24, 2019 - Closed Session B

VI. General Business Agenda

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

## A. Items Removed from the Consent Agenda

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

*(1 minute Ellen Reckhow)*

## B. Fare Change Recommendation

**ACTION REQUESTED:** Approve the fare change proposal.

*(15 minutes Mary Kate Morookian)*

Attachment A. Wake-Durham Fare Integration Study

Attachment B. Fare Change Details

Attachment C. Title VI Fare Recommendation Equity Analysis

Attachment D. Fare Presentation

Attachment E. Proposed Service and Fare Change Outreach – Public Engagement Summary

Attachment F. Fare Schedule Comparison

## VII. Other Business

### A. President & CEO's Report

*(5 minutes Jeff Mann)*

Contracts

#### 1. Transit Operations Report

*(5 minutes Patrick Stephens)*

#### 2. Wake Transit Update

*(5 minutes Patrick McDonough, Stephen Schlossberg)*

#### 3. Communications Update

*(5 minutes Mike Charbonneau)*

### B. General Counsel's Report

*(5 minutes Shelley Blake)*

### C. Chair's Report

*(5 minutes Ellen Reckhow)*

### D. Board Member Reports

#### 1. CAMPO Executive Board Representative

*(5 minutes Will Allen III)*

#### 2. DCHC MPO Board Representative

*(5 minutes Ellen Reckhow)*

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

*(5 minutes Will Allen III)*

#### 4. Chatham-Orange Task Force

*(5 minutes Michael Parker)*

## VIII. Closed Session - D-O LRT Project Office

**ACTION REQUESTED:** Enter into Closed Session pursuant to NCGS §143-318.11.(3) to consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body, which privilege is hereby acknowledged.

IX. Adjournment  
*(Ellen Reckhow)*

**GoTriangle Board of Trustees**  
**Meeting Minutes**  
**Budget Work Session – April 24, 2019**  
Board Room, The Plaza, 4600 Emperor Blvd., Suite 100  
Durham, NC

**Board Members Present:**

Will Allen III  
Sig Hutchinson  
Wendy Jacobs  
Vivian Jones (arr. 9:11 a.m.)  
Mark Marcoplos (arr. a.m.)

Michael Parker  
Ellen Reckhow, Chair  
Jennifer Robinson  
Steve Schewel  
Russ Stephenson

**Board Members Absent:**

Valerie Jordan (excused)  
Andy Perkins Jr.

Nina Szlosberg-Landis (excused)

Board Chair Ellen Reckhow called the meeting to order at 9:08 a.m.

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

Saundra Freeman presented the proposed FY 2020 budget and distributed an overview handout. Both are attached and hereby made a part of these minutes.

Jones arrived.

Freeman pointed out the continuing drawdown on general fund reserves in order to balance the annual budget.

Marcoplos arrived.

The Board discussed options for additional revenue sources.

Freeman reviewed the budget assumptions for FY20:

- Total Revenue \$35.5 million (up from \$32.1 million in FY19);
- Total Expenditures \$39.1 million (down from \$30.7 million in FY19);
- Vehicle Rental Tax revenues \$13 million (up from \$12.2 million in FY19) – 50% allocated to Durham-Orange and Wake plans;
- Vehicle Registration revenues of \$6.6 million up from \$6.3 million in FY19);
- Plaza building expenses \$633,000 and building lease income of \$494,000;
- Total headcount of 291.5, including county transit plans (up from 289.8 in FY19);

- Average merit 3%; maximum merit 4%;
- Estimated 5% increase in employee healthcare costs (no change in \$500 annual employee contribution for employee-only coverage);
- Bus revenue hours of 133,103 (directly operated, including Durham, Orange and Wake) down from FY19 total of 134,589;
- Contracted bus service hours 17,195 (down from 19,478 hours in FY19) – Robertson Scholars service ends May 2019; and
- Bus service cost per hour \$127, hoping to reduce to \$126 (up from \$123 budgeted in FY19);
- Bus service cost per hour including contracted services \$122 (up from \$118 budgeted in FY19);
- Bus capital project spending \$6 million; advanced technology \$646,000.

Schewel noted that the fund balance was significant compared to other government agencies and GoTriangle's budget. He said it gives time to wait for a more favorable Legislature. Robinson agreed. Mann pointed out that GoTriangle does not have the ability to increase its funding like cities and counties that can increase the property tax rate. Freeman added that the reserves are not all cash. Reckhow suggested revisiting the financial policies around fund balance.

Freeman highlighted assumptions of the Durham and Orange transit plans:

- Total revenues \$45.4 million (up from \$44.1 million in FY19), which includes:
  - Half (1/2) cent sales tax \$39.5 million;
  - Vehicle rental tax \$2.1 million;
  - \$7 county vehicle registration tax \$2.6 million;
  - \$3 regional vehicle registration tax \$ 1.1 million;
  - Other revenue \$112,000
- Total expenditures:
  - Original D-O LRT project \$184.8 million;
  - Transit Services \$7.9 million;
  - Capital Projects \$8.8 million;
  - Vehicle acquisitions \$536,000.

Freeman reviewed assumptions of the Wake Operating Fund for FY20:

- Total revenues \$107.3 million (up from \$100.6 million);
  - Half (1/2) cent sales tax \$92.1 million;
  - Vehicle rental tax \$4.4 million;
  - \$7 county vehicle registration tax \$6.7 million;
  - \$3 regional vehicle registration tax \$2.8 million;
  - Farebox \$1.3 million;
- Operating expenses \$25.2 million;
- Capital expenses \$93 million.

Freeman then reviewed specifics related to individual GoTriangle departments.

Schewel suggested that during FY20 a plan be developed for fund balance as well as a capital expenditures plan and a long term funding plan to include a legislative strategy.

**Action:** Chair Reckhow adjourned the meeting at 11:55 a.m.

\_\_\_\_\_  
Ellen Reckhow, Chair

Attest:

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

Draft

## GoTriangle Board of Trustees

### Meeting Minutes

April 24, 2019

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

#### Board Members Present:

Will Allen III

Sig Hutchinson

Wendy Jacobs

Vivian Jones

Mark Marcoplos (left 2:53 p.m.)

Michael Parker

Ellen Reckhow, Chair

Jennifer Robinson

Steve Schewel (left 2:44 p.m.)

Russ Stephenson

Nina Szlosberg-Landis (arr. 12:20 pm, left 3:20 pm)

#### Board Members Absent:

Valerie Jordan (excused)

Andy Perkins (excused)

Chair Ellen Reckhow officially called the meeting to order at 12:07 p.m.

#### I. Adoption of Agenda

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

#### II. Recognition

##### A. Introduction of New Hires

President and CEO Mann announced the hiring of Gloria Calderon, Human Resource Administrator (Compensation Specialist) and Quentin Turner, Paratransit Operator.

##### B. Announcement of Promotions

Mann then announced the following promotions: Mike Charbonneau, from Director Marketing & Communications to Chief Communications Officer and Gary Tober, Manager Real Estate to Director of Real Estate and Facilities.

##### C. Presentation of Service Awards

Deirdre Walker, Contracts and Grants Coordinator, was recognized for 15 years of service by Christy Winstead.

##### D. Staff Retirements

President/CEO Mann announced the retirement of Juanita Shearer-Swink, Senior Project Manager, D-O LRT project, after 26 years of service to GoTriangle and Dave Charters, Manager of Design and Engineering, D-O LRT project, with five years of

service. Chair Reckhow shared comments about Shearer-Swink's service. Board members offered their appreciation and memories.

### III. Public Hearing - Proposed Fare Change

**Action:** Chair Reckhow opened the public hearing on the proposed fare change at 12:15 p.m. There being no comments, the hearing was closed.

### IV. Public Comment

No comments.

### V. Consent Agenda

**Action:** On motion by Jones and second by Allen the consent agenda was approved. The motion was carried unanimously.

The following consent agenda items were approved:

- March 27, 2019 – Regular Session Minutes and
- March 27, 2019 – Closed Session Minutes.

### VI. General Business Agenda

#### A. Items Removed from Consent Agenda

None.

Szlosberg-Landis arrived.

#### B. Fare Change Proposal - Informational Item

Mary Kate Morookian's presentation is attached and hereby made a part of these minutes. She stated that the regional fare study was conducted as a task of the Wake Transit Bus Plan with GoTriangle, GoRaleigh, GoCary, GoDurham participating. The goals were established through interviews with the participants and included: improving regional coordination through the simplification of partner agency fare structures, improving pass distribution and sales, balancing revenue and ridership goals, making transit an affordable option, improving the passenger experience and exploring new fare technologies.

Peer agencies were chosen based on demographic similarities of the customer base but also agencies whose service offerings we admire as well as agencies with geographic proximity. The study compared the types of passes offered by peer agencies and the pass pricing. Peers tended to offer few types of passes, with pricing based on the mode offered and the service levels.



Morookian shared the proposed changes to GoTriangle's fare structure, shown in the table below. She also discussed anticipated revenue loss based on the elimination of the express fare category and the elasticity model.

Current Fare Structure			Proposed Fare Structure	
Fares	Regional	Express	Fares	Regional
Single Ride	\$2.25	\$3.00	Single Ride	\$2.50
Day Pass	\$4.50	\$6.00	Day Pass	\$5.00
7-Day	\$16.50	\$22.00	7-Day	\$24.00
31-Day	\$76.50	\$102.00	31-Day	\$80.00
Discount Single Ride	\$1.00	\$1.25	Discount Single Ride	\$1.25
Discount Day Pass	\$2.00	\$2.50	Discount Day Pass	\$2.50
Discount 7-Day	\$7.50	\$9.25	Discount 7-Day	\$12.00
Discount 31-Day	\$34.00	\$42.50	Discount 31-Day	\$40.00

Although included in the analysis, GoDurham will not be moving forward with fare increase, but rather will maintain their fare at \$1. They will, however, implement fare capping and mobile ticketing.

Parker asked how the potential advantages of this coordination might increase ridership. Morookian stated that staff is working on that estimate. Parker then asked the annual cost of collecting fares. Morookian stated that she would research those costs for the next presentation.

Hutchinson suggested a fare free period as part of the roll out of these changes to encourage potential new riders.

Reckhow pointed out the significant increase in the 7-day pass and asked about reducing that cost or phasing in the increase. Morookian explained that the price is based on two times the local fare, which is \$12 for a 7-day pass. She added that the 7-day pass is priced so low currently that even with fare capping, folks using the 7-day pass will experience an increase.

There also was discussion of the impacts the fare change will have on low income riders and the public outreach process.

Parker suggested that consideration should be given for the future of fare free or single fare for all systems.

**C. Recommended Service Changes for Fall 2019**

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

**Action:** On motion by Schewel and seconded by Jones the Board approved the recommended service changes. The motion was carried unanimously. Details of the changes are attached and hereby made a part of these minutes.

**D. Greater Triangle Commuter Rail Pre-Planning Study**

Jeff Mann requested authorization to enter into a contract for approximately \$850,000 with STV for pre-planning work for the commuter rail project. He stated this vendor was chosen through a competitive bid process. He added that the RFP was developed jointly with the project participants which included NCRR and the study will evaluate six service scenarios, three which include service to Johnston, Alamance and Orange counties. He explained that the expanded study is at the request of NCRR. Up to three scenarios can move forward into the Federal process to be narrowed further during Project Development.

Parker asked how much NCRR is contributing to the study. Mann stated the amount of the study attributable to the outside counties is \$260,000. If NCRR does not contribute, the split for the work would be 2/3 from Wake and 1/3 from Durham County, using existing funds in the county transit plans.

There was discussion about the need for NCRR to contribute financially to the study and whether Durham and Wake counties should be paying for a study outside their counties. Board members also discussed NCRR's commitment to this project if unwilling to contribute funds.

**Action:** Jones made a motion to authorize the President/CEO to execute an agreement with STV to conduct the Greater Triangle Commuter Rail pre-planning study, which was seconded by Hutchinson.

Parker suggested an amendment to ask NCRR to contribute financially. Blake proposed seeking letters from all of the partners that they support moving forward in the study.

**Action:** Jones made a substitute motion to authorize the President/CEO to execute an agreement with STV to conduct the GTCR pre-planning study and ask for letters of support from the study partners, which was seconded by Hutchinson.

She clarified that the motion did not include asking NCRR for a financial contribution.

Marcoplos pointed out that three counties are included in the study, but have no representation. He asked if there is a financial obligation.

Reckhow suggested including the three additional counties in the process and asking NCRR to pay half the additional cost of the study, and the three counties proportionately contributing the other half. Mann stated that in order to meet the December deadline, the study cannot wait.

Schewel stated that even without design, we can negotiate with NCRR on the right-of-way cost, indemnification, liquidated damages and the grade separation requirements through downtown Durham. He said these things need to be known very early to know if the project can be achieved.

Szlosberg-Landis said both the feasibility study and the negotiation can happen concurrently. She suggested including letters of agreement in all the public documents related to the project. She also suggested a working committee of two GoTriangle Board members and two NCRR Board members for these matters.

**Action:** A final substitute motion was made by Jones and seconded by Hutchinson to authorize the President/CEO to execute an agreement with STV to conduct the GTCR pre-planning study, while requesting (1) a letter of commitment to the process from NCRR, (2) a share in the funding for this study and (3) the creation of a committee made up of two representatives from the NCRR Board of Directors and two GoTriangle Board of Trustees members to work with staff on concurrence.

**Action:** Upon vote, the final substitute motion was carried 9 to 1 with Jacobs voting in the negative.

**E. 30% Design for Raleigh Union Station Bus Facility (RUS Bus)**

Jeff Mann stated that RUS Bus will include a bus facility that accommodates an overbuild. WSP, the on-call contractor for major projects, created a conceptual design and will advance this to 30% in preparation for a future developer's team to complete final design and construction of the transit facility and building. The Wake Transit Plan and other sources provide the \$1.3 million for this work, which should be completed early next year.

**Action:** On motion by Hutchinson and second by Parker the Board authorized the President/CEO to issue a Notice-to-Proceed to on call engineering consultant, WSP, to start and complete all professional services listed in the enclosed task order (total not-to-exceed amount of \$1,329,353.85). The motion was carried unanimously. The task order is attached and hereby made a part of these minutes.

**VII. Other Business****A. President and CEO's Report**

A list of contracts approved by the President and CEO is attached and hereby made a part of these minutes.

Mann highlighted the following items:

- The Lane Street building in Raleigh owned by GoTriangle has been renovated and is being used to store our bus shelters. GoRaleigh also will use this building for storage.
- GoRaleigh is the sponsor agency and leading the effort for BRT. Design work is underway on the New Bern Avenue corridor. It should enter project development later this year.
- I met with Secretary Trogdon to emphasize the importance of maintaining a transit corridor and ensuring upcoming highway projects are designed to allow for transit.

**1. Transit Operations Report**

Patrick Stephens noted the monthly report previously sent out.

**2. Wake Transit Update**

Patrick McDonough stated that he took the BRT corridor tour in Raleigh and there was discussion of TOD opportunities. Comments are begin received on the draft final commuter rail report.

Steven Schlossberg stated that the TPAC voted to recommend the FY20 transit plan to the governing boards, which will be posted for comment. The plan includes funding for bus service in Rolesville and Holly Springs, capital projects for bus infrastructure, funds for BRT, and advancement in technology. The community program funding includes four projects: a reverse town circulator in Wake Forest, and transit studies for Garner, Rolesville and Fuquay-Varina.

**3. Communications Update**

Mike Charbonneau's presentation is attached and hereby made a part of these minutes.

**B. General Counsel's Report**

General Counsel Shelley Blake noted the following items:

- Seven developers responded to the RUS Bus project RFQ. They are being short-listed to four, with a plan to send them an RFP by the end of May. The area has been accepted to apply for the brownfield process. The project also is going through a rezoning process. She shared a memo from the City of Raleigh on voluntary affordable housing conditions, which is attached and

hereby made a part of these minutes. She proposed that GoTriangle's zoning application use these guidelines.

- Gary Tober has made a list of GoTriangle-owned properties in Durham not affiliated with the ROMF. They are attached and hereby made a part of these minutes hereby made a part of these minutes.
- Board members have discussed a post-D-O LRT project review, and she suggested language, which is attached and hereby made a part of these minutes.

**Action:** Allen made a motion, which was seconded by Parker, to direct staff to release an RFQ.

Jacobs clarified that the report would come back to the Board. She also stated that it should be expedited. Marcoplos suggested if Responses come in sooner, the Board Chair and a few others could vet them. Reckhow suggested the officers. Jacobs highlighted that the process and interviews should be confidential.

Schewel left.

**Action:** Upon vote, the motion was carried unanimously. (Schewel's vote was counted as affirmative, having left unexcused.)

#### **C. Chair's Report**

Chair Reckhow said there is a tentative approved travel list for FY20. She said that Board members will be limited to one trip and asked that anyone who has not made a request do so soon.

#### **D. Board Member Reports**

##### **1. CAMPO Executive Board Representative**

Vivian Jones offered the CAMPO report. She stated that a report was received from TJCOG about the Triangle Transportation Demand Management Program, notice of the sub allocation of 5307 and other monies and an update on Federal rescission.

##### **2. DCHC MPO Board Representative**

Ellen Reckhow reported that the MPO Board adopted a resolution to discontinue the D-O LRT project and received a presentation on NC Moves 2050 (the State's update of the long range transportation plan).

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

Will Allen III stated there are three upcoming events: the Tri-MAP meeting on May 15<sup>th</sup>; a business briefing on May 20<sup>th</sup>, the Future of RDU Airport; and the RTA Transportation Breakfast on July 12<sup>th</sup>, "The Possibility of a Hyper Loop Future."

Marcoplos left.

**E. Real Property Inventory Update**

This information is attached and hereby made a part of these minutes.

**VIII. Closed Session - D-O LRT Project Office**

Pursuant to NCGS §143-318.11.(3) to consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body, which privilege is hereby acknowledged.

**Action:** On motion by Parker and second by Jacobs the Board entered into closed session at 2:54 p.m. pursuant to the General Statutes and purpose listed above. The motion was carried unanimously.

**IX. Closed Session - Rail Operations Maintenance Facility (ROMF) Litigation Update**

Pursuant to NCGS §143-318.11.(3) to consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body, which privilege is hereby acknowledged. The following cases will be discussed:

- GoTriangle v. Wesley and Marianne Massey
- GoTriangle v. Mary Hart
- GoTriangle v. Paula Sanders and Mary Hart
- GoTriangle v. Ella Day Turrentine
- GoTriangle v. Patterson's Mill, LLC
- John Gunter, Patricia Gunter, Joan Hart, Jon Hoffman, Betty Hoffman, and Virginia Meihaus vs. City of Durham and GoTriangle

**Action:** On motion by Parker and second by Allen the Board entered into closed session at 2:54 p.m. pursuant to the General Statutes and purpose listed above. The motion was carried unanimously.

Szlosberg-Landis left during the closed session.

**X. Adjournment**

**Action:** On motion by Parker and second by Robinson the meeting was adjourned at 3:29 p.m.

\_\_\_\_\_  
Ellen Reckhow, Chair

Attest:

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

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## MEMORANDUM

**TO:** GoTriangle Board of Trustees  
**FROM:** Regional Services Development  
**DATE:** May 22, 2019  
**SUBJECT:** Fare Change Recommendation

### Strategic Objective Supported

The item supports the following *objectives* from the Strategic Plan:

- Maintain cost-effectiveness
- Incorporate innovations to improve mobility and environmental stewardship
- Deliver a customer-friendly experience through our people and systems

### Action Requested

Staff requests that the Board of Trustees approve the fare change proposal with two effective dates:

- Free fare for Seniors (ages 65+) would have an effective date of August 4, 2019
- All other proposed fare changes to take effect in early 2020 commensurate with the implementation of mobile ticketing/fare capping

### Background and Purpose

A Regional Fare Study was conducted as part of the Wake Bus Plan to identify opportunities for more consistent fare purchase and collection procedures, standardization of fare policies and improved technology for the partner agencies (GoTriangle, GoRaleigh, GoCary and GoDurham). As part of the study, a fare proposal was developed and will be proposed for adoption/approval by GoTriangle, GoRaleigh, and GoCary.

The Regional Fare Study identified six goals:

1. Improve regional coordination
2. Balance revenue and ridership goals
3. Improve the passenger experience
4. Improve pass distribution
5. Make transit an affordable option
6. Explore new fare technologies

Staff presented the fare proposal to the GoTriangle Operations & Finance Committee on December 19, 2018, and January 17, 2019. On February 27, 2019, the Board of Trustees set a public hearing date for the fare proposal to occur on March 27, 2019.

Public outreach was conducted March 11-29 with a public hearing on the proposed fare and service changes at the March 27<sup>th</sup> Board of Trustees meeting. Public outreach was extended until April 24<sup>th</sup> with an additional public hearing set for April 24<sup>th</sup> in addition to an informational Board presentation. Attachment E provides an overview of the public outreach, customers reached and comments received.

Staff has reviewed the public comments and recommends the following service changes to be implemented in January 2020. Additional details about the fare change recommendations are provided in Attachment A.

- Offer free transit service to senior citizens (65 years or older).
- Remove distinction between regional and express fares.
- Increase the base fare \$0.25.
- Adjust the pricing of 7-day and 31-day passes.
- Implement mobile ticketing.
- Implement fare capping.

### **Changes to Fare Proposal Based on Feedback from the Board of Trustees and the Public**

Currently, the 7-day pass is \$16.50, and the current proposed fare structure change would mean an increase to \$24. Based on comments received during public outreach and from the Board of Trustees, staff has amended the original fare proposal to include an incremental price increase for the 7-day pass.

Staff asks that the Board approve a 7-day pass price increase to \$20 in FY20, and approve a second increase in FY21 to the recommended price of \$24 based on the results analysis of 7-day pass usage at that time.

### **Financial Impact**

- The Wake Transit Plan identified funds for technology improvements that will cover the necessary capital investment for mobile ticketing (\$150,000-\$350,000). An FY20 Wake Transit Work Plan request for mobile ticketing was submitted.
- The initial fare change recommendation projected a loss of roughly \$11,000 in farebox revenue. The amended fare proposal—reflective of comments received during public outreach and from the Board of Trustees—lowers the recommended price of the 7-day pass from \$24 to \$20, changing the projected loss in revenue to \$17,000.

Losses in revenue due to the implementation of the proposed fare structure and policy changes (in coordination with GoTriangle's partner agencies in Wake County) will be covered through Wake Transit funds. Wake County submitted an FY20 funding request to cover revenue lost due to the implementation of fare capping and free transit for senior citizens.

### **Attachments**

- Attachment A: Wake-Durham Fare Integration Study
- Attachment B: Fare Change Details (amended)

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



- Attachment C. Title VI Fare Recommendation Equity Analysis
- Attachment D. Fare Recommendation Presentation
- Attachment E. Proposed Service and Fare Change Outreach Public Engagement Summary
- Attachment F. Fare Schedule Comparison—Current to Recommended for FY20

**Staff Contact**

- Mary Kate Morookian, 919-485-7549, [mmorookian@gotriangle.org](mailto:mmorookian@gotriangle.org)



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

[www.gotriangle.org](http://www.gotriangle.org)



# Fare Integration Study

GoCary, GoDurham, GoRaleigh, and GoTriangle

Final Report

November 2018



## FARE INTEGRATION STUDY

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## 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 Group<sup>1</sup> 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.

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<sup>1</sup> 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



## FARE INTEGRATION STUDY

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

# 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 Group<sup>1</sup> 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.

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<sup>1</sup> 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.

## FARE INTEGRATION STUDY

- **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 INTEGRATION STUDY

# 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

	<b>GoRALEIGH</b>		<b>GoCARY</b>		<b>GoTRIANGLE</b> Regional		<b>GoTRIANGLE</b> Express		<b>GoDURHAM</b>	
	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

	<b>GoRALEIGH</b>		<b>GoCARY</b>		<b>GoTRIANGLE Regional</b>		<b>GoTRIANGLE Express</b>		<b>GoDURHAM</b>	
	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

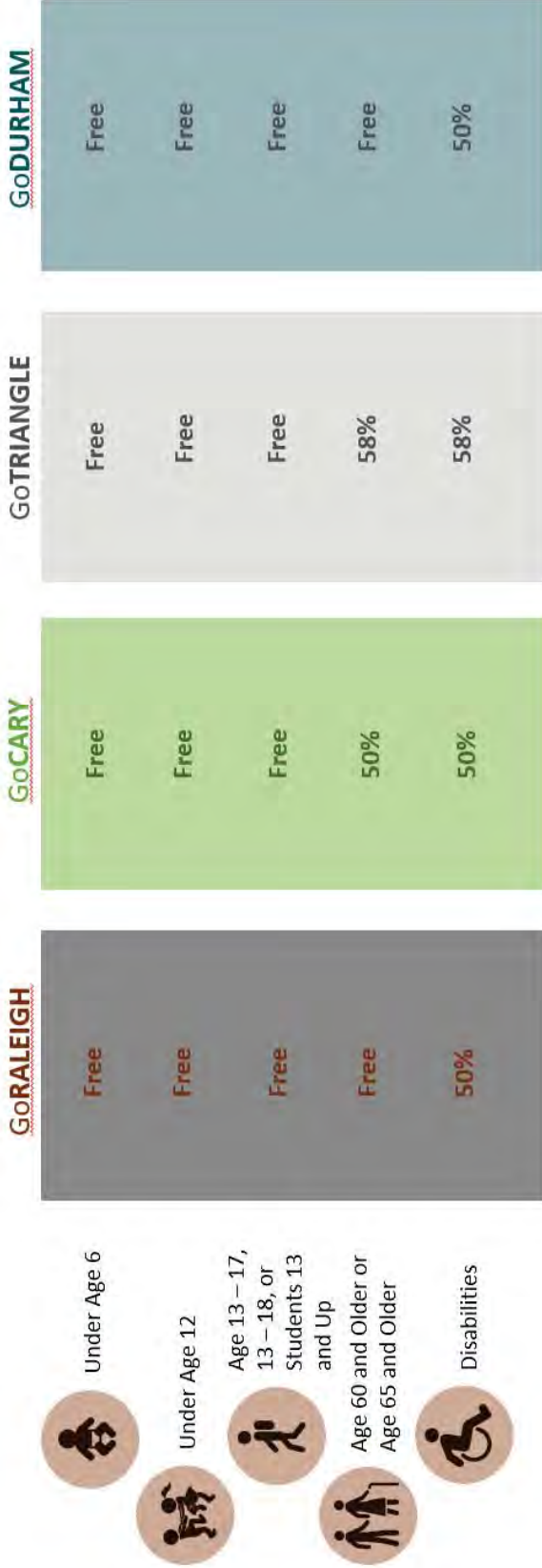
#### Disabilities

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

Figure 2-3 Fare Discounts Available





**FARE INTEGRATION STUDY**

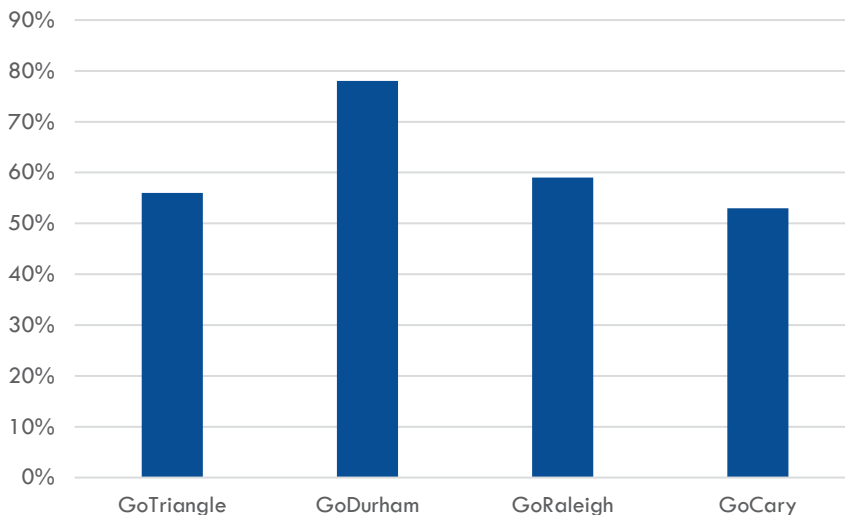
**Transfers**

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.





## FARE INTEGRATION STUDY

- 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			✓		



FARE INTEGRATION STUDY

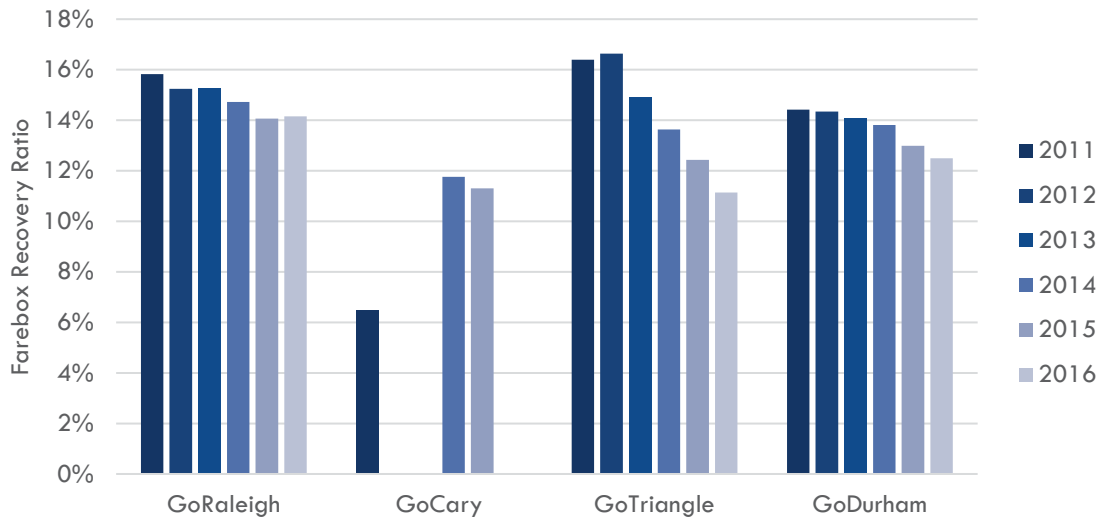
## REVENUE TRENDS

### 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.<sup>1</sup> 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.

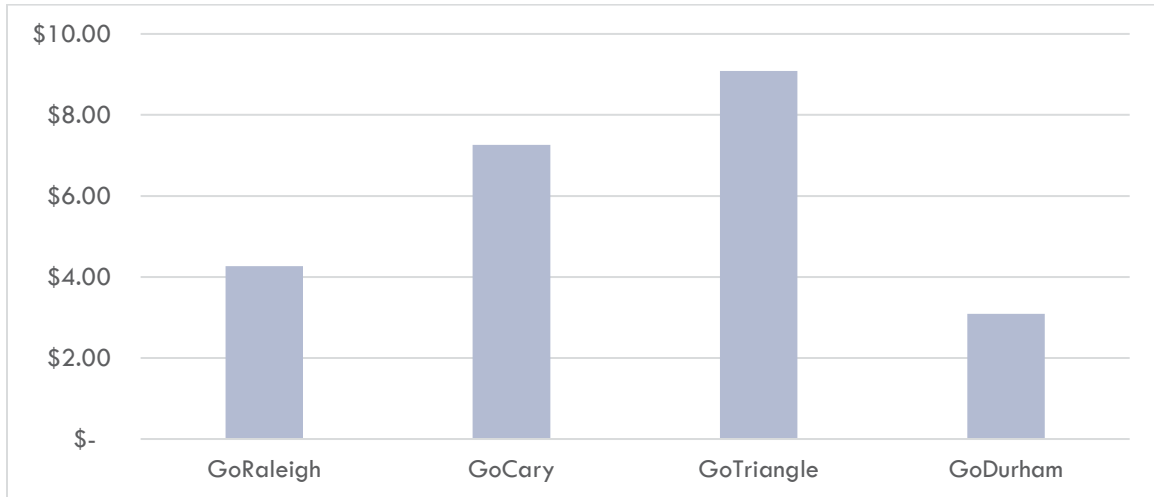
<sup>1</sup> Data was not available for GoCary in 2012 or 2013





**FARE INTEGRATION STUDY**

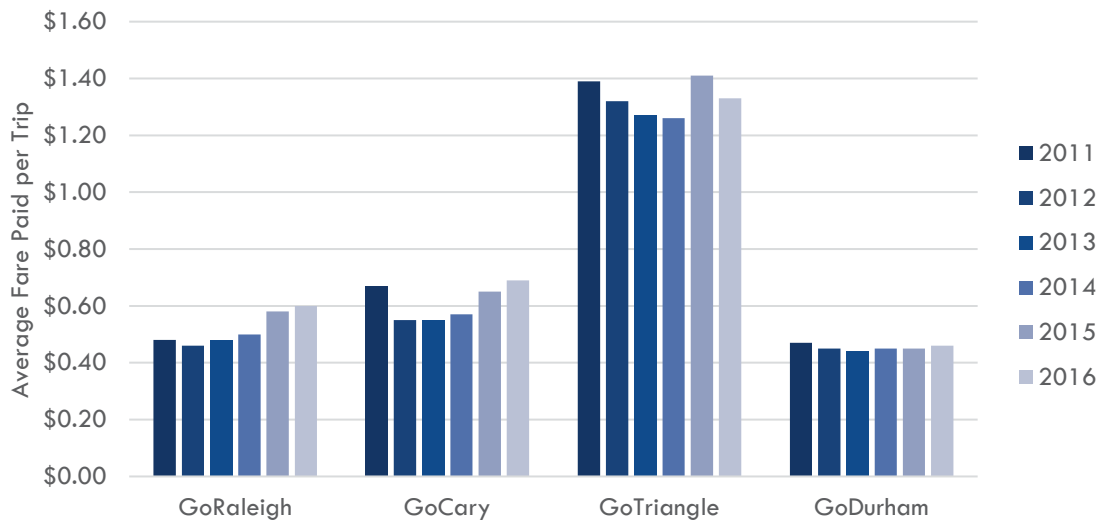
Figure 2-7 Average Operating Cost per Trip (2016)



**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)

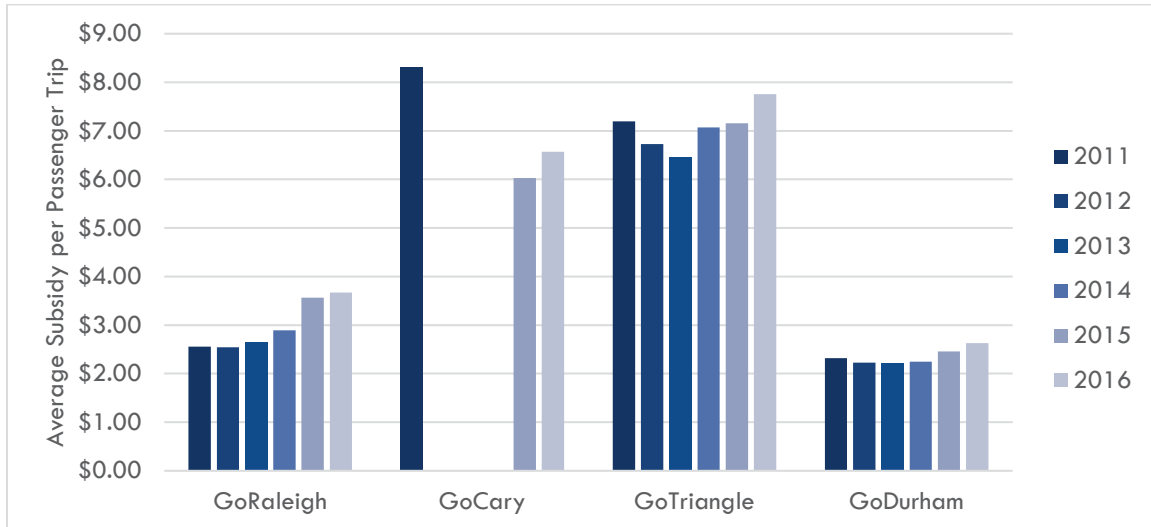


## FARE INTEGRATION STUDY

### 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.

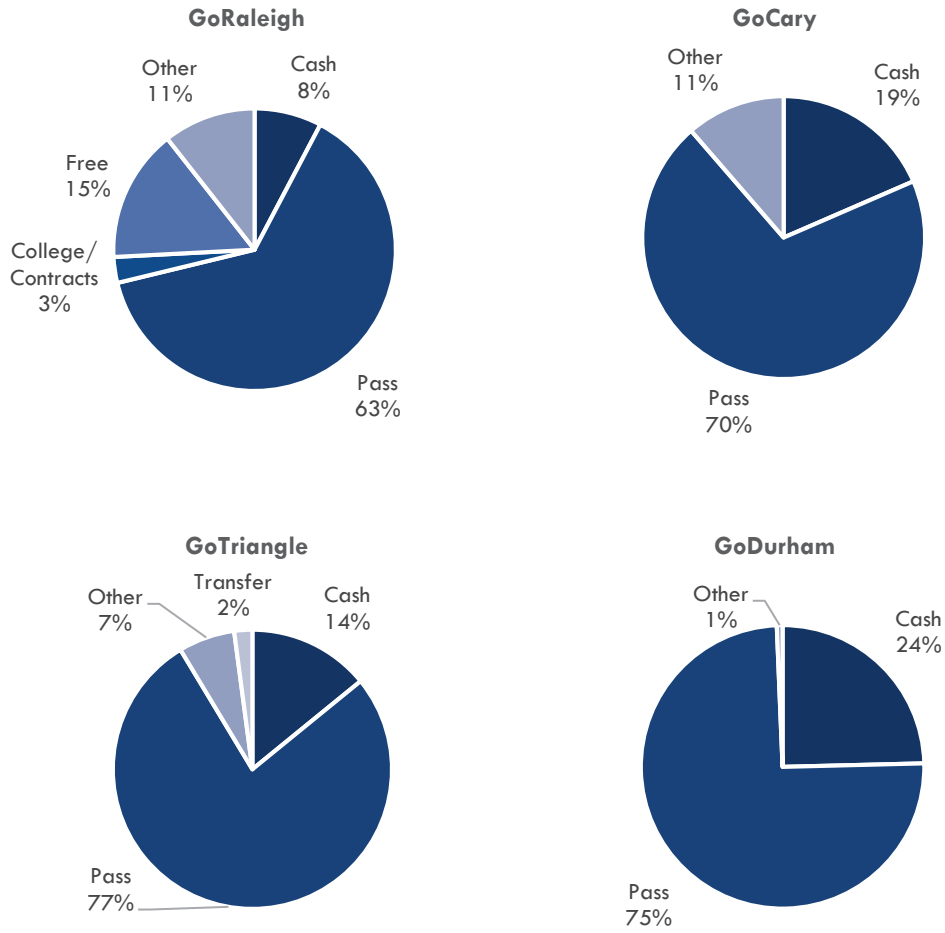
Cash payments account for less than 25% of boardings across the agencies, with 24% of GoDurham riders, 19% of GoCary riders, 14% of GoTriangle riders, and 8% of GoRaleigh riders paying cash.

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.

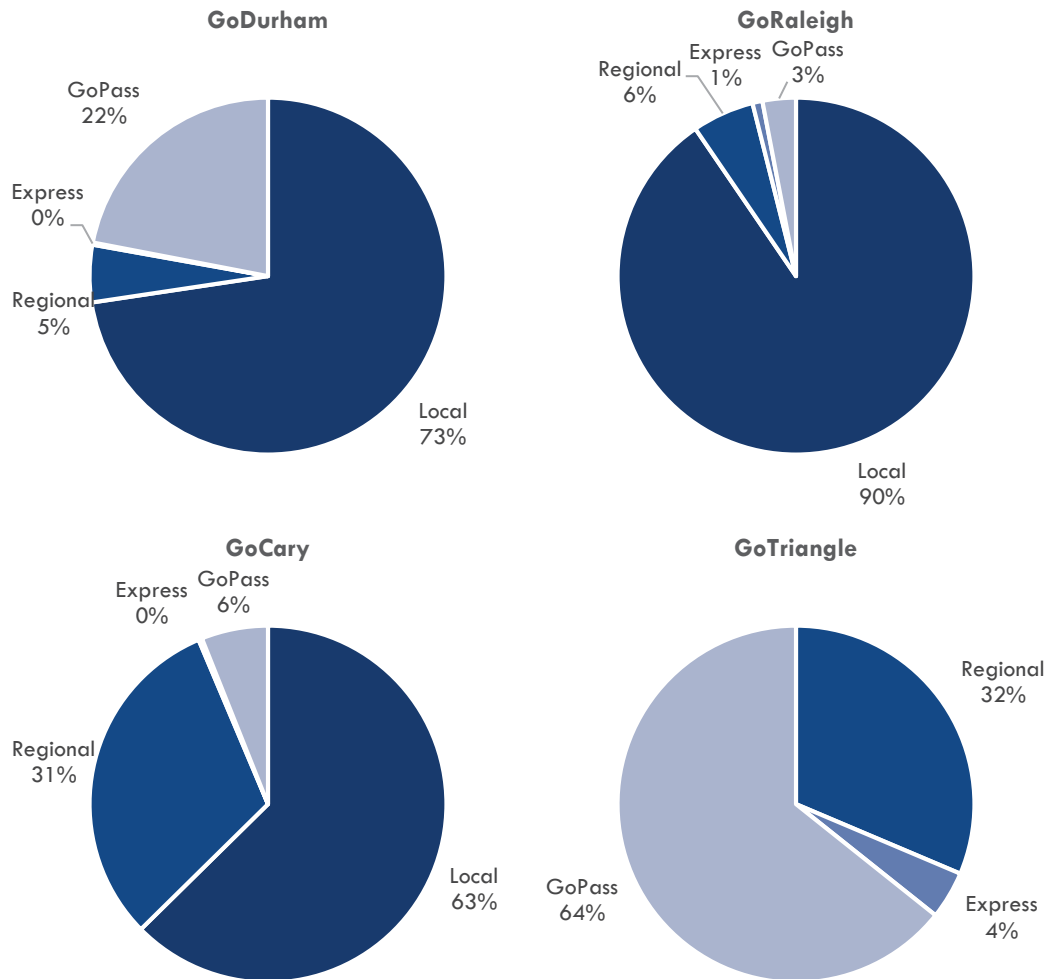
FARE INTEGRATION STUDY

Figure 2-10 Fare Media Used by Agency



FARE INTEGRATION STUDY

Figure 2-11 Pass Type by Agency



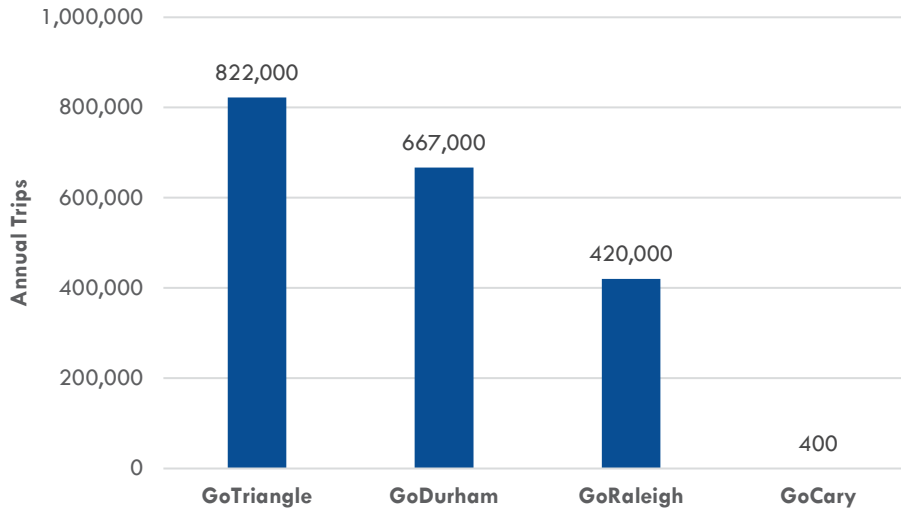
**GOPASS PROGRAM**

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**

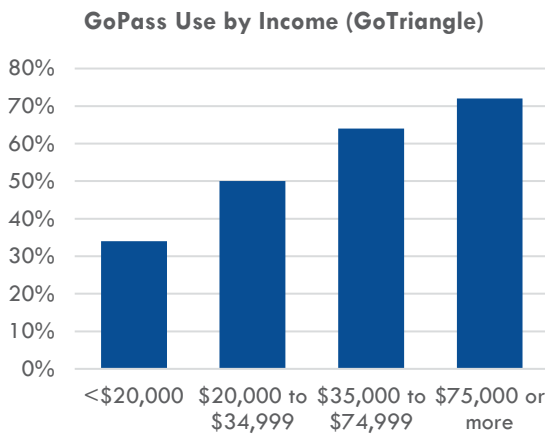
Figure 2-12 Annual GoPass Use by Agency



**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



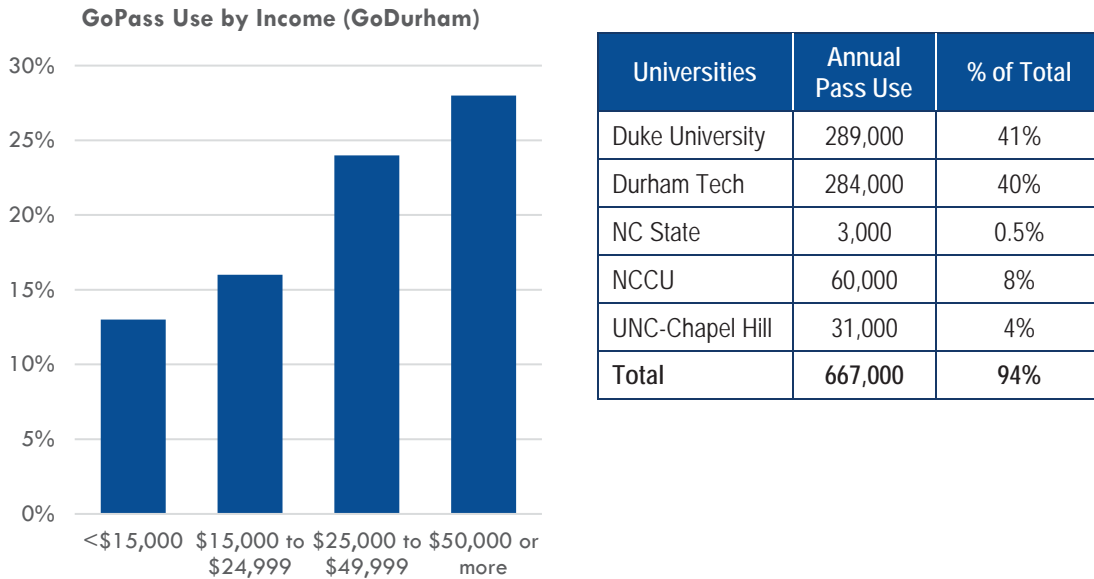
Universities	Express	Regional	% of Total
Duke University	72,000	106,000	22%
Durham Tech	1,800	25,000	3%
NC State	38,000	56,000	11%
NCCU	500	5,000	0.6%
UNC-Chapel Hill	56,000	335,000	48%
<b>Total</b>	<b>168,000</b>	<b>527,000</b>	<b>85%</b>

**FARE INTEGRATION STUDY**

**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%
<b>Total</b>	<b>369,000</b>	<b>89%</b>

## 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



## FARE INTEGRATION STUDY

- 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

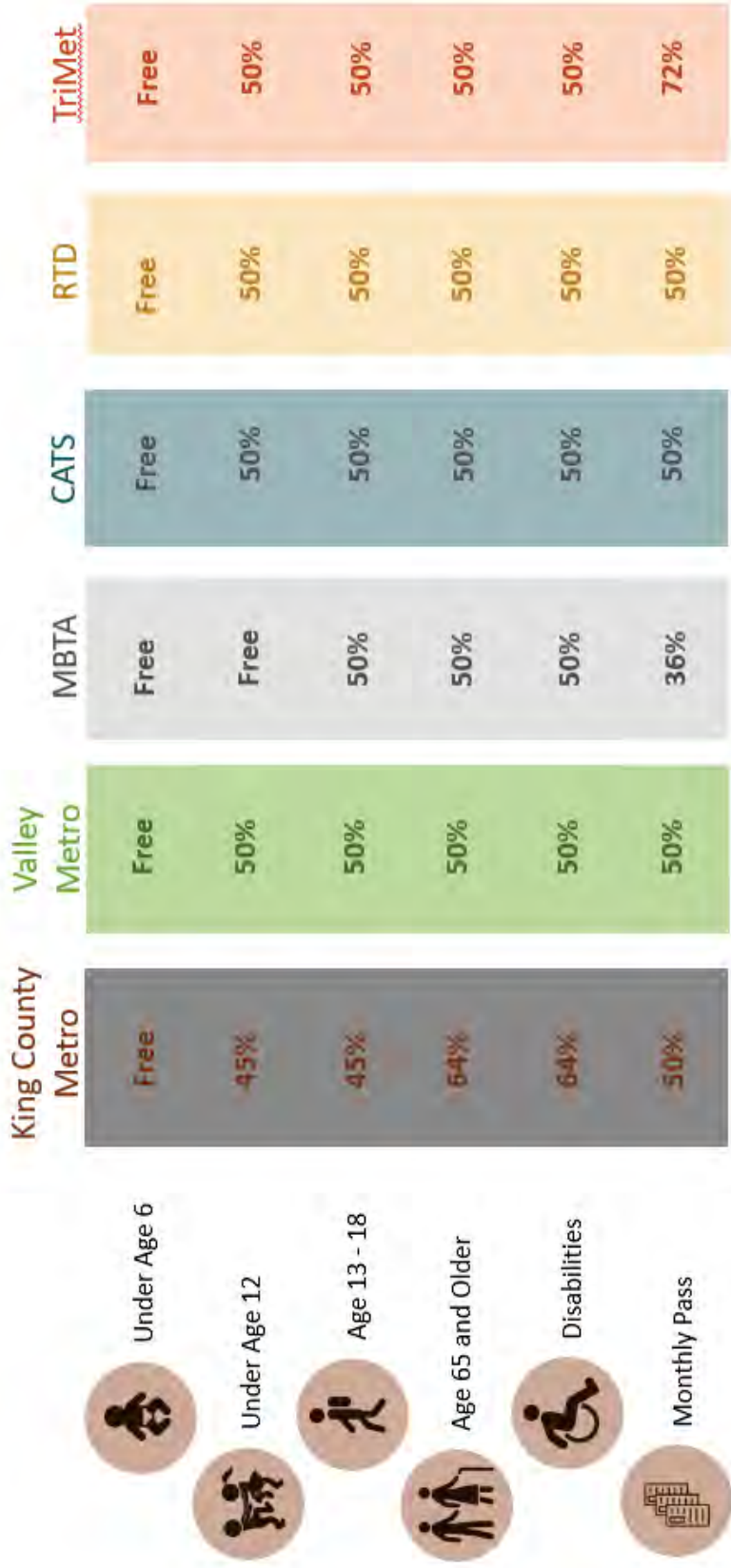
Agency	Fare Type	Onboard	Online	Transit/ Government Building	Social Services	In Stores	TVM
King County Metro	Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
TriMet	Day Pass	✓	✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
Valley Metro	Day Pass	✓	✓	✓	✓	✓	✓
	7-Day Pass		✓	✓	✓	✓	✓
	31-Day Pass		✓	✓	✓	✓	✓
RTD	Day Pass	✓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

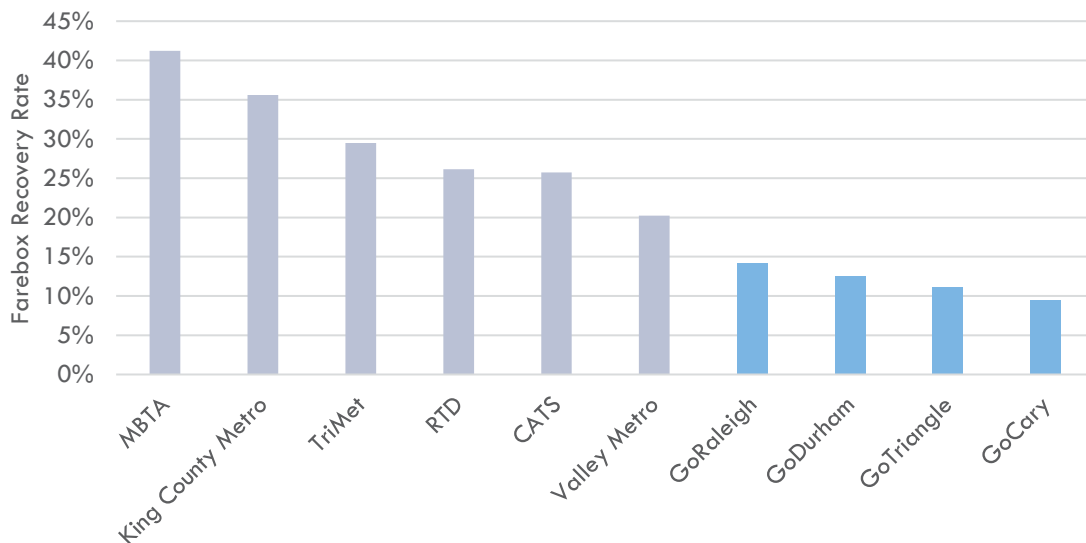
## REVENUE TRENDS

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)



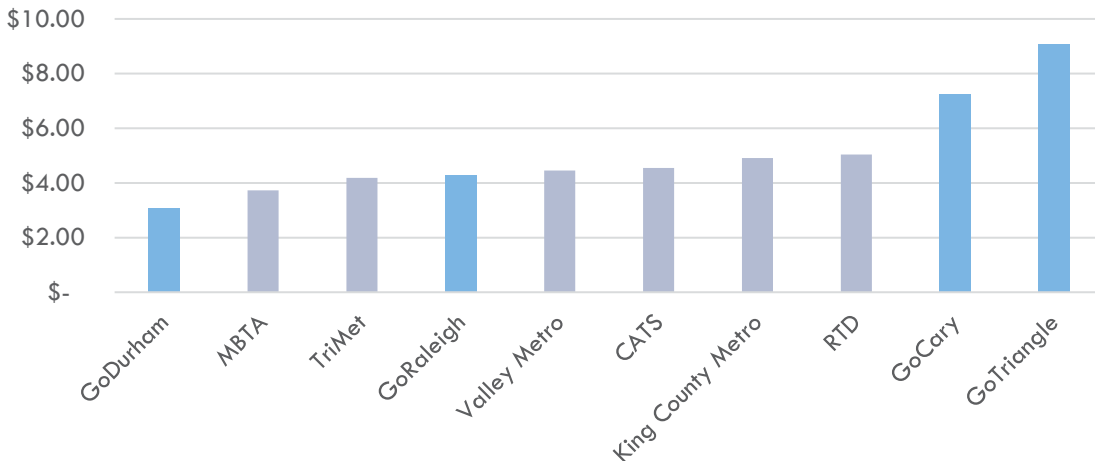
Source: NTD

### 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.

FARE INTEGRATION STUDY

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

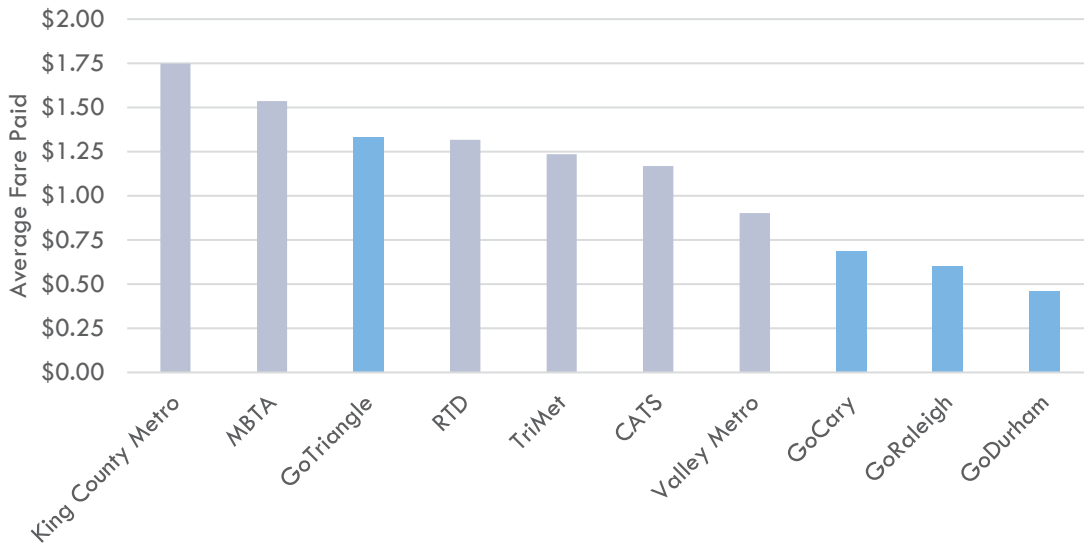


Source: NTD

**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

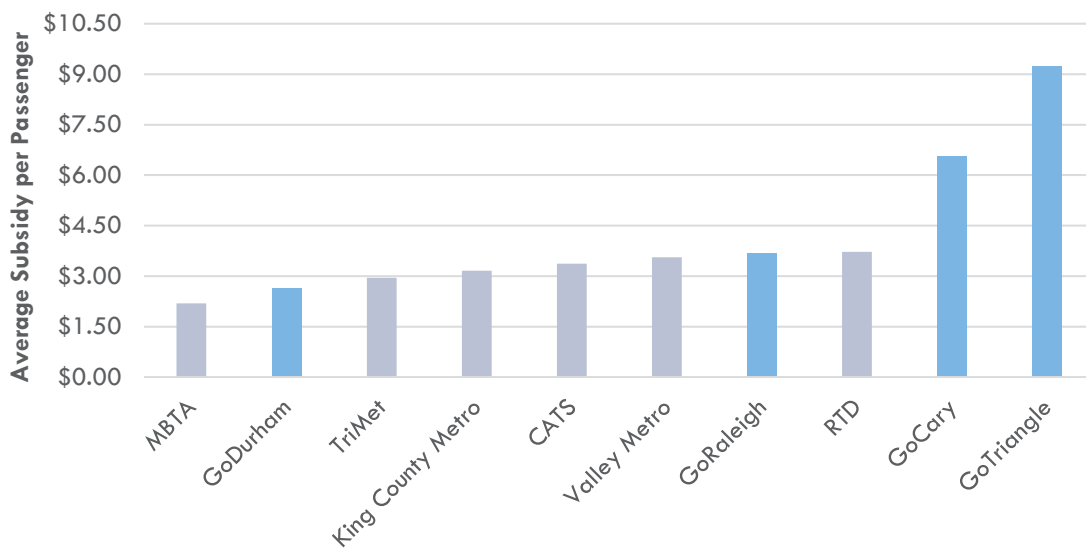


## Average Subsidy per Passenger

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

## FARE INTEGRATION STUDY

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)



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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.<sup>1</sup>

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

<sup>1</sup> 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%<sup>2</sup>
- 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

<sup>2</sup> 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.

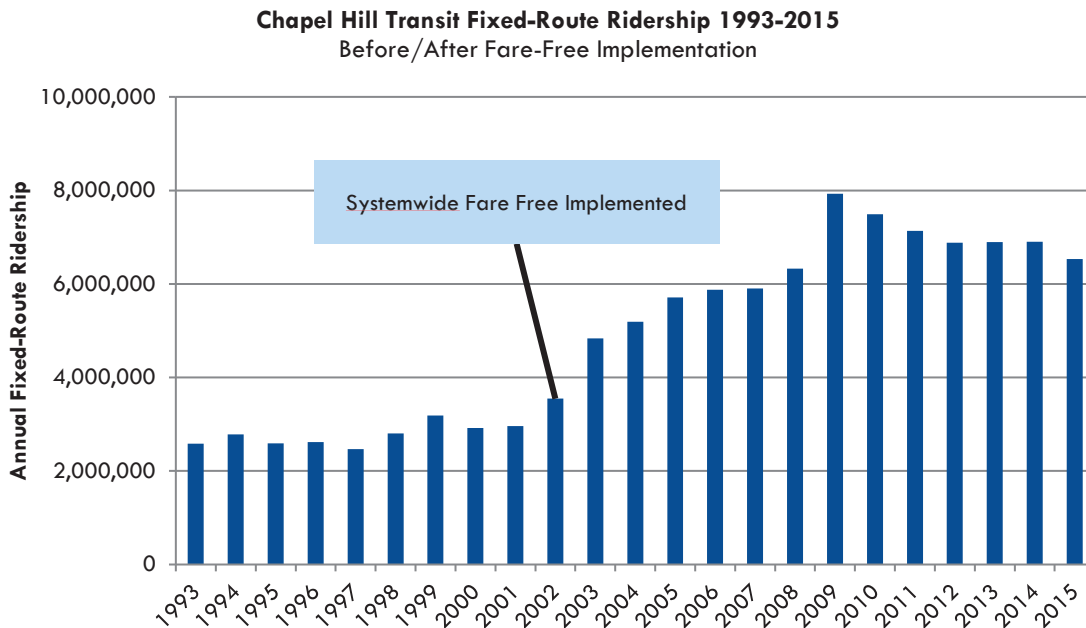
### Ridership and Operations Trends

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





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Figure 3-13 Chapel Hill Transit Demand Response Ridership Trends

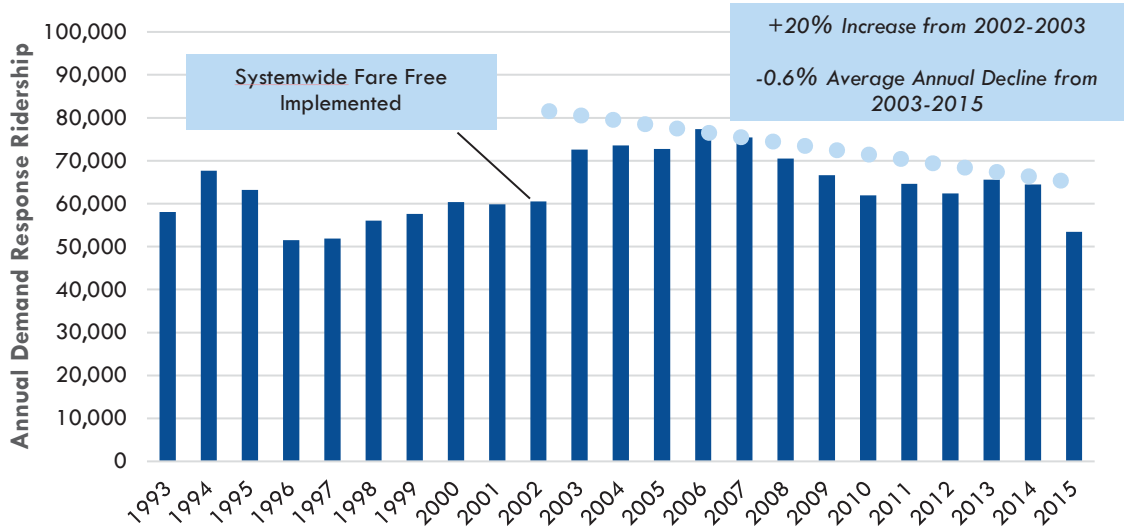
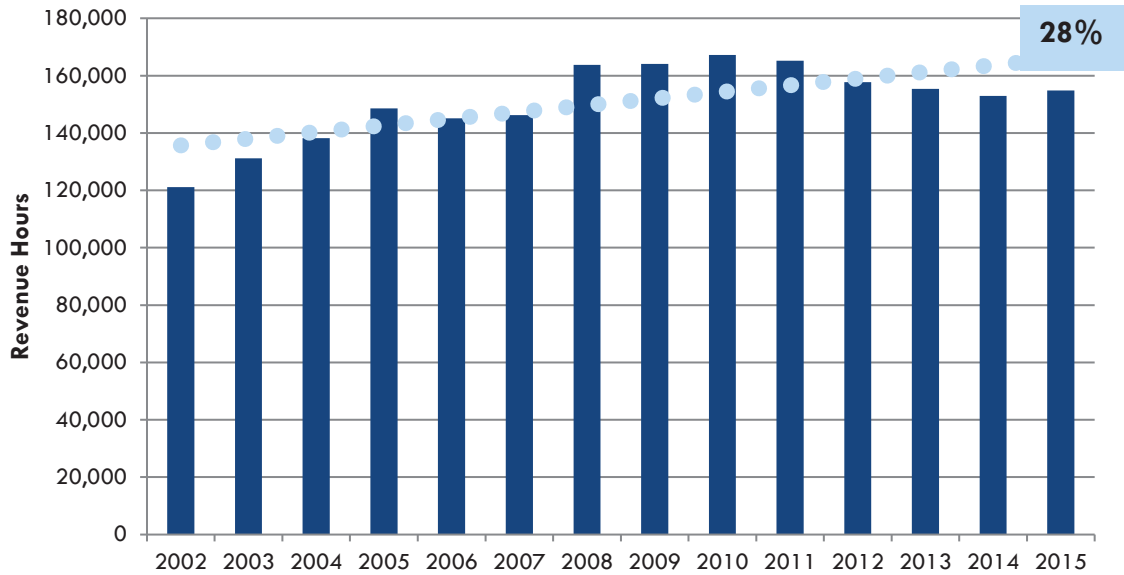
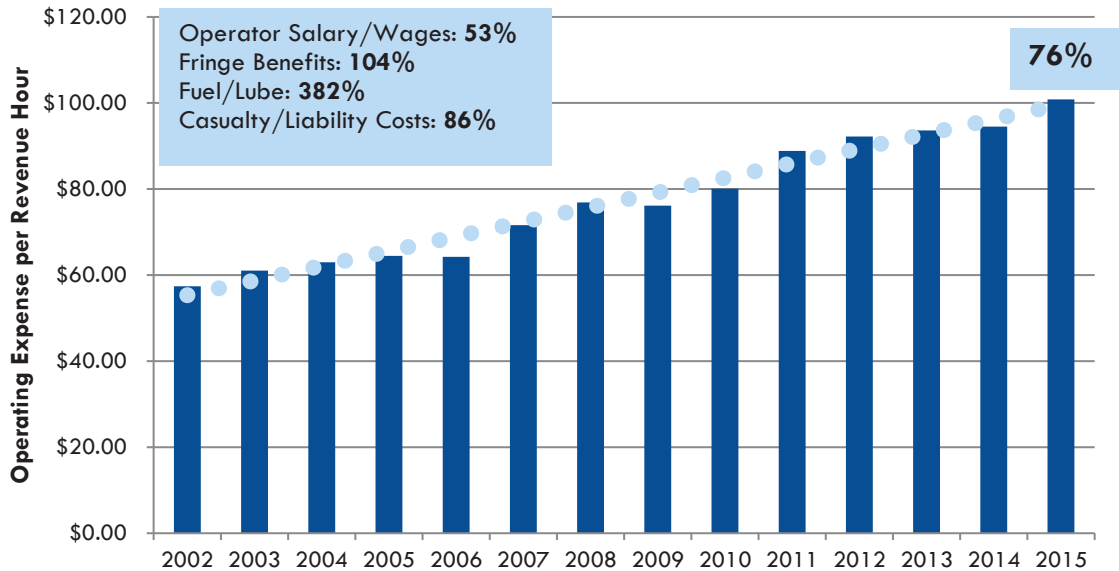


Figure 3-14 Chapel Hill Transit Revenue Hours Trends



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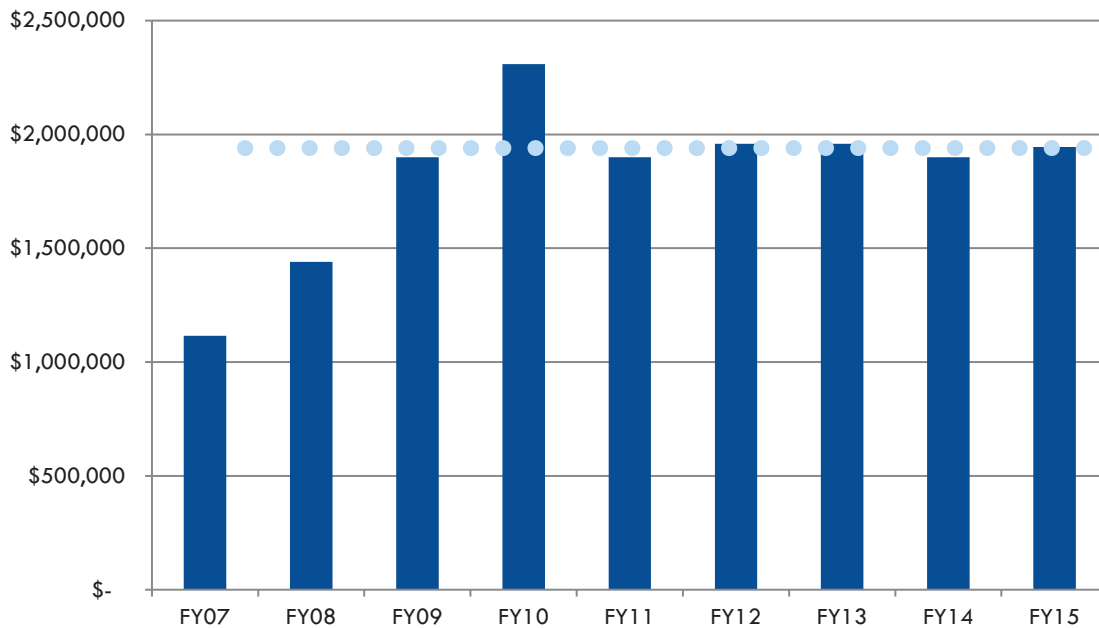
Figure 3-15 Chapel Hill Transit Cost per Revenue Hour Trends



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



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Figure 3-17 Chapel Hill Transit State Funding Trends

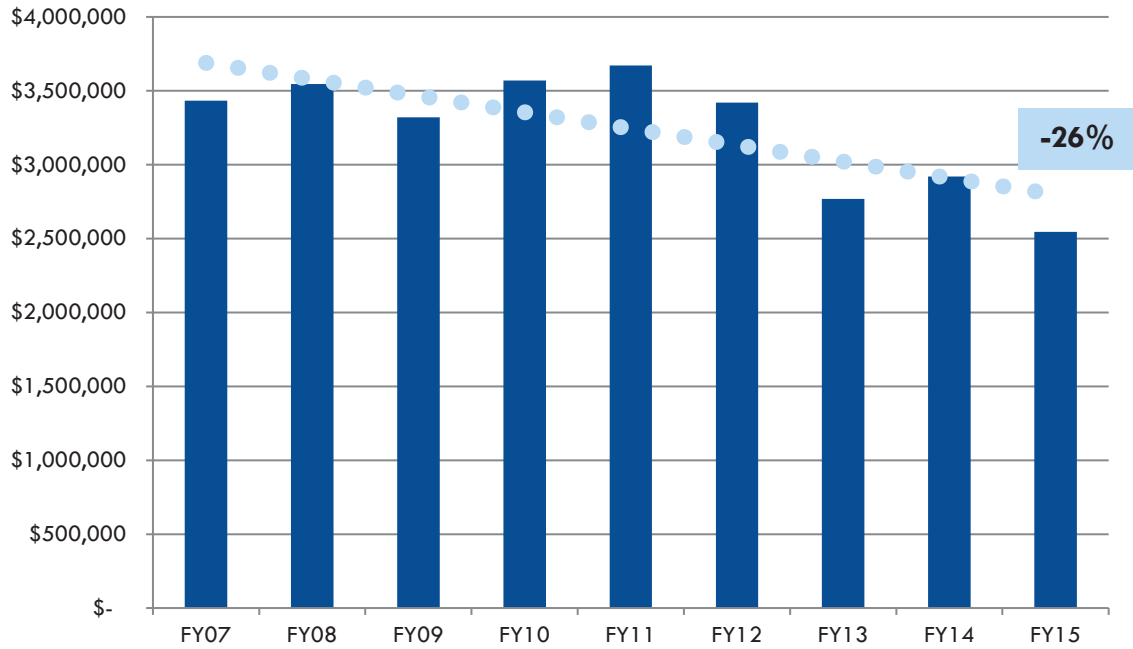
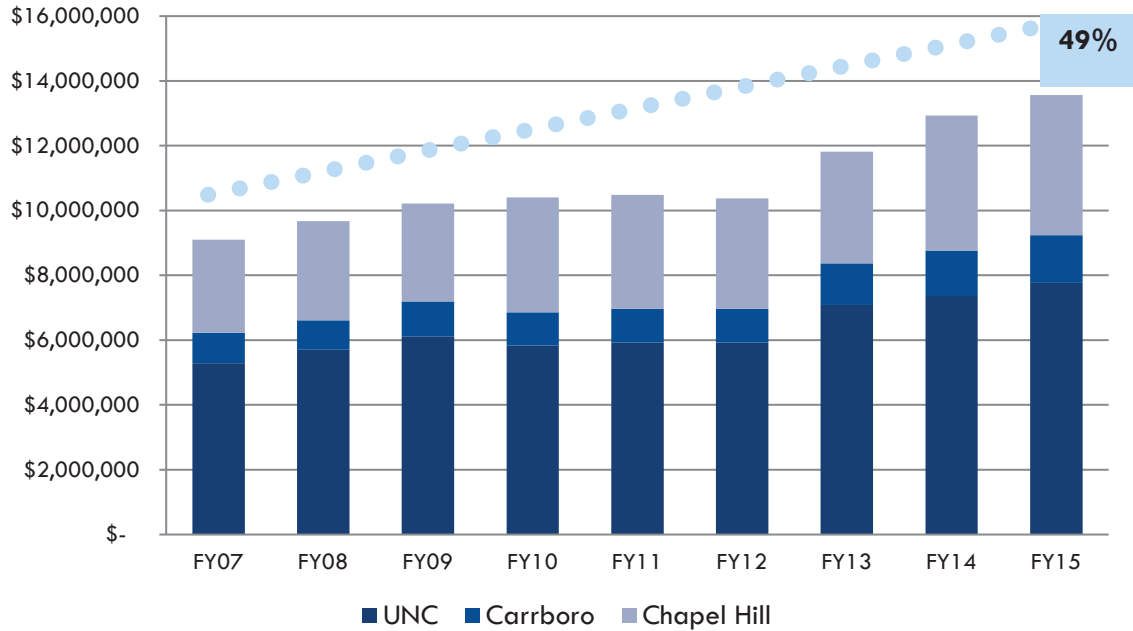


Figure 3-18 Chapel Hill Transit Partner Funding Trends



## **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 factors<sup>1</sup>:

- 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.

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<sup>1</sup> 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%.



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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

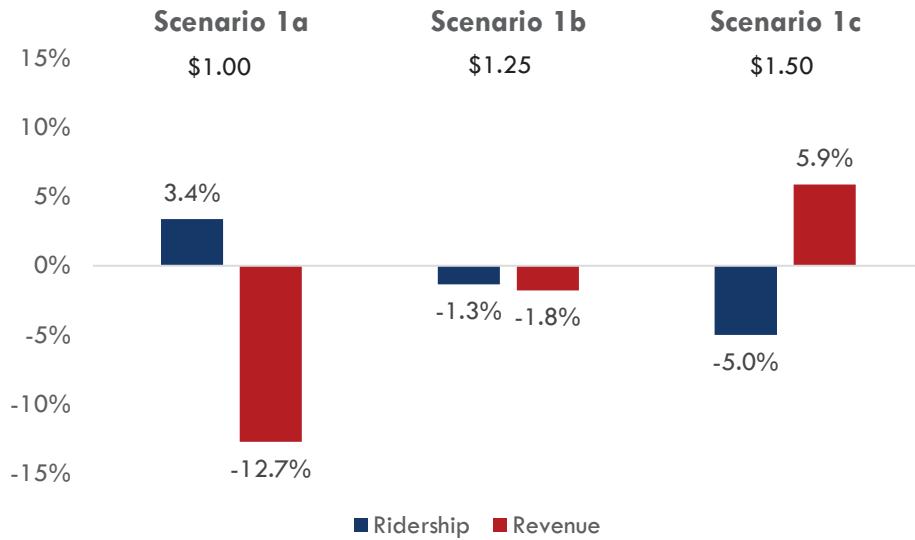
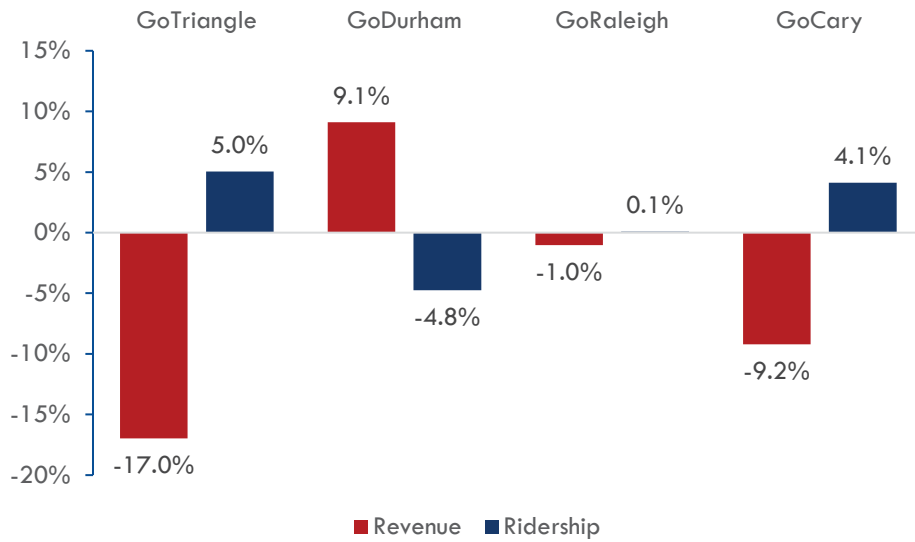


Figure 4-2 Region-Wide Flat Fare - \$1.25 Ridership and Revenue Impacts for Agencies





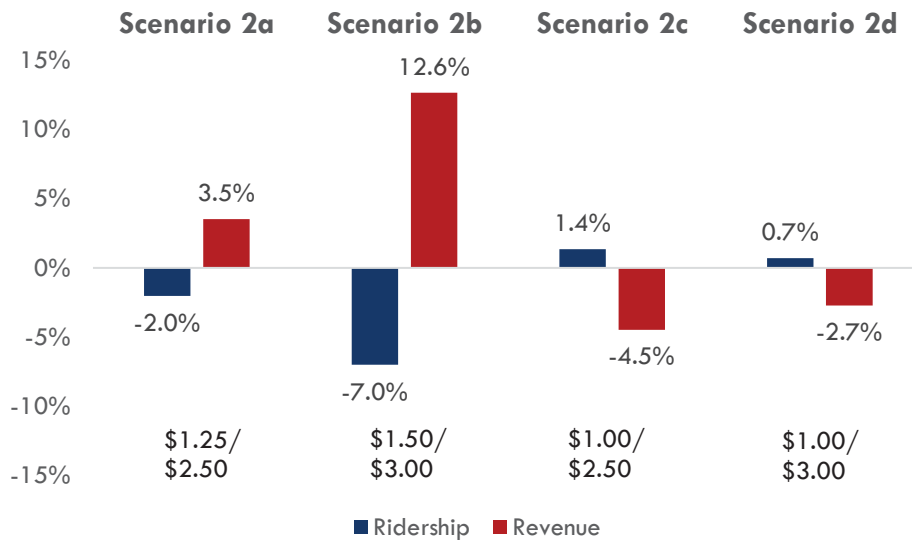
**FARE INTEGRATION STUDY**

**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

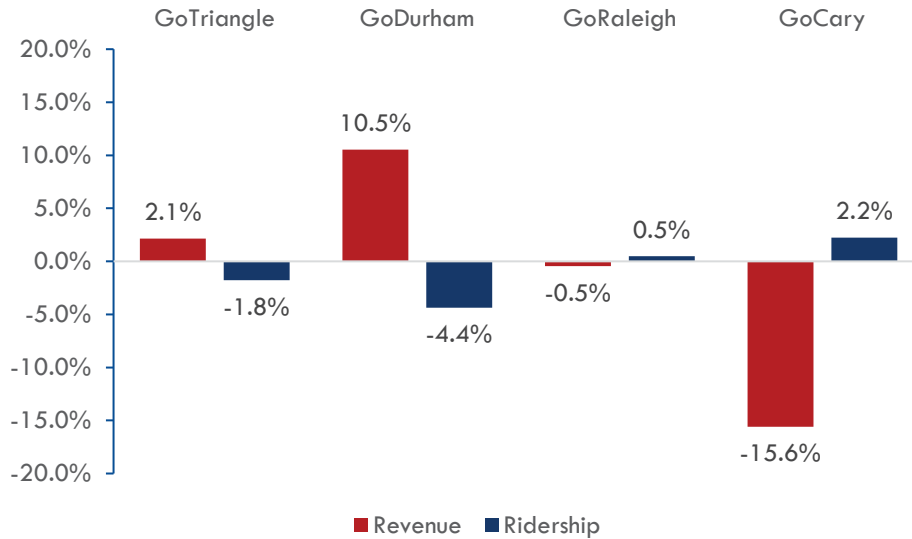






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Figure 4-4 Region-Wide Tiered Fare \$1.25/\$2.50 Ridership and Revenue Impacts for Agencies



**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.

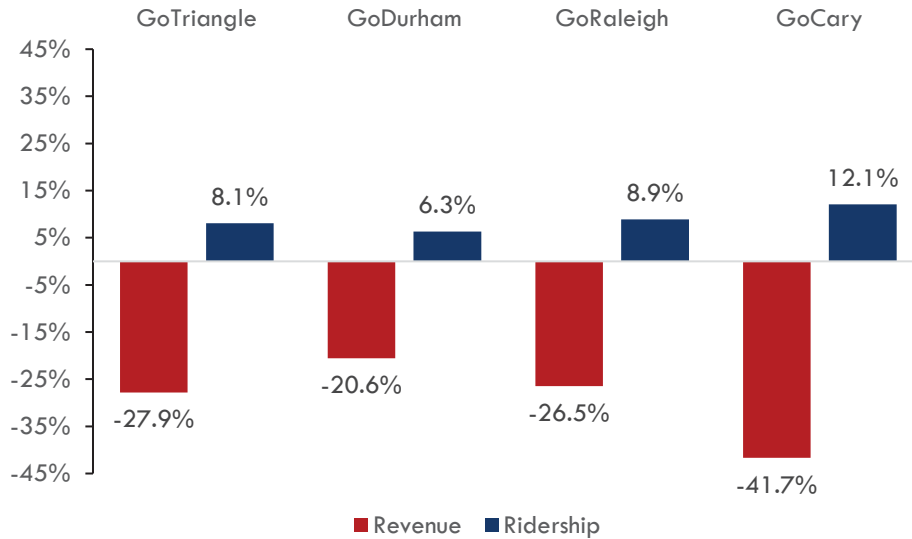
The agency-specific ridership and revenue impacts for Scenario 3 are shown in Figure 4-5. These impacts show large decreases in revenue and increases in ridership for all four agencies. Ridership increases range from 6.3% for GoDurham to 12.1% for GoCary. Revenue decreases range from 20.6% for GoDurham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



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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.

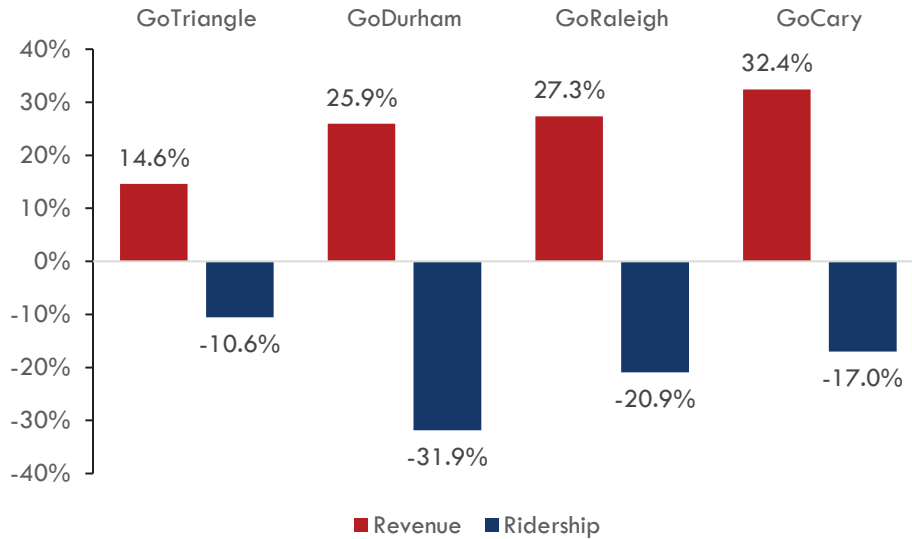
The agency-specific ridership and revenue impacts for Scenario 4 are shown in Figure 4-6. These impacts show large increases in revenue and large decreases in ridership for all four agencies. Ridership decreases range from 10.6% for GoTriangle to 31.9% for GoDurham. Revenue increases range from 14.6%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



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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.

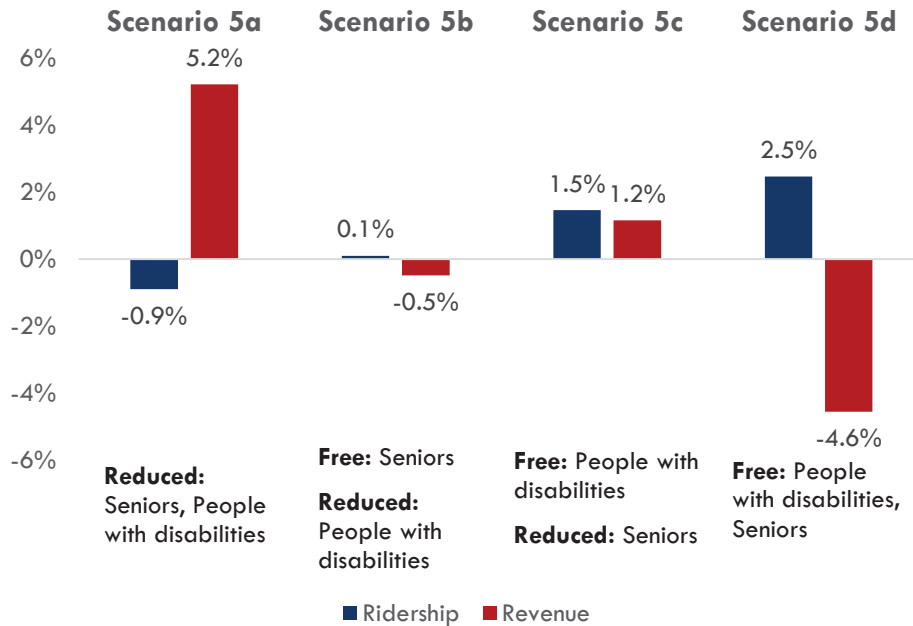
The results of these scenario alternatives present a range of ridership and revenue impacts, all of which may be feasible discount policies. Ridership impacts range from a 0.9% decrease in Scenario 5a to a 2.5% increase in Scenario 5d. Revenue impacts range from a 4.6% decrease in Scenario 5d to a 5.2%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



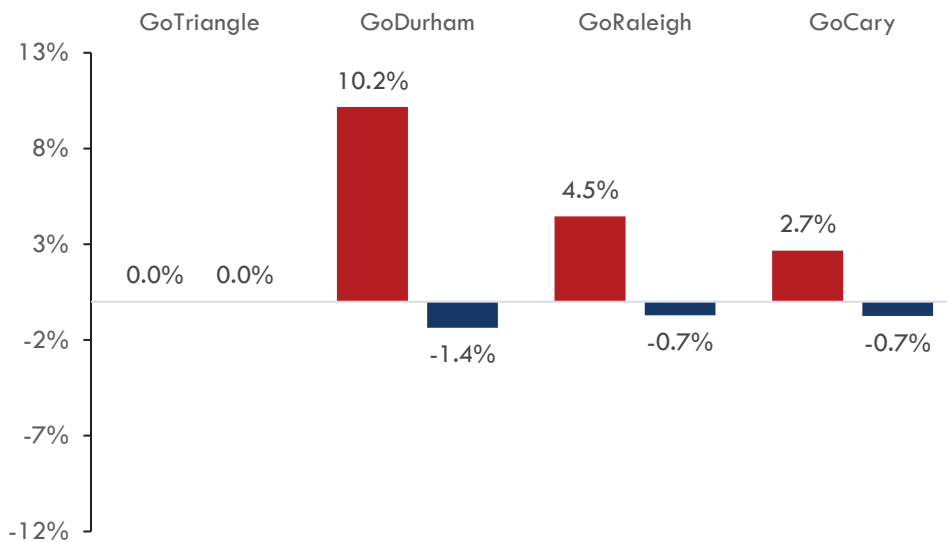
**FARE INTEGRATION STUDY**

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

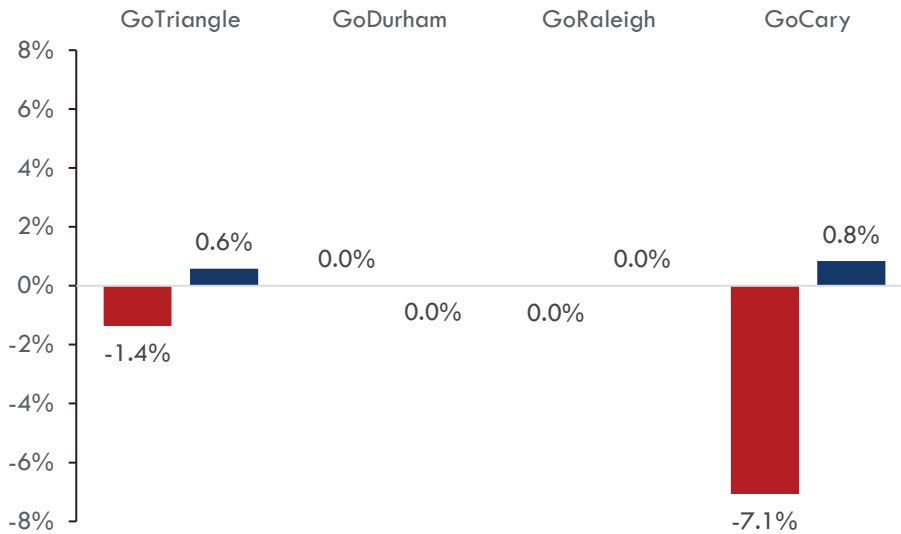




**FARE INTEGRATION STUDY**

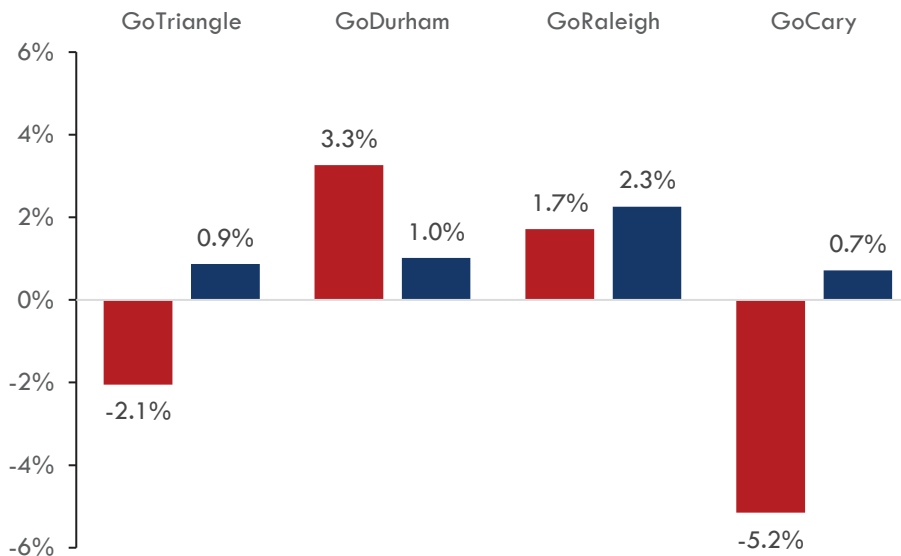
Providing free service to seniors and discounted service to people with disabilities results in no ridership or revenue changes for GoDurham or GoRaleigh (Figure 4-9). Providing free service for seniors results in a small increase in ridership for GoTriangle and GoCary, but a decrease in revenue. The 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

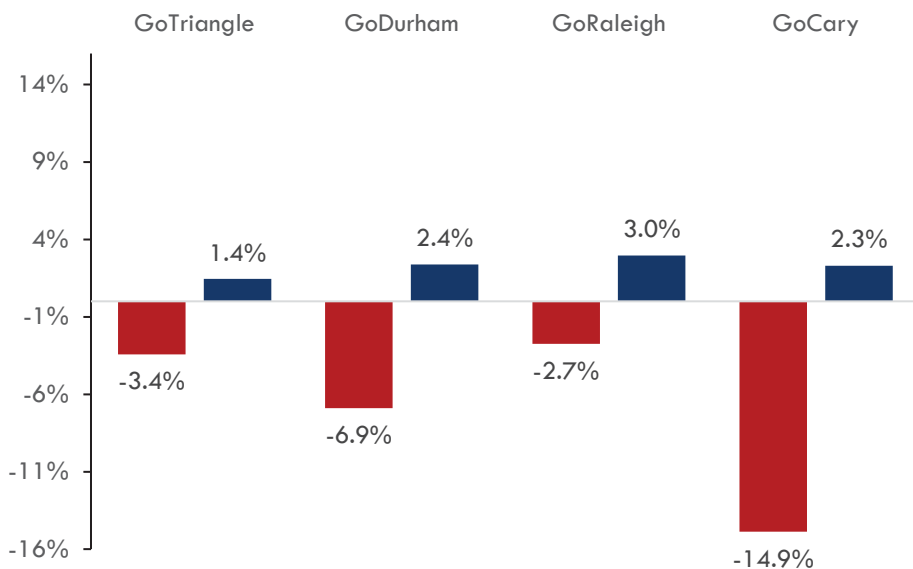




**FARE INTEGRATION STUDY**

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





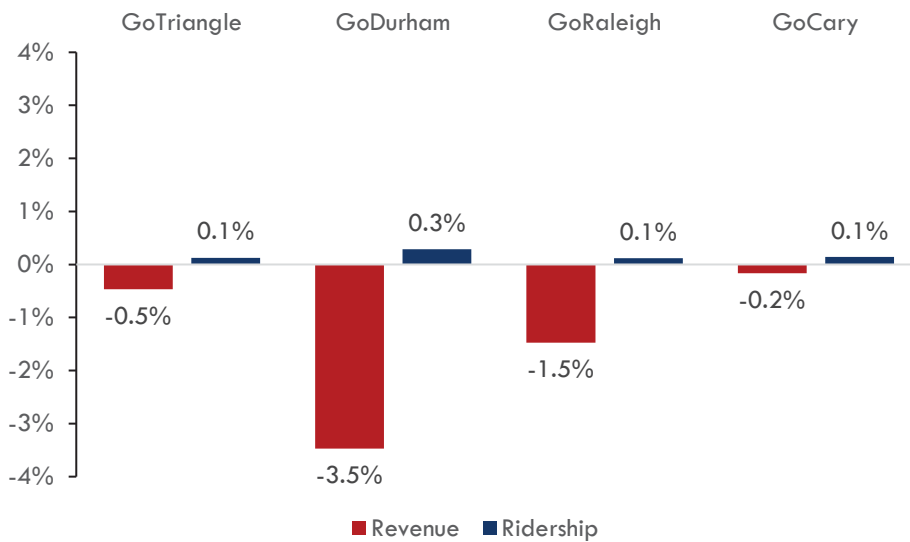
**FARE INTEGRATION STUDY**

**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**

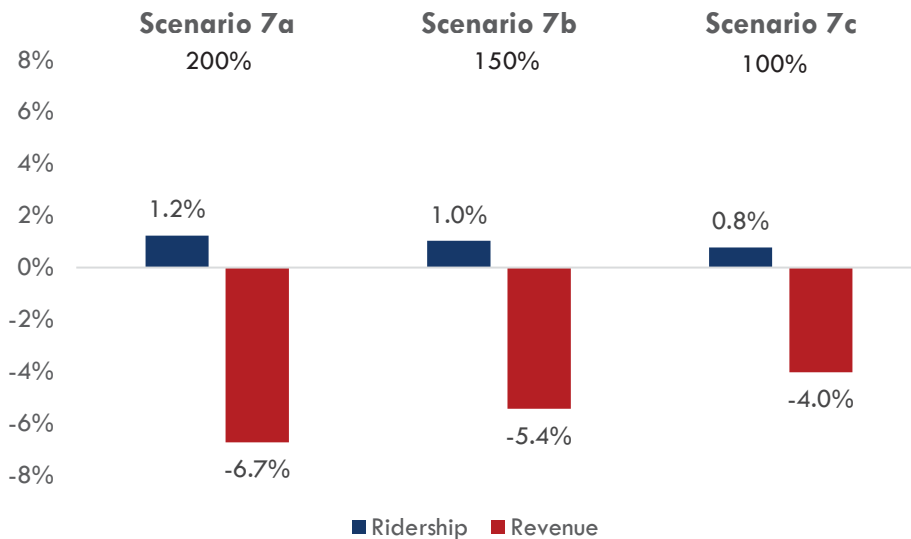
**Scenario 7: Offer a Low-Income Fare Category**

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

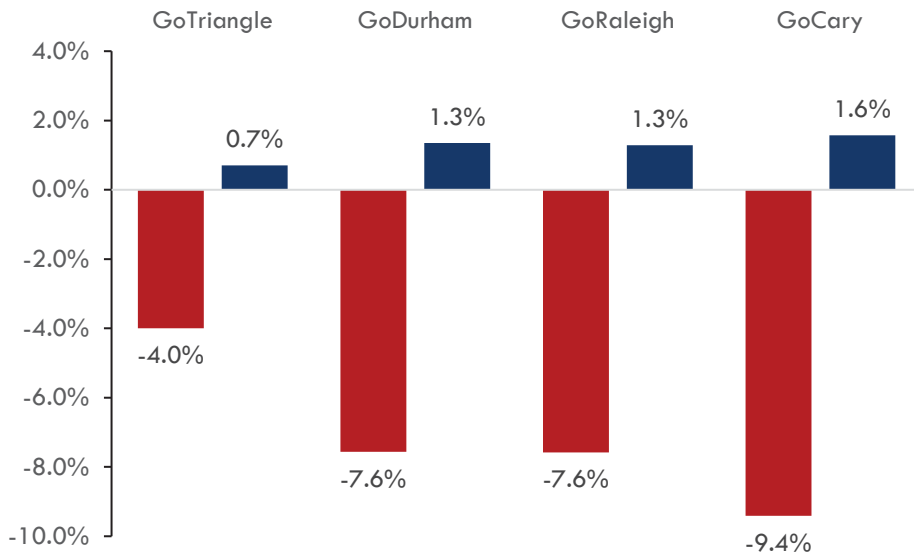






**FARE INTEGRATION STUDY**

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





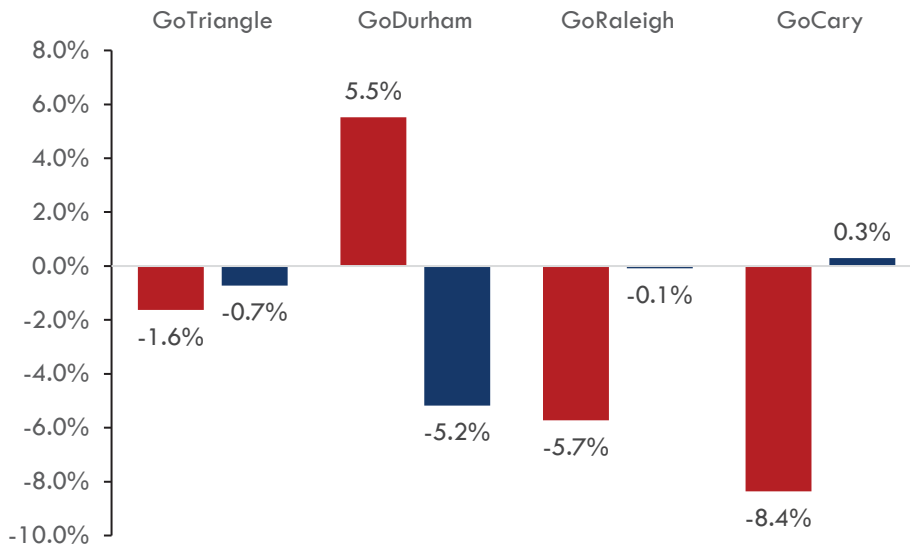
**FARE INTEGRATION STUDY**

**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.

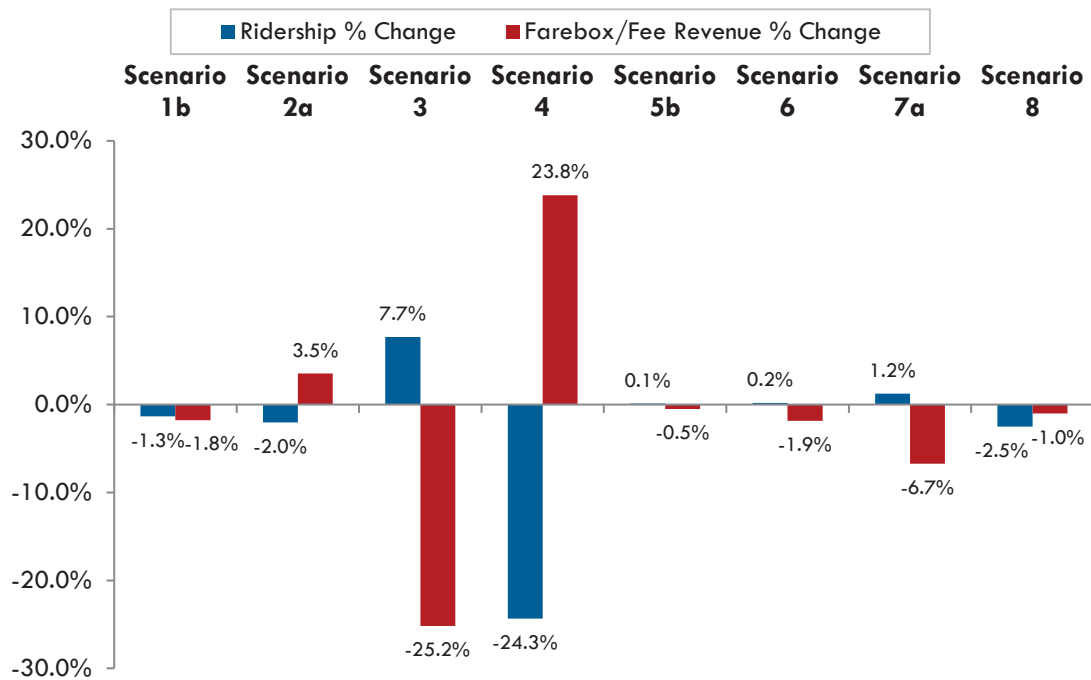


**FARE INTEGRATION STUDY**

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



## FARE INTEGRATION STUDY

### 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.<sup>1</sup> 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%).

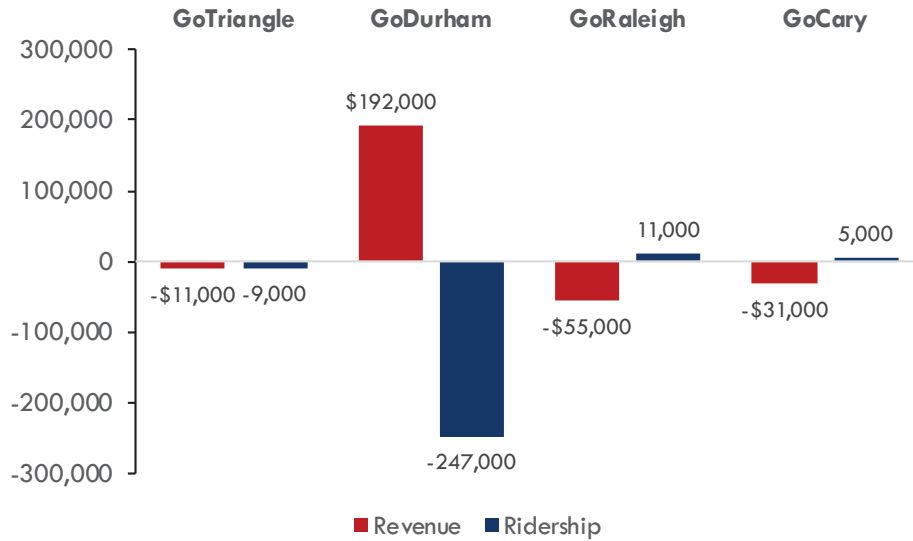
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<sup>1</sup> Since the Youth GoPass was implemented prior to completion of this study, no impacts were assumed related to this fare product.

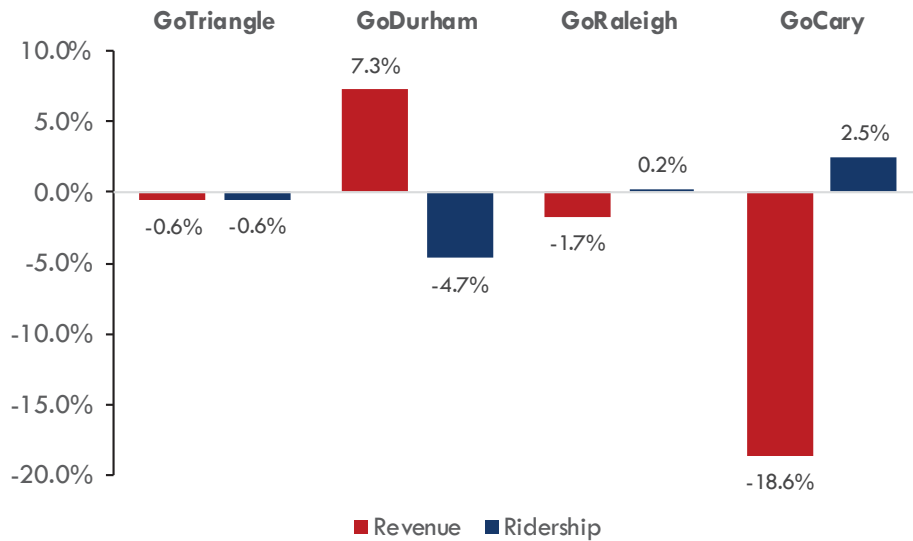


**FARE INTEGRATION STUDY**

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



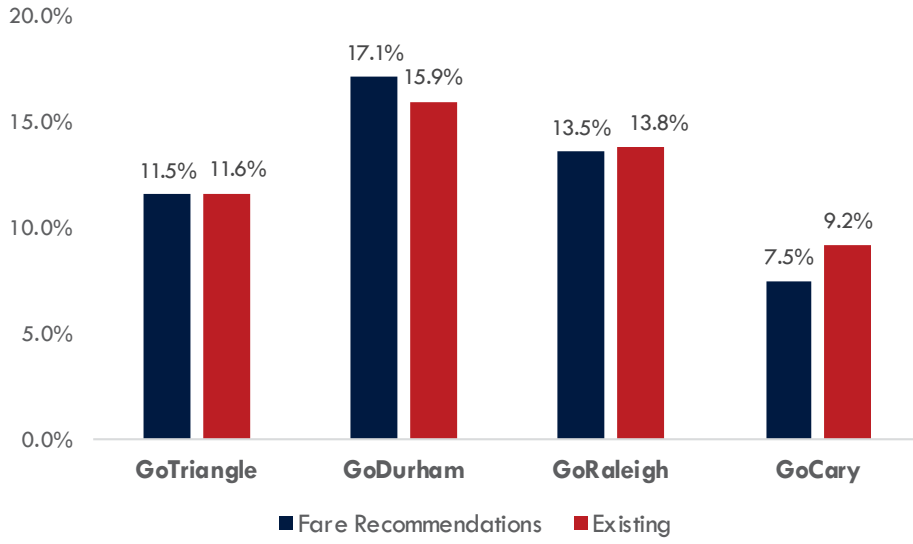
**Figure 5-3 Percent Ridership and Revenue Impacts of Recommended Fare Structure**





**FARE INTEGRATION STUDY**

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



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

## Fare Change Details

May 22, 2019

Report by: Mary Kate Morookian, Matthew Frazier, and Jennifer Green

### DETAILS OF AMENDED PROPOSAL

Based on feedback received during public outreach and from the Board of Trustees, staff has amended their original fare change proposal as it relates to the pricing of the GoTriangle 7-day pass. Instead of an increase from \$16.50 to \$24 in FY20, staff now recommends an incremental increase in price to \$20 in early FY20 (to be commensurate with the implementation of mobile ticketing), and then another increase to \$24 in FY21—based on the results of an analysis of customer pass usage and the benefits of fare capping to be completed at that time.

### Background

A Regional Fare Study was conducted as part of the Wake Bus Plan to identify opportunities for more consistent fare purchase and collection procedures, standardization of fare policies and improved technology for the partner agencies (GoTriangle, GoRaleigh, GoCary and GoDurham). As part of the study, a fare proposal was developed and will be proposed for adoption/approval by GoTriangle, GoRaleigh, and GoCary.

The following analysis discusses the following questions:

1. What is the fare proposal and how does it differ from today?
2. Why a fare change?
3. Who is affected by the fare proposal?
4. Will the fare proposal affect GoTriangle's ridership and revenue?
5. How has the public been made aware of the fare proposal and what has the response been?

### 1. What is the fare proposal and how does it differ from today?

#### **Fare Pricing Structure Changes**

With the approval of the recommended fare proposal (to be implemented by GoTriangle in early 2020, commensurate with mobile ticketing), GoRaleigh and GoCary local one-way base fares would be \$1.25, and GoTriangle regional/express services would be \$2.50 (see Table 1).

#### **Fare Policy Changes**

Seniors 65 and older will ride GoTriangle services free; currently, GoTriangle offers a 50% discount to seniors with ID. In order to better coordinate with GoRaleigh and GoCary, staff recommends that GoTriangle being offering free boardings for seniors to coincide with the August 4, 2020 service change date. Implementing this fare policy in advance of the other proposed fare changes would provide a benefit to those customers 65 and older traveling regionally, with minimal financial impact to GoTriangle.

#### **Technology Upgrades and Fare Capping**

Mobile ticketing, proposed for early 2020 implementation, eliminates the need for customers to purchase paper tickets, increases the availability of fare products and often speeds up the boarding process. This level of technology also allows transit agencies to track an individual customer's

purchases so that customers who buy single-day passes never spend more in a week or month than those who buy seven-day or 31-day passes.

The practice of fare capping is particularly beneficial for those who may not be able to buy more than a one-day pass at a time, keeping them from paying more than the cost of the longer pass over the course of a week or month.

Table 1 Current and Proposed GoTriangle Fare Structure

Current GoTriangle Fare Structure			Proposed GoTriangle Fare Structure	
Fares	Regional	Express	Fares	Regional
Single Ride	\$2.25	\$3.00	Single Ride	\$2.50
Day Pass	\$4.50	\$6.00	Day Pass	\$5.00
7-Day	\$16.50	\$22.00	7-Day	<del>\$24.00</del> \$20.00
31-Day	\$76.50	\$102.00	31-Day	\$80.00
Discount Single Ride	\$1.00	\$1.25	Discount Single Ride	\$1.25
Discount Day Pass	\$2.00	\$2.50	Discount Day Pass	\$2.50
Discount 7-Day	\$7.50	\$9.25	Discount 7-Day	<del>\$12.00</del> \$10.00
Discount 31-Day	\$34.00	\$42.50	Discount 31-Day	\$40.00

## 2. Why a fare change?

### **Regional Coordination and Simplification**

The Wake Bus Plan development process considered transit service improvement proposals on a regional scale. GoRaleigh, GoCary and GoTriangle are making improvements to their individual systems/routes, but those proposed improvements are based on the goal of using all systems together to create efficient, convenient and attractive travel across the region. Intuitive and consistent transit network design, fare structure and policies are important. The goals of the fare recommendation are:

1. Improve regional coordination
2. Balance revenue and ridership goals
3. Improve the passenger experience
4. Improve pass distribution
5. Make transit an affordable option
6. Explore new fare technologies

The final fare pricing recommendation is to have a local base fare of \$1.25 and a regional/express fare of \$2.50, which is easy for agency staff to communicate and for passengers to understand.

### **Issues with Current Pricing Structure**

GoTriangle currently charges \$16.50 for a 7-Day Regional Pass. This pricing strategy does not provide a benefit to buying a 31-day pass. For passengers using transit 5-7 days a week, it costs significantly less to buy four 7-day passes over a month for \$66 than to buy one 31-day pass for \$76.50. This pricing



structure is confusing to customers based on their answers to GoTriangle's most recent Customer Satisfaction Survey. The data show 43% of 31-day pass holders report a household income of less than \$35,000, which means price-sensitive passengers are buying a higher-priced pass because they assume it is a better deal.

Agencies typically set a base one-way fare price and then apply ride multipliers to determine the cost of multi-ride passes. These multipliers determine the number of one-way trips a customer must make in order to break even on the cost of the multi-ride pass. Based on peer agencies included in the Regional Fare Study, the agency standard for a 7-day pass multiplier ranges from 9.6 to 12 rides—GoTriangle applies a multiplier of 7.3.

According to the 2016 Customer Satisfaction Survey, 86% of GoTriangle 7-day pass customers are riding between 5-7 days a week, indicating they are making a total of 10-14 one-way trips. The final fare recommendation includes a multiplier of 9.6 for the 7-day pass, resulting in a price increase from \$16.50 to \$24.

While an increase to \$24 is still staff's ultimate recommendation, the fare change proposal has been amended to reflect an *incremental* increase in the price of the 7-day pass. An initial increase to \$20 in FY20 helps to address issues with the current pricing structure—with the purchase of four 7-day passes now having equal value to a 31-day pass and more accurately reflecting pass usage patterns with an applied multiplier of 8 rides—while only increasing price 21% (vs a 50% increase in the initial proposal).

A final increase to \$24 should be examined in FY21 based on the results of a pass usage/fare capping benefit analysis to be performed by staff.

### ***Improving the Customer Experience***

The fare recommendation also includes technology upgrades to include mobile ticketing as soon as early 2020 and possibly smart cards (or another form of contactless payment) in the future, as well as policy changes that include free boardings for seniors aged 65 and older and fare capping. These changes address the goals of exploring new technologies, improving the customer experience, improving pass distribution and making transit an affordable option.

Increasing the number of free rides, introducing fare capping, and reducing the cost of the express pass, together, would result in a loss of fare box revenue. However, increasing the base regional fare while increasing the cost of the currently underpriced 7-day pass would help minimize revenue loss.

### **3. Who is affected by the fare proposal**

In the recommended fare proposal, there is no longer a price distinction between GoTriangle's Regional and Express services. This results in a \$0.50 decrease in the one-way express fare — making express routes more accessible to price-sensitive passengers — and an increase of \$0.25 in the one-way regional fare. The biggest increases can be seen in the cost of the regional 7-day and 31-day passes —from \$16.50 to \$24 and from \$76.50 to \$80.

Below is a breakdown of total pass usage by type. The majority of passes used on GoTriangle buses are GoPasses at 46.2%, followed by the one-way trip pass at 20.1% and the day pass at 12.6%.



Total GoTriangle pass usage by type

Pass Type	Percent
Cash for one-way trip	20%
Day pass	13%
7-day pass	5%
31-day pass	5%
Stored value card	5%
GoPass	46%
Other	4%
Invalid	2%

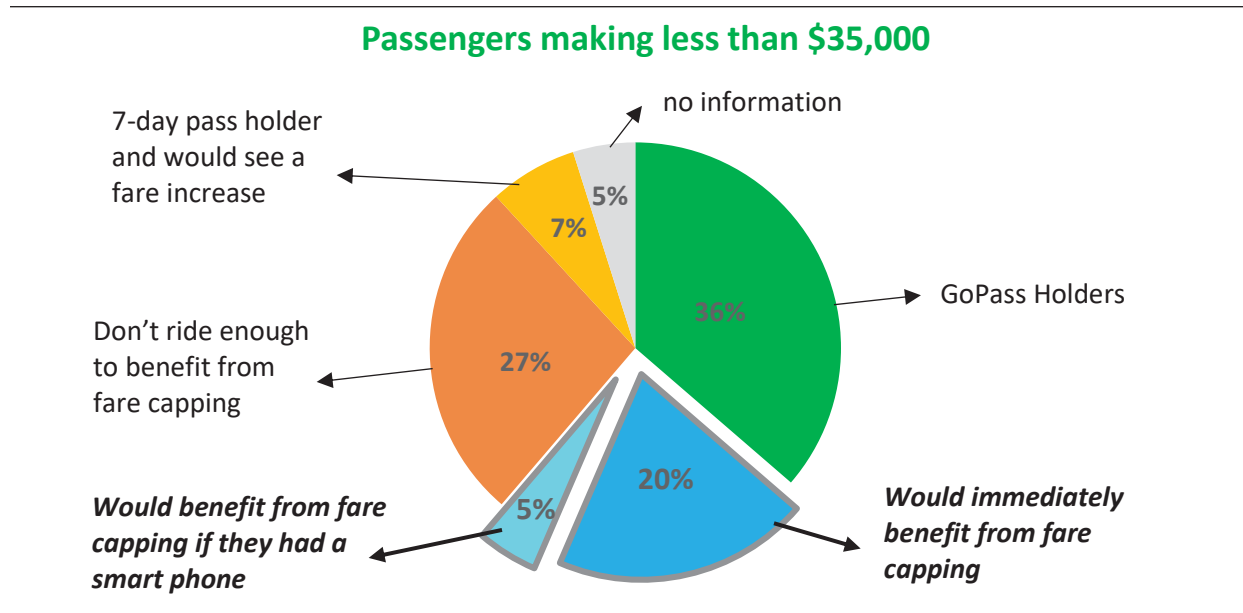
Fare capping would help mitigate effects of the proposed fare increase for passengers frequently purchasing short-term passes and who, by the end of the week or month, are spending more than the cost of a 7-day or 31-day pass.

Income levels of passengers purchasing different pass types

Fare Type	Cash	1-day	7-day	31-day	SVC	GoPass	Other	All Types
Less than \$20k	36.9%	41.0%	37.9%	23.3%	14.1%	14.7%	22.7%	24.3%
\$20k to \$35k	24.7%	32.8%	30.4%	19.8%	14.2%	21.2%	18.5%	23.3%
\$35k to \$75k	23.9%	16.2%	24.8%	29.7%	33.2%	31.3%	23.0%	27.3%
\$75k or more	14.4%	10.0%	6.9%	27.2%	38.5%	32.8%	35.8%	25.1%

Of day-pass and one-way pass holders with an income of less than \$35,000, 46% report using GoTriangle services at least five days a week—which means those people are overpaying for transit service by the end of the week or month. This number does not include the passengers currently purchasing 31-day passes when they could be purchasing four 7-day passes at a lower rate.

The chart below details the effects of the fare recommendation on current passengers making less than \$35,000 annually:



When considering how to mitigate the effects of a fare increase on low income passengers, 36% of GoTriangle's low income customers are GoPass holders, therefore not price sensitive, and not effected by a fare increase. For price sensitive low income customers, fare capping provides a mitigation for 25% of (20% without an alternative to the smart phone), totaling 51% of low income passengers unaffected by the proposed fare increase of the regional pass. Another 11% of low income passengers who currently purchase an express pass, will see a reduction in fares.

7% of low income passengers would not see a savings with the implementation of fare capping because of the current underpricing of the 7-day pass, and 27% of GoTriangle passengers do not ride frequently enough to realize savings through fare capping.

#### 4. Will the fare proposal affect GoTriangle's ridership and revenue?

In transit, the commonly-accepted standard measurement of sensitivity to fare changes is that for every 10% increase in fares, ridership will decrease by 3% (and vice-versa)<sup>1</sup>. If only basing an analysis on the proposed increased in regional pass price, the correction of the underpriced 7-day pass, reduction in the price of the express pass, and the loss in revenue due to the implementation of fare capping, projected impacts to GoTriangle's rates of ridership and revenue are relatively small.

These ridership/revenue projections do not include any estimates for the effects of mobile ticketing. Mobile ticketing is a relatively new technology and there is not yet a wealth of data to support correlations between the implementation of mobile ticketing and increases in ridership. However, staff is not concerned with the estimates in revenue and ridership losses provided by the consultant during the fare study. With the proposed equity improvements, simplification of the regional fare structure, increased accessibility of express fares, and making fare payment easier and more convenient—transit becomes a more affordable and attractive option.

Aside from ridership/fare revenue increases, mobile ticketing can help agencies realize savings and benefits through reduced farebox maintenance costs and faster boarding times. Since implementing mobile ticketing in 2012, MBTA in Boston sales has seen a shift in pass sales. Sales via the mobile app now account for more than 1/3<sup>rd</sup> of all tickets sold.<sup>2</sup>

#### 5. How has the public been made aware of the fare proposal and what has the response been?

In a collaborative effort between GoTriangle's planning, marketing and public engagement teams, the proposed 2019 service and fare changes were advertised broadly to current customers and stakeholders. In-person outreach included formal presentations, pop-up events, on-the-bus engagement, and "Talk to a Planner" events. The information was also available online and there were multiple pushes made across GoTriangle's social media platforms, as well as targeted marketing campaigns using Facebook advertising to further engage the community. From those efforts, 300 comments were generated, providing a robust picture of the public's perception of the proposals.

<sup>1</sup> Litman, T. (2018, Nov 28). *Transit Price Elasticities and Cross-Elasticities*. Retrieved from Victoria Transport Policy Institute: <https://www.vtpi.org/tranelas.pdf>

<sup>2</sup> "Mobile Becomes the Dominant Sales Channel as a Total Ticket Sales Surpass \$120 Million." *Masabi*, Masabi and Massachusetts Bay Transportation Authority, [info.masabi.com/hubfs/MBTA\\_case\\_study\\_02FINAL.pdf](http://info.masabi.com/hubfs/MBTA_case_study_02FINAL.pdf).

In total:

- More than **600 people** received information about the service and fare changes directly from a GoTriangle staff member, either on the bus, at a pop-up event or during a public presentation.
- Over **8,000 individuals and organizations** were sent the information via email.
- Another **380 people** found the information promoted on their Facebook feeds.
- Between March 11 and April 12, the Service Changes **webpage had 3,965 page views, a 300 percent increase** from the previous period.
- GoTriangle's social media posts for fare and service changes reached **an audience of 5,700 and resulted in 220 engagements**.
- From those efforts, **300 comments** were generated, providing a robust picture of the public's perception of the service and fare change proposals.

Below is an overview of the public's response to the proposed fare recommendation:

- 53 people responded to the survey.
- 68% of respondents are in favor of the fare pricing and policy changes and 32% are against.
- Regarding just the changes to the fare pricing structure, an equal number of people are for and against the proposed changes.
- People are very excited about mobile ticketing, fare capping, free fares for seniors, and the combined fare for regional/express.
- Most frequently cited concerns:
  - Increase of the 7-day discount and 31-day pass is too high
  - Concerned about fare increase impact to low income riders
  - What is the rationale for the change? What are the revenue impacts?
  - More details on the implementation – how to get the senior pass? Integration with other agency's fare capping?
  - How will people without a smart phone access the mobile ticketing?

**GO FORWARD**  
A COMMUNITY INVESTMENT IN TRANSIT

Fare Change Proposal  
Board of Trustees  
May 22, 2019

## GOALS

# Fare Integration Study

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Improve **Regional Coordination**



Balance **Revenue and Ridership Goals**



Improve **Passenger Experience**



Improve **Pass Distribution & Sales**



Make Transit An **Affordable Option**



Explore New **Fare Technologies**

WHY THE CHANGE?

# Proposed Fare Change

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**Regional coordination and simplification** – The Wake Bus Plan developed service proposals at the regional scale. An easy-to-message regional fare structure removes barriers and confusion for passengers traveling across the region using different systems.



**Issues with Current Pricing Structure** – The 7-day pass is currently underpriced (based on pass usage data) and 31-day pass holders are overpaying for transit.



**Improving the Customer Experience** – The fare recommendation simplifies regional travel, offers free boardings to seniors (65+), makes express routes more accessible to price sensitive passengers, offers fare capping as a benefit, and introduces mobile ticketing—making transit a more attractive option for many.

HOW IS IT DIFFERENT?

# Proposed Fare Structure

Current GoTriangle Fare Structure			Proposed GoTriangle Fare Structure	
Fares	Regional	Express	Fares	Regional
Single Ride	\$2.25	\$3.00	Single Ride	<b>\$2.50</b>
Day Pass	\$4.50	\$6.00	Day Pass	<b>\$5.00</b>
7-Day	\$16.50	\$22.00	7-Day	<b>\$24.00</b>
31-Day	\$76.50	\$102.00	31-Day	<b>\$80.00</b>
Discount Single Ride	\$1.00	\$1.25	Discount Single Ride	<b>\$1.25</b>
Discount Day Pass	\$2.00	\$2.50	Discount Day Pass	<b>\$2.50</b>
Discount 7-Day	\$7.50	\$9.25	Discount 7-Day	<b>\$12.00</b>
Discount 31-Day	\$34.00	\$42.50	Discount 31-Day	<b>\$40.00</b>



QUESTIONS/CONCERNS RAISED DURING PUBLIC OUTREACH AND BY THE BOARD

# Proposed Fare Structure

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## **Proposed price increase for 7-day pass is too high**

Staff amended the fare change proposal and is recommending an incremental price increase for the 7-day pass-- \$20 in FY20 and then revisiting an increase to the recommended \$24 in FY21.



## **Does an increase in price negatively impact low income passengers?**

Based on staff's analysis, more low income passengers benefit from the fare proposal than are negatively effected.



## **Will the stored value card still be available and easier to purchase?**

The stored value card will continue to be available to customers and will be available at third party retailers, transit centers, and via smart phone (as will all fare media).



## **What is the cost of collecting fares/will mobile ticketing help save money?**

Mobile ticketing helps reduce costs associated with printing paper tickets (roughly \$20k/year is spent on card stock), and repairs to the farebox. More purchases made via smart phone mean less wear and tear on fareboxes, which—at \$20k a piece to replace and \$100k spent annually on repair—could result in significant savings.

HOW IS IT DIFFERENT?

## Proposed Fare Structure (amended)

Current GoTriangle Fare Structure			Proposed GoTriangle Fare Structure	
Fares	Regional	Express	Fares	Regional
Single Ride	\$2.25	\$3.00	Single Ride	<b>\$2.50</b>
Day Pass	\$4.50	\$6.00	Day Pass	<b>\$5.00</b>
7-Day	\$16.50	\$22.00	7-Day	<del>\$24.00</del> <b>\$20.00</b>
31-Day	\$76.50	\$102.00	31-Day	<b>\$80.00</b>
Discount Single Ride	\$1.00	\$1.25	Discount Single Ride	<b>\$1.25</b>
Discount Day Pass	\$2.00	\$2.50	Discount Day Pass	<b>\$2.50</b>
Discount 7-Day	\$7.50	\$9.25	Discount 7-Day	<del>\$12.00</del> <b>\$10.00</b>
Discount 31-Day	\$34.00	\$42.50	Discount 31-Day	<b>\$40.00</b>

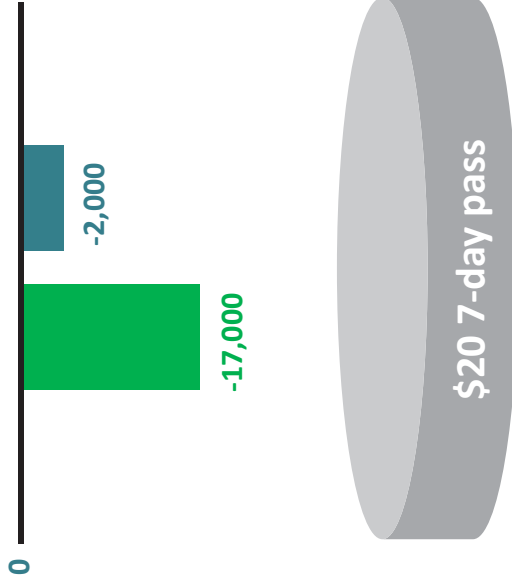
## RIDERSHIP AND REVENUE IMPACTS

# Proposed Fare Structure



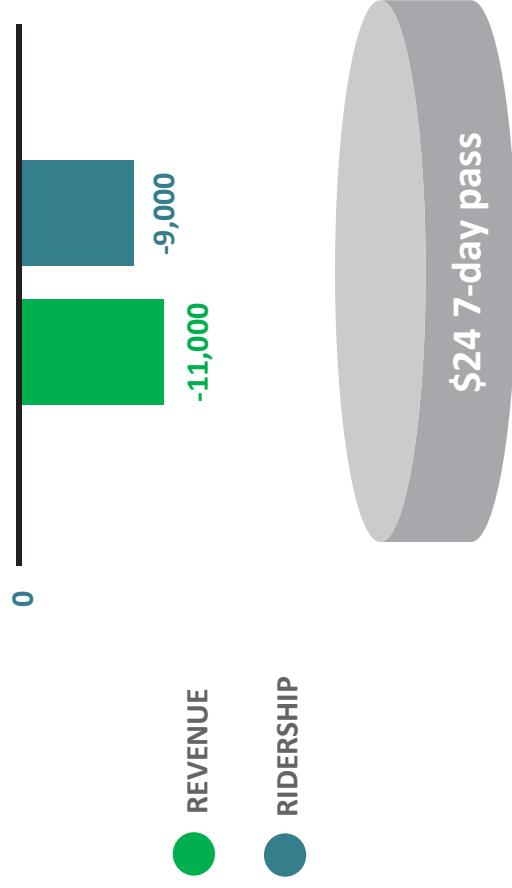
### Estimated Revenue loss

Reducing the cost of the express pass, offering free boardings for seniors and fare capping, all reduce farebox recovery. An increase in the base fare helps keep revenue loss to a minimum (0.6%).



### Estimated Ridership loss

Ridership impact estimates are based on changes in pass pricing alone and do not consider possible positive effects of mobile ticketing, increased availability of fares, and fare structure simplification.



## COMMENTS RECEIVED DURING PUBLIC OUTREACH

# August 2019

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Implement free senior boardings in conjunction with partner agencies



Coordinate internally



Build technology platform (using approved fare structure) with chosen mobile ticketing vendor



Restructure GoPass program

COMMENTS RECEIVED DURING PUBLIC OUTREACH

# Implementation Early 2020



Implement mobile ticketing and fare capping



Pursue new sales partnerships



Implement proposed fare structure



Expand GoPass program



# Next Steps

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- ▶ **Board Approval**
- ▶ **Technology Procurement**
- ▶ **Implementation Planning**
- ▶ **Marketing and Outreach Activities**

**GO FORWARD**  
A COMMUNITY INVESTMENT IN TRANSIT





## Proposed Service and Fare Change Outreach – Public Engagement Summary

March 2019 – April 2019

### The Public Engagement Strategy

GoTriangle conducted public outreach efforts between March 11, 2019 and April 24, 2019 to inform the community about the proposed service and fare changes. Customers and the general public provided feedback that would be incorporated into the final recommendations presented to the GoTriangle Board of Trustees. Staff used varied tactics to support the overall goal of engaging both current customers whose commutes would be affected and groups that would potentially use the proposed services below:

- **RTP Service Changes**
  - Discontinuation of OnDemand services
  - Replacement of OnDemand services with “Transit Connect”
  - 311 – Realign route to serve Kit Creek Road & Davis Drive
- **New Routes/Park-and-Rides**
  - North Raleigh Express (NRX) – New express route on I-540 to replace Route 201
  - 310W – New Service from RTC to Wake Tech RTP Campus
  - FRX – New Park-and-Ride at Wake Tech – Southern Wake Campus, replacing Park-and-Ride at Hilltop Crossings Food Lion
- **General Changes**
  - Chapel Hill-Raleigh Express (CRX) – Schedule changes
  - Durham-Raleigh Express (DRX) – Add trips and other schedule changes
  - Robertson Scholars Express (RSX) – GoTriangle will no longer operate the service after the school year
  - 700 – Construction reroute becomes permanent route
  - 102 – Replaced with GoRaleigh Route 20, an all-day weekday route with hourly service (*September implementation*)
  - Knightdale-Raleigh Express (KRX) – Replaced with GoRaleigh Route 33, an all-day weekday route with hourly service (*September implementation*)
- **Fare Changes**
  - New Pricing Structures
  - New Policy for Elderly Riders – Seniors 65 and older will ride GoTriangle services for free
  - Technology Upgrades – Mobile ticketing and fare capping

### The Approach

The community was able to submit comments on the proposed service and fare changes via the following methods:

- Online: Use the online feedback form that will present the service changes and fare updates in both English and Spanish at [gotriangle.org/service-changes](http://gotriangle.org/service-changes)
- Phone: Leave a message for Service Planning at 919-485-PLAN (7526)
- Email: [serviceplanning@gotriangle.org](mailto:serviceplanning@gotriangle.org)





- Mail: GoTriangle, Attn: Service Planning, P.O. Box 13787, RTP, NC 27709
- In Person: Speak to the GoTriangle Board of Trustees at either their meeting on March 27, 2019 at 12 p.m., or on April 24, 2019 at 12 p.m., in the Board Room of GoTriangle’s administrative offices at 4600 Emperor Blvd, Suite 100 in Durham

GoTriangle used a mixed-method approach to drive public participation in in the comment period. For all in-person activities, staff provided service change brochures and a fare change handout that was double-sided English and Spanish. All social media campaigns linked to the webpage and survey.

Find below an outline of specific activities that were conducted:

- A **news release** was posted on GoTriangle’s website.
- **Public hearing notices** were posted in the Herald Sun, News & Observer, La Noticia, and La Conexion on March 20. Another round of notices were included in the News & Observer, the Herald Sun, La Noticia, and La Conexion on April 3 and April 10.
- **Service change brochures** were placed on all of the buses.
- **Email communications** were sent to the following GoTriangle listservs: GoTriangle News Alerts, OnDemand Riders, GoForward List, Wake County Community Contacts, Durham and Orange County Community Contacts, Transit Advisory Committee.
- The news release was provided to the following organizations for internal distribution:
  - North Carolina State University
  - Apex
  - Wake Forest
  - Cisco
  - Fuquay Varina
  - Morrisville
  - Duke University
  - Rolesville
  - Smart Commute Raleigh
  - WakeUp Wake County
- **Presentations** on the service and fare changes were given to the following groups:
  - Environmental Protection Agency
  - Research Triangle Foundation
  - Southeast Raleigh Lions Club
- Staff conducted **targeted marketing via Facebook Advertising** to obtain feedback from Spanish-speaking communities, elderly populations, and other stakeholders along the affected bus routes. See attachment for additional detail.
- **“Talk to a Planner,”** events in the lobby prior to the Board of Trustees meeting where planners are available to answer questions as the public arrives.
- **On-the-bus outreach** per below:

Date	Time	Route	# of People Reached
Tues, March 19	3pm-6pm	105, DRX, CRX, 300, KRX, ZWX	65
Thurs, March 21	7am and 4:30pm	201	



			17
Thurs, March 21	6:05am (bus ops)-7:25am (RTC)	201	9
Mon, March 25	1pm, 1:30pm, 3:30pm, 4pm	400, 405 and 700	50

- **Pop-up events** per below:

Date	Time	Location	# of People Reached
Monday, March 11	10:30am – 11:30am	GoTriangle Bus Operations	10
Monday, March 11	2pm – 3pm	GoTriangle Bus Operations	20
Tuesday, March 19	7am-9:30am	GoRaleigh Station Wilmington St	30
Tuesday, March 19	3pm-5pm	Regional Transit Center	25
Tuesday, March 19	4pm – 5pm	GoRaleigh Station	65
Wednesday, March 20	6:45am-8:45am	McKnight Dr at Village Park Dr (Walmart)	10
Wednesday, March 20	10am – 12pm	Wake Tech RTP Campus	47
Thursday, March 21	8am – 10am	Morehead Planetarium	15
Thursday, March	6:30am-8:30am	7th Ave at Forest Hills, Garner	18
Thursday, March 21	8:25am	Regional Transit Center	2
Thursday, March 21	3pm-5:30pm	Health Sciences Library, Chapel Hill	10
Friday, March 22	2pm – 4pm	RSX Stop at Duke Chapel	31
Friday, March 22	6am – 8am	Hilltop Park-and-Ride	19
Tuesday, March 26	3pm-5:15pm	Chapel Drive	35
Tuesday, April 9	3:30pm – 5 pm	Regional Transit Center	27
Wednesday, April 10	5:30pm – 7:30pm	Maureen Joy Charter School (Health Fair)	80
Friday, April 12	7:30am – 9:30am	Regional Transit Center	82
Friday, April 12	11pm – 2pm	Dress for Success Job Fair	20
Thursday, April 18	11:30am – 1:30pm	Cisco Sustainability Fair	TBD



## The Results

In total, more than **700 people** received information about the service and fare changes directly from a GoTriangle staff member, either on the bus, at a pop-up event, or at a presentation. Over **8,000 individuals and organizations** were sent the information via email. Another **380 people** found the information promoted on their Facebook feed.

Between March 11 and April 12, the Service Changes **webpage had 3,965 page views, a 300 percent increase** from the previous period. GoTriangle's social media posts for fare and service changes reached **an audience of 5,700 and resulted in 220 engagements.**

From those efforts, **300 comments** were generated, providing a robust picture of the public's perception of the service and fare change proposals.

## Fare Schedule for Comparison

SERVICE TYPE	FARE TYPE	CURRENT*		RECOMMENDED**	
		Full Fare	Discount Fare	Full Fare	Discount Fare
Regional	Cash Fare	\$2.25	\$1.00	\$2.50	\$1.25
	Transfer to Regional Route	Free	Free	Free	Free
	Transfer to Express Route	\$0.75	\$0.25	-----	-----
	DayPass (unlimited rides)	\$4.50	\$2.00	\$5.00	\$2.50
	7-Day Pass (unlimited rides)	\$16.50	\$7.50	\$20.00	\$10.00
	31-DayPass (unlimited rides)	\$76.50	\$34.00	\$80.00	\$40.00
	Cash Fare	\$3.00	\$1.25	-----	-----
Express	Transfer	Free	Free	-----	-----
	DayPass (unlimited rides)	\$6.00	\$2.50	-----	-----
	7-Day Pass (unlimited rides)	\$22.00	\$9.25	-----	-----
	31-DayPass (unlimited rides)	\$102.00	\$42.50	-----	-----
	Cash Fare	\$4.50	\$4.50	\$5.00	\$5.00
	11-Ride Card	\$45.00	\$45.00	\$50.00	\$50.00
	Monthly Pass	\$153.00	\$153.00	\$160.00	\$160.00
Discounts	Children (5 and under)	Free	Free	Free	Free
	Children (6 through 12)	Pay Discount Rates	Pay Discount Rates	Free	Free
	Youth (ages 13 through 18)	Pay Discount Rates	Pay Discount Rates	Free with Youth GoPass, else Pay Discount Rates	Discount Rates
	Seniors (ages 65+)	Pay Discount Rates	Pay Discount Rates	Free	Free
	Persons w/ Disabilities	Pay Discount Rates	Pay Discount Rates	Pay Discount Rates	Pay Discount Rates
	Social Service Org's	25% discount off DayPass	25% discount off DayPass	25% discount off DayPass	25% discount off DayPass
	\$13.50 Stored Value	\$12.00	\$12.00	-----	-----
\$25 Stored Value	\$20.00	\$20.00	\$20.00	\$20.00	
\$50 Stored Value	\$40.00	\$40.00	\$40.00	\$40.00	

\*\* If adopted, free fare for Seniors (ages 65+) would have an effective date of August 4, 2019, with all other proposed fare changes to take effect in early 2020 commensurate with the implementation of mobile ticketing/fare capping.