



GoTriangle
Operations & Finance Committee
June 01, 2023
8:30 am-10:00 am Eastern Time

The GoTriangle Operations & Finance Committee meets remotely.

Microsoft Teams meeting | Join on your computer or mobile app

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Phone Conference ID: 602 240 539#*

I. Call to Order and Adoption of Agenda

(1 minute Michael Parker)

ACTION REQUESTED: Adopt agenda with any changes requested.

II. Draft Minutes | April 13, 2023

(1 minute Michelle Dawson)

ACTION REQUESTED: Approve minutes.

III. Route 305 Service Change Recommendation

(10 minutes Austin Stanion)

ACTION REQUESTED: Recommend Board approval of the proposed Route 305 service change.

Title VI Analysis

IV. Microtransit Service Contracts

(10 minutes Austin Stanion)

ACTION REQUESTED: Authorize the President/CEO to award and execute contracts with Uber, Lyft, National Express Transportation (in partnership with Spare Labs), and River North (Via) for microtransit services, with total cost not to exceed \$1.6M for the initial two-year term.

V. North Durham and East Durham Microtransit Pilot Evaluation

(20 minutes Austin Stanion)

Microtransit Pilot Evaluation Report

VI. FY2024 Proposed Budget

(20 minutes Sandra Freeman)

VII. Adjournment

(Michael Parker)



**BOARD OF TRUSTEES
OPERATIONS & FINANCE COMMITTEE
MEETING MINUTES**

4600 Emperor Boulevard
Suite 100
Durham, NC 27703

Thursday, April 13, 2023

8:30 a.m.

Remote | Microsoft Teams

Committee members present | Corey Branch [arr. 8:56 a.m., left 9:35 a.m.], Brenda Howerton, Sig Hutchinson, Michael Parker, Stelfanie Williams

Committee members absent | Valerie Jordan, Jennifer Robinson

Michael Parker called the meeting to order at 8:31 a.m. A quorum was present.

I. Adoption of Agenda

II. Approval of Minutes

Action: A motion was made by Howerton and seconded by Hutchinson to adopt the agenda and approve the minutes of March 2, 2023. Upon vote by roll call, the motion was carried unanimously.

III. Juneteenth Holiday

Sharon Chavis requested that the Committee recommend board approval to add Juneteenth [June 19] as a paid GoTriangle holiday beginning June, 2023. She stated that transit services would be will be provided at a Sunday service level as with other holidays. The financial impact will be \$17,000-\$35,000 annually. This brings the total to 13 paid GoTriangle holidays.

Parker noted that transit dependent workers who might have to work on this holiday could be inconvenienced by a Sunday service level. He asked how that would be managed. Katharine Eggleston responded that GoTriangle would coordinate with and follow the level of service provided by other agencies in the region.

Action: A motion was made by Howerton and seconded by Hutchinson to recommend the board adopt policy HRB-207 Employee Paid Holidays, adding Juneteenth as a paid holiday beginning June 19, 2023. Upon vote by roll call, the motion was carried unanimously.

IV. Scheduling FY2024 Budget Public Hearings

Saundra Freeman stated that public hearings on the proposed budget are held each year in May and June. Due to changes in the board's Rules of Procedure the committee must approve the scheduling of the public hearing. Staff will advertise and provide notice of the hearings as required.

Action: A motion was made by Hutchinson and seconded by Howerton to approve the scheduling of two public hearings on the proposed FY2024 budget on May 24 and June 28. Upon vote by roll call, the motion was carried unanimously.

V. Framework for Reinstatement of Fares

Katharine Eggleston's presentation is attached and hereby made a part of these minutes. She stated that the FTA-required fare equity analysis found no disparate impact nor a disproportionate burden to minority and low-income customers. Staff, however, proposes mitigation strategies to maximize access for these populations.

Proposed fare structure

\$2.50 single ride cash fare

\$5 day pass

\$20 weekly pass

\$80 monthly pass

\$0 fare for seniors aged 65 and older and for children age 12 and under

Various GoPass programs

Liz Raskopf shared the results of the public engagement period which explained the trade-offs between transit reliability and fare collection and asked the opinion of respondents on a return to fares.

Branch arrived.

Parker commented that there needs to be a broader conversation about how GoTriangle can generate revenue for its core bus services. He also stated his disappointment that there was not a question about how re-imposing fares might impact the rider's ability to ride GoTriangle.

Eggleston stated that a number of partners from GoTriangle's prior GoPass program are fully supportive of renewing their GoPass partnerships, in some cases at a higher cost; however, some are concerned about not being able to do that in a fare free environment and others want to ensure that the GoPass is fair across all the institutions. She said it would be very difficult to get to the pre-pandemic level of financial participation without fares in place.

Eggleston reiterated that GoTriangle's current revenues are not sufficient to cover its current operations and basic capital needs such as wages for operations and maintenance staff and bus replacement. She said staff is aware that keeping fares suspended has equity benefits and staff proposes a reduced fare program for low-income riders to ensure that Title VI populations are not burdened by fares. She added that studies have shown that service improvements are likely to be more impactful than fare reductions even for low income riders and the experience of other agencies throughout the country indicate that low-income fare programs can reduce the burden of fares for riders with limited ability to pay and increase ridership.

Staff recommendations

- Implement the 2019 adopted fare structure with mobile ticketing and daily, weekly and monthly caps on fares paid by each rider.
- Update the GoPass program to include reducing barriers to access; responding to all-day travel demand, hybrid work and varied commute patterns; and provide a stable revenue for long-term GoTriangle bus service reliability, restoration and expansion.

- Seek funding from the county transit plans to implement a multi-year GoPass pilot program for low-income riders.
- Defer implementation of fare restoration to January 1, 2024, in order to secure funding and implement the GoPass low-income pilot, ensure seamless restoration of the GoPass for pre-pandemic partners and communicate with riders.

Williams asked how long the conversations with local governments will take regarding the funding of the low-income pilot program. Eggleston explained that staff would define the program and submit funding requests to the Staff Working Groups in Durham and Orange counties and the TPAC in Wake County in late summer for a recommended first quarter amendment to the work plans. If recommended, the amendments would come before the GoTriangle board and other funding partner boards for approval in the fall. That would allow for would allow for program roll-out in January.

Action: A motion was made by Hutchinson and seconded by Branch to recommend the board adopt the proposed framework for reinstatement of fares for use in the event that the Board of Trustees decides to reinstate fare collection in FY2024. Upon vote by roll call, the motion was carried unanimously.

VI. Zero Emission Transition Plan

Jay Heikes' presentation is attached and hereby made a part of these minutes. He explained that GoTriangle received a grant for two battery-electric buses which were deployed in January 2020. An additional five battery-electric buses are expected to be deployed in 2025. GoTriangle is submitting a low-no emission grant application this year for the charging infrastructure to support the new buses. The grant application requires that GoTriangle adopt a Zero Emission Transition Plan.

Heikes explained that components of the plan and GoTriangle's short-term and long-term approach to zero emission transition.

Branch left.

GoTriangle will update its bus plan and short range transit plan in order to complete a fleet composition analysis and regional electric charging analysis and develop a fleet composition goal and strategy

VII. Adjournment

Action: Chair Parker adjourned the meeting at 9:52 a.m.

Prepared by:

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

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee

FROM: Planning and Development

DATE: May 18, 2023

SUBJECT: Route 305 Service Change Recommendation

Strategic Objective or Initiative Supported

1.2 Pursue service improvements and expansion opportunities

Action Requested

Staff requests that the Operations and Finance Committee recommend approval of the proposed Route 305 service change to the Board of Trustees.

Background and Purpose

Staff is proposing a schedule expansion to Route 305 (Holly Springs- Apex- Raleigh) to provide all-day service to the Town of Apex. The route currently serves downtown Raleigh, North Carolina State University (Main Campus), WakeMed Cary, Lake Pine Plaza Park and Ride, and Ting Park Park and Ride, primarily during peak hours. The current schedule is below.

HOLLY SPRINGS TO APEX TO RALEIGH							RALEIGH TO APEX TO HOLLY SPRINGS						
Main St at Center St (Holly Springs) (NB) #1725	Sportsmanship Way at Ting Park (P&R) #1721	Apex Peakway at Cambridge Village #1183	Lake Pine Plaza (P&R) #1720	Tyvon Rd at Kilbaine Farm Rd (WakeMed Cary) #1345	Western Blvd at Dan Allen Dr (NC State Main Campus) #1227	Wilmington St at Hargett St (GoRaleigh Station) #1734	Wilmington St at Hargett St (GoRaleigh Station) #1734	Western Blvd at Morrill Dr (NC State Main Campus) #1301	Tyvon Rd at WakeMed Cary #1318	Lake Pine Plaza (P&R) #1720	Apex Peakway at Cambridge Village #1183	Sportsmanship Way at Ting Park (P&R) #1724	Main St at Center St (Holly Springs) (NB) #1726
1	2	3	4	5	6	7	7	6	5	4	3	2	1
6:43 AM	6:47 AM	6:56 AM	7:11 AM	7:20 AM	7:44 AM	7:55 AM	8:00 AM	8:09 AM	8:30 AM	8:38 AM	8:50 AM	-	-
7:43 AM	7:47 AM	7:56 AM	8:11 AM	8:20 AM	8:44 AM	8:55 AM	9:00 AM	9:09 AM	9:30 AM	9:38 AM	9:50 AM	-	-
8:43 AM	8:47 AM	8:56 AM	9:11 AM	9:20 AM	9:44 AM	9:55 AM	10:00 AM	10:09 AM	10:30 AM	10:38 AM	10:50 AM	-	-
-	-	9:56 AM	10:11 AM	10:20 AM	10:44 AM	10:55 AM	-	-	-	-	-	-	-
-	-	10:56 AM	11:11 AM	11:20 AM	11:44 AM	11:55 AM	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3:00 PM	3:10 PM	3:34 PM	3:48 PM	4:00 PM	-	-
-	-	-	-	-	-	-	4:00 PM	4:10 PM	4:34 PM	4:48 PM	5:00 PM	-	-
-	-	4:05 PM	4:16 PM	4:22 PM	4:44 PM	4:55 PM	5:00 PM	5:10 PM	5:34 PM	5:48 PM	6:00 PM	5:11 PM	5:15 PM
-	-	5:05 PM	5:16 PM	5:22 PM	5:44 PM	5:55 PM	6:00 PM	6:10 PM	6:34 PM	6:48 PM	7:00 PM	6:11 PM	6:15 PM
-	-	5:56 PM	6:07 PM	6:13 PM	6:35 PM	6:45 PM	7:00 PM	7:09 PM	7:30 PM	7:38 PM	7:50 PM	7:11 PM	7:15 PM

The proposed service change will deliver midday service to Apex, resulting in hourly service from 7:00 AM to 7:00 PM. Offering midday service will provide an all-day connection for residents to travel between Apex and Raleigh. The change will also provide better connections to the GoRaleigh system and GoTriangle routes 100 and 300.

Funding for expanding Route 305 was originally included in the FY21 Wake Transit Work Plan, but implementation has been on hold due to GoTriangle's operator shortage. Staff will assess adding bi-directional travel to Holly Springs later this fiscal year as operator numbers continue to rise and more service can be provided.

The service change has a proposed effective date of August 7, 2023. The change will be accompanied by a minor schedule change to route(s) 100, 400, 700, 800, CRX, and DRX. GoTriangle plans to restore the CRX and DRX express routes to the January 2020 Pre-Pandemic level of service and restore Saturday service on routes 100, 400, 700, and 800. GoTriangle also plans to restore the 800S will be into the 800-weekday schedule for a more frequent connection between Southpoint and Chapel Hill. These changes do not require Board approval and will be implemented in August if operator numbers support restoration.

Title IV Analysis

A Title IV Equity Analysis was conducted for the proposed service changes. None of the changes proposed in the August Service Change would impact low-income or minority communities in a disproportionate or disparate way.

Financial Impact

This service expansion represents an increase of 6 daily revenue hours of service, which equates to a cost of \$190,000 based on GoTriangle's FY23 budgeted cost per hour. Funding for this expansion is included in the Recommended FY24 Wake Transit Work Plan.

Attachments

- August 2023 Service Change Title VI Analysis

Staff Contacts

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- Austin Stanion, Int. Transit Svc. Planning Supvr., 919-485-7451 astanion@gotriangle.org
- Meg Scully, Planning Manager, 919-485-7451, mscully@gotriangle.org
- Katharine Eggleston, Chief Dev't. Officer, 919-485-7564, keggleston@gotriangle.org



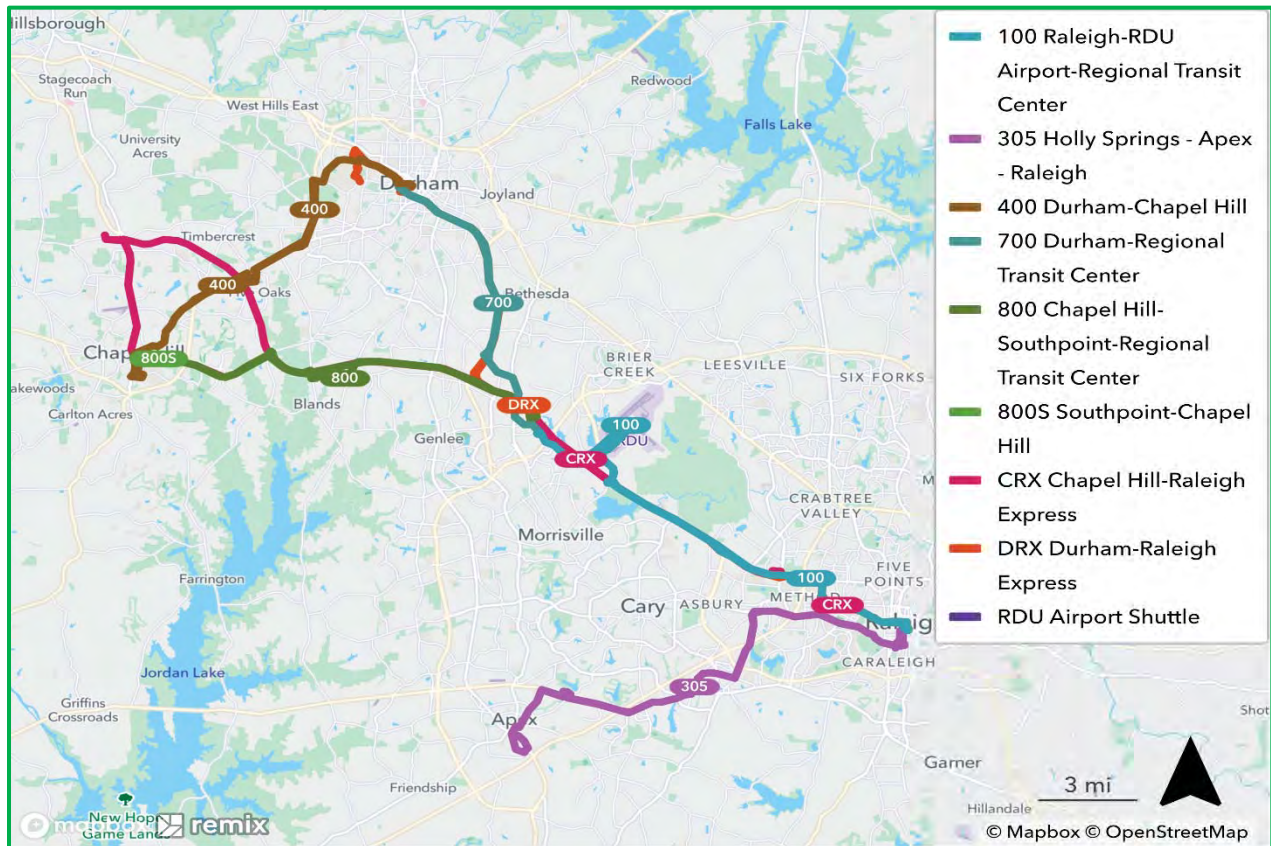


Title VI Service Equity Analysis

Restoration: RDU Shuttle, 100, 700, 800, 800S, CRX, DRX

Expansion: 305

August 2023



Introduction

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is an analysis of the GoTriangle proposed service changes for August 2023.

Proposed Service Changes

GoTriangle is proposing a service change to restore suspended trips on routes 100, 400, 700, 800, 800S, RDU Shuttle, CRX, and DRX, and to expand Route 305 to provide midday service to Apex. The improvements will reinstate service levels to pre-pandemic levels and provide more frequency. The expansion on the route 305 will provide all day connections from the Town of Apex to GoRaleigh Station. All of the service changes proposed are beneficial (increases in service).

Route	Current Service	Proposed Change
100 Raleigh-RDU Airport- Regional Transit Center	60-minute headways on Saturdays, deviates to airport	30-minute headways on Saturdays, does not deviate to airport
305 Holly Springs - Apex - Raleigh	Peak service only	Add midday service between Apex and Raleigh
400 Durham-Chapel Hill	60-minute headways on Saturdays	30-minute headways on Saturdays
700 Durham-Regional Transit Center	60-minute headways on Saturdays	30-minute headways on Saturdays
800 Chapel Hill-Southpoint- Regional Transit Center	60-minute headways on Saturdays	30-minute headways on Saturdays
800S Southpoint-Chapel Hill	No service	30-minute headways during weekday peak periods
CRX Chapel Hill-Raleigh Express	Limited peak service	Additional peak trips
DRX Durham-Raleigh Express	Limited peak service	Additional peak trips
RDU Airport Shuttle	No service on Saturdays (airport coverage provided on Route 100)	30-minute headways on Saturdays

Figure 1. Displays current route and level of service and proposed August service change.

Title VI Definitions

Minority Population

According to FTA Circular 4702.1B, a minority person is defined as an individual identifying as:

- American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.

Minority populations are defined by FTA as any readily identifiable group of minority persons who live in geographic proximity, or who may be geographically dispersed, but who may be similarly affected by a proposed action.

Low-Income Population

According to the FTA circular, low-income means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines or within a locally developed income threshold that is at least as inclusive as these guidelines. As described in the following section, GoTriangle's policy defines low-income persons as those with household incomes below 150 percent of the federal poverty level for a regionally average household size.

Low-income population is defined by FTA as any readily identifiable group of low-income persons who live in geographic proximity or who may be geographically dispersed, but who may be similarly affected by a proposed action.

The FTA circular on Title VI compliance states that while low-income populations are not a protected class under Title VI there is an "...inherent overlap of environmental justice principles in this area, and because it is important to evaluate the impacts of service and fare changes on passengers who are transit-dependent, FTA requires transit providers to evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes."

GoTriangle Policies

The GoTriangle Board of Trustees adopted three policies in June 2014 related to Title VI that guide this analysis as required by the Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012.:

- Major Service Change Policy
- Disparate Impact Policy, and
- Disproportionate Burden Policy.

The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

Note: Due to service suspensions from impacts of Covid-19 and operator shortages, GoTriangle is currently operating fewer than 50 vehicles in peak service. However, staff has conducted this analysis for consistency with past practice and to ensure we are providing fair and equitable service to the communities served by our routes.

Major Service Change Policy

A "major service change" is defined as follows:

- The addition or elimination of a route
- A change in at least 25 percent of an existing route's pattern, measured in route-miles
- The expansion or reduction in the span of service or frequency of service on any route by at least 25 percent, measured in revenue vehicle hours
- The expansion or reduction in regular days of service on any route

The following types of activities are not classified as "major service changes" and shall not require that a Service Equity Analysis be conducted:

- Service for special events
- Routing changes to address construction or road closures
- Added service operated during emergencies

Disparate Impact Policy for Major Service Changes

The FTA circular identifies disparate impacts as a “facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient’s policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.”

These disparate impact policies establish thresholds for determining when impacts of major service changes by each respective agency disproportionately affect minority populations. The thresholds apply to the difference in impacts of the proposed service change between minority populations and non-minority populations, measured by using the service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by minority populations.

Disproportionate Burden Policy for Major Service Changes

Disproportionate burden addresses impact to low-income populations. The FTA circular defines disproportionate burden as “a neutral policy or practice that disproportionately affects low-income population’s more than non-low-income populations.”

These disproportionate burden policies establish thresholds for determining when impacts of major service changes by each respective agency disproportionately affect low-income populations. The thresholds apply to the difference in impacts of the proposed service change on low-income populations compared to the impacts on other populations, measured by using service population or ridership of the affected route(s) compared with the service population or ridership of the system.

For Service Equity Analyses, a threshold of 10 percent shall be used by GoTriangle to determine if the effects of a proposed service change are borne disproportionately by low-income populations.

Methodology

The methodology listed below was used to assess the impacts of each route:

1. Identify the current and proposed alignments for each route in Remix route planning software
 - The alignments for the current and proposed alignments were stored in Remix under two different projects.
2. Capture the populations surrounding each route, including the low-income and minority populations of each route.
 - Remix provides the low-income and minority population percentages for the buffers surrounding each alignment both before and after the service change.
3. Use Remix to calculate the change borne by low-income and minority populations
 - The Remix Title VI engine is capable of calculating the differences in low-income and minority populations within ¼ mile of the current and proposed alignments. Remix can also calculate the total people-trips, low-income people-trips, and minority people-trips as well as the differences of all people-trips between current and proposed alignments.

4. Aggregate the total populations and low-income/minority percentages of current alignments
 - The average of total populations served by each route pattern and sum of total annual trips made by all patterns were taken to represent the total population and total annual trips for the route. The route's low-income and minority averages within ¼ mile were provided by Remix.
5. Calculate low-income and minority people-trips and find the difference before and after service changes
 - After making the correct aggregations, the average ¼ mile population and the total number of annual trips per route were automatically calculated
6. Determine the difference in minority people-trips and low-income people-trips for the system overall with proposed changes
 - The difference is calculated by subtracting the area average of low-income and minority populations from the 'change borne' percentage of each category. If the difference exceeds 10%, that means there is a disparate or disproportionate impact.

Results

For proposed service changes, the percentages of affected minority and low-income populations is calculated and evaluated according to the disparate impact and disproportionate burden policy. If the percentage of proposed service change affects minority and/or low-income populations within the service change area by more than 10%, then the recommended service change is determined have a disparate impact to minority populations and/or disproportionate burden to low-income populations.

Disparate and Disproportionate Impact Analysis

The Title VI analysis for proposed service changes was conducted based on the service area population that is within one quarter-mile (.25 mi) from the route(s). The service area population for the affected routes is 1,580,405 persons. The percentage of low-income population in that service area is 16.1% and the percentage of minority population is 43.5%. Comparing GoTriangle current service to the proposed service change, there are a total of 420,584,195 people-trips gained annually. People-Trips are calculated by multiplying area population and annual route trips. 108,255,934 (25.7%) of those trips are by low-income persons, and 148,939,970 trips are by minority persons (35.45%).

Low-income population accounts for 16.1% of the service area population. GoTriangle defines low-income as individuals with household incomes 1.5 times the Census-defined poverty rate for a regionally average household size. The low-income change borne from the proposed service change is 25.7%. The delta is +9.6%; the low-income delta is calculated by subtracting the area average from the change borne (25.7%-16.1%). As a result, there is no disproportionate impact on low-income persons—low-income populations are projected to benefit proportionally more from this change.

The Minority population in the service area represents 43.5%. The change borne is 35.4%, which produces a delta of –8.1%. There is no disparate impact on minorities based on GoTriangle's Disparate and Disproportionate Burden policy threshold of 10%.

People-trips Gained	Total people-trips	Low-income people-trips	Minority people-trips
Trips (% of people-trips)	420,584,195 (100%)	108,255,936 (25.7%)	148,939,970 (35.45%)

Figure 2. Analysis was conducted using Remix by Via Software. This chart represents the number of people trips gained annually upon implementation of the August 2023 service change. Data reflected are estimates of new trips available with the proposed schedules.

Impact Analysis Table	Low Income	Disproportionate Burden?	Minority	Disparate Impact?
Change Borne (Delta)	25.7% (9.6%)	No	35.4% (-8.1%)	No
Service Area Average	16.1%		43.5%	

Figure 3. Analysis was conducted using Remix by Via Software, chart compares the impact to the minority and low-income population of the proposed service change. Data reflected are estimates of trips available by the current and proposed schedules.

Route	People-Trips (Population * Trips)	Low Income People-Trips	Minority People-Trips
100 Raleigh-RDU Airport-Regional Transit Center	28,233,480	7,087,666	7,364,280
305 Holly Springs - Apex - Raleigh	105,501,660	17,174,336	39,082,065
400 Durham-Chapel Hill	27,685,680	11,448,311	11,820,160
700 Durham-Regional Transit Center	3,504,805	773,494	1,713,940
800 Chapel Hill-Southpoint-Regional Transit Center	18,001,980	3,829,717	5,679,360
800S Southpoint-Chapel Hill	100,882,080	24,259,667	30,520,440
CRX Chapel Hill-Raleigh Express	49,933,845	15,675,880	15,150,315
DRX Durham-Raleigh Express	85,609,875	27,866,836	36,924,000
RDU Airport Shuttle	1,230,790	140,030	685,410
Total	420,584,195	108,255,936	148,939,970

Figure 4. The table indicates the additional people-trips, low-income trips, and Minority trips by route following the implementation of the proposed service change. Analysis was conducted using Remix by Via Software, chart compares current route and schedule to August 2023 service change. Data reflected are estimates of trips available by the proposed schedules.

Conclusions

The changes proposed in the August Service Change will not impact low income or minority communities in a disproportionate or disparate way. The changes will be expanding service and restoring service that was suspended due to COVID-19. These changes will provide more trips to the population within the service area. Changes will positively affect the communities served. Changes are aligned with our strategy to return pre-Pandemic service frequency and offer more service in the Town on Apex.

*Connecting all points of the Triangle*

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Planning and Development
DATE: May 22, 2023
SUBJECT: Microtransit Service Contracts

Strategic Objective or Initiative Supported

1.1 Increase number of customers served with sustainable transportation services

Action Requested

Staff requests that the Board of Trustees authorize the CEO and President to award and execute contracts with Uber, Lyft, National Express Transportation (in partnership with Spare Labs), and River North (Via) for microtransit services, with total costs allocated across the four contracts not to exceed \$1.6M for the initial two-year term.

Note: Contracts for service will not guarantee a particular level of rides to any particular service provider.

Background and Purpose

GoTriangle currently operates three microtransit zones (RTP Connect, East Durham Connect, and North Durham Connect) with a voucher-based program via contract with Lyft. In April 2023, The RTP Zone served 503 rides, the East Durham Zone serviced 1,988 rides, and the North Durham Zone serviced 9,151 rides.

Earlier this year, GoTriangle publicly advertised a competitive opportunity to provide similar microtransit services going forward to support GoTriangle's existing zones, with flexibility to support changes to the zone geographies and program rules, and to support expansion of the program to new zones throughout the region over the upcoming two to five years.

Four vendors submitted proposals for this opportunity. A selection committee including GoTriangle staff and representatives from the City of Durham and Research Triangle Foundation evaluated the proposals and recommended awarding contracts to all four vendors.

The ability to select between multiple service providers will give GoTriangle the flexibility to provide microtransit service that best serves each service zone's unique use-case, and give riders the ability to choose their preferred service. Contracts for service will not guarantee a particular level of rides to any particular service provider.

Financial Impact

The recommended FY24 Durham County Transit work plan includes \$679,355 for the North Durham and East Durham Zones. The recommended GoTriangle budget for FY24 includes \$100,000 for the RTP Connect Zone. The costs for the RTP Connect Zone are split with the Research Triangle Foundation.

The four contracts will be managed within the overall annual budget available, with total costs over the initial two-year term anticipated not to exceed \$1.6M. If expansion zones are identified and funded during the initial two-year term that would require an increase to this \$1.6M total contract cap, appropriate additional authorization would be obtained at that time.

Attachments

- None

Staff Contacts

- Austin Jude Stanion, 919-485-7451, astanion@gotriangle.org
- Meg Scully, Planning Manager, 919-485-7451, mscully@gotriangle.org
- Katharine Eggleston, Chief Dev't. Officer, 919-485-7564, keggleston@gotriangle.org



*Connecting all points of the Triangle*

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Planning and Development
DATE: May 25, 2023
SUBJECT: North Durham and East Durham Microtransit Pilot Evaluation

Strategic Objective or Initiative Supported

1. 5 Maintain cost-effectiveness

Action Requested

None.

Background and Purpose

The first phase of microtransit pilot funded by the Durham Transit Plan began in March 2022 and is scheduled to end June 30, 2023. The service will continue after this date with modified program rules described in this memo. The program currently has two zones: one in northern Durham and one in east Durham. The service is operated by Lyft. The program currently provides a subsidy of up to \$25 per trip for trips within each zone (not between zones). GoTriangle manages the program including administration, planning and contracting. The pilot was developed in collaboration with the City of Durham and Durham County.

The program evaluation found that the service has been successful in several regards, providing a flexible mobility service with usage exceeding expectations. However, service in the northern zone is currently being consumed at a rate which is not financially sustainable under the program's budget allocated in the Durham Transit Plan (growing from about \$1,000 per month to over \$117,000 per month between December 2022 and April 2023 with an original total program budget of \$164,250 for FY23), and many trips were found to be duplicative of fixed route service which does not align with the program's goal of providing mobility to transit deserts.

GoTriangle staff has coordinated with City of Durham, Durham County, and DCHC MPO staff to review the results of the pilot program evaluation. Through the Durham Transit Plan Staff Working Group, Durham County, DCHC MPO, and GoTriangle staff have recommended maintaining the programmed budget for FY24 which, if adopted by the governing boards, will necessitate program design changes to keep the program within budget.

To conform the program's design with the adopted goals and budget allocated in Recommended FY24 Durham Transit Work Program, GoTriangle plans to make the following program changes on July 1:

- Reduce the size of the service zone to the original service zone identified in 2017 GoDurham SRTP and studied in the 2020 Microtransit Study, with the addition of the Treyburn region in the Northeast to provide access to the job centers there
- Limit the number of trips by a single passenger to 60 per month, compared to the current cap of 120 per month
- Continue to regularly evaluate performance of the service and consider additional changes in the future

City of Durham staff has expressed concerns about the proposed changes because they will result in reduced ridership and options for customers, particularly in areas that will be removed from the North Durham zone. The City of Durham is pursuing opportunities to incorporate lessons learned from this microtransit pilot to improve their demand-response service options include commencing a Durham County Transit Plan funded study of the service. Staff will also collaborate with the City to market the fixed route and other demand response services that continue to serve the area.

Financial Impact

None.

Attachments

- Durham Transit Plan Funded Microtransit Pilot Evaluation Report

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Durham Transit Plan Funded Microtransit Pilot Evaluation

GoTriangle – May 24, 2023

Executive Summary

- The Durham Transit Plan funded microtransit initial pilot period will end June 30, 2023. GoTriangle operated two zones during the pilot period: one in east Durham and one in north Durham. The cost to operate the north Durham zone quickly exceeded the budget and additional funding was required to complete the full duration of the pilot period without changes to the program design. GoTriangle staff has performed an evaluation to identify changes to the program design necessary to operate the program within budget in FY24.
- The evaluation found that both the East Zone and North Zone were successful, providing a flexible mobility service with usage meeting or exceeding expectations. However, service in the North Zone is being consumed at a rate which is not financially sustainable under the program's budget (growing from about \$1,000 per month to over \$117,000 per month between December 2022 and April 2023 with an FY23 total program budget of \$164,250), and was found to be duplicating fixed route service, in contrast to the program's goal of providing mobility to transit deserts. The chart below shows the rapid growth of costs and rides in the North Zone.

	Dec	Jan	Feb	March	April
East Durham Cost	\$ 2,127.36	\$ 10,113.31	\$ 14,467.19	\$ 18,620.55	\$ 21,678.02
East Durham Rides Completed	204	1,004	1,306	1,733	1,988
North Durham Cost	\$ 1,010.29	\$ 31,301.92	\$ 73,533.72	\$ 115,157.20	\$ 117,309.16
North Durham Rides Completed	81	2,455	5,302	8,417	9,151

- More than 60% of trips in the North Zone began and ended within ¼ mile of a fixed route bus stop. These trips are considered duplicative of fixed route service, which is outside of the scope of the original intent of this program. Additionally, 85% of trips began or ended outside the originally studied service area.
- To operate the program within the budget allocated in the recommended FY24 Durham Transit Work Program, the following program design changes are recommended to allow for continued provision of a reliable mobility option in transit deserts while also accommodating new riders and program growth:
 - Revising the service zone to the original service zone identified in 2017 GoDurham Short Range Transit Plan and studied in the 2020 Microtransit Study, with the addition of the Treyburn region in the Northeast to provide access to the job centers there
 - Reducing the number of subsidized trips allowed for each passenger from 120 per month to 60 per month
- The next phase of implementation will be considered a continuing pilot, as continued evaluation of use may result in recommendations for additional program rule changes that were discussed during this evaluation but ultimately not recommended at this time. Examples include a possible requirement that at least one end of each trip originate far from a fixed route bus stop or a requirement that passengers pay a small fare for each trip (copay).

Introduction

This report analyzes the current Durham Transit Plan funded microtransit pilot program that began with the earliest implementation of East Durham Zone in March 2022 followed by the North Durham Zone in November 2022. The pilot is funded through the Durham County Transit Plan and operated by Lyft. GoTriangle manages the program including administration, planning and contracting. The pilot program rules were developed in collaboration with the City of Durham and Durham County. This report introduces the findings, describes the program's inception and goals, service parameters and existing conditions, documents analysis of the data and rider use, behavior, and trends, and concludes with recommended mitigations to provide for a financially sustainable program upon completion of the initial pilot phase on June 30, 2023.

The current rate of utilization of the North Zone service is financially unsustainable within the program's budget allocated in the Recommended FY24 Durham Transit Work Program. The FY23 program budget of \$164,250 was exceeded during the fourth month of the North Durham zone implementation, and additional funding was required to complete the full duration of the pilot period without changes to the program rules. The analysis in this report determined that generally the higher costs are due to deviations in the pilot program design from the original program purpose. More than 60% of trips taken within the North Zone both originated and ended within a quarter-mile radius of a fixed-route bus stop; in other words, more than 60% of trips were duplicative of fixed-route service and therefore beyond the program's original purpose to provide a mobility option in areas of Durham that are not served by fixed-route buses.

To operate the program within the budget allocated in the recommended FY24 Durham Transit Work Program, the following program design changes are identified to allow for continued provision of a reliable mobility option in transit deserts while also accommodating new riders and program growth:

- Revising the service zone to the original service zone identified in 2017 GoDurham Short Range Transit Plan and studied in the 2020 Microtransit Study, with the addition of the Treyburn region in the Northeast to provide access to the job centers there
- Reducing the number of subsidized trips allowed for each passenger from 120 per month to 60 per month

It is also suggested that the City and County explore ways to operationalize some of the other benefits observed in the pilot that were determined to be outside of the microtransit program scope but are nonetheless beneficial to mobility, such as enhancing the GoDurham ACCESS program to provide more responsive and less expensive service as well as implementing the northern Durham fixed route expansion as recommended in the Durham County Transit Plan as soon as possible. These measures would provide similar mobility benefits achieved in the microtransit pilot through more financially sustainable transit services.

As an emerging mode of transportation that is inherently flexible, the microtransit program will continue to evolve. GoTriangle will continue to closely evaluate the program and recommend needed changes to ensure that the program is financially sustainable and that usage is aligned with the program's goals and community needs. Future program adjustments may be recommended based on

factors including expansion of fixed routes, improvements to the GoDurham ACCESS demand response service, and better pedestrian infrastructure integration at the edges of the fixed-route service area. Through regular and recurring monitoring, data analysis, and responsive adjustments, GoTriangle aims to optimize the microtransit service for those that need it most, while also considering reliability, accessibility, and customer satisfaction.

Program Inception and Goals

These microtransit zones were first identified in the GoDurham Short Range Transit Plan (S RTP), approved by the Durham City Council in 2019, which recommends short range transit plans and programs to address unmet transit needs and streamline service. The zones were further studied in a Microtransit Study conducted in winter and spring of 2020 by Nelson Nygaard.

The GoDurham S RTP identified six areas in Durham with potentially unmet needs, including north Durham and east Durham. While the north and east areas have some fixed route transit routes near high-density areas, there are also low-density outskirts that are considered far from these fixed route options. The planning consultants from Nelson Nygaard, who led the development of the Durham S RTP, recommended microtransit in these areas.

The Durham Transit Plan funded microtransit pilot program provides valuable service for people who may not have access to a car or have limited access to public transportation. GoTriangle contracts with Lyft to operate the microtransit service, which enhances connections to the GoDurham fixed-route network. Lyft provides a zone-based, curb-to-curb service, and the program subsidizes the cost of rides up to \$25 per trip. This on-demand last-minute transportation service offers first-mile and last-mile connections to and from the GoDurham fixed-route service. Currently trips can start and end anywhere in the existing zone.

The goal of the program is to increase access to employment, schools, and groceries, while also increasing ridership and mobility in the areas of Durham County that are not well served by fixed-route buses (transit deserts). The current pilot service is specifically targeted towards areas with a high transit propensity and limited or no bus service, within the identified service zones in eastern and northern Durham. Preliminary on-demand service zones identified in the 2020 study were developed based on market review findings, with identified potential service types including a zone-based model and a hybrid zone/hub-based model.

The goals of the microtransit pilot program defined in the 2020 study, prepared by Nelson Nygaard, are shown below.

- **Goal 1: Make Service More Convenient**
 - Preserve and enhance mobility for current customers
 - Expand coverage to areas not served by fixed route
 - Improve the customer experience, including more access, decrease wait and trip times, and ease of use
 - Integrate experience with other modes, including fixed route

- **Goal 2: Connect People to Life's Activities**
 - Improve access to jobs
 - Connect people to healthcare and other social services
 - Design service that will benefit the largest number of people
 - Improve connections to fixed route network
- **Goal 3: Design an Equitable Service that Improves Access to Opportunity**
 - Create shared economic prosperity for disadvantaged populations
 - Address safety concerns around microtransit
 - Build partnerships within each zone to encourage use and improve service
 - Ensure fares are accessible and affordable
 - Design service to meet the needs of those with the fewest mobility options
- **Goal 4: Create a Model That Will Be Sustainable**
 - Understand the financial and technical feasibility of on-demand mobility options
 - Develop services that achieve a high level of public support
 - Learn and test new strategies for leveraging technology to improve the customer experience
 - Generate additional data to understand transit demand and travel flows
 - Gain experience collaborating and contracting with private-sector mobility companies

These goals guide the evaluation of the pilot program in this report, as well as the recommendation for program rule and zone changes as the program moves out of the initial pilot phase.

Service Parameters, Service Areas, and Existing Conditions

The pilot program runs from Monday through Saturday, between 7am and 8pm, and on Sundays between 8am and 7pm. The program currently has two zones. Trips in the East Zone must begin and end within the East Zone, and trips in the North Zone must begin and end within the North Zone; trips from one zone to the other trips originating or ending outside the zone boundaries are not eligible for the program. Additionally, riders who are 17 years old or younger must be accompanied by an adult. Riders with smartphone access can book a subsidized Lyft trip by downloading and opening the app and entering their requested drop-off and pickup locations. Trips may also be arranged by calling the Regional Information Center concierge service to book a trip. The service does not accept cash as a payment option, but unbanked riders can use pre-paid debit cards. Trips can be scheduled in advance or requested on-demand via the Lyft app, with a maximum wait time of 15 minutes and most waits under 10 minutes.

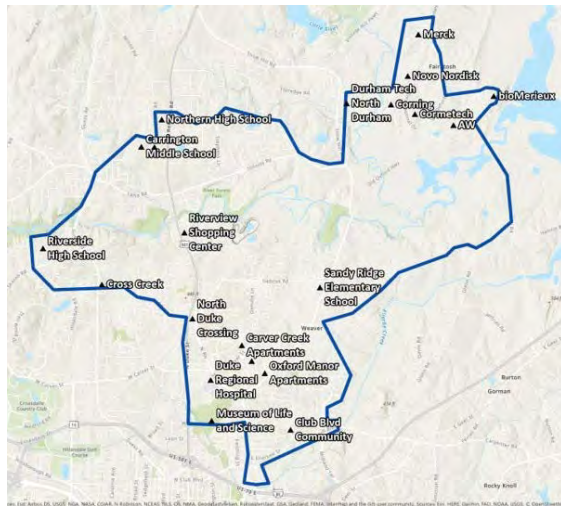
At present, four active GoDurham fixed routes serve North Durham at an average headway of 30 minutes, while one active GoDurham fixed route serves East Durham with a 60-minute headway. Both of the microtransit zones overlap somewhat with areas served by these GoDurham fixed route buses and GoDurham ACCESS ADA paratransit. Additionally, county-funded programs provide limited demand response service throughout the area to eligible passengers (Durham County residents who are disabled, 60 years of age or older, transportation disadvantaged, or live in rural areas of Durham County are eligible for service). The Senior Shuttle also provides scheduled service to shopping from destinations within the north zone.

Detailed information regarding fixed route service, ADA paratransit, and microtransit service is available in the table below.

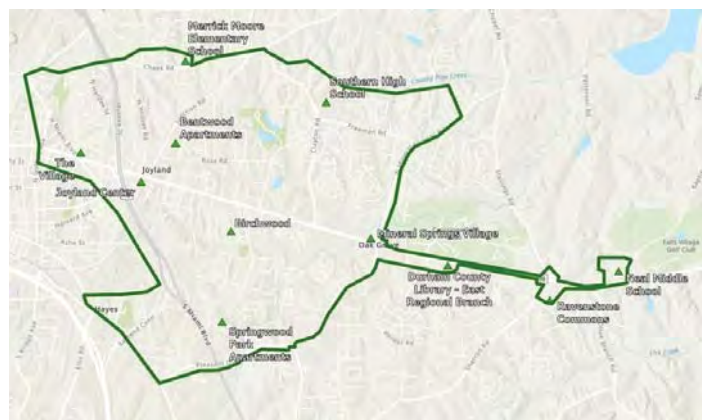
Table 1: Mobility Service in East and North Durham

	Service Hours	Frequency	Booking Options	Service Boundaries
Route 4	6:00am - 12:30am	30 minutes	No Booking Required	North Durham
Route 9	7:00am - 9:30pm	1 hour	No Booking Required	North Durham
Route 9A	6:00am - 12:30am	30 minutes	No Booking Required	North Durham
Route 9B	6:00am - 12:30am	30 minutes	No Booking Required	North Durham
Route 3B	5:00am - 12:00am	1 hour	No Booking Required	East Durham
GoDurham ACCESS	5:30am - 12:30am	ADA/DAR 24-hour reservation required	Mobile Booking, Concierge Call and Advanced Reservation	GoDurham Service Area
GoDurham County ACCESS	5:30am - 12:30am	ADA/DAR 24-hour reservation required	Mobile Booking, Concierge Call and Advanced Reservation	Durham County
USURV	5:30am - 12:30am	ADA/DAR 24-hour reservation required	Mobile Booking, Concierge Call and Advanced Reservation	GoDurham Service Area
GoDurham Senior Shuttle	10:00am - 2:30pm	Weekly grocery access service	No Booking Required	Serves 10 Senior Communities
Microtransit Pilot	7:00am - 8:00pm	MOD Last-minute On-Demand	Mobile Booking and Concierge Call	North and East Durham

The East and North Durham service zones as implemented for the pilot program are shown below.



Map 1: North Durham Expanded Service Zone



Map 2: East Durham Expanded Service Zone

Methodology

Data used in this analysis includes anonymized rider IDs, daily rides, cost per ride, ride distance, time of day, origins, and destinations. The analysis focuses on March 2023, the most recent full month's data available at the time of the analysis.

Lyft provides ridership data via approximate coordinates rather than precise origins and destination addresses to protect passenger privacy. The approximate origin and destination locations are represented on a grid on a map. Each location covers an approximately 0.5x0.5 square mile area. These locations are referred to as quadrants in the analysis, and there are 45 unique quadrants in the North Zone study area. An example of how these quadrants appear on a map is shown below.

The GoTriangle team examined the proximity of microtransit origins and destinations to the current fixed route network and identified three types of trips.

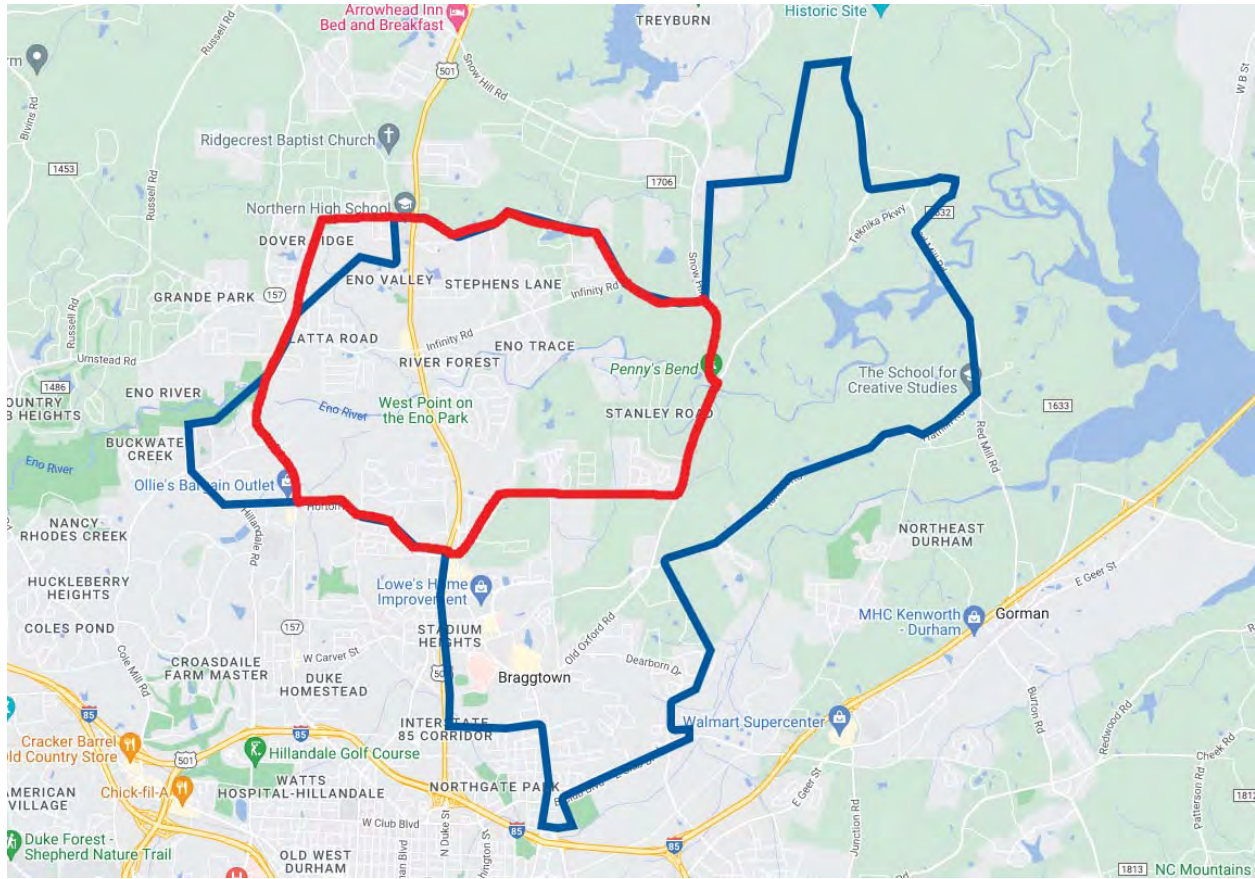
- ## North and East Zone Analysis

North Zone Original and Current Service Zone Analysis

In 2017 the GoDurham STRTP recommended six potential Durham microtransit zones. The 2020 Microtransit Study evaluated three implementation zones. The “original” zone recommended in the STRTP appears in red in the map below. This zone includes an area with limited fixed route transit service and lower densities where fixed route service is not a viable option. Ridership data and budgets were developed for the smaller red zone. During the pilot implementation phase, the north zone was extended to the blue zone boundary illustrated in the map below, beyond the original boundaries recommended by Nelson Nygaard. A map of the original and expanded (current) service zone is shown below.

In RED: Original service zone in 2017 GoDurham SRTP and 2020 Microtransit Study

In BLUE: Expanded (current) service zone that was implemented as pilot zone.



Map 4: Original and Current Service Zones Overlay

Geographic Concentrations

The service zone's expansion significantly contributed to ridership and cost in this zone. In March 2023, 7,270 or 85.83% of rides began and/or ended outside the original zone. This accounted for a cost increase of \$98,554.67 in the month of March alone. Seven of the nine major trip generating locations were outside of the originally studied service zone. Major trip generating locations were defined as quadrants associated with 500 trips or more from December 1, 2022, and March 31, 2023. Nine (out of the total forty-five) quadrants were identified as major trip generators. All seven of the major trip generators that are outside of the original service zone are within 0.25 miles of a fixed-route stop.

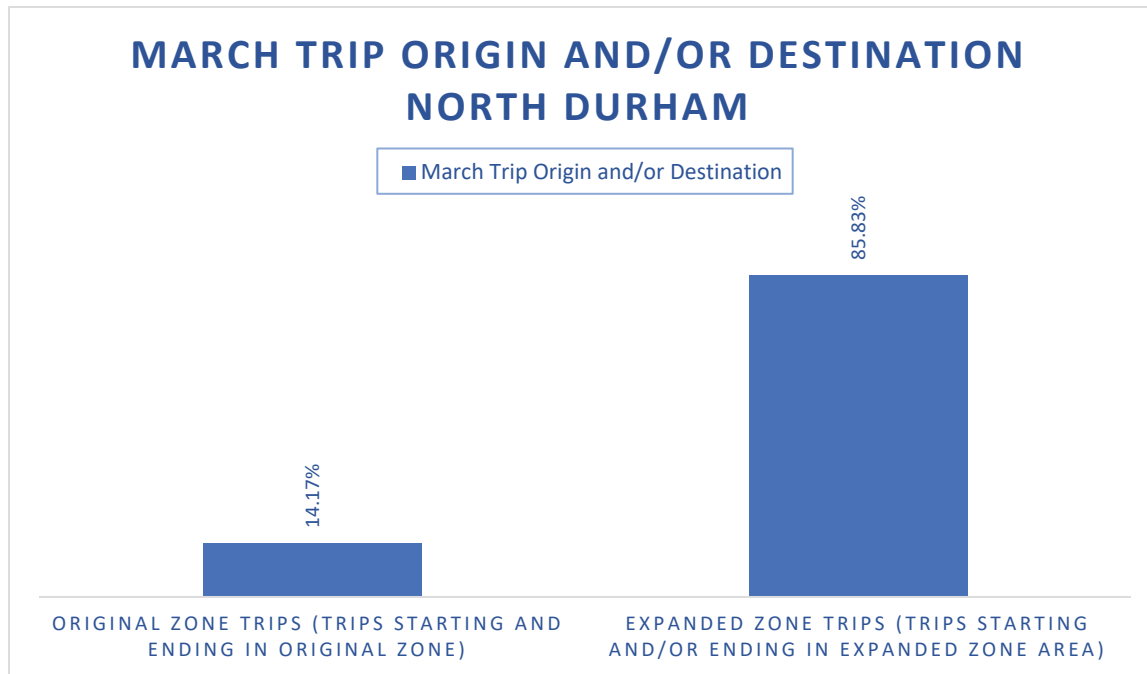


Figure 2: North Durham March Trip Origin and/or Destination

Table 2: North Durham Top Ridership Quadrants

Quadrant Area	Total Trips	Original or Expanded	Proximity to FR Stop
Oxford Commons Commercial Area	3696	Expanded Zone	NEAR FR (1/4 mile)
Mix Low Cost Apartment Residential Housing	1738	Original Zone	FAR FR (over 1/4 mile)
North Duke Mall; Mid Cost Commercial	1363	Expanded Zone	NEAR FR (1/4 mile)
Northern Highschool; Low Cost Family Residential	1272	Original Zone	NEAR FR (1/4 mile)
Red Maple Park Residential Area	1132	Expanded Zone	NEAR FR (1/4 mile)
Duke Regional Hospital; Mixed Low Commercial	978	Expanded Zone	NEAR FR (1/4 mile)
Lakeview Park Residential Area	843	Expanded Zone	NEAR FR (1/4 mile)
Mix Low-Mid Cost Commercial	666	Expanded Zone	NEAR FR (1/4 mile)
Mix Low Cost Commercial	571	Expanded Zone	NEAR FR (1/4 mile)

North Zone Fixed Route Bus Stop Overlap Analysis: From December 1, 2022, through March 31, 2023, 61.54% of all trips started within 0.25 miles of a fixed route bus stop and ended within 0.25 miles of a fixed route bus stop. Because these trips both began and ended near a fixed route bus stop, these trips could have been completed using a bus or paratransit vehicle rather than the microtransit program. These trips added \$133,051.06 to the total cost of the program (60.59% of total cost) during the four-month period studied.

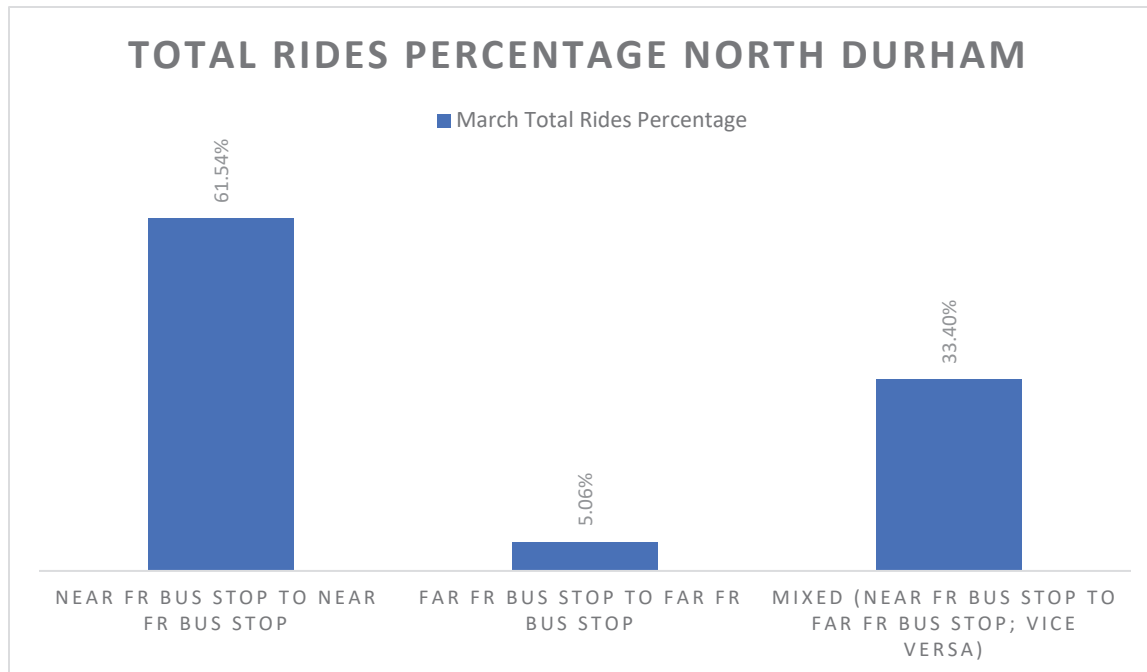
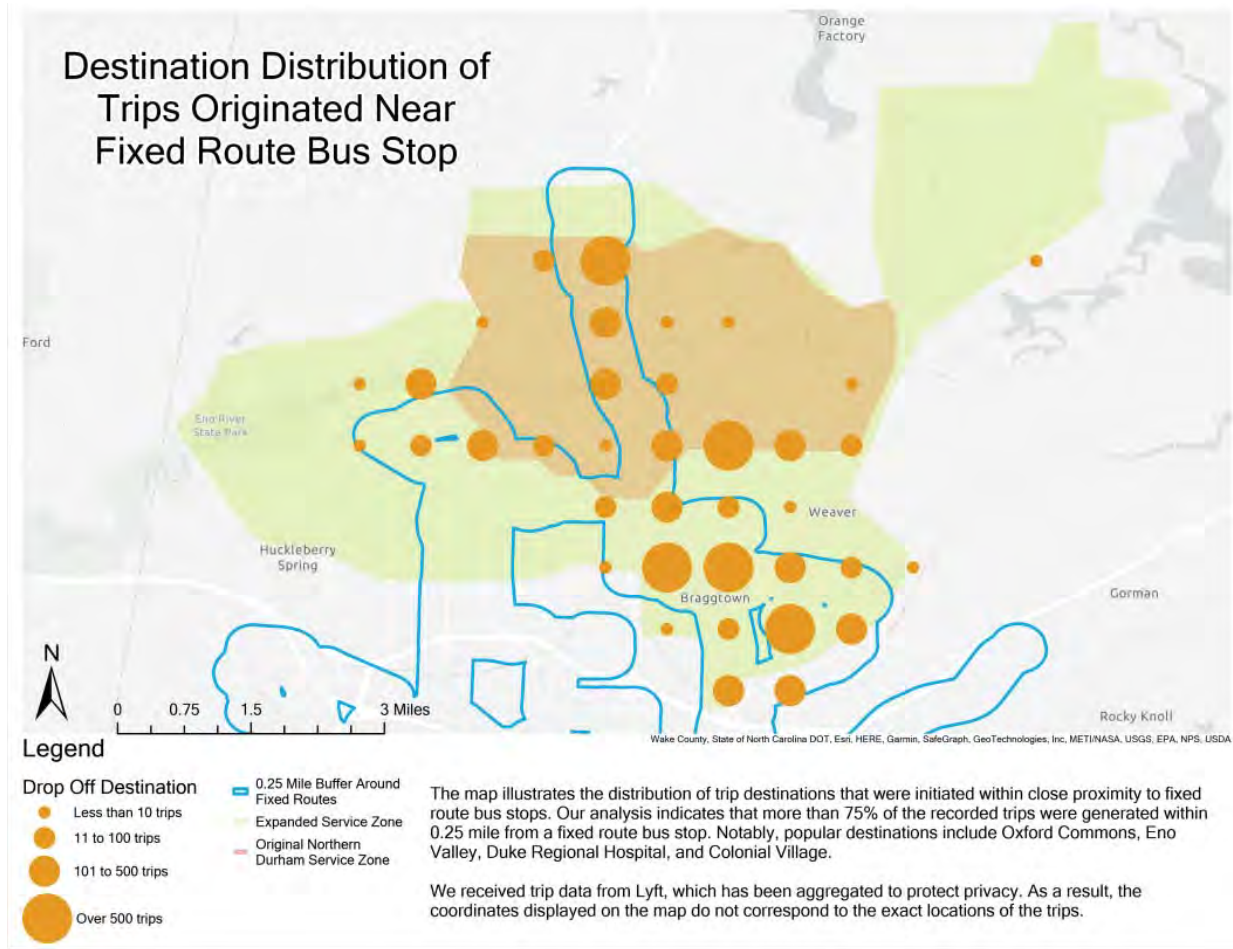


Figure 3: North Durham Total Rides Percentage

Table 3: North Durham Unique Rides Near or Far from a fixed route bus stop (December to March Origins/Destinations)

UNIQUE RIDES NEAR OR FAR FROM A FIXED ROUTE BUS STOP (December to March O/D)			
			% against Total
Near FR to Near FR (1/4 mile to a Bus Stop)	Unique Quadrant Combinations (O/D)	238	35.42%
	Rides	9944	61.54%
	Cost	\$133,051.06	60.59%
Far FR to Far FR (1/4 mile far from a Bus Stop)	Unique Quadrant Combinations (O/D)	91	13.54%
	Rides	818	5.06%
	Cost	\$11,717.67	5.32%
Mixed (Pick up Near FR; Drop off Far FR; Vice Versa)	Unique Quadrant Combinations (O/D)	343	51.04%
	Rides	5396	33.40%
	Cost	\$74,810.63	34.07%
TOTAL UNIQUE QUADRANT COMBINATIONS		672	
TOTAL RIDES		16158	
TOTAL COST		\$219,579.36	

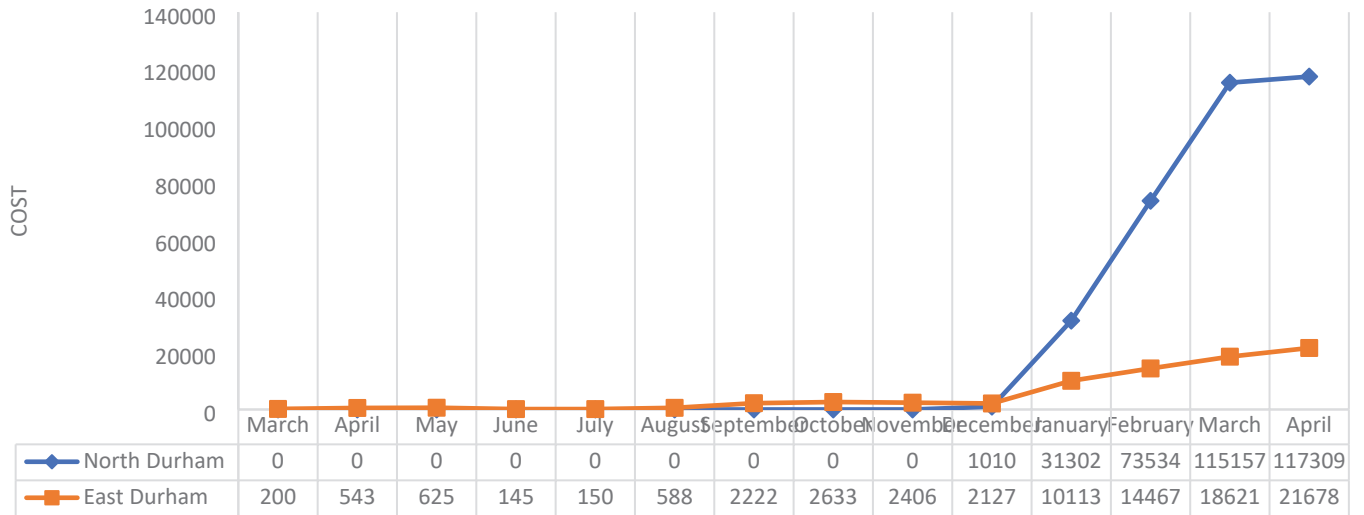
Figure 4: North Durham Destination Distribution of Trips Originated Near Fixed Route Bus Stop



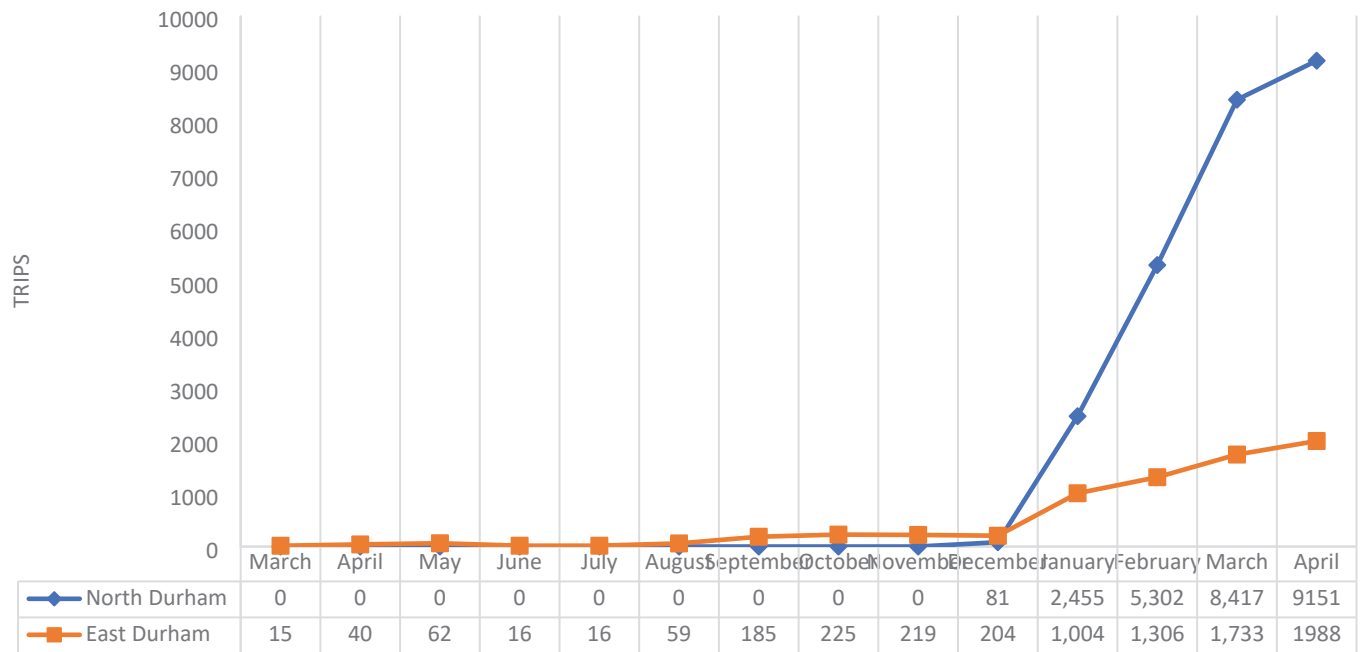
Trends over time

As seen on the chart below, ridership is growing in both the East Durham zone and the North Durham zone. However, ridership and costs in the North Durham zone will quickly outpace the program's FY24 \$679,355 budget for both zones.

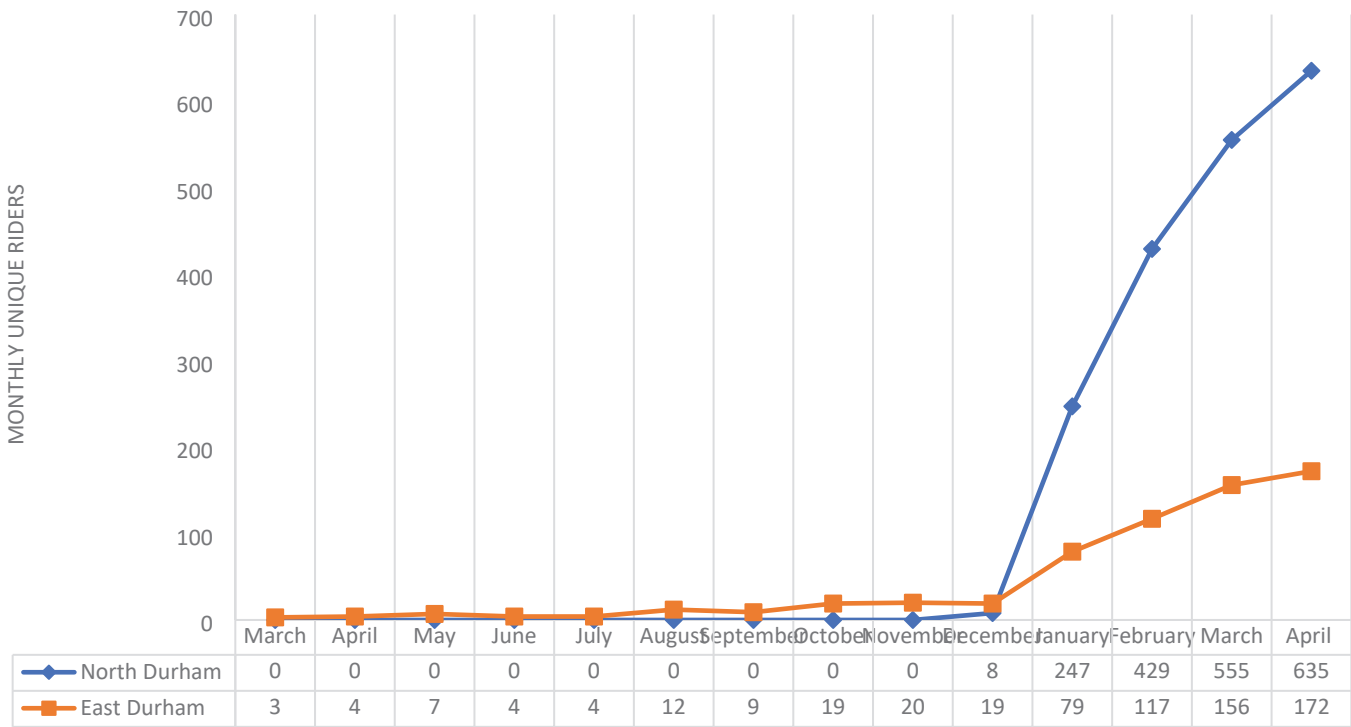
PROGRAM COST TREND OVER TIME NORTH AND EAST DURHAM



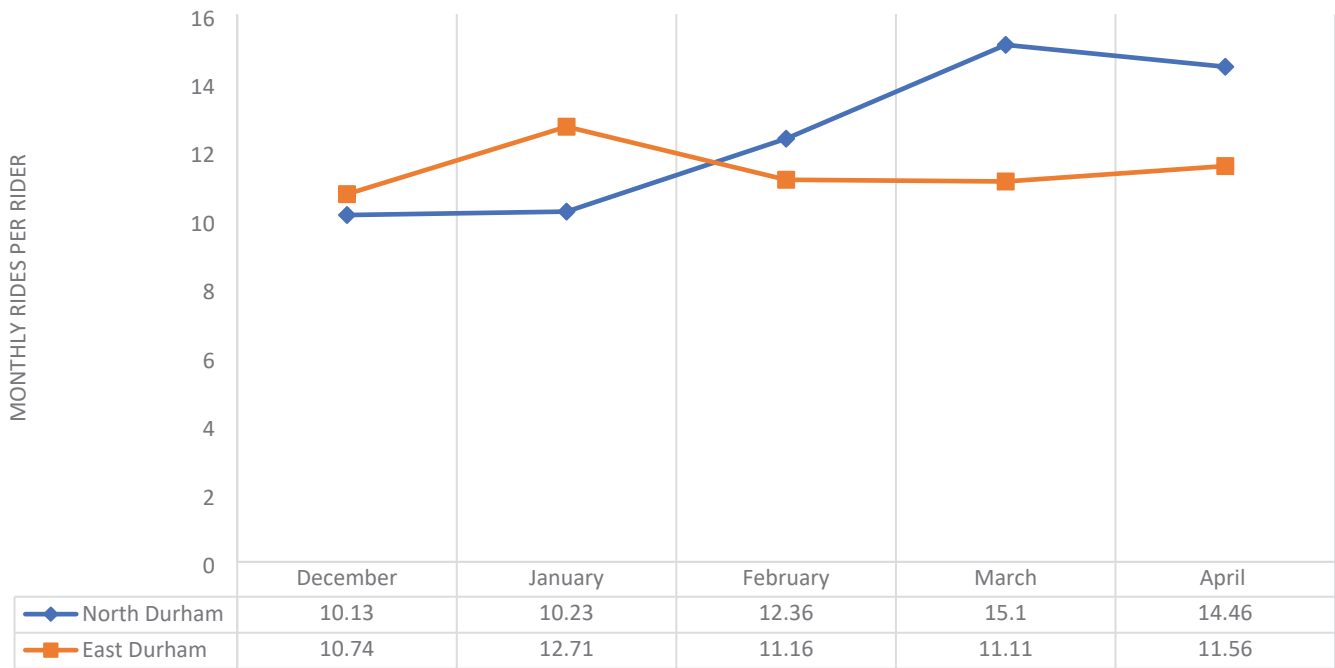
PROGRAM TRIPS TREND OVER TIME NORTH AND EAST DURHAM

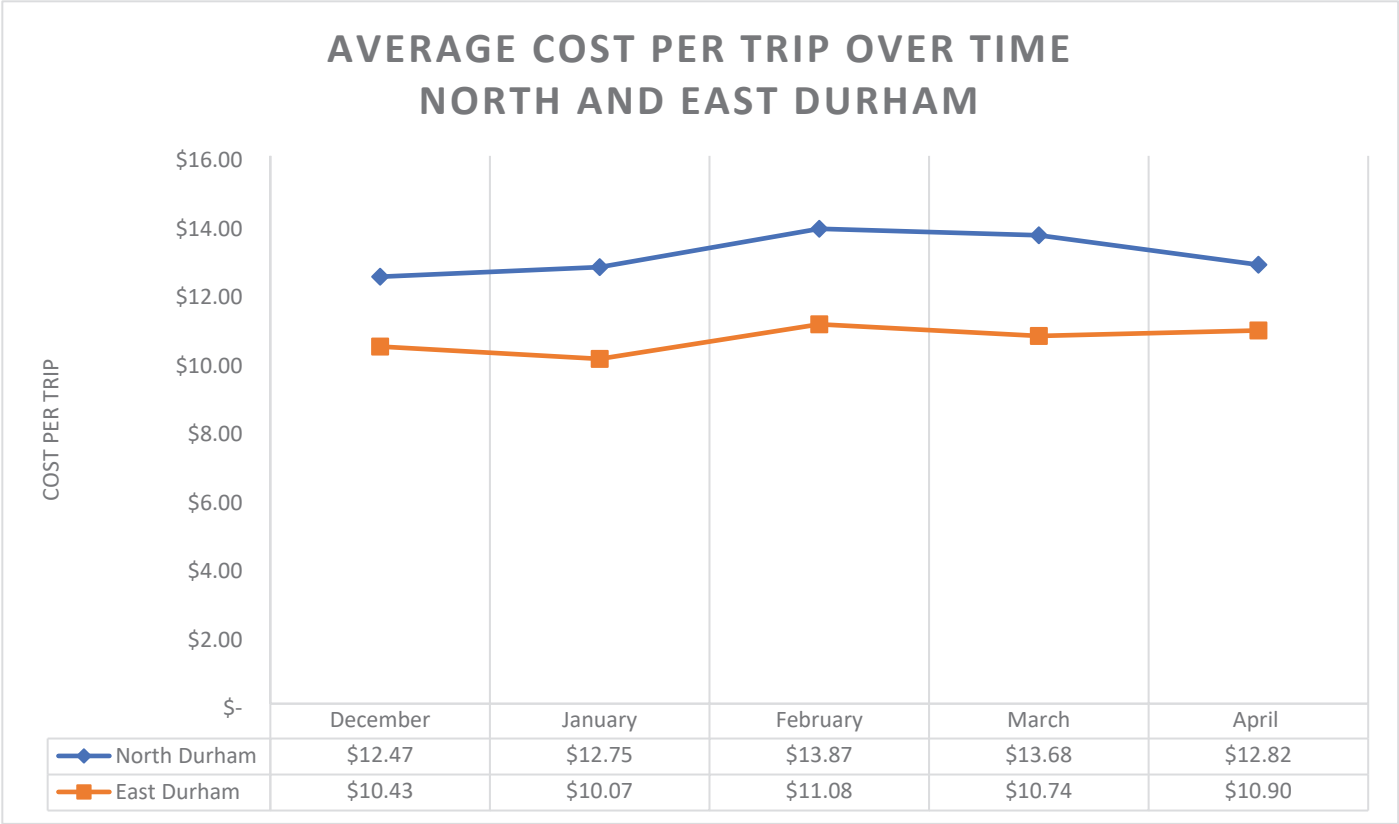


UNIQUE RIDERS: TREND OVER TIME
NORTH AND EAST DURHAM



RIDES PER MONTH PER RIDER: TREND OVER TIME
NORTH AND EAST DURHAM





Superusers and individual rider usage

The pilot program limits riders to 120 rides per month. Most riders consume a small number of trips while a small number of riders are “superusers.” Individual rider behavior was evaluated, including superusers who disproportionately contribute to the monthly number of rides and monthly program cost compared to other riders. From December 1, 2022, through March 31, 2023, of 1,142 unique passengers the following number of trips were consumed:

Figure 9: North Durham Total Unique Rider Trips (December to March)

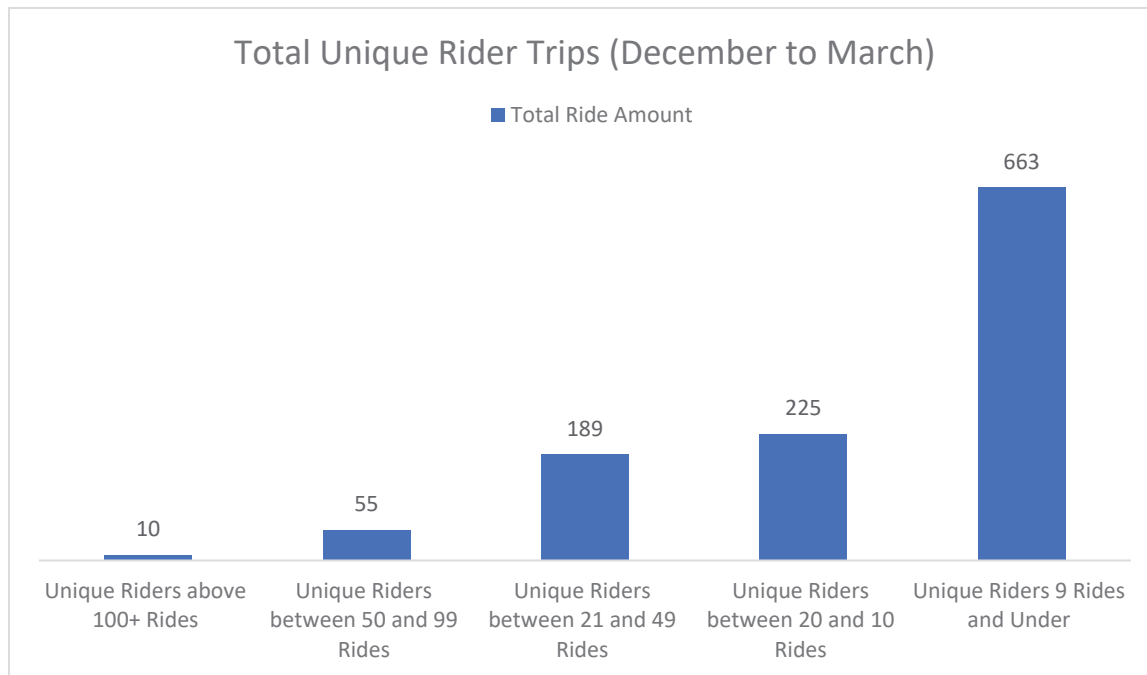


Figure 11: North Durham Microtransit Super Users (December to March)

North Durham Microtransit Super Users All Months			
	Unique Riders	Total Ride Cost	Percentage
Amount of Users Above 100+ Rides	10	\$14,279.52	22.70%
Amount of Users between 50 and 99 Rides	55	\$47,510.81	29.06%
Amount of Users between 21 and 49 Rides	189	\$80,789.86	17.15%
Amount of Users between 20 and 10 Rides	225	\$45,038.53	21.35%
Amount of Users 9 Rides and Under	663	\$32,817.50	9.74%
Total	788	\$220,859.97	100.00%

- 225 riders took 20 rides or fewer each at a total cost of \$77,856.03 (\$87.68/ride)
- 189 riders took between 21 and 49 rides each at a total cost of \$80,789.86 (\$427.46/ride)
- 55 riders took between 50 and 99 rides each at a total cost of \$47,510.81 (\$863.83/ride)
- 10 riders took more than 100 rides each at a total cost of \$14,279.52 (\$1,427.95/ride)

One rider took 228 trips totaling \$3,189.05 in the months of February and March alone.

Recommended Mitigations

The recommendations below are based on the findings of this evaluation and the previously stated goals of the microtransit pilot program. These goals include: making service more convenient and expanding coverage to areas not service by fixed round; connecting people to life's activities by improving connections to the fixed route network; designing an equitable service that improves access to

opportunity; and creating a model that will be sustainable, including understanding the financial and technical feasibility of on-demand mobility options.

Mitigation 1: Change Zone Boundary to Original Zone with Treyburn Addition

- Reducing the size of the zone to align with the originally-studied area with the Treyburn addition would result in significant cost savings. Using March 2023 data as an example, \$82k of the total \$98k costs were attributable to trips starting and/or ending outside of the originally-studied area.
- This change aligns the service zone with the goal of providing mobility in transit deserts. The Treyburn addition adds employment centers to the service without significantly increasing costs.
- Extending the border of the service zone further south beyond the recommended zone increases the likelihood that the program will replicate existing fixed route service, and significantly increase costs.

Map: Recommended Zone: Originally Proposed Service Zone (Purple) with Proposed Treyburn extension (Blue)

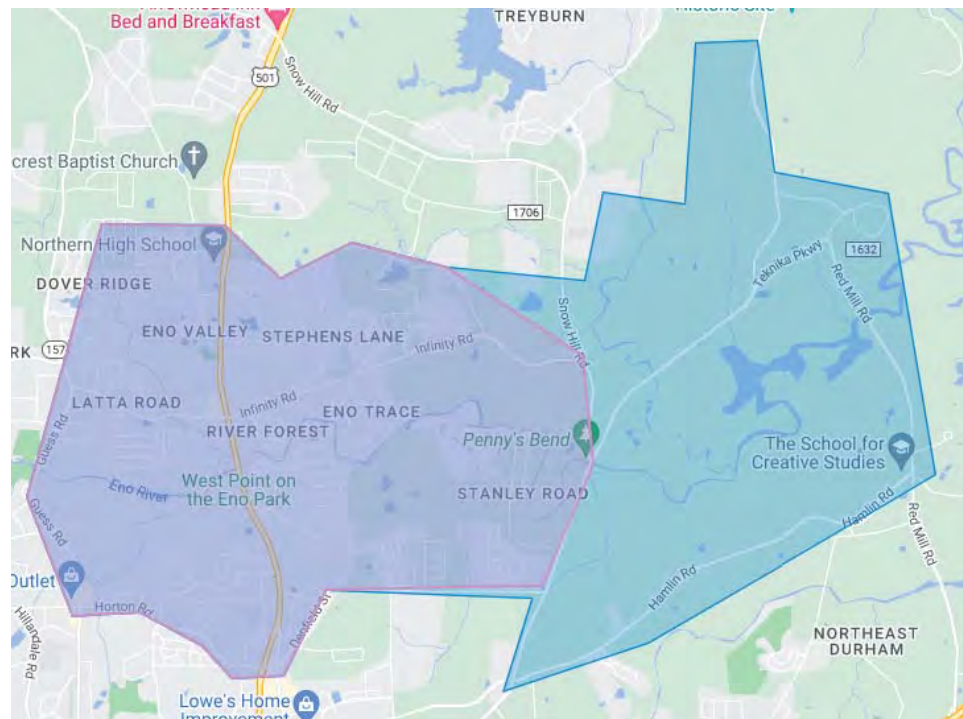


Figure 12: Original vs Current Expanded Service Zone

		Current Expanded Zone vs Original Service Zone Total Cost & Difference					
			December	January	February	March	TOTAL
Expanded	Current Expanded Service Zone Total Ride Cost		\$1,010.29	\$31,255.72	\$73,362.37	\$98,554.67	\$204,183.05
Expanded	Current Expanded Service Zone Total Ridership		81	2453	5292	7270	15096
Original	Original Service Zone Total Ride Cost		\$669.93	\$12,116.20	\$26,409.11	\$16,165.17	\$55,360.41
Original	Original Service Zone Total Ridership		51	899	1732	1111	3793
	Cost Difference		\$340.36	\$19,139.52	\$46,953.26	\$82,389.50	\$148,822.64
	Cost Percentage Difference		33.69%	61.24%	64.00%	83.60%	60.63%
	Ridership Difference		30	1554	3560	6159	11303
	Ridership Percentage Difference		37.04%	63.35%	67.27%	84.72%	63.09%

Mitigation 2: Change Monthly Ride Cap from 120 to 60

- A second recommended mitigation is adjusting the cap on total rides taken by an individual user in both the GoDurham North Zone and GoDurham East Zone from 120 to 60 per month. While ridership and cost has not grown as drastically in the East Zone as in the North Zone, revising these program rules will ensure that both zones can accommodate new ridership. These rules will also create consistency across zones.
- Currently the maximum monthly trips per rider is set at 120. Under the current 120 rides per month cap, riders have little incentive to take the bus with the TNC convenience available. With a lower cap, some riders may use the service more judiciously: taking advantage of other transportation options, such as using fixed-route buses and sharing rides where possible, and saving microtransit rides for situations where there is not a convenient alternative.
- A cap of 60 rides per month would allow more users to access the program within the available budget, incentivize riders to take other available forms of transit, and still ensure that riders to get to and from work every day.
- Lower monthly ride cap options (50 rides per month, 40 rides per month) were considered, but it was determined that the incremental cost savings from these lower caps were not worth the impacts to rider mobility. A cap of 2 rides per day was also considered, but this would be overly-limiting to riders with acute mobility needs over a short period of time.
- Lowering the trip subsidy amount (currently \$25 per trip) was also considered, but it was determined that a lower subsidy cap would not yield significant cost-savings and would introduce the potential for unexpected costs for riders.

Estimated Financial Impacts of Mitigations 1 & 2

Figure 12: Estimated Financial Impacts of Mitigations

North Service Zone	North Zone April Cost Before Mitigation	North Zone April Cost Difference		North Zone April Cost After Mitigation	
60 Monthly Trip Cap	\$ 117,309.16	\$ (8,194.63)	-6.99%	\$ 16,101.75	
Zone Adjustment	\$ 117,309.16	\$ (98,554.67)	-84.01%		
Conciege Service	\$ 660.75	\$ (570.56)	-86.35%		
Total After Mitigations		\$ (101,868.16)	-86.84%	\$ 16,101.75	13.65%
East Service Zone	East Zone April Cost Before Mitigation	East Zone April Cost Difference		East Zone April Cost After Mitigation	
60 Monthly Trip Cap	\$ 21,678.02	\$ (5,634.09)	-25.99%	\$ 17,135.49	
Conciege Service	\$ 1,474.88	\$ (383.32)	-25.99%		
Total After Mitigations		\$ (6,017.41)	-25.99%	\$ 17,135.49	74.01%
North and East Zone April Cost After Mitigaton	\$ 33,237.24				
North and East Zone April Cost After Mitigaton x12	\$ 398,846.85				
FY24 Budget for East and North Zone	\$ 679,355.00				

GoDurham North Zone: Adjusting the zone size as described above and capping rides at 60 trips per month would have had an impact of \$101,868.16 or 86.35% of program costs for the month of April in the North Zone.

GoDurham East Zone: Capping rides at 60 trips per month would have had an impact of \$6,017.41 or 25.99% of program costs for the month of April in the East Zone.

Our projections, based on April data, suggest that our recommended mitigations would reduce the annual program costs to \$398,846.85 which is within the annual budget of \$679,355.00 and creates appropriate capacity for the program to support growth in ridership within the zones.

Mitigation 3: Identify New Service Design to Discourage Duplication of Fixed Route Service

- In addition to the above recommended mitigations, there may be ways to discourage microtransit riders from booking trips which could otherwise be taken using fixed route or GoDurham ACCESS service. In the creation and configuration of microtransit zones, it may be possible to prohibit trips between specific areas if such a trip could instead use a fixed route service or GoDurham ACCESS. The flexibility of service configurations varies based on the microtransit technology provider, but it is worthwhile to explore what options exist. This option would require a longer-term investigation of technical capabilities and could be implemented in the future.