**CONNECT Beyond**
**A Regional Mobility Initiative**

# Identification and Assessment of Urban-Rural Connections

**8/27/2021**

# Contents

# Introduction

In each of the 12 surrounding counties of the CONNECT Beyond study area, there is a designated public transit provider or providers that offer transportation services to its county residents. Transit providers vary in the CONNECT Beyond study area, from fixed route urban service providers to community / human rural service providers. As of the development of this document the region counted 17 transit agencies (six fixed route urban and 11 community transportation providers). Transit providers in the study area are shown in Figure 1.

**FIGURE 1 REGIONAL MAP**
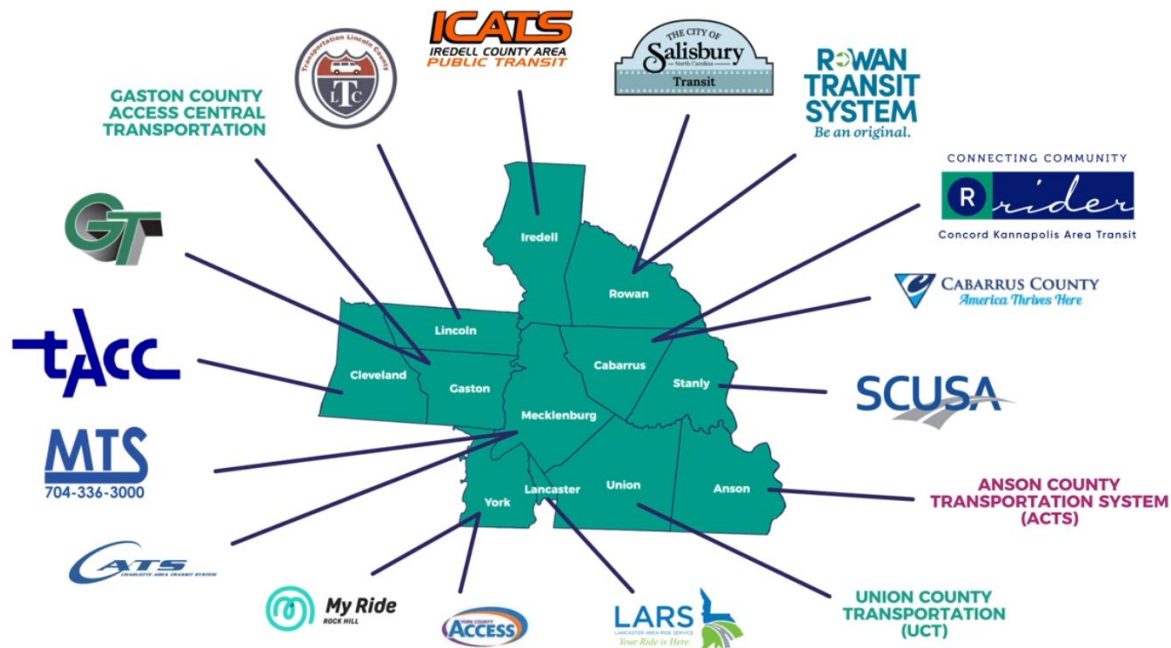


While the transportation providers' overall objective is the same - to transport persons to their desired destinations, there are a myriad of unique factors that determine who, when, where, and how the trips occur, especially in rural areas. Rural areas have unique characteristics that make it attractive for individuals to reside and age in place there. Characteristics such as less population and density, more open land, and a strong sense of community. However, those areas also provide fewer options to meet certain daily needs such as medical facilities, employment, educational opportunities, and shopping. Community transportation services provide a daily lifeline to those that do not have a vehicle to make such trips, mainly for medical tips.

# Purpose of the Task

The primary purpose of the Strengthen the Rural to Urban Connections task of the CONNECT Beyond study was to identify opportunities for increased connections and coordination for rural to urban transit service areas. Alternatively, reverse commutes from urban to rural communities occur and also needed to be examined. The following list of items was looked at to strengthen the Urban to Rural Connections of the CONNECT Beyond study area:

- Cross-county transit connections;
- Regional trip planning and fare collection systems;
- Joint procurement opportunities; and
- Connection opportunities with educational institutions.

This task also examined methods for improving service opportunities for senior citizens, persons with disabilities, veterans, and other special needs individuals which are often the majority of passengers transported by rural public providers. The following sections and accompanying appendices summarize the work done to complete this task.

# Summary of Human Services/Community Transportation Providers

The following is a summary of unique or shared characteristics of the CONNECT Beyond community transportation providers.

## Contracted Service

One commonality of the community transportation providers is that they are all contracting services to their respective county's health and human service agencies (ex: Department of Social Services, Health Department, Head Start, etc.). Operating grant funds[1] for Community Transit Providers are intended and must be used to reimburse the provider for human service agencies' trips. Other grant funds are designated for providing demand response service, which includes transports for employment, educational, and recreational trips.

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[1] Operating funds from NCDOT, SCDOT, and FTA grants all come with requirements on how the funding is spent.

## Trip Scheduling

The majority of the community transportation providers utilize the same trip scheduling and routing software; the software is called RouteMatch. Using the same software enables the agencies to coordinate rides with another agency because the agencies' rider databases can easily be shared. Due to the demand for services within each county, transit providers have either designated specific days of the week and their hours of service to travel out of their counties to urban areas, or to arrange coordinated rides with another transit provider.

## Trip Coordination

Coordinating trips with other transit systems, e.g., one agency transporting a rider to a connection point to transfer onto another community transportation provider, takes administrative time but can be offset by the fact that an agency may recognize a reduced 'per trip' cost through rideshares and can utilize its own vehicle within its county for a local transport. The CONNECT Beyond study effort was able to identify the following:

- The number of coordinated trips that occur frequently (even amidst COVID-19) between neighboring counties;
- Jurisdictional boundaries can limit trip coordination;
- Coordinated trips that occur sporadically due to a transit system's inability to operate the requested trip; and
- Locations where passenger transfers have occurred in the past and might potentially occur in the future. This insight informed the CONNECT Beyond mobility hubs task.

## Trip Cost Estimation

Almost all of the agencies use a 'fully allocated cost' computer model to derive the actual cost of a passenger trip to an urban area. This practice is approved by the North Carolina and South Carolina DOT (NCDOT and SCDOT) agencies and the Federal Transit Administration (FTA). For some counties adjacent to Charlotte's city limits, the transit providers charge a 'fixed rate' for individuals traveling to specific destinations within Charlotte, such as specialty doctor offices and medical centers. Transportation service is limited, however, to rural general public passengers, i.e., individuals who are not clients of a human service agency. The constraints for out-of-county transports for rural general public are that the:

- Trip is too costly for the transit system, i.e., cost recovery is too low;

- Trip is too expensive for the rural general public passenger;

- Transit system lacks available personnel and equipment; and

- Governance restrictions, i.e., governing body restricts the transit provider to operate only within its country.

## Shared Issues

The systemic issues of Community Transportation providers are their lack of dedicated funding, reliance upon local and Federal subsidies, and an ever-increasing demand for services. An aging population requires more transports to medical facilities and life-sustaining locations. Younger residents want to be employed, but they often must rely upon public transportation to get to work and educational institutions. The North Carolina transit providers lost some of their State-issued Rural Operating Assistance Program (ROAP) funding for FY2021 and began a Managed Care brokerage system with the Department of Health and Human Services in the Summer of 2021. This Project came at a time when, needless to say, the community transportation providers were unsure of their current service levels and operations and were somewhat challenged to look to the future. The Providers enjoyed the opportunity to engage with other agencies that share the common purpose of transporting local residents to destinations that sustain the residents' livelihood and quality of life.

Factors differing among the transit providers, is (a) how and when the passenger trips are scheduled; (b) the actual cost for the transports; and (c) whether or not the transit provider actually operates the trip or contracts with another transit agency to transport the passenger(s).

# Stakeholder Engagement and Outreach

Meetings and conversations were conducted with providers across the region to fully understand community transportation provider needs, current operating practices, and to develop study recommendations, meetings and conversations were conducted with providers across the region. The following is a summary of the engagement and outreach completed for this effort. A detailed description of the three targeted stakeholder meetings that were conducted can be found in Appendices 1-3. The presentation that was given at the Mobility Management Meeting on June 15, 2021 is in Appendix 4. In conjunction with the Rural to Urban task, the project team completed an inventory of each of the fixed-route urban providers. This information was critical to understanding the current and past performance of the fixed-route providers. This information is detailed in Appendix 5.

## Targeted Stakeholder

Targeted Stakeholders included the rural transit systems' administrators for the 12 counties; administrators of the two small urban transit systems in the region; staff members of the planning organizations representing the 12 rural transit systems; the Executive Director of the North Carolina Public Transit Association (NCPTA); a representative of the North Carolina Department of Transportation (NCDOT) - Integrated Mobility Division; and members of the Project Planning Team. Most of the aforementioned North Carolina representatives of rural and small urban transit systems already actively participate in the Centralina Regional Mobility Management meetings held quarterly and facilitated by the Aging Program Coordinator - Centralina Regional Council on Aging (COA).

## Stakeholder Meetings

Three Stakeholder Meetings were facilitated: February 15, 2021; March 16, 2021; and April 20, 2021. Each lasted one and one-half hours. Written meeting agendas were prepared in advance and forwarded to all Stakeholders for review, in the event they were unable to participate and could remain apprised of on-going activities.

Following each meeting, the task lead engaged in telephone conversations with stakeholders who were absent and others with whom the task lead needed to clarify information brought forth during the discussion. Individual telephone calls provided the opportunity to gain insight on the transit systems' operations; service standards; and internal operating practices and procedures.

## Key Topics Discovered

The two most resounding topics discussed at each meeting centered on (a) the growing demands for transit services in the rural areas and (b) the decrease in funds to provide these. In surveying the transit systems, a majority of them limit transports solely within their own counties. This is especially true for non-medical rides for the general public, many who are transit dependent, because they don't own a personal vehicle or cannot afford other transportation options. Currently, the community transportation providers only operate out-of-county when passengers have medical appointments with specialty doctors in Charlotte, Rock Hill, or other urban areas. To control costs of the more distant trips, several providers coordinate and contract with neighboring counties to transport passengers to their final destinations (medical centers). The neighboring counties receive a portion of the passengers' fully allocated costs of the trip. Coordinated trips allow the 'home' counties to keep their

equipment and personnel within the local areas and then fulfill additional requests for in-county transports.

During 2020 with COVID-19 vehicle capacity restrictions in place, several of the rural systems discontinued operating their deviated fixed routes which accommodate general public riders who pay fares to ride. Retailers, education institutions, and food vendors experienced the decrease in transit riders. Even though vehicle capacity limitations ended at the start of Summer 2021, the majority of systems have not restarted or have no planned date to resume fixed routes. This is because the Federal and State funds to support local matching dollars are not available for FY2022.

Like most rural transit systems throughout the United States, the community transportation administrators lamented the issue of not having a dedicated stream of funding to support rural to urban connections. Rural systems rely upon contracts with human service agencies (from County budgeted dollars) and Federal / State allocations. All of these are variable, fluctuating from year to year. Effective mid-Summer 2021, the State of North Carolina Department of Health & Human Services instituted the NC Medicaid Managed Care program where Medicaid-recipients receive transports from one of two brokered transportation companies (ModivCare and One Call). The stakeholders have valid concerns that their transit systems may experience reduced revenues from no longer transporting local county Medicaid recipients.

Planning and operating funds are available for community transportation providers from several sources; one potential source is transportation planning organizations (TPOs). Through CONNECT Beyond stakeholder engagement with Community Transportation Providers, it became apparent that some providers have not entirely been active participants at TPO advisory councils and/or attended standing meetings. Thus, some community transportation providers have not provided input on how funds could be distributed, or the level of funds needed to meet their needs. As previously stated, stakeholders already have organized quarterly conversations during the Centralina Regional Mobility Management meetings. Stakeholder engagement in this study was beneficial because it brought forth issues that have far-reaching effects from the providers' normal day-to-day operating challenges. Stakeholders' desire to continue more in-depth conversations with not only their neighboring counties but also the South Carolina providers to find ways to increase the number of coordinated trips; MPOs to learn more about participation and engagement in meetings, projects, and funding opportunities; and to enhance communication with local and State officials to restore and hopefully increase funds for rural transit systems.

# Recommendations

The stakeholder engagement, literature, high level data review, and stakeholders assisted in the development of the recommendations to Strengthen Rural to Urban Connections for the CONNECT Beyond study. Stakeholders prioritized the recommendations based upon (a) what they deem most important; (b) can commence with no delay; and (c) are most beneficial to their transit operations in future years:

1. **Regional Communication:** Rural agencies should be contacted during the planning of fixed route service changes and not after implementation. Also, fixed route service planners to work with the rural systems before implementing schedule adjustments which can adversely affect rural providers' out-of-county trips/routes.

2. **NC Medicaid Managed Care:** NC rural systems should maintain records of fluctuations in ridership and financials to determine impacts on systems' operations. The effects of NC Department Health and Human Services' decision to institute a transportation brokerage system needs to be made known to government officials, especially if it fails to achieve the purported goal of saving monies for the counties and the State.

3. **ConCPT (Consolidation and Coordination of Public Transportation Systems)**: Working in conjunction with NC Department of Transportation – IMD, rural Transit Advisory Boards, and local government officials, transit administrators determine the benefits of formalizing deviated fixed routes from rural to urban areas.

4. **Review for potential modification 5307 & 5310 Allocation Formulas and Processes**. Rural transit providers need to be invited to be active participants in the planning and review of funding formulas that affect their systems. Representation at MPO technical or advisory committees is a means of providing input on funding matters.

5. **Regional Sales Tax.** A North Carolina law already exists to allow counties' the right to assess taxes of county residents to support transit initiatives. Working with local officials, MPOs, and Transit 'Champions', lobby for legislators to enact General Statute for a regional sales tax.

6. **JARC Funds: Allocate Funds.** This Federal funding program should be reinstated to promote job access reverse commute funds, especially as economic development opportunities occur outside of urban areas.

7. **Distribution of FTA Funds in Charlotte UZA to Demand Response Systems: Appropriate Allocation for CATS Service Gaps.** CATS needs to engage dialogue with SCDOT, York County, & Lancaster County officials to obtain approval for service into the SC areas. Also, CRPTO & City should discuss current distribution formula with FTA representative to ensure that SC funds are appropriately disbursed for SC services.

8. **Review of Travel Policies.** Tri-annual review of transit systems' policies to determine adverse impact on public's ability to travel to urban areas.

9. **Mobility Manager Position.** Job position (incumbent or newly hired) designated to work with transit system to coordinate passenger trips with neighboring transit provider(s). Sustained funds are needed to support the position.
10. **Vanpool Program:  Non-Charlotte Urbanized Areas.** After determining costs and that a viable ridership market exists, rural transit administrators should meet with CATS Vanpool Program Administrator to assess implementation.
11. **MPO / RPO Member Representation.** Transit agency representation as members on MPO and RPO technical committees or advisory boards can provide insight and knowledge to planners of rural transit operations. Rural administrators can assist in preparing the Local Coordinated Plans (LCPs).
12. **Regional Transit Commission.** Continuing the good work of the Connect Beyond project, establish a Task Force to research 'best practices' in establishing a regional commission. Develop alternatives for structuring a Commission with emphasis on regional transportation matters & representation of all (rural & urban) transit agencies.

The recommendations shared by the task stakeholder group were further refined through ongoing engagement with the Joint Advisory Committee, the project management team, and all other study recommendations.

# Next Steps

Stakeholders will continue discussing the Recommendations during their quarterly Centralina Regional Mobility Management meetings that are already scheduled for September 14, 2021 and December 14, 2021. North Carolina rural transit providers are now modifying their operations to reflect the institution of the NC Medicaid Managed Care program.

# Appendices

1. Appendix 1 – Meeting 1 Summary Report
2. Appendix 2 – Meeting 2 Summary Report
3. Appendix 3 – Meeting 3 Summary Report
4. Appendix 4 – Mobility Management Meeting Presentation
5. Appendix 5 – Regional Transit Inventory and Performance Analysis

# APPENDIX 1 – Meeting Summary #1

# CONNECT Beyond

## Rural to Urban Connections

## Stakeholder Meeting Series

### Meeting 1 Report

Prepared by Cherry Consulting

May 04, 2021

# General Information

The CONNECT Beyond Project Management Team (PMT) held a virtual meeting for the Rural to Urban Connections Working Group. The Rural to Urban Connections Working Group is comprised of representatives from the rural transit systems within the CONNECT Beyond study area. The purpose of this virtual meeting was to meet with rural transit providers to gain information about the current operations of the region's rural transit systems and about how trips to urban areas are currently coordinated and facilitated. This first meeting for the Rural to Urban Connections Working Group was held on **Monday, February 15, 2021** from **3:00 p.m. – 4:30 p.m.**

## Virtual Meeting Information

| Date | Time | Virtual Platform | Meeting Manager |
|------|------|------------------|-----------------|
| **Monday, February 15, 2021** | 3:00 p.m. – 4:30 p.m. | Zoom | Sabrina Colón |

# Meeting Goals & Objectives

## Meeting Objectives

1. Provide a 'high level' project update
   a. Work to date: High Capacity Transit corridors
   b. Work to come
2. Provide 2021 calendar of dates affecting Rural transit providers
   a. Follow-up telephone calls [month of February]
   b. Next meeting:  TUESDAY, MARCH 16th, 2021 [9am – 10:30 am]
3. Remind attendees of the importance of rural transit systems' involvement in this project to enhance rural to urban connections
4. Obtain information and gather data from rural transit providers on current conditions (using questions previously provided to guide the discussion)
   a. The data that is not found in FTA NTD or other reports
5. Learn what SC transit providers know, currently we have no information
6. Present research findings from previous transit studies & learn of additional studies that need to be reviewed

## Meeting Experience

- Why this project is critical and create excitement about being involved in CONNECT Beyond
- Understand the total mobility network, stress the importance of rural transit systems' involvement in this project to enhance rural to urban connections
- Welcome input from rural transit providers both during this meeting & throughout the entire Connect Beyond Project
- Thanks for their time and input in today's meeting and especially encourage participation for next two months as a member of the Rural to Urban Connections Working Group.

## Committee Homework

a. Send email to Rebecca Cherry advising her of the (1) best time, (2) best day, (3) best telephone number to use to make individual contact, if needed
b. Answer post meeting survey with questions to help round out our analysis and inform future concepts
c. Calendar next set of meetings, date & time:
    a. Tuesday, 16 March from 9:00 AM to 10:30 AM
    b. Tuesday, 20 April from 9:00 AM to 10:30 AM (last meeting for this task)

# Meeting Agenda

| Time | Agenda Item | Presenter/ Facilitator | Notes/Key Takeaway |
|---|---|---|---|
| 2:15 PM. – 4:30 PM | Project Team Arrival / Testing / Pre-Meeting Logistics | • Sabrina Colón<br>• Katie Kutcher | Test backup presentation |
| 3:00 – 3:15 | Welcome & Overview of the Connect Beyond Project to date | • Jason Wager<br>• Jorge Luna | • Introductions – Many are members of the Project's 'Technical Advisory Committee'<br>• Project Overview<br>• Share Meeting Objectives<br>• Work to date: HCT |
| 3:15 – 3:30 | Research findings from previous studies | • Rebecca Cherry | Chart showing previous studies & the recommendations for connectivity with other transit providers |
| 3:30 – 4:15 | Discussion session: Open-ended dialogue among rural transit providers | • Rebecca Cherry<br>• Jorge Luna<br>• Kevin Walsh | This will be one single forum; no breakout sessions are envisioned here.<br><br>Need a lot of notes to be taken! Ascertain<br>• if any connectivity is currently occurring<br>• limitations that currently exist to inhibit urban connections |

| | | | • the transportation demands for<br>• rural communities to travel throughout the region |
|---|---|---|---|
| 4:15 – 4:30 | What's Needed & What's Next in Task 9 | • Rebecca Cherry<br>• Jason Wager<br>• Jorge Luna | Review 'Next Steps' for Task 9: Rural to Urban<br>• More research (regionally, Statewide, & nationally) on connectivity & coordinated services<br>Review upcoming Calendar.<br>• February 2021: One-on-one follow-up by Rebecca with Rural Transit Administrators<br>• Tuesday, 3/16th Conference Call |

# Meeting Materials

For the Rural to Urban Connections Stakeholder Meeting 1, the Project Team developed a Meeting Plan, Meeting Presentation, and Discussion Questions to use during the meeting, and Discussion Questions to distribute to the Working Group Members following the meeting. The Meeting Materials are available in **Appendix _.**

## Virtual Meeting Materials

| Material | Responsibility |
|---|---|
| Meeting Plan | Cherry Consulting |
| Meeting Presentation | Cherry Consulting |
| In-Meeting Discussion Questions | Cherry Consulting |
| Post-Meeting Discussion Questions | Cherry Consulting/HDR |

# Meeting Staffing

This Rural to Urban Connections Stakeholder Meeting 1 was staffed by Project Management Team members and by members of the Consultant Team from HDR and Cherry Consulting.

| Role | Name | Agency | Responsibility |
|---|---|---|---|
| Meeting Host | Katie Kutcher | Centralina COA | Opens and closes the meeting; Manages the flow of the meeting and Q&A session. |
| Meeting Facilitators | Katie Kutcher | Centralina | Share, control presentation, and record presentation |
| Backup Host | Katie Kutcher | Centralina | Has presentation loaded if Facilitators experience technical difficulty |
| Presenters | Rebecca Cherry | 3C | Presents information during the meeting; facilitates questions to participants; engages participants in discussion(s) with other participants. |
| | Jorge Luna | HDR | |
| | Kevin Walsh | HDR | |
| Note taker / Chat moderator | Katie Kutcher | 3C | Captures meeting minutes and records all questions and comments from attendees. |
| | David Rhew | | |

## Meeting Attendees

There were **20** individuals who attended this Rural to Urban Connections Stakeholder Meeting 1.

| Name | Email | Organization | Job Title | Transit Provider |
|---|---|---|---|---|
| **Sara Ravenel** | sara.ravenel@hdrinc.com | HDR | Communications Coordinator | Project Team |
| **Katie Kutcher** | KKutcher@centralina.org | Centralina Regional Council | | Project Team |
| **Rebecca Cherry** | rebecca@cherryconsultingnc.com | Cherry Consulting | Consultant | Project Team |
| **Jason Wager** | jwager@centralina.org | Centralina Regional Council | Project Manager | Project Team |
| **Jorge Luna** | jorge.luna@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Kevin Walsh** | kevin.walsh@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Kristal Ford** | Kford@lincolncounty.org | Lincoln County Transportation | Transportation Manager | TLC |
| **Sally Sherrin** | Ssherrin@lancastercoa.org | Lancaster COA | Executive Director | LARS |
| **Stephanie Costner** | Shcostner@yahoo.com | Trans Admin of Cleveland County | Administrative Officer | TACC |

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|---|---|---|---|---|
| **Jerrel Leonard** | Jerrel.Leonard@ci.charlotte.nc.us | CRTPO | | CRTPO |
| **Theresa Torres** | Theresa.torres@unioncountync.gov | Union County DSS | Transportation Services Division Manager | Union County (NC) |
| **Kara Drane** | Kdrane@catawbacog.org | Catawba COG | Transportation Planning Staff | |
| **Richard Buchanan** | Richard.Buchanan@mecklenburgcountync.gov | Mecklenburg Transportation Services | Operations Manager | MTS |
| **Jason Lawrence** | JLawrence@ci.charlotte.nc.us | Charlotte Area Transit System | | CATS/Project Team |
| **Bradley Johnson** | Bradley.johnson@co.iredell.nc.us | Iredell County Area Transit System | Transit Manager | ICATS |
| **David Rhew** | Director@nctransit.org | NC Public Trans. Assoc. | Director | NCPTA |
| **Ron Shoultz** | ronald.shoultz@co.iredell.nc.us | Iredell County Area Transit System | Transit Planner | ICATS |
| **Donald Ghantt** | dghantt@lincolncounty.org | Transportation Lincoln County | Operations Supervisor | |
| **Masie Jones** | Masie.Jones@mecklenburgcountync.gov | Mecklenburg Transportation Services | Transportation Manager | MTS |
| **Michael Coone** | michael.coone@gastongov.com | Gaston County ACCESS | Director | ACCESS |

# Meeting Notes

Messrs. Wager and Luna provided an overview of the Connect Beyond Project, since several of this meeting's attendees do not serve on another advisory committee and are just now becoming engaged in the Project. Graphics showing the Project's study area were shown, demonstrating the viable role played by the 12 rural counties. Mr. Luna explained the other Project Tasks, specifically the High Capacity Corridor and Mobility Hubs initiatives, that are occurring simultaneously with this Task.

Ms. Cherry explained that it was best for her to research and acquire information from previous transit consulting studies to serve as a baseline for future rural to urban connections. A chart was shown of the studies and also the recommendations contained within them. Attendees were requested to provide the names and topics of additional studies for Ms. Cherry's review. Representatives from ICATS and the Catawba Regional Council added two studies to the list.

In advance of this meeting, Ms. Cherry developed questions pertaining to current practices of coordinated trips and collaborative efforts among the transit providers.   These questions were distributed to the Attendees with the meeting notification so they could be prepared for the Open Discussion.  The following are the Attendees' responses and comments to the questions.

| Questions | Responses/Notes |
|---|---|
| 1. Prior to CV-19, was there a demand for members of your community &/or your current riders to travel to Urban areas in the CB study area?  If so, provide name(s) of Urban areas? | <ul><li>Brad Johnson- ICATS: goes into Mecklenburg (2 trips in AM/ 2 trips in PM 5 days a week). Every Monday to Charlotte for Medical, Tuesday and Wednesday to Concord and Rowan, Friday to Hickory and Conover</li><li>Masie- MTS- coordinates with Gaston County for medical needs (VA services)</li><li>MTS had to reduce capacity due to COVID</li><li>Sally- LARS: about back to capacity state funding for pickups in Lancaster county</li><li>Union County- has medical trips to Charlotte every day. Union partners with Anson 3 days a week.</li></ul> |
| 2. How frequently do you receive requests for travel from your area to Urban areas? | |
| 3. Is your transit system able to meet the needs for requested commutes to Urban area(s)? | <ul><li>Brad- ICATS: Yes. They get frequent requests to go into charlotte for shopping. ICATS only provides trips for medical  (unless they already have a vehicle going there for a medical reason). Funding limits trip types that are not medical.</li><li>Theresa- UCTS: demographics creates a challenge for people to connect from one system to another.</li><li>Time of trip (length of trip) is a barrier (people do not wish to spend 6 hours to get to their desired location)</li></ul> |

| | |
|---|---|
| 4. Is your transit system able to meet the needs for requested commutes to Urban area(s)? | • Brad- ICATS: Yes. They get frequent requests to go into charlotte for shopping. ICATS only provides trips for medical (unless they already have a vehicle going there for a medical reason). Funding limits trip types that are not medical.<br><br>• Theresa- UCTS: demographics creates a challenge for people to connect from one system to another.<br><br>• Time of trip (length of trip) is a barrier (people do not wish to spend 6 hours to get to their desired location) |
| 5. If your transit system is unable to meet the demands, do you coordinate with other neighboring transit systems to fulfill the trip request? | (Already addressed in another question) |
| 6. If you coordinate trips with a neighboring transit provider, who is it (or they, if multiple systems)? | • Anson & Union<br><br>• Mecklenburg & Gaston & Iredell<br><br>• Iredell & CATS (Thursday ICATS meets with Greenway-Hickory- Valley Hills Mall) |
| 7. If the request for a Rural-Urban trip is made, what actions do you take to facilitate and/or fulfill this request? [Your agency fulfills; you contact an external provider (coordinated trip with neighboring transit provider; contract with an external provider, such as a taxi company, private for-profit provider, etc.)? | • Some counties have established schedules for regional trips<br><br>• Missing the MDS- regional coordination meetings. Utilize Centralina MM meetings when they can.<br><br>• State (NCDOT) doesn't recognize CATS as a system to be eligible for coordination funding |
| 8. Spearheaded by NCDOT in the past, other NC transit agencies have collaborated to develop bus routes to urban areas. Did any similar discussions occur in the past in this region? If so, do you know why the collaboration did not occur? | (No response given) |

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|---|---|
| 9. Once CV-19 diminishes, do you foresee any "pent up" demand for transports from your area to Urban areas? | (No response given) |
| 10. Recognizing that the Rurals areas (12 counties) are part of the CB Project, the establishment of Mobility Hubs is a key component/task. If you were to designate a Hub to connect your area towards an Urban destination, where would it be located? | (see Jorge's notes in mapping)<br><br>Existing Hubs (currently utilized)<br>• ICATS uses the VA Hospital in Rowan (can connect with RITA & Salisbury Transit from there)<br>• Union County Transportation currently uses the hospital in Monroe and the Walmart in Indian Trail as a hub with ACTS<br><br>Additional suggestions for future hubs:<br>• Richard from MTS: Amazon Distribution locations could serve as hubs (Steele Creek, Highway 74)<br>• Theresa with UCTS: somewhere on 74<br>• Brad with ICATS: Statesville would be ideal to connect with P.A.R.T. and Greenway (77 &40 connection) |
| 11. Recognizing that the Rurals areas (12 counties) are part of the CB Project, the establishment of Mobility Hubs is a key component/task. If you were to designate a Hub to connect your area towards an Urban destination, where would it be located? | (see Jorge's notes in mapping)<br><br>Existing Hubs (currently utilized)<br>• ICATS uses the VA Hospital in Rowan (can connect with RITA & Salisbury Transit from there)<br>• Union County Transportation currently uses the hospital in Monroe and the Walmart in Indian Trail as a hub with ACTS<br><br>Additional suggestions for future hubs:<br>• Richard from MTS: Amazon Distribution locations could serve as hubs (Steele Creek, Highway 74)<br>• Theresa with UCTS: somewhere on 74<br>• Brad with ICATS: Statesville would be ideal to connect with P.A.R.T. and Greenway (77 &40 connection) |
| 12. If a regional trip planning software system (and database) existed, do you think that your transit agency would be more inclined to participate in coordinating trips? | Seems to be interest from transit providers.<br><br>Current Software:<br>• UCTS: RouteMatch |

| | |
|---|---|
| | - MTS: RouteMatch & In House Platform<br>- Gaston ACCESS: RouteMatch<br>- ICATS: RouteMatch (NOTE: Leaving RouteMatch- have an RFP that was released 2/15/21<br>- LARS: EcoLane<br>- TLC: RouteMatch<br>- ACTS: TripMaker<br>- SCUSA:TripMaker<br>- CATS: Transitioning to RouteMatch for STS ONLY<br>- CATS: Fixed route uses (*Hastas?(missed that one?)*)<br><br>Note: NCPTA has a Technology Workgroup exploring 4 vendors. |
| 13. Is a 'standardized' fare collection system necessary to achieve connectivity between rural to urban areas? | Any automated fare collection?<br>- TLC- do not collect a fare for demand response. Deviated Fixed-route will be "Fare-Free". Will have a fare box in each vehicle just in case. Contracted services have grant/county funding to cover trips.<br>- ICATS new software will have integrated system to collect software<br>- Union- does not need an automated system at this time. |
| 14. What procurement opportunities exist between agencies to enhance rural to urban commutes? | - CATS- we would like to explore that possibility<br><br>- Starts with Integrated Mobility- need to offer flexibility<br><br>- Medicaid- (MTS) said your system will have to be synced with one or more brokers.<br><br>- NCPTA is working with the brokers to reduce the administrative burden for Medicaid transportation |
| 15. What barriers or issues exist that restrict movements from rural to urban areas? | |

| 16. Do you know if any local educational institutions have sought opportunities to coordinate trips with another institution (possibly community colleges)? | ICATS – Mitchell Community College sites |
|---|---|

Additional Comments:

- Richard-Buchanan - MTS: Will CONNECT Beyond address Medicaid Managed Care at all?  These changes in North Carolina will greatly impact transit providers. For example, in Mecklenburg alone, it is anticipated to create a $800,000 annual deficit.   David Rhew - NCPTA said that the Association already has work groups established related to Medicaid Managed Care.  Jason Wager – CCOG thinks this may tie in with CONNECT discussions around funding sources.  If not, an additional meeting may be set up (as needed) to explore these challenges.
- Brad Johnson - ICATS:  Will CATS be able to work with neighboring counties and systems for procurement and utilization of software such as Remix?  There were challenges and limitations the last time the discussion was had in the region.  Brad requested that local policies be revised to provide the opportunity for such partnership.  Jason Lawrence- CATS responded that he thinks there were contracting challenges last time but does not believe local policies would prevent such a partnership.  CATS plans to include neighboring systems in future discussions to explore options.

Mr. Luna provided an interactive map of the region that is included on the Connect Beyond website.  He then showed Attendees how to add specific locations to the map.  Mr. Luna made the request for Attendees to go online after this meeting and indicate both current and potential transfer locations for coordinated trips and possible, future Mobility Hubs.

Ms. Cherry advised that she would be conducting follow-up telephone calls with transit representatives who were unable to participate today to obtain their input.  Attendees were requested to provide any additional information to Ms. Cherry that could benefit this Project Task.

# APPENDIX 2 – Meeting Summary #2

# CONNECT Beyond

## Rural to Urban Connections

## Stakeholder Meeting Series

### Meeting 2 Report

Prepared by Cherry Consulting

May 24, 2021

# General Information

The CONNECT Beyond Project Management Team (PMT) held a virtual meeting for the Rural to Urban Connections Working Group. The Rural to Urban Connections Working Group is comprised of representatives from the rural transit systems within the CONNECT Beyond study area. Information obtained from a questionnaire distributed following the Committee's first meeting on 15 February was presented. The Questionnaire focused on systems' current operating policies; charges for services, particularly out-of-county transports; and suggestions for enhancing rural mobility. Preliminary recommendations were presented for 'rating and ranking' evaluations (using 'Mural' software) and discussion. This second of three scheduled meetings for the Rural to Urban Connections Working Group was held on **TUESDAY, March 16th from 9:00 AM – 10:30 AM.**

## Virtual Meeting Information

| Date | Time | Virtual Platform | Meeting Manager |
|------|------|------------------|-----------------|
| **Tuesday, March 16, 2021** | 9:00 a.m. – 10:30 a.m. | Zoom | Katie Kutcher |

# Meeting Goals & Objectives

## Meeting Objectives

1. Summarize the findings from the first Questionnaire.
2. Present Preliminary Concepts for discussion.
3. Solicit additional Concepts to enhance regional mobility from participants.
4. 'Rate and Rank', i.e. prioritize the Concepts based upon three criteria: (1) Benefit to their system; realistic or 'doable'; and timing of implementation. The prioritization indicates the level of importance to enhancing mobility; and (2) the constraints or barriers that impede rural to urban mobility and connectivity. Using a software program [Mural], participants indicated their responses or 'votes'.
5. Provide 2021 calendar of dates affecting Rural transit providers
    a. Next meeting: TUESDAY, APRIL 20th, 2021 [9am – 10:30 am]
    b. Connect Beyond – Advisory Committee presentation: Wednesday, May 26th
6. Ensure the locations, both current and future, for passenger transfers of coordinated trips and potential Mobility Hubs are identified. An interactive map of the Region, available on the Connect Beyond website, assists in displaying the locations.

## Meeting Experience

- Why this project is critical and excitement about being involved in CONNECT Beyond
- Understand the total transit network, stress the importance of rural transit systems' involvement in this project to enhance rural to urban mobility
- Welcome input from rural transit providers both during this meeting & throughout the entire Connect Beyond Project (one-on-one with consulting team members)

- Thanks for their time and input in today's meeting and especially encourage participation for the next month as Mobility / Rural Ad Hoc Committee member.

## Committee Homework

1. Send email to Rebecca Cherry if edits are needed in the 'Summary of Questionnaire Responses' chart.
2. Provide Input to supplement the 'Preliminary Concepts' and/or any comments made during the 3/16/21 call. [Further evaluation and possible inclusion continues through 4/20/21.]
3. Calendar next set of meetings, date & time:
   a. Tuesday, 20 April from 9:00 AM to 10:30 AM (last meeting for this task)
   b. Wednesday, 26 May - Connect Beyond Advisory Committee

# Meeting Agenda

| Time | | Agenda Item | Presenter/ Facilitator | Notes/Key Takeaway |
|---|---|---|---|---|
| 8:15 AM. – 10:30 AM | | **Project Team Arrival / Testing / Pre-Meeting Logistics** | • Katie Kutcher<br>• Sabrina Colón | Test backup presentation |
| 9:00 – 9:10 | | Welcome & 'Roll Call' of participants | • Katie Kutcher | • Welcome members.<br>• Request members to sign-in via Chat button. Ask persons on phones to identify themselves [NOTE: RPC will record attendance for follow-up and inclusion of written information]<br>• Share Meeting Objectives |
| 9:10 – 9:25 | • | • Review of CB activities in last month<br>• Summary of Responses to Questionnaire | • Jason Wager & Kevin Walsh<br>• Rebecca Cherry | • Any slides that JW or KW want to include<br>• RPC: Show the Summary Chart (1-page) of questionnaire responses<br>• RPC: Power Point slides that detail additional comments, similarities & differences |
| 9:25 – 10:00 | | Mural Software - Prioritization of Preliminary Concepts | • Kevin Walsh<br>• Jorge Luna<br>• Rebecca Cherry | • KW – Technical Facilitator. Explains how to use the software<br>• Jorge Luna – Fields questions involving technical difficulties (via Chat); monitors Chat room<br>• Katie Kutcher - monitors Chat room<br>• Rebecca Cherry – Facilitates dialogue, obtaining clarification for Sticky placements and 'ranking' of Concepts; encourages additional Concepts<br><br>• |
| 10:00 – 10:15 | | Group Discussion: Present Prioritizations and solicit additional Concepts. | • Rebecca Cherry<br>• Jorge Luna | • Summary of findings<br>• Rebecca Cherry – probing questions |

| Time | | Topic | | |
|---|---|---|---|---|
| | | Develop more detailed tasks required to implement Concepts | • Kevin Walsh | • Kevin Walsh or Jorge Luna - Operation of Mural |
| 10:15 – 10:30 | | What's Needed & What's Next in Task 9 and Connect Beyond project | • Jason Wager<br>• Katie Kutcher<br>• Jorge Luna | • Jorge Luna & Jason Wager - Review how Task 9 activities will 'fit in' with other CB project tasks<br>• Katie Kutcher - Review upcoming Calendar:<br>  o Tuesday, 4/20th Conference Call<br>  o Wed., 5/26th Advisory Committee<br>• |

## Meeting Materials

For the Rural to Urban Connections Stakeholder Meeting 2, the Project Team developed a Meeting Plan, Meeting Presentation, and Discussion Questions to use during the meeting, and Discussion Questions to distribute to the Working Group Members in advance of the meeting. The Meeting Materials are available in **Appendix _**.

### Virtual Meeting Materials

| Material | Responsibility |
|---|---|
| Meeting Plan | Cherry Consulting |
| Meeting Presentation | Cherry Consulting, HDR |
| In-Meeting Discussion Questions | Cherry Consulting, HDR |
| Post-Meeting Discussion Questions | Cherry Consulting |

## Meeting Staffing

This Rural to Urban Connections Stakeholder Meeting 2 was staffed by Project Management Team members and by members of the Consultant Team from HDR and Cherry Consulting.

| Role | Name | Agency | Responsibility |
|---|---|---|---|
| Meeting Host | Katie Kutcher | Centralina COA | Opens and closes the meeting; Manages the flow of the meeting and Q&A session. |

| | | | |
|---|---|---|---|
| Meeting Facilitators | Kevin Walsh<br>Jorge Luna<br>Rebecca Cherry | HDR<br>HDR<br>3C | Presenters of the presentation and record new information |
| Backup Host | Sabrina Colon | HDR | 'Locks' Mural prior to dissemination of the link (Mon., 3/8/21); Back-up for technical expertise (Tues., 3/16/21) to Kevin Walsh & Jorge Luna; Records session and preserves the Mural screen (3/16/21) for future us. |
| Presenters | Rebecca Cherry | 3C | Presents information during the meeting; facilitates questions to participants; engages participants in discussion(s) with other participants. |
| | Jorge Luna | HDR | |
| | Kevin Walsh | HDR | |
| Note taker / Chat moderator | Katie Kutcher | Centralina COA | Captures meeting minutes and records all questions and comments from attendees. |

## Meeting Attendees

There were **24** individuals who participated in this Rural to Urban Connections Stakeholder Meeting 2.

| Name | Email | Organization | Job Title | Transit Provider |
|---|---|---|---|---|
| **Katie Kutcher** | KKutcher@centralina.org | Centralina Regional Council | | Project Team |
| **Rebecca Cherry** | rebecca@cherryconsultingnc.com | Cherry Consulting | Consultant | Project Team |
| **Jason Wager** | jwager@centralina.org | Centralina Regional Council | Project Manager | Project Team |
| **Jorge Luna** | jorge.luna@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Kevin Walsh** | kevin.walsh@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Matthew Gallman** | | | | |
| **Sally Sherrin** | Ssherrin@lancastercoa.org | Lancaster COA | Executive Director | LARS |
| **Stephanie Costner** | Shcostner@yahoo.com | Trans Admin of Cleveland County | Administrative Officer | TACC |
| **Jerrel Leonard** | Jerrel.Leonard@ci.charlotte.nc.us | CRTPO | Planner | CRTPO |
| **Christian Snelgrove** | | Centralina COG | Intern | CCOG |

| Kara Drane | Kdrane@catawbacog.org | Catawba COG | Transportation Planning Staff | |
| --- | --- | --- | --- | --- |
| **Richard Buchanan** | Richard.Buchanan@mecklenburgcountync.gov | Mecklenburg Transportation Services | Operations Manager | MTS |
| **Jason Lawrence** | JLawrence@ci.charlotte.nc.us | Charlotte Area Transit System | | CATS/Project Team |
| **Twanna Littlejohn** | Twanna.Littlejohn@gastongov.com | Gaston ACCESS | Trans. Mgr. | Gaston ACCESS |
| **Michael Coone** | Michael.Coone@gastongov.com | Gaston ACCESS | Director – DSS | Gaston ACCESS |
| **Ron Shoultz** | ronald.shoultz@co.iredell.nc.us | Iredell County Area Transit System | Transit Planner | ICATS |
| **Randy Shank** | RShank@stanlycountync.gov | SCUSA | Trans. Manager | SCUSA |
| **Masie Jones** | Masie.Jones@mecklenburgcountync.gov | Mecklenburg Transportation Services | Transportation Manager | MTS |
| **Michelle Nance** | MNance@centralina.org | Centralina | Director | CCOG |
| **Bob Bushey** | RWBushey@cabarruscounty.us | Cabarrus County Trans. Svcs. | Transportation Director | CCTS |
| **Tanya Byrd** | TByrd@co.anson.nc.us | Anson County Trans. Svcs. | Transportation Director | ACTS |
| **Valerie Steele** | Valerie.Steele@rowancountync.gov | Rowan County Trans. Svcs. | Transportation Director | RTS |
| **Pam DiGiovanni** | | NCDOT-IMD | Sr. Trans. Planner | NCDOT-IMD |
| **Rodney Harrison** | RLHar@salisburync.gov | Salisbury Transit | Transit Director | Salisbury Transit |
| **Natalie Tunney** | NTunney@centralina.org | Centralina | COA | CCOG |
| **Dietrich Brown** | DBrown@ci.charlotte.nc.us | Charlotte CATS – STS | Deputy Dir., STS | STS |
| **Katie Quinn** | | City of Rock Hill | Planner | My Ride |

# Meeting Notes

This meeting was held in conjunction with the regularly scheduled meeting of the Metrolina Mobility Management Group.  Each quarter Ms. Kutcher facilitates a roundtable discussion of regional rural and small urban transportation providers, where topics directly affecting the transportation of the elderly and disabled are discussed.  This meeting afforded the Mobility Management Group to learn more about the Connect

Beyond activities, since some participants were not included in the Project's Technical Advisory Committee for Task 9 – Rural to Urban Connectivity.

Mr. Luna provided an overview of the work that was transpiring with the Integrated Mobility Technical Advisory Group and the Mobility Hubs Advisory Group. Ms. Cherry provided an updated list (short-list provided during the first meeting on 15 February) of agencies' previous planning studies and explained that that the recommendations included in these studies was the basis for the concepts developed for Connect Beyond. She informed attendees of the similarities and the differences in the studies for individual agencies but all that were applicable to the Region.

In advance of this meeting, Ms. Cherry developed and distributed a survey of questions that took a 'deep dive' into challenges and barriers that impede the agencies' coordination of trips with a neighboring agency. From the agencies' responses, four (4) Concepts became apparent and served as the basis for today's interactive activity. The Concepts were: communication; governance; funding; and service coordination. Attached is the summary of Committee members initial responses.

Mr. Walsh explained that a software package called 'Mural' was going to be used for the attendees to provide comments, suggestions, and further explain how the Concepts affect their organizations and the ability to transport passengers to urban areas. The software utilizes a white board and Post-it Notes whereby participants are able to document their comments. Mr. Luna assisted participants in the manipulation of the software by responding to questions that they had via Chat Room comments.

At the end of the allotted time of the exercise, the intention was to then 'rate and rank' the comments and suggestions for each Concept and discuss specific tasks to take to break down coordination barriers. However, there was not enough time, so Ms. Cherry advised that she would contact the Technical Advisory Committee members for follow-up, and the information will be shared at the next meeting on April 20, 2021. Attendees were encouraged to provide Ms. Cherry additional Concepts that may have been missed.

# PRELIMINARY CONCEPTS

## COMMUNICATION

**C-1**  On-going (no less than twice a year), regional communication among the representatives of the 12 counties and two states.

**C-2**  Quarterly meetings between CATS-STS and MTS to discuss best practices and devise new strategies for coordinated service delivery.

**C-3**  NCPTA Director convenes future, regularly scheduled regional conversations with transportation systems, with invited participation of NC and SC State DOT representatives.

## SERVICE COORDINATION

**S-1**  Analyze costs for establishing a Regional Mobility Manager position. Duties may include: information / referral source of all available transportation; research, review, & apply for grants for additional FTA funds; liaison for interstate passenger trips and also State DOTs.

**S-2**  SC systems should evaluate opportunities for coordinating with neighboring NC transit providers, executing interagency MOUs for coordinated trips and/or shared rides.

**S-3**  Conduct cost / benefit analysis to determine whether or not a 'standardized' fare collection system [example: the ORCA card in greater Seattle, WA area] enhances regional mobility, especially for interstate, non-medical passenger trips.

**S-4**  With an urban provider or MPO serving as lead agency, investigate opportunities for multi-system procurements (software, equipment procurements, advanced technology), thereby optimizing economies of scale.

## FUNDING

**F-1**  Evaluate both financial and service impacts of NC's 2021 implementation of Medicaid 'Managed Care' program. Analysis on whether urban areas are more adversely impacted than rural areas due to the existence of private transportation providers.

**F-2**  Determine funding source or shared-cost allocation to support long-term Regional Mobility Program (Regional Mobility Manager position and administration of a Regional Mobility Call Center).

**F-3**  Evaluate Local Government transit funding approaches to include, but not be limited to: (a) Rental vehicle gross receipts tax; (b) Vehicle registration surcharge; (c) Parking tax; (d) Local option sales tax; (e) Land transfer fees; (f) County government contributions.

## GOVERNANCE

**G-1**    Conduct an in-depth review of Transit Providers' service area policies and structures that may restrict regional travels to more urbanized areas.  Policies may include, but not be limited to, trip purpose, defined geographic service areas, fare structure, hours of operation, etc.

**G-2**    Discussions on funding to occur between CRTPO and RFATS to address obvious service gaps existing in York County (City of Tega Cay and Town of Fort Mill) and LARS – Panhandle (Highway 521 corridor).  Since funds are directed to the Charlotte Urbanized Area, a bi-state agreement needs to be executed that outlines the portion of funds available to SC providers.

**G-3**    Working with integrated technology suppliers, investigate license costs for acquiring multi-county / multiple transportation providers, whereby the transportation systems are operating on the same software platform, for the same contract period, and having computer support and assistance from not only the supplier but also other neighboring system administrators and scheduling / dispatch staff.

**G-4**    Commence communication between the two State Departments of Transportation [SCDOT – Office of Public Transit and NCDOT – Intermodal Division], organized by CRMPO with involvement from counties' respective Planning Organizations, to identify the similarities and differences in policies and State regulations that challenge and/or impede cross-state coordinated transports.

# APPENDIX 3 – Meeting Summary #3

# CONNECT Beyond

## Rural to Urban Connections

## Stakeholder Meeting Series

### Meeting 3 Report

Prepared by Cherry Consulting

May 25, 2021

# General Information

The CONNECT Beyond Project Management Team (PMT) held a virtual meeting for the Rural to Urban Connections Working Group. The Rural to Urban Connections Working Group is comprised of representatives from the rural transit systems within the CONNECT Beyond study area.  Information obtained during the second meeting held on 16 March and via the Mural software exercise was presented, in addition to a presentation on Mobility Hubs by representatives of Alta Planning, LLC, another contracted Project Management Team member.  This third scheduled meeting for the Rural to Urban Connections Working Group was held on **TUESDAY, April 20th from 9:00 AM – 10:30 AM.**

## Virtual Meeting Information

| Date | Time | Virtual Platform | Meeting Manager |
|------|------|------------------|-----------------|
| **Tuesday, April 20, 2021** | 9:00 a.m. – 10:30 a.m. | Zoom | Katie Kutcher |

# Meeting Goals & Objectives

## Meeting Objectives

1. Present 'High Priority' Concepts for enhanced mobility from rural to urban areas.
2. Modify the timeframes, tasks, and responsible parties for implementation of the Concepts.
3. Acquire information regarding Mobility Hubs.  Committee asked to provide input on (1) factors to consider. (2) Solicit additional Concepts to enhance regional mobility from participants.
4. Provide 2021 calendar of dates affecting Rural transit providers
    4.1. No additional meetings for the Ad Hoc 'Rural to Urban Connection' Committee; however, a Connect Beyond Advisory Committee for Task 9 is scheduled for WEDNESDAY, May 26th, 2021 [10am – noon pm] where a formal presentation will occur.
    4.2. Metrolina Mobility regularly scheduled quarterly meeting:  Tuesday, June 15th, 2021 (9:00 am – 10:30 am)

## Meeting Experience

- Understand the value and importance of rural transit systems' involvement in this project to enhance rural to urban connections.
- Welcome input from rural transit providers both during this meeting & throughout the entire Connect Beyond Project (one-on-one with consulting team members).
- Thanks for their time and input in today's meeting and their total engagement for the past three months as Mobility / Rural Ad Hoc Committee members

## Committee Homework

1. Send email to Rebecca Cherry if edits are needed in the 'Concepts' chart.
2. Send additional information to Rebecca Cherry on suggestions for Mobility Hubs – now and in the future.

a. Calendar next set of meetings, date & time: Wednesday, 26 May - Connect Beyond Advisory Committee

# Meeting Agenda

| Time | Agenda Item | Presenter/ Facilitator | Notes/Key Takeaway |
|---|---|---|---|
| 8:15 AM. – 10:30 AM | **Project Team Arrival / Testing / Pre-Meeting Logistics** | • Katie Kutcher | Test backup presentation |
| 9:00 – 9:10 | Welcome & 'Roll Call' of participants | • Katie Kutcher | • Welcome members.<br>• Request members to sign-in via Chat button. Ask persons on phones to identify themselves [NOTE: RPC will record attendance for follow-up and inclusion of written information]<br>• Share Meeting Objectives |
| 9:10 – 9:45 | • Summary of Prioritization of Concepts<br>• Discussion on appropriateness of timeframes, lead agency, & required resources | • Rebecca Cherry | • RPC: Brief overview of Mural exercise & how the 'Concepts' chart was compiled<br>• KK: Operating the Power Point slides that detail the Concepts |
| 9:45 – 10:05 | **Mobility Hubs Discussion** | • John Cocke, ALTA<br>• Kevin Walsh<br>• Jorge Luna | • John Cock (ALTA) to present Power Pt Slides<br>• JL & KW: add additional, closing comments |
| 10:05 – 10:20 | **Group Discussion: Funding**<br>• Identify the 'champions' for rural transit<br>• ConCPT program<br>Realistic funding alternatives | • Rebecca Cherry<br>• Jorge Luna<br>• Kevin Walsh | • RC: probing questions<br>• Kevin Walsh or Jorge Luna – additional comments |

| | | | |
|---|---|---|---|
| | | • Jason Wager<br>• Katie Kutcher<br>• | |
| 10:20 – 10:30 | **Wrap Up** | • Katie Kutcher | Calendar of Future Events:<br>• 5/26 – Jt. Advisory Committee for Rural to Urban Connections<br>• 6/15 – Metrolina Mobility regularly scheduled meeting |

# Meeting Materials

For the Rural to Urban Connections Stakeholder Meeting 3, the Project Team developed a Meeting Plan, Meeting Presentation, and Discussion Questions to use during the meeting, and Discussion Questions to distribute to the Working Group Members in advance of the meeting. The Meeting Materials are available in **Appendix _**.

## Virtual Meeting Materials

| Material | Responsibility |
|---|---|
| Meeting Plan | Cherry Consulting |
| Meeting Presentation | Cherry Consulting, HDR, ALTA |
| In-Meeting Discussion Questions | Cherry Consulting, HDR. ALTA |
| Post-Meeting Discussion Questions | Cherry Consulting |

# Meeting Staffing

This Rural to Urban Connections Stakeholder Meeting 3 was staffed by Project Management Team members and by members of the Consultant Team from HDR, Cherry Consulting, and ALTA Planning.

| Role | Name | Agency | Responsibility |
|---|---|---|---|
| Meeting Host | Katie Kutcher | Centralina COA | Opens and closes the meeting; Manages the flow of the meeting; controls slide presentation. |
| Meeting Facilitators | Kevin Walsh<br>Jorge Luna<br>Rebecca Cherry<br>John Cocke | HDR<br>HDR<br>3C<br>ALTA | Presenters of the presentation and record new information |
| Backup Host | Jorge Luna | HDR | Provides insight on other tasks occurring with the Connect Beyond project |

| | | | |
|---|---|---|---|
| Presenters | Rebecca Cherry | 3C | Presents information during the meeting; facilitates questions to participants; engages participants in discussion(s) with other participants. |
| | Jorge Luna | HDR | |
| | Kevin Walsh | HDR | |
| Note taker / Chat moderator | Katie Kutcher | Centralina COA | Captures meeting minutes and records all questions and comments from attendees. |

## Meeting Attendees

There were **17** individuals who participated in this Rural to Urban Connections Stakeholder Meeting 3.

| Name | Email | Organization | Job Title | Transit Provider |
|---|---|---|---|---|
| **Katie Kutcher** | KKutcher@centralina.org | Centralina Regional Council | | Project Team |
| **Jason Wager** | JWager@centralina.org | CCOG | | Project Team |
| **Rebecca Cherry** | rebecca@cherryconsulting nc.com | Cherry Consulting | Consultant | Project Team |
| **Jorge Luna** | jorge.luna@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Kevin Walsh** | kevin.walsh@hdrinc.com | HDR | Consultant Project Manager | Project Team |
| **Sally Sherrin** | Ssherrin@lancastercoa.or g | Lancaster COA | Executive Director | LARS |
| **Amber Plyler** | APlyler@lancastercoa.org | Lancaster COA | Trans. Manager | LARS |
| **Jerrel Leonard** | Jerrel.Leonard@ci.charlott e.nc.us | CRTPO | Planner | CRTPO |
| **Jason Lawrence** | JLawrence@ci.charlotte.n c.us | Charlotte Area Transit System | | CATS/Project Team |
| **Michael Coone** | Michael.Coone@gastongo v.com | Gaston ACCESS | Director – DSS | Gaston ACCESS |
| **Ron Shoultz** | ronald.shoultz@co.iredell. nc.us | Iredell County Area Transit System | Transit Planner | ICATS |
| **Jeff Crouchley** | Jeff.crouchley@co.iredell. nc.us | Iredell County Area Transit System | Operations Manager | ICATS |
| **Masie Jones** | Masie.Jones@mecklenbur gcountync.gov | Mecklenburg Transportation Services | Transportation Manager | MTS |
| **Michelle Nance** | MNance@centralina.org | Centralina COG | Director | CCOG |

| Bob Bushey | RWBushey@cabarruscounty.us | Cabarrus County Trans. Svcs. | Transportation Director | CCTS |
|---|---|---|---|---|
| Tanya Byrd | TByrd@co.anson.nc.us | Anson County Trans. Svcs. | Transportation Director | ACTS |
| Theresa Torres | Theresa.Torres@unioncountync.gov | Union County Trans. Svcs. | Transportation Director | Union County |
| Pam DiGiovanni | pmdigiovanni@ncdot.gov | NCDOT-IMD | Sr. Trans. Planner | NCDOT-IMD |
| Randy Shank | RShank@stanlycountync.ogv | SCUSA | Transit Director | SCUSA |
| Natalie Tunney | NTunney@centralina.org | Centralina | COA | CCOG |
| David Rhew | director@nctransit.org | NCPTA | Exec. Director | NCPTA |
| John Cocke | | ALTA Planning | Owner / Sr. Planner | ALTA Planning |

# Meeting Notes

Using the 'Mural' training tool that generated comments on the four (4) preliminary Concepts [derived from previous planning study recommendations and responses to the February 2021 survey distributed following the February 15 first Technical Advisory Committee meeting], this meeting focused on the Concepts and specific tasks (developed by the Consultant Team). Using a 'rating and ranking' methodology, the following two Concepts were of highest importance to Technical Advisory Committee members for promoting regional mobility: Communication and Funding. [NOTE: no other Concepts were provided by Committee members following the March meeting.] Discussion occurred regarding enhancing communication between the fixed route transit providers and the rural systems. Rural systems want to be engaged early on in the process of fixed route providers modifying their routes. Technical Committee members' comments reflected that they appreciated the opportunity to converse with one another in this Project and hope that it will continue. Mr. Rhew of NCPTA said that he intends to make this happen.

Ms. Cherry said that the funding concept is relevant since the Managed Care contracts begin in the summer and ROAP (Rural Operating Assistance Program) funding for next fiscal year is unknown. She invited Ms. DiGiovanni to speak to the opportunities for coordinating under the auspices of the NCDOT-IMD ConCPT grant funding program. The IMD representative did so. After Ms. DiGiovanni concluded, Ms. Cherry encouraged the transit providers to look to persons in their communities to determine partnerships, including even private partners that may be able to facilitate additional funds to enhance coordinated mobility. Also, examination of alternative modes of coordination was encouraged.

Technical Advisory Committee members inquired about the CATS vanpool services. Mr. Lawrence said that there were 45 vans operating before Covid occurred (March 2020) and now there are currently 23 active vanpools. Mr. Leonard was asked when the CRPTO study of the distribution formula of Charlotte UZA funds will be completed such that neighboring rural recipients may hear of the results. He responded that it may

take another year.  Mr. Wager said that the Funding and Partnership Advisory Committee has a Joint Advisory Committee meeting on June 9th and he expects cross-jurisdictional funding matters to be discussed.

Mr.Cocke then made a presentation of Mobility Hubs since this is an essential component for connecting rural communities to urban areas.  There was little to no discussion from the Technical Advisory members, but this may have been to the lack of time available for any indepth conversation.  [NOTE:  Following this meeting, Ms. Kutcher sent an email to the Committee asking for feedback or any comments that they wanted to make regarding the Concepts and/or Mobility Hubs.  To date, the only response received was from Ms. Sherrin who again asked that the funding for LARS be examined and that CRPTO consider an allocation.]

# PRELIMINARY CONCEPTS

## COMMUNICATION

**C-1**     On-going (no less than twice a year), regional communication among the representatives of the 12 counties and two states.

**C-2**     Quarterly meetings between CATS-STS and MTS to discuss best practices and devise new strategies for coordinated service delivery.

**C-3**     NCPTA Director convenes future, regularly scheduled regional conversations with transportation systems, with invited participation of NC and SC State DOT representatives.

## SERVICE COORDINATION

**S-1**     Analyze costs for establishing a Regional Mobility Manager position.  Duties may include: information / referral source of all available transportation; research, review, & apply for grants for additional FTA funds; liaison for interstate passenger trips and also State DOTs.

**S-2**     SC systems should evaluate opportunities for coordinating with neighboring NC transit providers, executing interagency MOUs for coordinated trips and/or shared rides.

**S-3**     Conduct cost / benefit analysis to determine whether or not a 'standardized' fare collection system [example:  the ORCA card in greater Seattle, WA area] enhances regional mobility, especially for interstate, non-medical passenger trips.

**S-4**     With an urban provider or MPO serving as lead agency, investigate opportunities for multi-system procurements (software, equipment procurements, advanced technology), thereby optimizing economies of scale.

## FUNDING

**F-1**     Evaluate both financial and service impacts of NC's 2021 implementation of Medicaid 'Managed Care' program.  Analysis on whether urban areas are more adversely impacted than rural areas due to the existence of private transportation providers.

**F-2**     Determine funding source or shared-cost allocation to support long-term Regional Mobility Program (Regional Mobility Manager position and administration of a Regional Mobility Call Center).

**F-3**     Evaluate Local Government transit funding approaches to include, but not be limited to: (a) Rental vehicle gross receipts tax; (b) Vehicle registration surcharge; (c) Parking tax; (d) Local option sales tax; (e) Land transfer fees; (f) County government contributions.

## GOVERNANCE

**G-1**    Conduct an in-depth review of Transit Providers' service area policies and structures that may restrict regional travels to more urbanized areas.  Policies may include, but not be limited to, trip purpose, defined geographic service areas, fare structure, hours of operation, etc.

**G-2**    Discussions on funding to occur between CRTPO and RFATS to address obvious service gaps existing in York County (City of Tega Cay and Town of Fort Mill) and LARS – Panhandle (Highway 521 corridor).  Since funds are directed to the Charlotte Urbanized Area, a bi-state agreement needs to be executed that outlines the portion of funds available to SC providers.

**G-3**    Working with integrated technology suppliers, investigate license costs for acquiring multi-county / multiple transportation providers, whereby the transportation systems are operating on the same software platform, for the same contract period, and having computer support and assistance from not only the supplier but also other neighboring system administrators and scheduling / dispatch staff.

**G-4**    Commence communication between the two State Departments of Transportation [SCDOT – Office of Public Transit and NCDOT – Intermodal Division], organized by CRMPO with involvement from counties' respective Planning Organizations, to identify the similarities and differences in policies and State regulations that challenge and/or impede cross-state coordinated transports.

# APPENDIX 4 – Mobility Management Meeting Presentation

# Purpose

- Thank you for your support
  - Working meetings (fixed route and rural to urban connections)
  - Joint Advisory Committee
- Share path to recommendations development
- Draft high-level recommendations
  - What are we missing?
  - How do we share the message forward

# Total Mobility Network

High Capacity Transit

- LIGHT RAIL
- BUS RAPID TRANSIT
- STREET CAR
- COMMUTER RAIL

Fixed Route Bus Network

- COMMUTER EXPRESS
- REGIONAL LOCAL INTERCITY
- LIMITED STOP
- RURAL/FLEX ROUTES

Paratransit

- DEMAND RESPONSE
- WHEELCHAIR ACCESSIBLE

Emerging Mobility and Transportation Demand Management (TDM) Strategies

- SCOOTER
- BIKE SHARE
- CARPOOL
- AUTONOMOUS

Transit Supportive Strategies

- REGIONAL TRIP PLANNER
- TRANSIT-ORIENTED DEVELOPMENT
- SERVICE STANDARDS
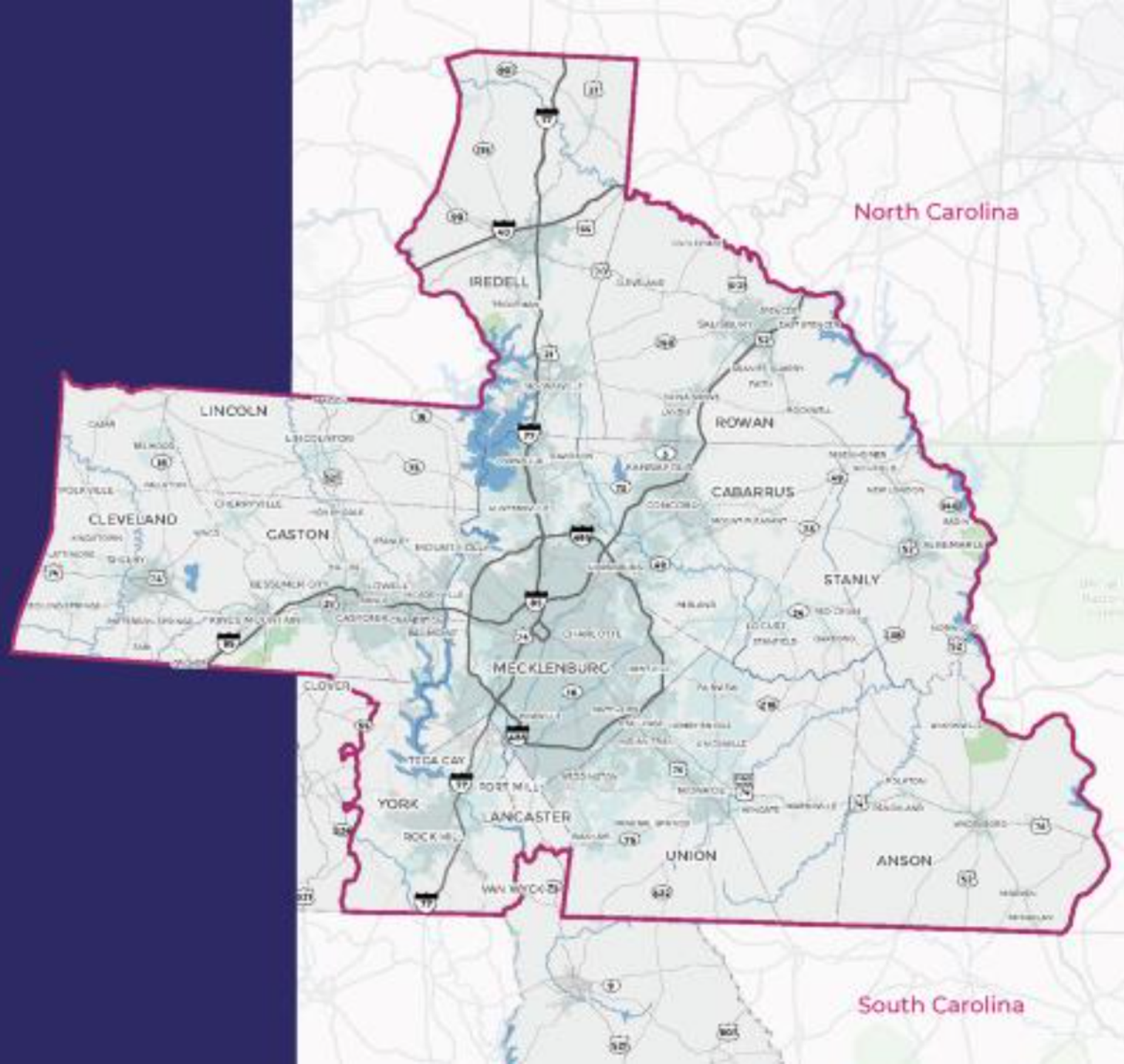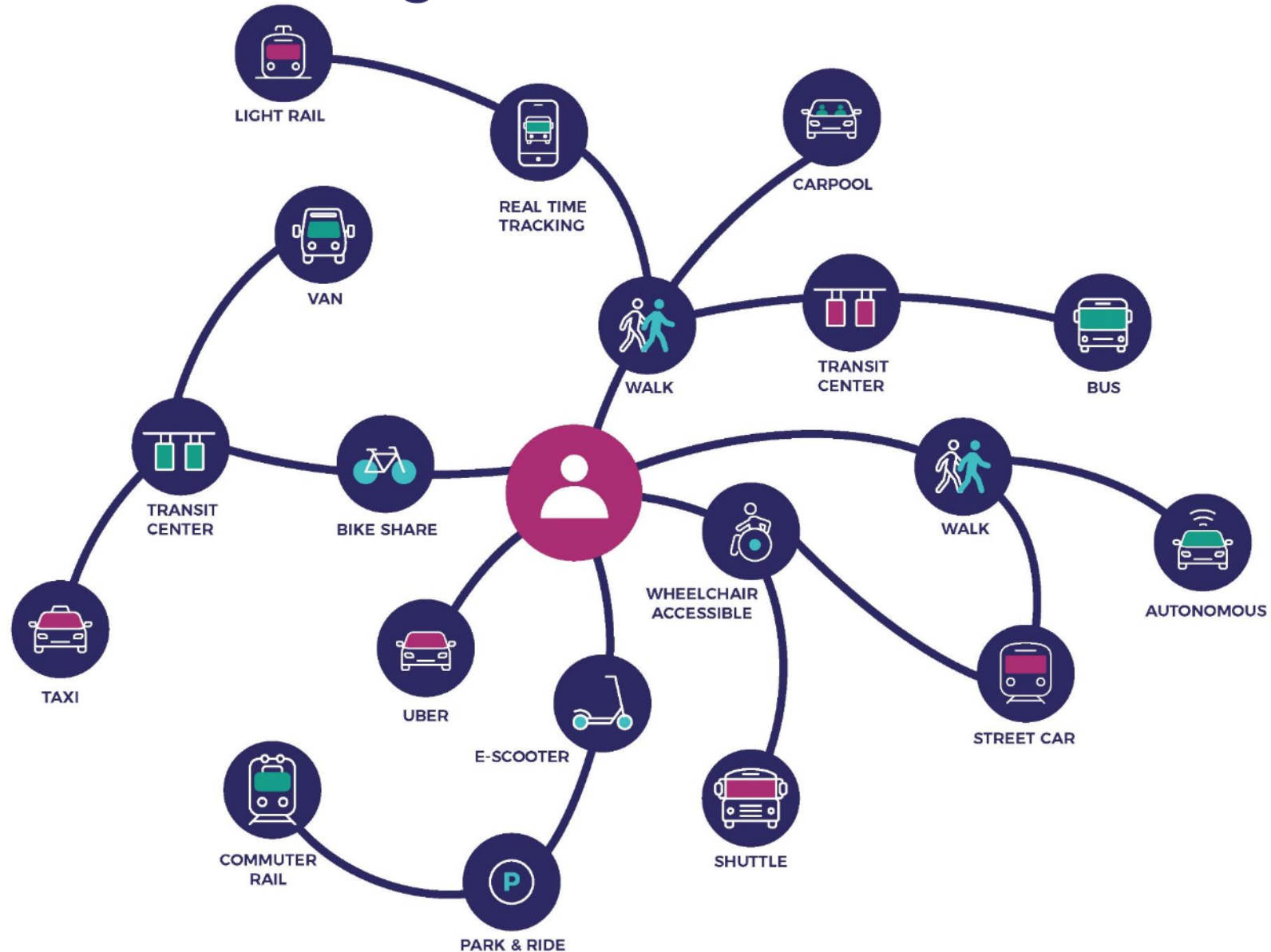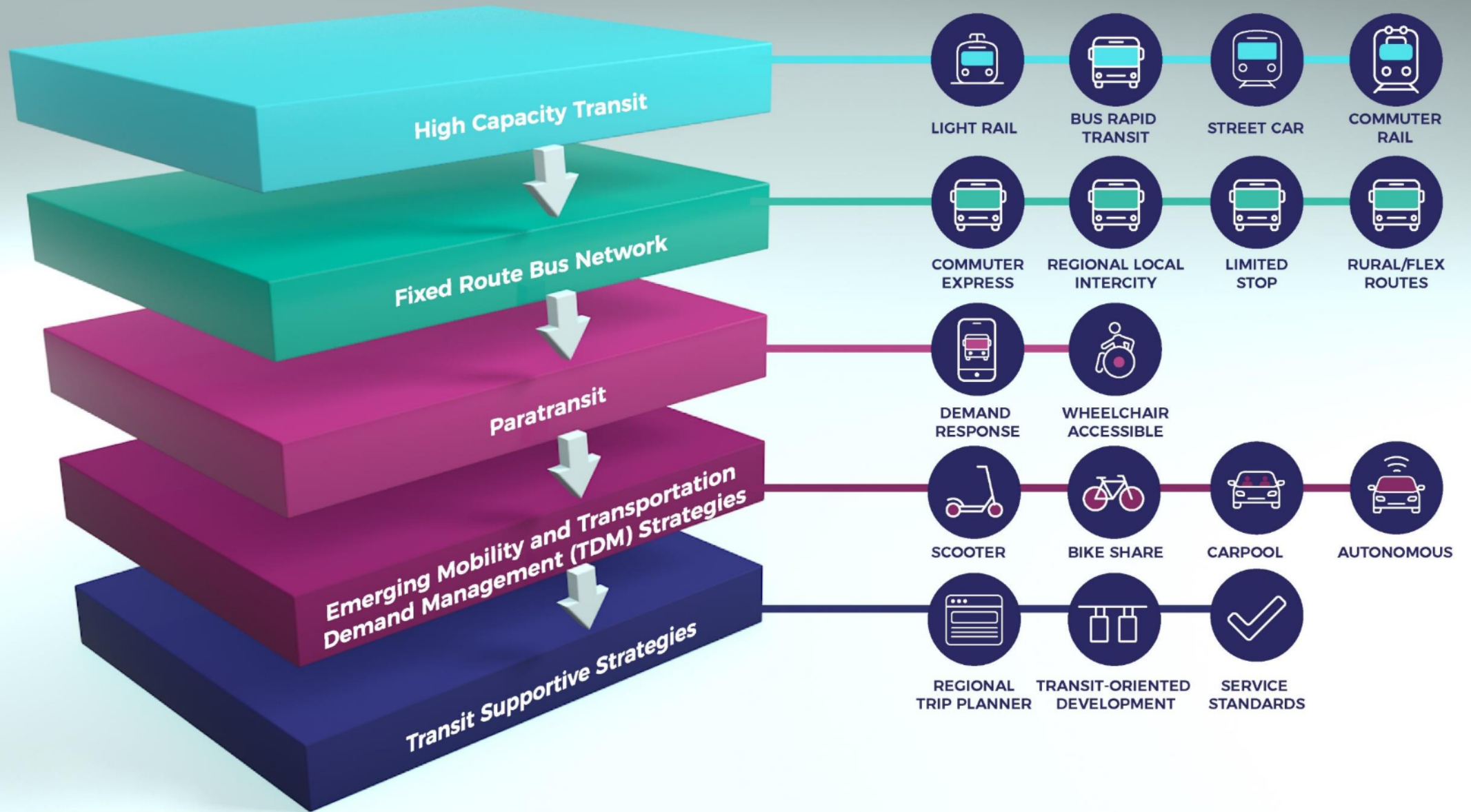
# Network Identified

- CONNECT Beyond
  - High Capacity Transit
  - Mobility Corridors
- **HCT only part of the equation**
- A total mobility network needs:
  - Local bus connections
  - Freeway-based express
  - Rural to urban options
  - Transportation choices
  - Supportive land use
  - Collaboration and resources
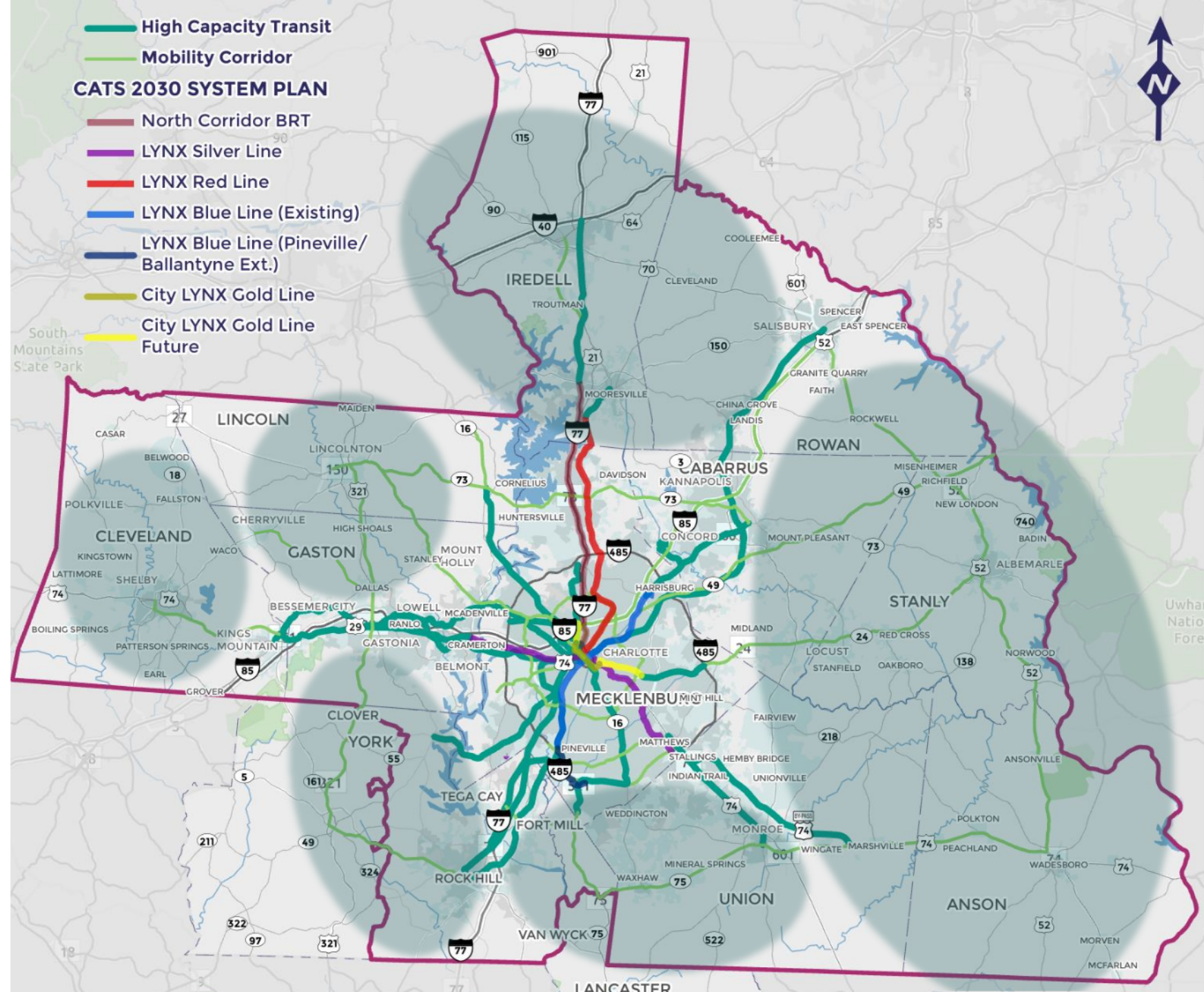
# Progress To Date

**High Capacity Transit & Emerging Mobility Corridors**

**Building a Better Bus Network**

**Improving Transportation Choices (TDM) & Emerging Mobility**

**Transit Supportive Development Strategies**

**Rural to Urban Connections & Mobility Hubs**

**Funding & Partnerships**

# High-Capacity Transit & Emerging Mobility Corridors

Credit: Jeffrey D. Allred, Deseret News
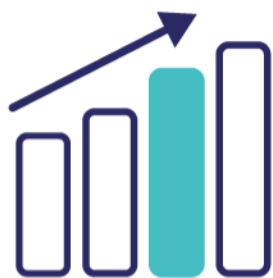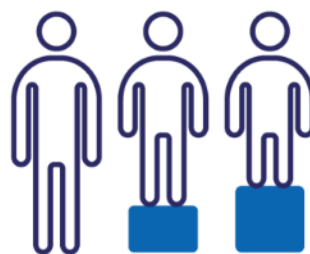
# Mobility Layers and Actions

**Identification**  **Mobility Options**  **Preparedness Strategic & Actions**

**Candidate Corridors**

**HCT Corridors**

High-Capacity Transit Solutions
(Light rail, bus rapid transit, commuter rail)

- Implement HCT Services
- Complete Planning & Environmental Studies

**Mobility Corridors & CONNECT Beyond Region**

Enhanced Bus Solutions

- Freeway-Based Express Bus Service
- Expand Service to New Areas
- Span or Frequency Enhancements

Mobility Solutions

- Transit Enhancement Strategies & Technologies
- Micro-Transit, Job Access Shuttles, Vanpools
- Land Use Strategies to Promote Transit

# High Capacity Transit (HCT) and Mobility Corridors

- HCT network
  - Light Rail
  - Commuter Rail
  - Bus Rapid Transit
  - Express Bus

- Mobility corridors
  - Other corridors to connect the region
  - Corridors that may be good HCT corridors in the long-term
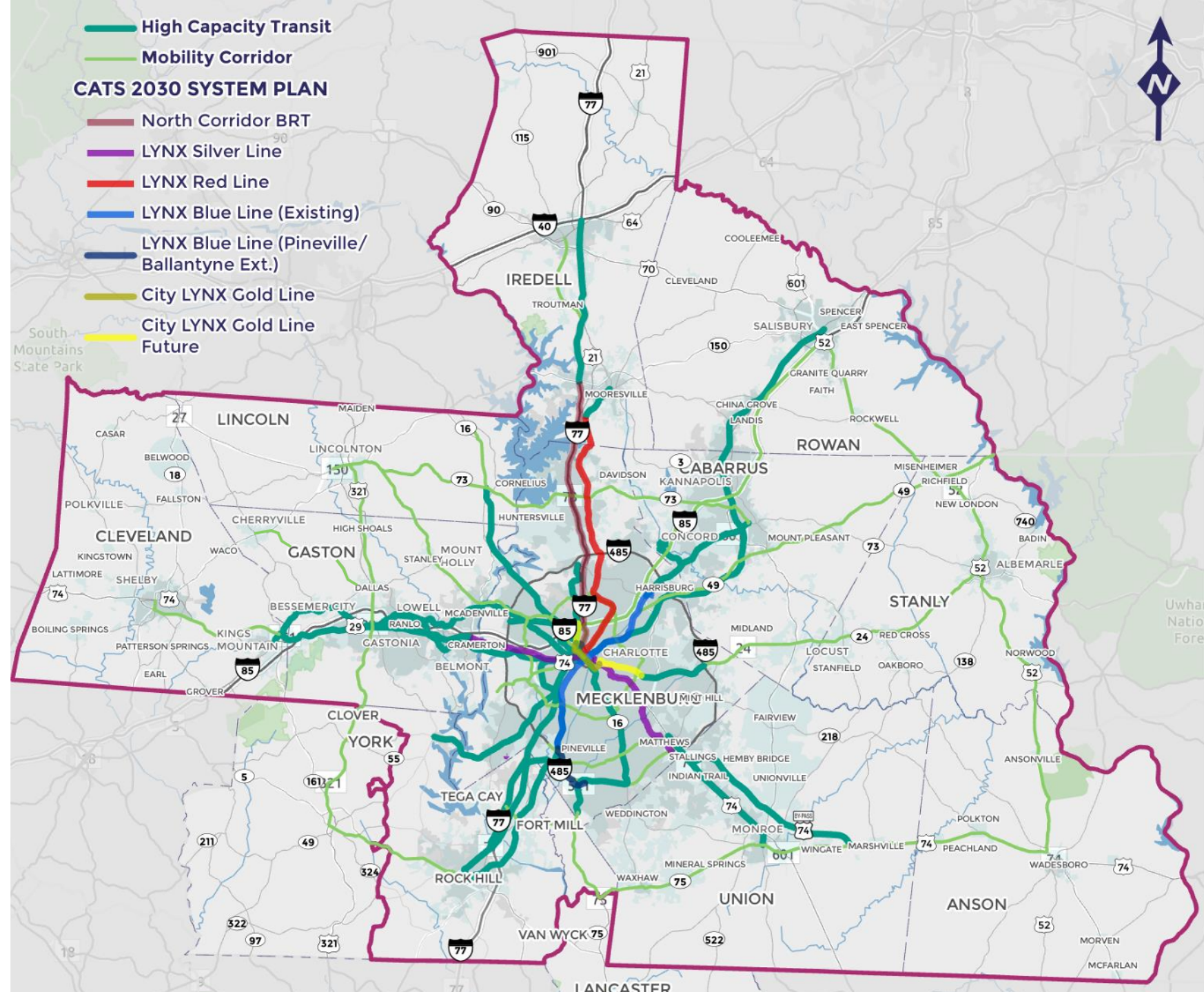
# Building a Better Bus Network

# Opportunity Statement

- Our region has multiple transit agencies

- Our residents and visitors rarely stay within a single jurisdiction

- To traverse our region our residents and visitors must navigate multiple transit systems

- To meet the transit needs of our residents and visitors today and in the future, we must explore and work towards a seamless and integrated transit system that allows everyone the freedom to effectively move around our region

**Existing Routes**
- Charlotte Area Transit System (CATS)
- City of Gastonia Transit
- Iredell County Area Transportation System (iCATS)
- Rock Hill MyRide
- Rowan Express
- Rider Transit
- City of Salisbury Transit
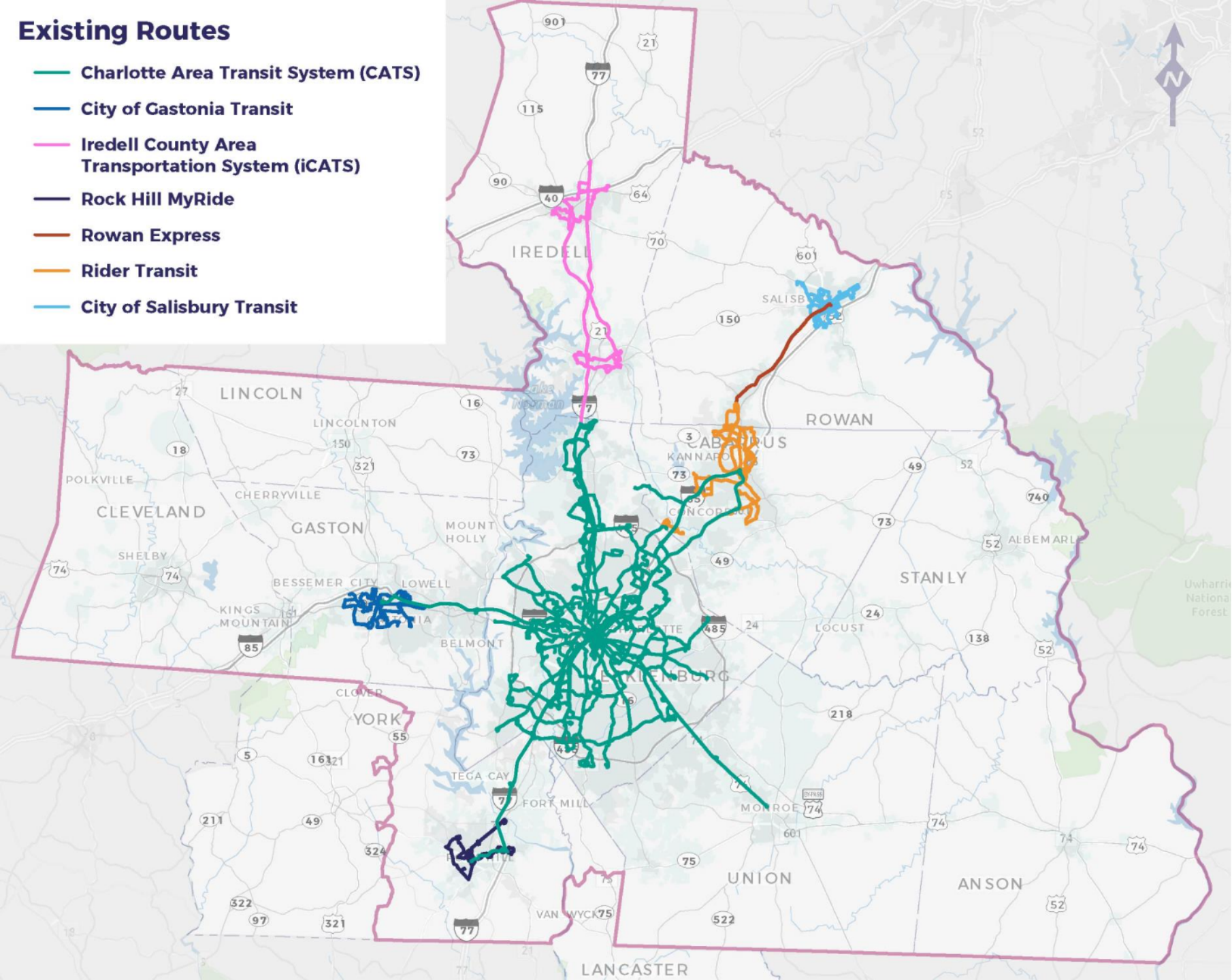
# Bus Routes in Our Region

# Building a Better Bus Network

Policy  Technology  Operational  Financial  Interagency Coordination  Education & Outreach

# Policy

- Develop an integrated system for the region
  - Fare, mobile ticketing
  - Trip planning
- Update policies, remove operating barriers for cross-jurisdictional travel
- Develop regional service standards
  - Customer's expectation across the region (hours, days, frequency, etc.)
  - Amenity guidelines
- Develop, maintain regional short-range or transit development plans
- ADA certification process standardization and reciprocity
- Incorporate transit and transit amenities in plan review process
- Collective purchasing for capital and planning tools
- MPO federal fund programming guidelines to fund regionally coordinated transit programs
- Inform local planning processes on bike/pedestrian transit connectivity
- Coordinated transit funding

# Technology

- Develop a coordinated and integrated fare collection technology
  - Software
  - Hardware
- Integrate with micromobility options
  - Trip planning incorporation
  - Pilot and/or deploy micromobility service models
- Leverage technology across the region to improve service delivery
  - Share positive technical experiences and adopt regionally
- Consistently collect and record ridership at the stop level to help inform future service adjustments and plan development
- Create a regional transit website and trip planning tool
- Develop and incorporate regional real-time tracking
- Develop integrated regional transit website
  - Trip planning
  - Customer service
  - Fare information

# Operational

- Create and maintain a regional service planning working group
- Adopt consistent service change periods
- Develop regional policy for strategic transfer points
- Perform a regional park-and-ride and Operations and maintenance (O&M) facility needs assessment
- Share transit O&M facility resources
- Develop coordinated amenities to improve the user experience
- Enhanced/expanded
  - Leve of service
  - Service area coverage
  - Frequency
- Regional fixed route scheduling integration
- Augment staff (planning and transit operations)
- Explore service consolidation opportunities
  - Fixed route and human services

# Financial

- Make funding available for new operational and administration staff
- Implement pilot projects to demonstrate the benefits of transit investments
- Develop regional collective purchasing agreement
  - Stronger purchasing power
- Explore public-private partnerships (P3s)
  - Potential opportunity with medical facilities and healthcare providers
- Explore other funding opportunities
- Reserve funding within each agency for regionally coordinated topics
- Develop a strategy to overcome dependence on state and federal funding
- Coordinate with NCDOT and SCDOT to integrate HCT and other transit investments into roadway planning and design process

# Interagency Coordination

- Create a regional service planning working group
- Establish a regional paratransit working group
- Create a regional transit coordination entity
- Stronger transit coordination with MPOs
  - Develop a ~5-year regional transit plan to forecast changes and capital needs
- Regional training programs to improve data collection and reporting
  - Develop regional reporting manual
- Cooperative purchasing agreements (stronger purchasing power)
- Coordinate policy development across region
- Add a transit committee to standing MPO technical meetings and transit personnel at the MPO level
  - Support transit agency with local planning and federal fund programming
- Match accompanying and complimentary ADA services

# Education & Outreach

- Identify and implement pilot projects to demonstrate the benefits of transit investments
  - Micromobility, emerging technology and service delivery models
- Implement regional marketing campaign on why transit is important
  - Highlight what we do today, what we could do tomorrow/future
- Demonstrate how transit supports overarching city goals such as land use planning, economic development, sustainability (clean air), etc.
- Identify opportunities to incorporate transit in other planning efforts
  - Example: Update zoning ordinance to include transit amenities as part of the development approval process
- Identify, engage and promote local and regional transit champions
- Work with community colleges and develop a curriculum to prepare the transit workforce of tomorrow
- Transit agencies develop and deploy (every 5 years) an on-board and customer satisfaction surveys

**Strengthen Rural to Urban Connections**

# Opportunity Statement

- Our region has multiple transit providers.

- Our residents may reside in one county, but their lives are not bound by that county. They require good access to specialty medical facilities, good paying jobs, educational opportunities, and more.

- To traverse our region our residents and visitors must navigate multiple transit systems.

- To meet the transit needs of our residents and visitors today and in the future, we must explore and work towards a seamless and integrated transit system that allows everyone the freedom to effectively move throughout our region.

# Recommendations for Stronger Rural to Urban Connections

**CONNECT Beyond**

Governance

Service Coordination

Funding

Communication

# Governance

- Conduct an in-depth review of Transit Providers' service area policies and structures to expand coordination and trips opportunities
- Standardized agreements/MOUs to enhance the customer experience and service coverage
- Address urbanized area service gaps
  - Mecklenburg, York, and Lancaster counties.
- Investigate the license costs for integrated technology for acquiring multi-county/multiple transportation providers – operating on the same software platform
- Communication between the two State Departments of Transportation (SCDOT – Office of Public Transit and NCDOT – Intermodal Division)

# Service Coordination

- Establish a Regional Mobility Manager
- Establish standing agency coordination touchpoints
  - Amongst in-state systems
  - South Carolina and North Carolina should
  - With transit providers
- Conduct cost / benefit analysis to determine whether or not a 'standardized' fare collection system will enhance mobility in the region
- Develop regional plan to collectively purchase transit capital
  - Stronger purchasing power

# Funding

- Evaluate both the financial and service impacts to rural and urban providers of NC2021 Medicaid Managed Care program
  - Coordinate with NCPTA
- Develop a funding source and/or shared-cost allocation to support a long-term Regional Mobility Program
- Pursue transit funding approaches
  - Local, regional, state, federal, others
  - Rental vehicle gross receipts tax, vehicle registration surcharge, parking tax, local option sales tax, land transfer fees, county government contributions

# Communication

- Implement an on-going regional communication and marketing program on the value of transit
- Establish quarterly meetings between CATS-STS and MTS to discuss best practices and devise new strategies for coordinated service delivery
- Establish standing technical touchpoints between providers with participation of NC and SC State representatives
  - Continue implementing CONNECT Beyond recommendations
  - Unearth and implement new service opportunities
  - Establish agreements to enhance user experience, expand services, and future opportunities

# Mobility Hub Network

Rural

Suburban

Urban

## TRANSIT NETWORK CONNECTIVITY

- ● MOBILITY HUB
- ○ TOD
- ▬ HIGH-SERVICE TRANSIT ROUTE
- ▬ NEIGHBORHOOD-SERVING TRANSIT ROUTE
- ┇┇┇ COMPLETE STREET OR GREENWAY
- ↔ MULTIMODAL CONNECTIONS
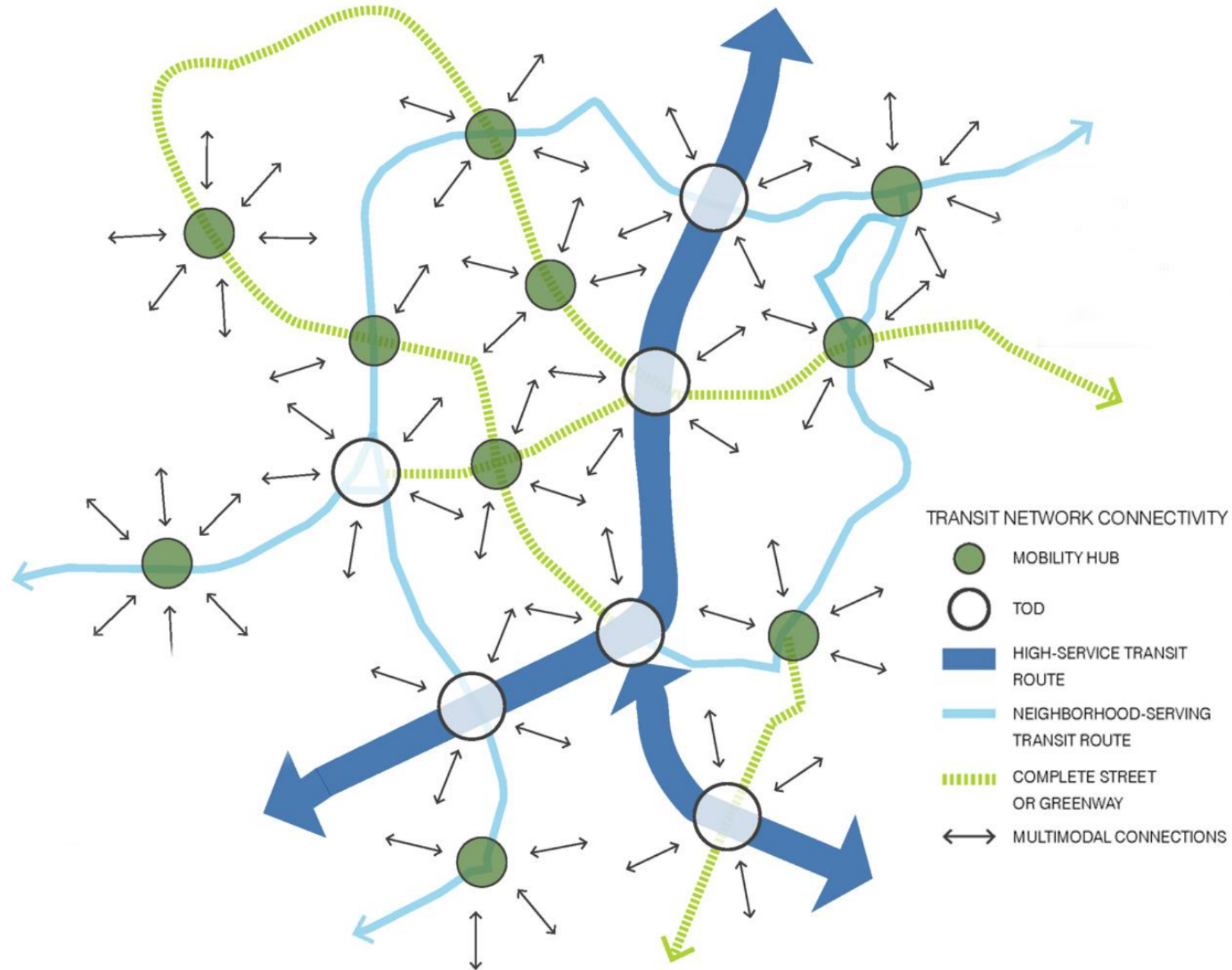
# Mobility Hubs

Mobility hubs provide an integrated suite of mobility services, amenities, and technologies to enable seamless multimodal trips.

## Locations should include:

- Access to **two or more transportation services**
- **Biking and walking access** to the site
- A **sense of place** and human-centered design
- Locally-relevant and context sensitive **programming and amenities**
- **Fair and equitable access**, including universal design
- Cohesive, **intentional design**
- **Flexibility** to adapt to evolving needs
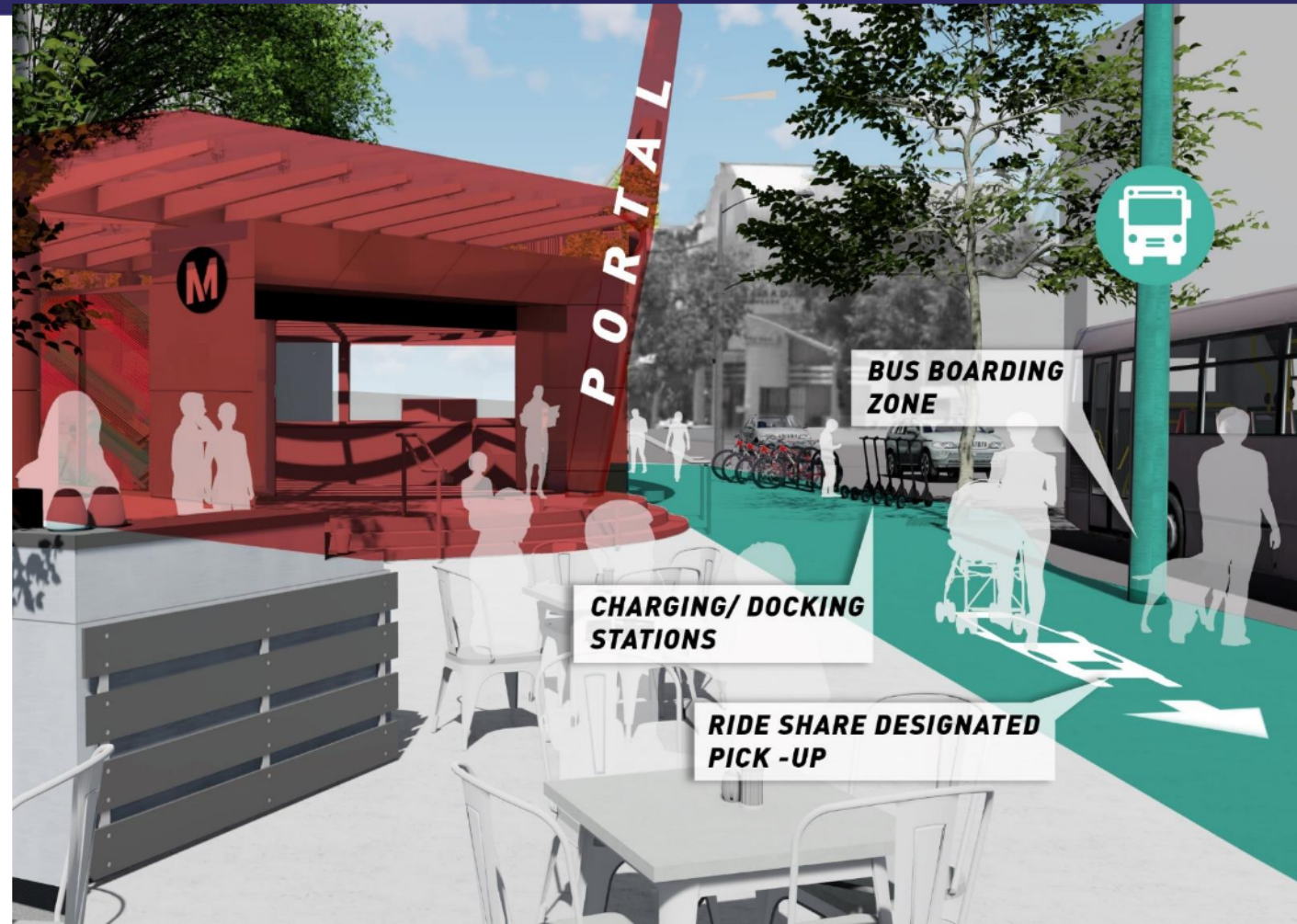
# Mobility Hubs

Mobility hub elements can be mixed and matched to create a mobility hub that is customized for each location.
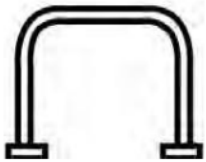
Short term bike parking
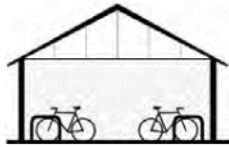
Long term bike parking

Bikeshare & scootershare parking
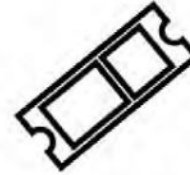
Transit ticket and integrated payment kiosks

Real time transit information & other shared mode information

Electric vehicle charging (including bicycles & scooters)

Bus/shuttle stop
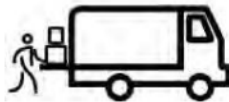
Freight loading/ unloading area

Wifi hub
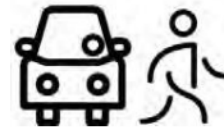
Ridesourcing loading/ unloading area
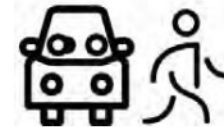
Microtransit pick up & drop off area
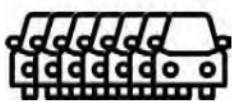
Carshare parking and access points

# Mobility Hubs

Mobility hubs can be big or small. They are designed to perform differently in different contexts.

## Legend

**Transit Lines**
- North Corridor BRT
- LYNX Silver Line
- LYNX Red Line
- LYNX Blue Line (Existing)
- LYNX Blue Line (Pineville/Ballantyne Ext.)
- City LYNX Gold Line
- City LYNX Gold Line Future
- Charlotte Area Transit System (CATS)
- City of Gastonia Transit
- Iredell County Area Transportation System (iCATS)
- Rock Hill MyRide
- Rowan Express
- Rider Transit
- City of Salisbury Transit

**Mobility Hubs and Corridors**
- Mobility Hubs (CATS)
- Mobility Hubs (CONNECT Beyond)
- High Capacity Transit
- High Capacity Transit - Commuter Rail
- Mobility Corridor

# Thank You!

# APPENDIX 5 – Regional Transit Inventory and Performance Analysis

# Regional Transit Inventory and Performance Analysis

**August 11, 2021**

# Contents

# Tables

# Figures

# Introduction

The greater Charlotte metropolitan region continues to grow at a fast pace. Currently there are approximately 2.6 million people who live in our region and by 2045 it is projected to grow to roughly 4.1 million. This growth raises important questions about the future of mobility, accessibility, and connectivity for the 12 counties in and around the Charlotte metropolitan area.

Transportation is a critical component in keeping a region and its residents connected and thriving. Data show that areas seamlessly interconnected by a variety of transportation options are far more likely to attract people, businesses, investments, and new opportunities. Providing a variety of transportation options helps enhance the quality of life for residents and visitors by providing greater access to education, healthcare, and recreational activities. These options impact economic development as well by creating better access to jobs and businesses within the greater Charlotte region.

To help address the issue of creating seamless and integrated transportation connections, the region embarked on a project called CONNECT Beyond—a two-state, 12-county regional mobility initiative coordinated by the Centralina Regional Council and the Metropolitan Transportation Commission (MTC). The goal of CONNECT Beyond is to create a unified regional transit vision and plan.

## Purpose

This report documents the regional transit system evaluation process for the 12-county study area. The purpose of the evaluation was to analyze the performance of urban fixed route service providers (described in this report as Urban Services Providers) and rural human service providers (described in this report as Community Transportation Providers). The project team examined existing conditions to gain insight into current operating efficiencies and develop preliminary concepts for connecting and optimizing transit services in the region. The data collected was used to complete a system-wide performance analysis and identify areas needing further examination. A general description of the region's transit service was developed, along with an analysis of daily operating standards by each service type (local, express, circulators, etc.). The resulting observations are intended to inform the region on ways to connect and optimize existing transit services.

This document is organized as follows:

- Description of the region's transit services
- Summary of daily operating requirements and historical service performance characteristics for Fiscal Years (FY) 2014–2018 by agency:
    - Riders per revenue hour
    - Riders per revenue mile
    - Operating cost per rider
    - Miles per passenger trip
- Analysis of system-wide key performance metrics against national benchmarks and peer systems

## Project Background

Over the past two decades, the greater Charlotte metropolitan region has experienced unprecedented growth. Strategic public infrastructure investments, coupled with the region's diversified population and economic base, have helped attract and retain a rich mixture of residents and workers. This has helped the region remain resilient through turbulent national economic cycles and the COVID-19 pandemic.

Transportation has been regularly identified by residents as a top priority. Past regional planning efforts included CONNECT Our Future, an initiative focused on developing a comprehensive regional growth framework across 14 counties in North Carolina and South Carolina. CONNECT Our Future established core values to help guide the region's growth and development.

Transportation remains a central feature of the ongoing CONNECT Our Future effort. With 1.5 million additional residents projected to arrive in the region by 2045, regional and community leaders realized a variety of mobility options would be needed to support all travelers. As economic conditions, financial outlooks, transportation system trends, and land use environments change, regional plans must be updated accordingly. As the greater Charlotte region continues to compete on the global stage, access to a safe, reliable, affordable, and well-connected transportation network will be one of the most important means of ensuring equitable participation and benefits for social and economic prosperity.

CONNECT Beyond is the first regional effort to create a single, coordinated transit vision that includes multiple transit modes. The CONNECT Beyond project study area, shown in Figure 1, includes Anson, Cabarrus, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union counties in North Carolina and the urbanized areas of Lancaster and York counties in South Carolina.

**FIGURE 1. CONNECT BEYOND PROJECT STUDY AREA**

SOURCE: NCDOT, SCDOT, HDR 2020
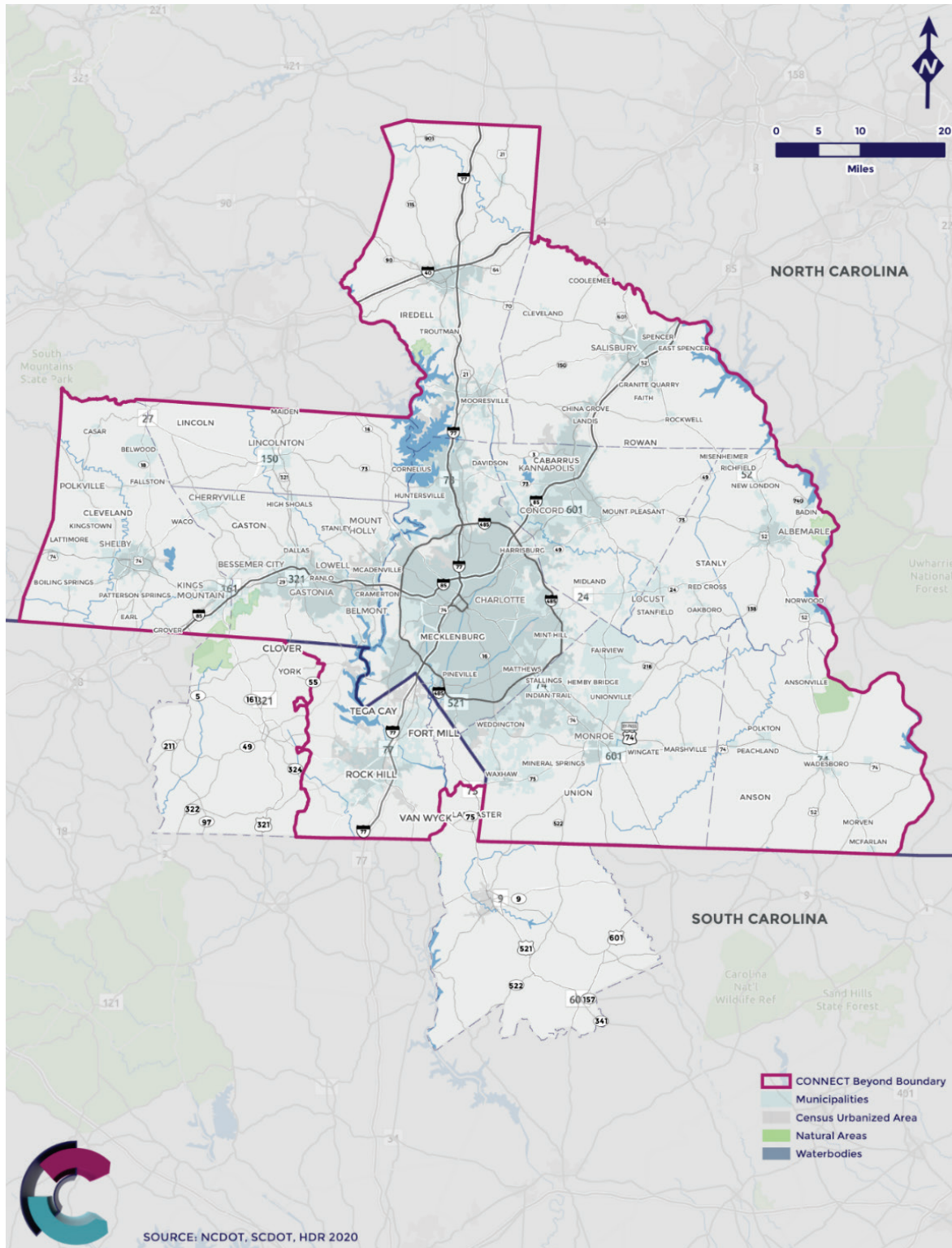
# Approach

An assessment of existing data from the National Transit Database (NTD) and each partnering agency was conducted. Fiscal year (FY) 2018 was chosen as the cutoff point because it was assumed that when the study began, some agencies may not have submitted their FY 2019 data or may have been in the process of reviewing their data with the Federal Transit Administration (FTA). The study team initiated a data request with each agency and a data collection effort from NTD concurrently for the following information:

- Funding Structure – Key NTD Categories (FY 2018)
- Annual Ridership (FY 2014–2018)
- Revenue (FY 2014–2018)
- Revenue Miles (FY 2014–2018)
- Revenue Hours (FY 2014–2018)
- Average Passenger Miles per Trip (FY 2014–2018)
- Monthly Ridership (FY 2014–2018)
- Vehicle Assets (FY 2018)
- Facility Assets (FY 2018)
- Facility Geographic Information System (GIS) (2019)

Because the initial data request coincided with many agencies' fiscal year-end, only a limited number of initial responses were received. Consequently, an itemized data profile was created for each agency and provided as a follow-up request. Each data profile had hyperlinked worksheets by data type with available data from NTD already inserted for validation and data cells with missing information identified for completion. The profiles also included a request for the following additional qualitative data not required for NTD reporting:

- Passenger boarding data from the 10 highest ridership fixed route stops and demand response stops/areas
- Demand response service area or subscription route destination – GIS
- On-time performance definition and data by mode and route (2017-2019)[1,2]

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[1] A transit vehicle is considered "on time" if it departs a location within a certain number of minutes after and/or before the scheduled time. Transportation Research Board Transit Cooperative Research Program Report 88: A Guidebook for Developing a Transit Performance-Measurement System
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_report_88/guidebook.pdf

[2] A 2011 article noted a voter mandate of 85 percent on-time for San Francisco MUNI so that funding is tied to performance.
https://ggwash.org/view/9463/use-industry-standards-for-bus-and-rail-on-time-performance

- System history and service modification/expansion in 2019

Peer systems from across the United States were selected based on system design and network connectivity. The Florida Transit Information System (FTIS) peer selection tool was used for the selection because it incorporates socioeconomic factors, transportation network characteristics, and funding structure.[3]

The results of the system evaluation hinged on the completeness and quality of the data. Given the scale and staffing of each agency there are varying approaches to data collection which can make a unified database difficult to attain. The study team found the following data related issues:

- While the FTA publishes and updates reporting policy requirements and user guides[4], not all agencies collect or report the same data (depending on agency capacity and requirement); therefore, some data points were missing or unvalidated.
- Some data were lost or not available because of staff turnover.
- Double counting of data can occur when related services are provided and reported by multiple agencies; data can include fare revenue and ridership information.
- Some monthly data reported did not add up to annual data totals when compiled. The study team relied on NTD data unless agencies made corrections when validating the information in the data request files provided.
- Annual changes to NTD requirements may be unclear to some agencies, resulting in cumbersome or difficult data collection.
- On-time performance (actual and goal) is not a standard metric that is defined or tracked in the region.
- Some agencies report operating and financial information to the North Carolina Department of Transportation (NCDOT) Public Transportation Division. However, data from NCDOT and NTD reporting were not always consistent.

Given the regional focus of the CONNECT Beyond project, there seems to be a need for a structured and coordinated approach to collect, validate, and manage data pertinent to transit planning. Such an approach will improve data reliability and inform future planning.

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[3] https://www.ftis.org/Urban-iNTD-Tutorials/intd07.html
[4] https://www.transit.dot.gov/ntd/manuals

# Service Inventory

## Transit Service Area Profile

The CONNECT Beyond study area includes two states, 12 counties, and 17 transit agencies. Together, these agencies provide public transit services that include demand response, demand taxies, subscription routes, circulators/shuttles, fixed route buses, vanpools, light rail, streetcar, and commuter express buses. Transit providers in the study area are shown in Figure 2.

**FIGURE 2. REGIONAL MAP**
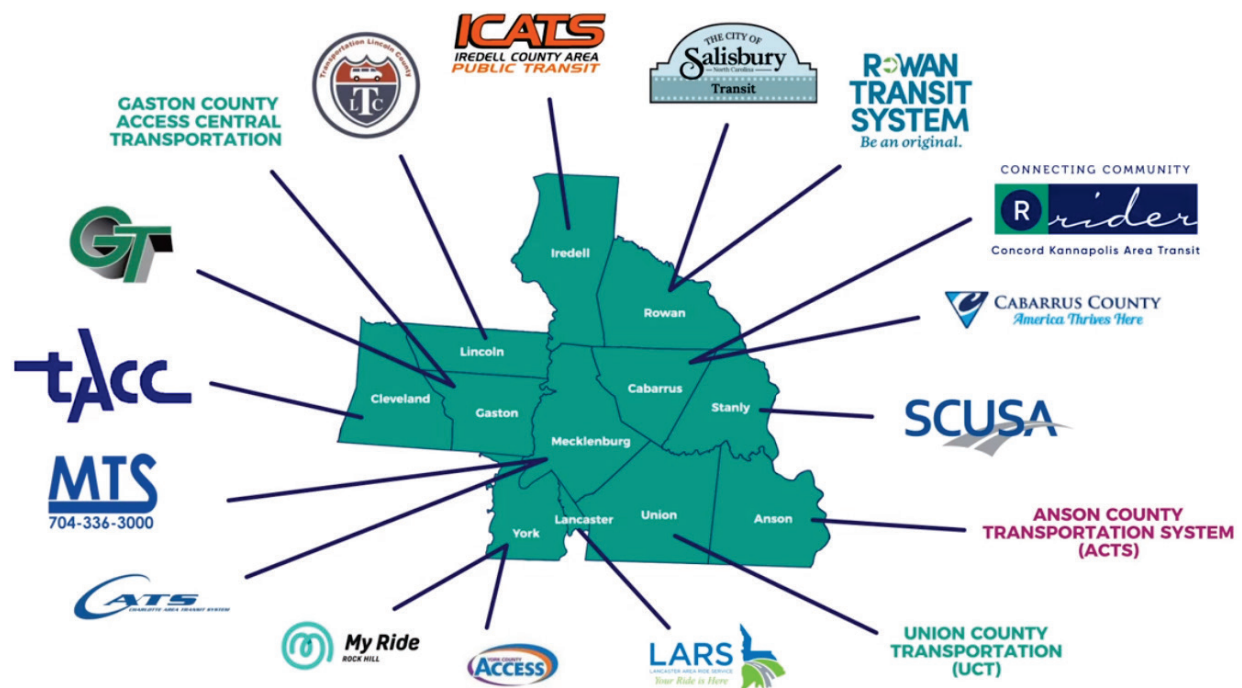
A summary of public transit services by agency is provided in Table 1.

TABLE 1. SERVICE OPERATED BY AGENCY

| Agency | Bus | Commuter Bus | Demand Response | Demand Response Taxi | Light Rail | Streetcar Rail | Vanpool |
|---|---|---|---|---|---|---|---|
| Urban Services Providers | | | | | | | |
| Charlotte Area Transit System | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Concord Kannapolis Area Transportation - Rider Transit | ✓ | | ✓ | | | | |
| City of Gastonia Transit | ✓ | | ✓ | | | | |
| Rock Hill My Ride | ✓ | | | | | | |
| City of Salisbury Transit | ✓ | | | | | | |
| Community Transportation Providers | | | | | | | |
| Anson County Transportation System | | | ✓ | | | | |
| Cabarrus County Transportation Services | | | ✓ | | | | |
| Gaston County ACCESS Central Transportation | ✓ | | ✓ | | | | |
| Iredell County Area Transportation System | ✓ | | ✓ | | | | |
| Lancaster Area Ride Service (Zone 5) | | | ✓ | | | | |
| Mecklenburg Transportation System | | | ✓ | ✓ | | | |
| Rowan Transit System | ✓ | | ✓ | | | | |
| Stanly County Transportation Services – Stanly County Umbrella Services Agency | | | ✓ | | | | |
| Transportation Administration of Cleveland County | ✓ | | ✓ | | | | |
| Transportation Lincoln County | ✓ | | ✓ | | | | |
| Union County Human Services' Transportation Division (Union County Transportation) | | | ✓ | | | | |
| York County Access | | | ✓ | | | | |

A summary of operations characteristics by agency is provided in Table 2.

**TABLE 2. OPERATIONS CHARACTERISTICS BY AGENCY**

| Agency | Service Frequency | Span & Level of Service | Americans with Disabilities Act (ADA) Coverage Area | Fare Structure |
|---|---|---|---|---|
| Urban Services Providers | | | | |
| Charlotte Area Transit System | Weekday & Weekend; Light Rail 7.5-15 minutes weekday / 20 minutes weekend Local Fixed Route 10-60 minutes Local Express and Regional Express 15-30 minutes (weekday peak only) Village Rider Shuttle 60 minutes (weekday only) | Monday –Saturday 5:00 am to 2:00 am Sunday 5:00 am to 1:00 am | Federally mandated within 3/4 mile of local fixed route services | $2.20 for base fixed route fares, $3 for express fare, $4.40 for regional express fair, mileage-based vanpool fares, and $3.50 for paratransit fares |
| Concord Kannapolis Area Transit – Rider Transit | Monday–Sunday 60-75 minutes | Monday–Friday 5:30 am to 8:30 pm Saturday–Sunday 8:30 am to 8:30 pm | Federally mandated within 3/4 mile of fixed route services | $1.25 for base fixed route fares, $0.60 reduced fare, and $2.00 for paratransit fares |
| City of Gastonia Transit | Monday–Friday 60 minutes Saturday 120 minutes | Monday–Friday 5:30 am to 6:30 pm Saturday 8:00 am to 6:00 pm | Federally mandated within 3/4 mile of fixed route services | $1.25 for base fixed route fares, $0.60 reduced fare, and $2.50 for paratransit fares |
| Rock Hill My Ride | Monday–Saturday 60 minutes | Monday–Saturday 7:00 am to 7:00 pm Sunday 9:00 am to 5:00 pm Route 1 Downtown/Knowledge Park Loop- extended service Fridays and Saturdays until 9:00 pm. | Federally mandated within 3/4 mile of fixed route services | Zero fare for fixed route and $2.50 for Ride-to-Work Service provided by York County (each way) |

| Agency | Service Frequency | Span & Level of Service | Americans with Disabilities Act (ADA) Coverage Area | Fare Structure |
|---|---|---|---|---|
| City of Salisbury Transit | Monday–Friday 70-80 minutes<br>Saturday 70 minutes | Monday–Friday 6:00 am to 7:00 pm<br>Saturday 9:30 am to 3:20 pm | Federally mandated within 3/4 mile of fixed route services | $1.00 for base fixed route fares, $0.50 reduced fare, and $2.00 for paratransit fares |
| Community Transportation Providers | | | | |
| Anson County Transportation System | On demand | Monday–Friday 8:30 am to 4:30 pm | Countywide; out of County trips are considered on a case by case basis | Services to appointments $1.20 one way for up to five miles, then an additional $0.60 per 2.5 miles increment. ACTS charges businesses $14.77 per hour and $0.58 per mile for each route |
| Cabarrus County Transportation Services | On demand | Normal business hours, six days a week. Only dialysis, life sustaining, or other critical appointments scheduled on county holidays. | Countywide; out-of-county can also be scheduled | Rural General Public trip is $3.00 |
| Gaston County ACCESS Central Transportation | Monday–Sunday 75-100 minutes | Monday–Friday 4:00 am to 6:00 pm<br>Salisbury VA–Tuesday and Thursday only<br>Gaston College– every hour 7:30 am to 4:30 pm at Transit Station | Federally mandated within 3/4 mile of fixed route services | $1.00 for base subscription route fares |
| Iredell County Area Transportation System | Monday–Sunday 75-100 minutes | Express routes– three trips during AM and PM peak 5:00 am to 8:30 pm<br>Bloom– four trips daily 9:00 am to 4:00 pm<br>Mooresville Main– seven trips daily 7:00 am to 6:00 pm<br>Community Connection– eight trips daily 6:30 am to 4:00 pm<br>Shuttle to Salisbury VA– Tuesdays 8:30 am to 4:00 pm | Federally mandated within 3/4 mile of local fixed route services | $1.25 for base fixed route fares, $0.60 reduced fare, and $2.00 for paratransit fares. 5310-Urban Elderly & Disabled program and Job Access and Reverse Commute (JARC) program charges $1.00 one way. $3,00 for express and $1.50 reduced fare. |

| Agency | Service Frequency | Span & Level of Service | Americans with Disabilities Act (ADA) Coverage Area | Fare Structure |
|---|---|---|---|---|
| Lancaster Area Ride Service (Zone 5) | On demand | Monday–Friday 9:00 am to 3:00 pm | Countywide; out-of-county services for medical treatments only | $2 one way for trips within Lancaster County, $5 one way to and from Rock Hill, and $10 to and from Columbia or Charlotte |
| Community Transportation Providers (continued) | | | | |
| Mecklenburg Transportation System | On demand | Monday–Sunday 5:00 am to 7:00 pm | Countywide | $1.50 one way, with some trips covered by different agencies. No fare to veterans, Medicaid transportation, or nutrition congregate. |
| Rowan Transit System | Express: five morning and five afternoon trips are provided Monday through Friday that connect the Depot Transfer Site in Salisbury to the Amtrak station in Kannapolis. | Demand Response: West Rowan– Tuesday North Rowan– Wednesday South Rowan– Thursday East Rowan– Friday; 7:30 am to 5:00 pm Express– five days a week from 5:19 am to 9:19 am and 1:19 pm to 5:19 pm every hour | Countywide | Express: $1. Demand Response: $2 one way except for those eligible for certain grant funded programs or Medicaid |
| Stanly County Transportation Services – Stanly County Umbrella Services Agency | On demand | Monday–Friday 8:30 am to 5:00 pm | Countywide | One-way tickets range from $1.50 to $6.50 based on origin and destination |
| Transportation Administration of Cleveland County | CCT: Four trips West End REACH: Seven trips a day every 45 minutes | CCT–Monday–Friday 7:15 am to 3:08 pm West End REACH– Monday, Wednesday, Friday 9:15 am to 2:45 pm | Federally mandated within 3/4 mile of fixed route services | CCT: $1.00 for base fixed route fares, $2 per deviation West End REACH is zero fare Demand response base rate is $1.67 per van mile in or out-of-county |

| Agency | Service Frequency | Span & Level of Service | Americans with Disabilities Act (ADA) Coverage Area | Fare Structure |
|---|---|---|---|---|
| Community Transportation Providers (continued) | | | | |
| Transportation Lincoln County | Subscription and on-demand | Demand Response: Monday–Friday 6:00 am to 5:00 pm; out-of-county 9:00 am to 3:00 pm<br>Mooresville and Huntersville– Tuesday–Thursday 9:00 am to 2:00 pm<br>Lincolnton Town– 8:05 am to 5:45 pm (eight loops a day) | Countywide | Lincolnton Town route is $1.00 one-way loop. Rural, general public trips change price depending on zone. Most trips paid by human service agency contract. |
| Union County Human Services' Transportation Division (Union County Transportation) | On demand | Monday–Friday 6:00 am to 5:00 pm. Only dialysis, life sustaining, or other critical appointments scheduled on county holidays. | Countywide | $2 one way for RFP and EDTAP clients and $0 for human service agency clients |
| York County Access | On demand | Monday–Friday 6:00 am to 6:00 pm<br>Ride-to-Work– 5:30 am to 9:00 am and 3:30 pm to 6:00 pm | Countywide; out of county service available | $2.50 each way; trips outside York County will be determined on an individual basis |

## Urban Services Providers

### Charlotte Area Transit System

Background

CATS was formed in 2000 after Mecklenburg County voters approved a transit ½-cent sales tax in 1998. Prior to 1998, Charlotte Transit, a division of the Charlotte Department of Transportation, provided transit services primarily within the city limits of Charlotte. With a dedicated county-wide funding source, CATS expanded services throughout Mecklenburg County. Through an interlocal agreement with all seven Mecklenburg County jurisdictions, CATS remained a department within the City of Charlotte, but a policy board called the Metropolitan Transit Commission was created to govern policy, service planning, and capital investments.[5] CATS serves the greater Charlotte region including Mecklenburg County, the City of Charlotte and the six towns surrounding Charlotte (Cornelius, Davidson, Huntersville, Matthews, Mint Hill, and Pineville). As of 2020, the agency operates over 50 fixed bus routes, including, 17 express bus routes, Village Rider town shuttles, light rail, streetcar, demand response, and vanpool services. CATS' general profile is provided in Table 3.

### TABLE 3. AGENCY PROFILE – CATS

| Profile | CATS |
|---|---|
| Service frequency | 7.5–15 minutes on light rail and fixed route bus on weekdays and 30–60 minutes on weekends; 45–60 minutes for express and shuttle bus (Village Rider) |
| Span & level of service | Monday–Saturday, 5:00 am to 2:00 am<br>Sunday, 5:00 am to 1:00 am |
| Americans with Disabilities Act (ADA) coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | $2.20 for base fixed route fares, $3 for express fare, $4.40 for regional express fair, mileage-based vanpool fares and $3.50 for paratransit fares |

In FY 2018, CATS provided services for 23 million riders on a $284 million annual budget. About 44 percent of the total $284 million was funded by local sources (including the county ½-cent sales tax). Table 4 provides a breakdown of CATS' funding by source.[6]

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[5] https://charlottenc.gov/cats/transit-planning/Pages/default.aspx
[6] Directly generated funds are funds that a transit agency earns from non-governmental sources, including passenger fares, funds related to transit (park-and-ride parking revenue, advertising and concessions, charter service, etc.), funds unrelated to transit (subsides from other sectors, investment income and interests, etc.), dedicated funds (applicable to transit agencies that are independent political entities and have the ability to impose taxes, such as non-local, county tax to transit). Local and State funds include funds from local and state government annual budgets that are not dedicated to transit. Federal funds typically include amounts that agencies receive from the Federal government on a cost-reimbursement basis.

**TABLE 4. AGENCY FUNDING – CATS, FY 2018**

| Funding Source | FY 2018 Amount | Percentage of Funding |
|---|---|---|
| Total directly generated funds earned during period | $33,273,047 | 12% |
| Total local funds earned during period | $124,105,428 | 44% |
| Total state funds earned during period | $57,556,410 | 20% |
| Total federal funds earned during period | $69,066,211 | 24% |
| Total funds earned during period | $284,001,096 | 100% |

For CATS services provided in FY 2018, most trips were on fixed route buses (67 percent), followed by light rail (26 percent). In FY 2018, bus services made up 64 percent of the total operating expenses with light rail was next at 15 percent. Vanpools and commuter buses provided the longest trips, at 43 and 14 miles respectively. Table 5 outlines the general characteristics of the services by mode.

**TABLE 5. SERVICE CHARACTERISTICS BY MODE – CATS, FY 2018**

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Bus | 67% | 64% | 4.3 |
| Commuter bus | 4% | 10% | 14.4 |
| Demand response | 1% | 9% | 10.3 |
| Light rail | 26% | 15% | 5.2 |
| Streetcar rail | 1% | 1% | 0.8 |
| Vanpool | 1% | 1% | 42.9 |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.*

Service Performance

CATS' overall ridership decreased from FY 2014 to FY 2018 at a rate of seven percent per year This trend was driven by a ten percent annual decrease in bus ridership, an estimate that was a significant departure from the national average of negative two percent over the same period.[7] The combined light rail and streetcar ridership grew at five percent a year, which is higher than the national rail ridership growth rate of negative one percent. Additionally, the LYNX Blue Line Extension (BLE) began service March 2018. Bus routes were changed during that time, specifically Route 11, which was CATS' highest ridership route. Many of CATS' customers

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[7] As reported by Transit Center. https://insights.transitcenter.org/

transitioned from bus to the BLE corridor. Figure 3 and Figure 4 depict CATS' monthly ridership for FY 2014–2018.[8]

**FIGURE 3. AGENCY MONTHLY RIDERSHIP – CATS – BUS AND LIGHT RAIL, FY 2014–2018**



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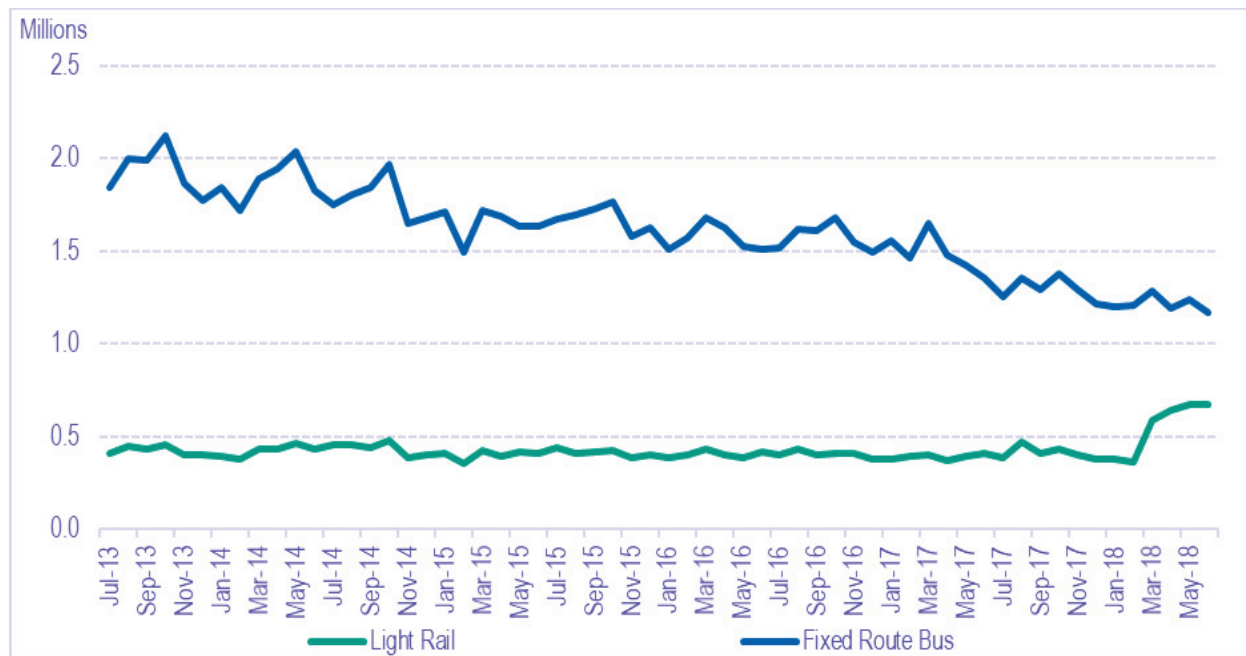
[8] Chart does not have enough room to show label for each month.

**FIGURE 4. AGENCY MONTHLY RIDERSHIP – CATS – OTHER MODES, FY 2014–2018**
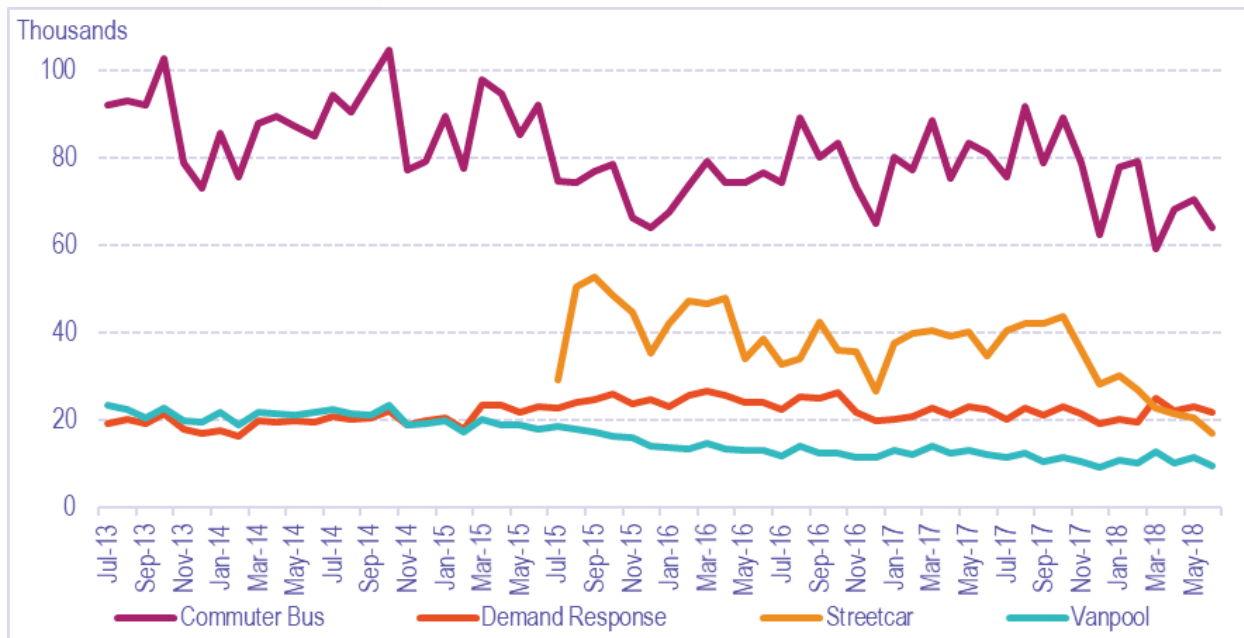


Performance data was standardized for service effectiveness and efficiency.[9] The most effective transit modes for CATS were streetcar (free) and light rail, as they carried the largest number of riders per revenue mile and per revenue hour. As a result, they were the most fiscally efficient modes as well, with operating expense at around $4.00 per trip, which was on par with the national average.[10] Commuter bus service reported the strongest fare recovery, at 29 percent; however, compared to national averages, bus was not as effective or efficient. Table 6 reports CATS' performance data from FY 2018.

**TABLE 6. SERVICE PERFORMANCE BY MODE – CATS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|------|----------------------------|----------------------------|----------------------------|---------------|---------------------|
| Bus | 1.5 | 19.6 | $6.13 | 18% | 86% |
| Commuter bus | 0.7 | 15.4 | $16.82 | 29% | 84% |
| Demand response | 0.11 | 1.8 | $50.20 | 6% | 82% |
| Light rail | 4.1 | 64.6 | $3.69 | 19% | 98% |
| Streetcar rail | 7.9 | 41.8 | $4.00 | N/A | 86% |

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[9] Data standardization was applied to put variables on the same scale for comparison. In additional to time (FY 2018), ridership was scaled by revenue mile and revenue hour to measure service effectiveness while operating expense was scaled by ridership to measure service efficiency.

[10] As reported by Transit Center. https://insights.transitcenter.org/

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Vanpool | 0.1 | 6.5 | $15.28 | 19% | N/A |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |
| National average – rail | 4.1 | N/A | $3.64 | 52% | N/A |

*Note: CATS reported its vintage trolley streetcar service as streetcar rail. Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average data are from TransitCenter.Org. Demand response performance was not available on TransitCenter.Org*

For on-time performance,[11] CATS bus reported over 84 percent and light rail reported over 98 percent of all trips, which was extremely high compared to information collected by the following sources:

- Swiftly (2019): 2,698 bus routes in the 25 largest agencies reported on-time performance of 66 percent on average,[12]
- Transit Center (2018): all sampled agencies reported on-time performance below 75 percent.[13]

The asset conditions for CATS are shown in Table 7. According to the FTA, the FY 2018 national average of facility condition rating was 3.0 and the useful life remaining for bus service vehicles was 7.6 years (out of 14 years for bus and 10 years for van/cutaways).[14] As shown in Table 7, CATS' facility ratings were above 4.0 (which is the threshold for "Good"; maximum is 5.0 "Excellent") with vehicle useful life at least two years below the national average.[15]

### TABLE 7. ASSETS CONDITIONS – CATS, FY 2018

| Facilities TERM-LITE Score | Vehicles Useful Life Remaining – Fixed Route Bus | Vehicles Useful Life Remaining – Demand Response |
|---|---|---|
| 4.3 | 5.1 | 4.9 |

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[11] A vehicle is considered "late" when it arrives five minutes or more after the scheduled time. A vehicle is considered "early" if it departs one minute or more prior to the scheduled time. All other trips are considered "on time".
https://charlottenc.gov/cats/bus/Pages/on-time.aspx
[12] For consistency, 2018 data should have been used for comparison, but the data were not available.
https://blog.goswift.ly/state-of-the-bus-2019-badbcbc614de
[13] https://transitcenter.org/bus-time-even-mean/
[14] FTA requires transit agencies to assess and report facility condition to the NTD based on the five-point scale used in the Transit Economic Requirements Model (TERM). The TERM scale indicates that an asset is considered in good repair if it has a rating of 3 (adequate), 4 (good), or 5 (excellent); it is not considered to be in good repair if it has a rating of 1 (poor) or 2 (marginal). https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/asset-management/146671/tam-2018-ntd-extended_2.pdf
[15] Ibid.

## Concord Kannapolis Area Transit – Rider Transit

Background

Two public transit agencies currently help provide mobility options in Cabarrus County—Cabarrus County Transportation Service (CCTS) and Concord Kannapolis Area Transportation (Rider). Rider has provided local fixed route service in Concord and Kannapolis since 2004, as well as federally mandated complementary Americans with Disabilities Act (ADA) paratransit services (contracted to a private company). Rider's fixed route bus service includes seven local routes and the Concord Charlotte Express (CCX), a regional express route that connects passengers traveling from Cabarrus County to the greater Charlotte metropolitan area. Additionally, Rider is part of the Emergency Management System (EMS) for the City of Concord, the City of Kannapolis, and, if needed, Cabarrus County. As part of the EMS, Rider helps with evacuations in the case of severe weather, natural or manmade disasters. Rider's service profile is provided in Table 8.[16]

A connection to Rowan County is provided by Rowan Transit System (RTS). RTS provides express service between China Grove, Kannapolis, Landis, and Salisbury under a joint funding partnership and connects Salisbury Transit System (STS) and Rowan County passengers with Rider Transit in Concord/Kannapolis.

#### TABLE 8. AGENCY PROFILE – RIDER

| Profile | Rider |
|---|---|
| Service frequency | Monday–Sunday, 60-75 minutes |
| Span & level of service | Monday–Friday, 5:30 am to 8:30 pm<br>Saturday–Sunday, 8:30 am to 8:30 pm |
| ADA coverage area | Federally mandated within 3/4-mile of fixed route services |
| Fare structure | $1.25 for base fixed route fares, $0.60 reduced fare, and $2.00 for paratransit fares |

Rider operated with a $5.8 million annual budget to provide transportation services to about 416,100 riders in FY 2018. Its services were mostly funded by a combination of local and federal funds. Table 9 provides a breakdown of the Rider's funding by source.

#### TABLE 9. AGENCY FUNDING – RIDER, FY 2018

| Funding Source | FY 2018 Amount | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $314,972 | 6% |

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[16] http://ckrider.com/wp-content/uploads/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf

| Funding Source | FY 2018 Amount | Percentage of Total |
|---|---|---|
| Total local funds earned during period | $1,648,490 | 28% |
| Total state funds earned during period | $297,265 | 5% |
| Total federal funds earned during period | $3,561,394 | 61% |
| Total funds earned during period | $5,822,121 | 100% |

Fixed route bus made up 97 percent of all ridership and 84 percent of total operating expenses. Table 10 outlines the general characteristics of the services by mode. Bus trips were on average four times longer than those of demand response.

### TABLE 10. SERVICE PROVIDED BY MODE – RIDER, FY 2018

| Mode | Percent Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Bus | 97% | 84% | 19.1 |
| Demand response | 3% | 16% | 4.5 |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.

Service Performance

Figure 5 and Figure 6 depict the monthly ridership for FY 2014–2018 for fixed route bus and demand response respectively. The five-year period recorded a three percent drop in overall annual ridership. More specifically, bus ridership declined at four percent a year even though demand response ridership grew at 24 percent.

**FIGURE 5. AGENCY MONTHLY RIDERSHIP – RIDER – FIXED ROUTE BUS, FY 2014–2018**
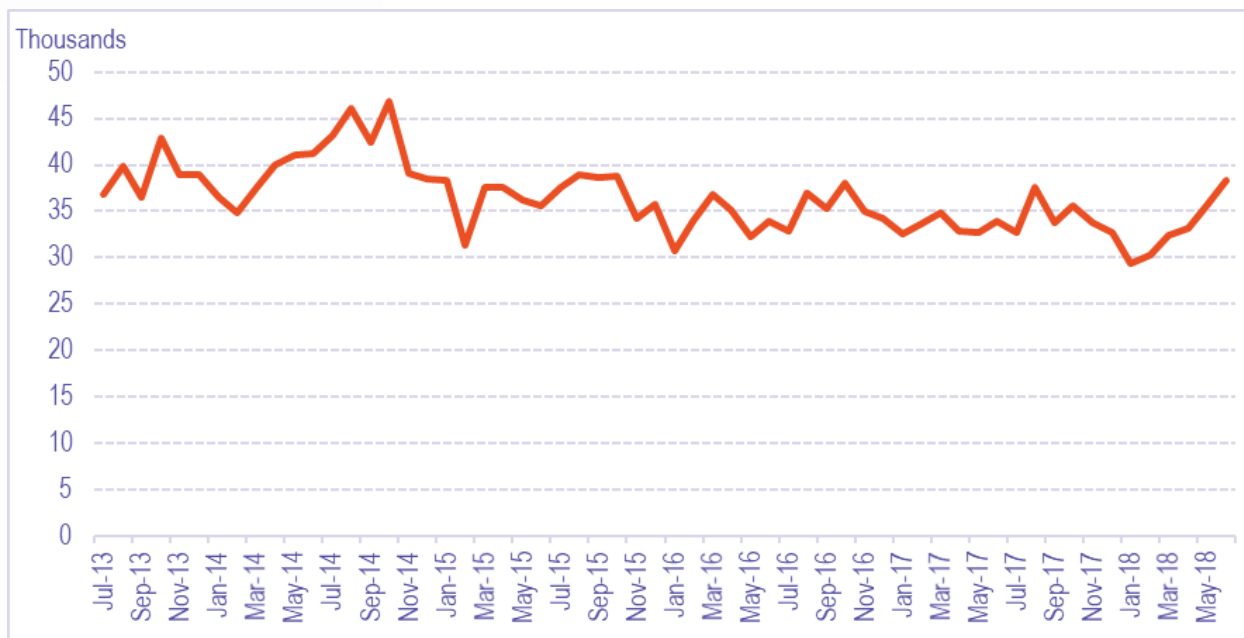


**FIGURE 6. AGENCY MONTHLY RIDERSHIP – RIDER – DEMAND RESPONSE, FY 2014–2018**
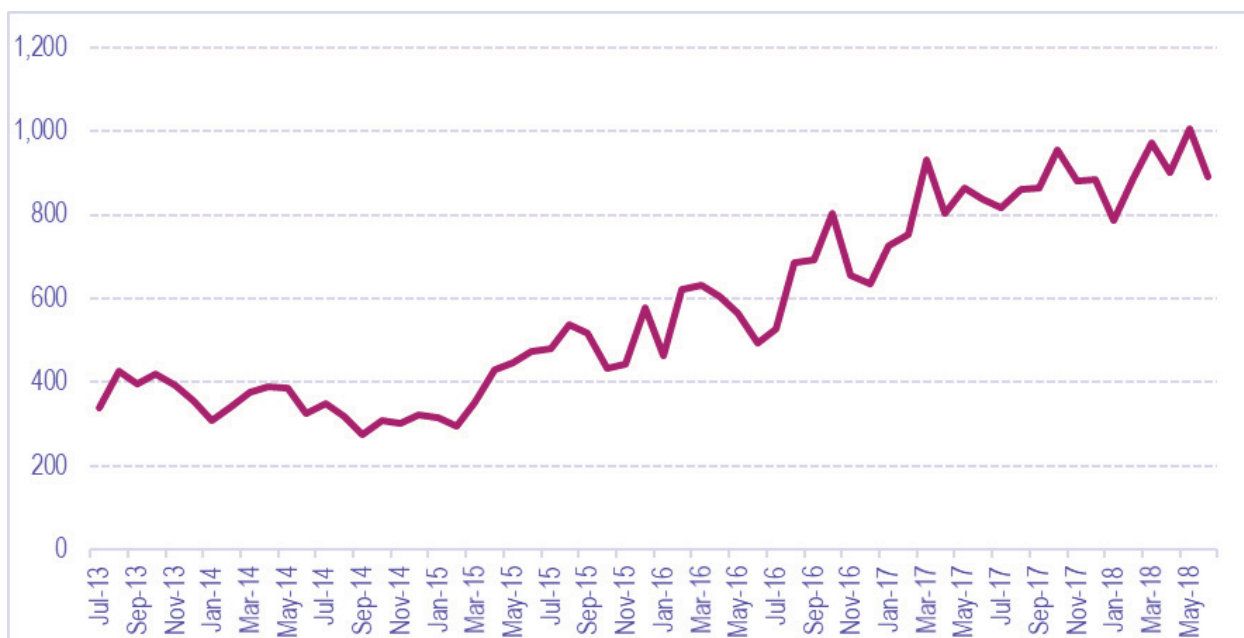


Rider's demand response services were seven times more costly per trip than its fixed route services while serving one-tenth of the riders per hour (Table 11). Rider does not collect on-time performance data for buses.

**TABLE 11. SERVICE PERFORMANCE BY MODE – RIDER, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Bus | 0.7 | 11.0 | $7.79 | 8.5% | N/A |
| Demand response | 0.1 | 1.4 | $56.90 | 3.4% | 96% |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org

Fixed route and demand response fleets had average useful life of over six years in FY 2018. Rider did not report capital responsibilities over any facilities and was not required to report facility conditions.

## City of Gastonia Transit

Background

The City of Gastonia has operated Gastonia Transit since 1978, when it acquired the assets of a private transit company. The City of Gastonia provides both fixed route and paratransit services. All six Gastonia Transit fixed route services begin and end at the City's downtown bus terminal, Bradley Station. The Gastonia Transit ADA Van Service operates curb-to-curb van service for passengers who cannot utilize the fixed route bus system due to a physical or mental disability.[17]  The City's general transportation profile is provided in Table 12.

### TABLE 12. AGENCY PROFILE – CITY OF GASTONIA

| Profile | City of Gastonia |
|---|---|
| Service frequency | Monday–Friday, 60 minutes<br>Saturday, 120 minutes |
| Span & level of service | Monday–Friday, 5:30 am to 6:30 pm<br>Saturday, 8:00 am to 6:00 pm |
| ADA coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | $1.25 for base fixed route fares, $0.60 reduced fare, and $2.50 for paratransit fares |

In FY 2018, the City of Gastonia operated with a $2.7 million annual budget to provide transportation services to approximately 194,500 riders. Its services were mostly funded by a combination of local and federal funds. Table 13 provides a breakdown of the City's funding by source.

### TABLE 13. AGENCY FUNDING – CITY OF GASTONIA, FY 2018

| Funding Source | FY 2018 Amount | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $159,586 | 6% |
| Total Local funds earned during period | $795,194 | 30% |
| Total state funds earned during period | $243,565 | 9% |
| Total federal funds earned during period | $1,460,176 | 55% |
| Total funds earned during period | $2,658,521 | 100% |

The majority of the City's transit operating budget was expended on fixed route services (91 percent), as almost all trips were provided by fixed route services (97 percent). Table 14 outlines the general characteristics of the services by mode.

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[17] https://www.cityofgastonia.com/transportation-2.html

**TABLE 14. SERVICE CHARACTERISTICS BY MODE – CITY OF GASTONIA**

| Mode | Percent Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Bus | 97% | 91% | 12.1 |
| Demand response | 3% | 9% | 9.4 |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.*

Service Performance

Figure 7 and Figure 8 depict the monthly ridership for FY 2014–2018 for fixed route bus and demand response services respectively. The five-year period recorded a 10 percent drop in annual ridership. Bus and demand response ridership declined at a rate of 10 percent and 8 percent respectively.

**FIGURE 7. AGENCY MONTHLY RIDERSHIP – CITY OF GASTONIA – FIXED ROUTE BUS, FY 2014–2018**
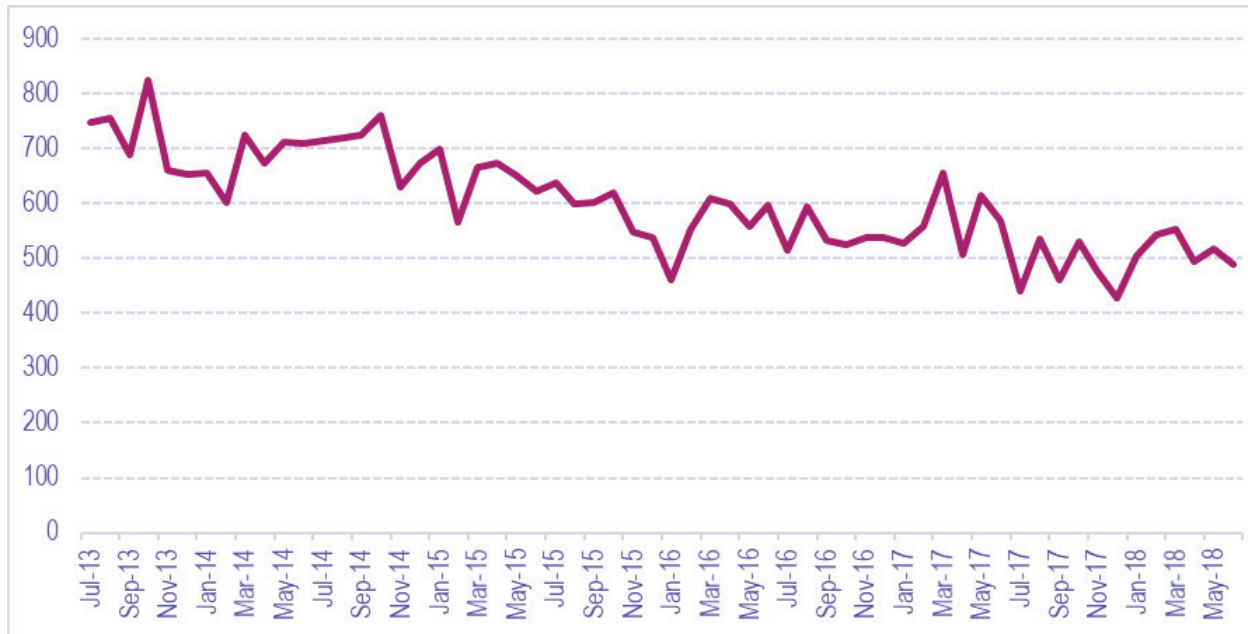
The City's demand response services were over three times as costly per trip as its fixed route services while serving less than half of the riders per hour (Table 15). The City does not collect on-time performance data.

TABLE 15. SERVICE PERFORMANCE BY MODE – CITY OF GASTONIA, FY 2018

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Bus | 0.6 | 9.1 | $11.87 | 6% | N/A |
| Demand response | 0.1 | 3.9 | $35.12 | 7% | N/A |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org

The asset conditions for the City are reported in Table 16 with its three facilities (administrative, bus center, and maintenance) rated as "Adequate" and vehicle useful life shorter than the national average by at least five years.

**TABLE 16. ASSETS CONDITIONS – CITY OF GASTONIA, FY 2018**

| Facilities TERM-LITE Score | Vehicles Useful Life Remaining – Fixed Route Bus | Vehicles Useful Life Remaining – Demand Response |
|---|---|---|
| 3.0 | 2.4 | 2.2 |

## Rock Hill My Ride

Background

The City of Rock Hill in York County, South Carolina partnered with Winthrop University, Piedmont Medical Center, and Family Trust Federal Credit Union, to debut a new fixed route transit system branded as My Ride Rock Hill, on July 1, 2019. The fare-free service operates four fixed routes. York County Access provides demand response services. My Ride's service profile is provided in Table 17.[18]

TABLE 17. AGENCY PROFILE – MY RIDE

| Profile | My Ride |
|---|---|
| Service frequency | Monday–Saturday, 60 minutes |
| Span & level of service | Monday–Saturday, 7:00 am to 7:00 pm<br>Sunday, 9:00 am to 5:00 pm<br>Route 1 Downtown/Knowledge Park Loop: extended service Fridays and Saturdays until 9:00 pm. |
| ADA coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | Zero fare for fixed route and $2.50 for Ride-to-Work Service provided by York County Access is $2.50 each way. |

During FY 2020, the City of Rock Hill operated with a $1.8 million annual budget to provide fixed route services to about 199,320 riders. Its services were mostly funded by a combination of local and federal funds. For FY 2019, the federal government paid most of the $6.6 million startup cost for My Ride, including the cost of the buses. For the first five years, the government will pay half of the operating costs. Major local stakeholders also provided funds to implement and operate the service: $1.75 million came from the City's general fund, $1.0 million came from Winthrop University and $500,000 each came from Piedmont Medical Center and Family Trust Federal Credit Union. Table 18 provides a breakdown of the City's funding by source.

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[18] http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf

TABLE 18. AGENCY FUNDING – MY RIDE, FY 2020

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | N/A | N/A |
| Total local funds earned during period | $860,476 | 48% |
| Total state funds earned during period | $0 | 0% |
| Total federal funds earned during period | $925,263 | 52% |
| Total funds earned during period | $1,785,739 | 100% |

Service Performance

Figure 9 depicts the monthly ridership since its opening. Prior to March 2020, My Ride was reporting an 11 percent monthly increase in ridership.

FIGURE 9. AGENCY MONTHLY RIDERSHIP – MY RIDE, FY 2020
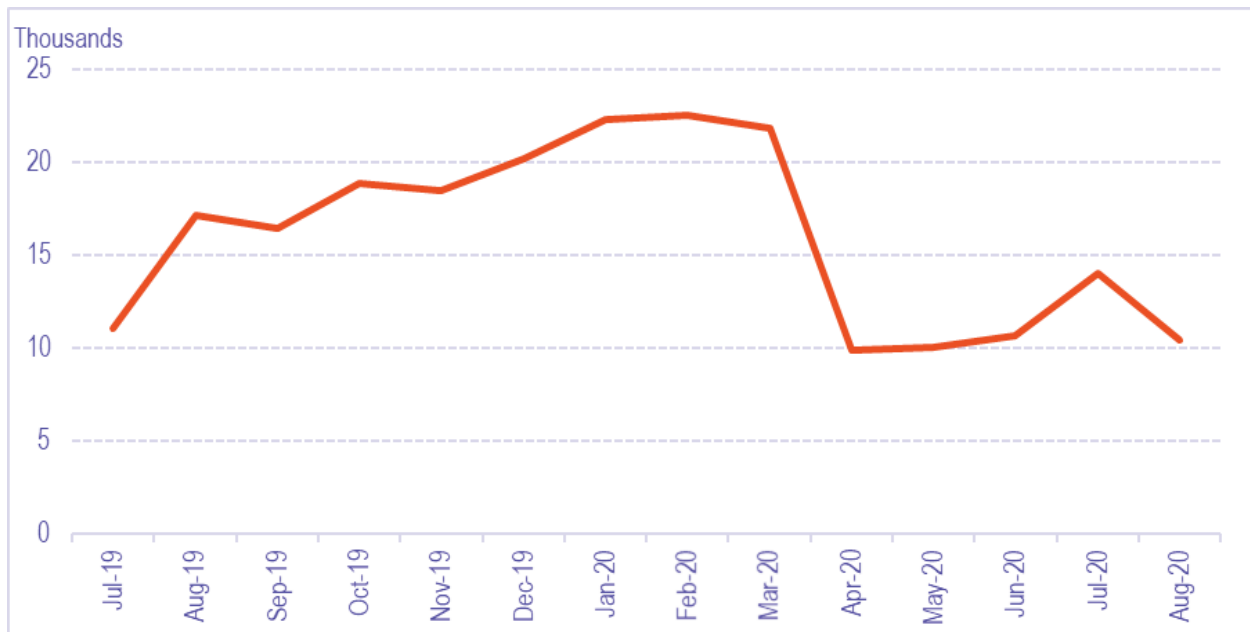
My Ride Rock Hill has served one passenger per revenue mile and almost 15 per revenue hour (Table 19) and maintained an on-time performance of 86 percent. The City does not collect fares or on-time performance data.

**TABLE 19. SERVICE PERFORMANCE BY MODE – MY RIDE, FY 2020**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|------|----------------------------|----------------------------|----------------------------|---------------|---------------------|
| Bus | 1.0 | 14.9 | N/A | N/A | 86% |

My Ride reported fixed route and demand response (operated by York County Access) fleets of average useful life of 10 and three years respectively. My Ride did not report capital responsibilities over any facilities and was not required to report facility conditions.

## City of Salisbury Transit

Background

The City of Salisbury directly operates fixed route services through STS, which provides transportation services to the City and the adjacent communities of Spencer and East Spencer.[19] STS operates a three bus fixed route service and contracts with RTS for demand response services for paratransit trips within the required areas of the system.[20] Service connections are available to Rowan Express, Mid-Carolina Regional Airport, Greyhound bus, Amtrak, and Concord Kannapolis Rider.[21] The City's general transportation profile is provided in Table 20.

### TABLE 20. AGENCY PROFILE – STS

| Profile | STS |
|---|---|
| Service frequency | Monday–Friday, 70-80 minutes <br> Saturday, 70 minutes |
| Span & level of service | Monday–Friday, 6:00 am to 7:00 pm <br> Saturday, 9:30 am to 3:20 pm |
| ADA coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | $1.00 for base fixed route fares, $0.50 reduced fare, and $2.00 for paratransit fares |

STS operated with a $1.3 million annual budget to provide about 148,900 trips in FY 2018. Its services were mostly funded by local sources. Table 21 provides a breakdown of STS' funding by source.

### TABLE 21. AGENCY FUNDING – STS, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $175,610 | 14% |
| Total local funds earned during period | $547,578 | 42% |
| Total state funds earned during period | $189,253 | 15% |
| Total federal funds earned during period | $379,375 | 29% |
| Total funds earned during period | $1,291,816 | 100% |

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[19] Services assumed to have started in 2013 as NTD does not report data prior to that year.

[20] Demand response service information is reported by RTS. https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf

[21] https://salisburync.gov/Government/Transit

Service Performance

According to NTD, the City of Salisbury's fixed route ridership declined three percent per year between 2014 and 2018. While STS does not provide monthly ridership data by mode to NTD, the agency monthly ridership was depicted in NCDOT reports.[22]

Some of STS' performance metrics are reported in Table 22. The City did not provide monthly ridership, trip length, or on-time performance data.

**TABLE 22. SERVICE PERFORMANCE BY MODE – STS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Bus | 0.9 | 12.7 | $8.26 | 6% | N/A |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org

STS reported a "Good" rating for its administrative and maintenance facility in FY 2018; however, its fixed route fleets only had an average of 1.3 years remaining useful life.

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[22] Public Transportation Division Urban Transportation Operating and Financial Statistics Reports. There are no data accompanying the charts that can be used for the CONNECT Beyond analysis.
https://connect.ncdot.gov/business/Transit/Documents/Forms/AllItems.aspx

## Community Transportation Providers

### Anson County Transportation System

Background

Anson County offers human services and demand response transportation services. Human services routes operate on a schedule optimized to provide service to specific locations including dialysis treatment centers, employment locations throughout Wadesboro, the employment training facility at the McLaurin Vocational Rehabilitation Center in Hamlet, and meal sites for the elderly located in Morven, Peachland, and Wadesboro.[23] Demand response service is available and paid for by established agencies and businesses. Other funding sources include Medicaid, Elderly & Disabled Transportation Grant, Rural General Public Grant, and/or Employment Grant.[24] The County's general transportation profile is provided in Table 23.

**TABLE 23. AGENCY PROFILE – ACTS**

| Profile | ACTS |
|---|---|
| Service frequency | On demand |
| Span & level of service | Monday–Friday, 8:30 am to 4:30 pm |
| ADA coverage area | Countywide; out of County trips are considered on a case by case basis |
| Fare structure | Services to appointments $1.20 one way for up to five miles, then an additional $0.60 per 2.5 miles increment. ACTS charges businesses $14.77 per hour and $0.58 per mile for each route |

In FY 2018, Anson County operated with a $1 million annual budget to provide transportation services to about 28,920 riders who averaged 12.4 miles per trip. Its services were mostly funded by a combination of directly generated (from established agencies and businesses) and federal funds. Table 24 provides a breakdown of the County's funding by source.

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[23] Employment training sites are where disabled residents are transported from their homes to a work site which trains the disabled to perform a task (normally manual labor) that suits their disabilities. Anson County and others) contract the transportation services for vocational rehabilitation. Nutrition sites are locations where meals are served to senior residents, with Anson County transporting the residents from their residences to the meal site and then back home once meal ends. Costs are covered through Block Grants applied for by the Council on Aging (COA).

[24] http://www.co.anson.nc.us/199/Transportation

## TABLE 24. AGENCY FUNDING – ACTS, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $612,249 | 61% |
| Total local funds earned during period | $22,618 | 2% |
| Total state funds earned during period | $145,814 | 15% |
| Total federal funds earned during period | $219,337 | 22% |
| Total funds earned during period | $1,000,018 | 100% |

Figure 10 depicts the monthly ridership for FY 2014–2018. The five-year period recorded a seven percent drop in annual ridership. Human services and demand response services are jointly reported as demand response mode in NTD.

## FIGURE 10. AGENCY MONTHLY RIDERSHIP – ACTS, FY 2014–2018
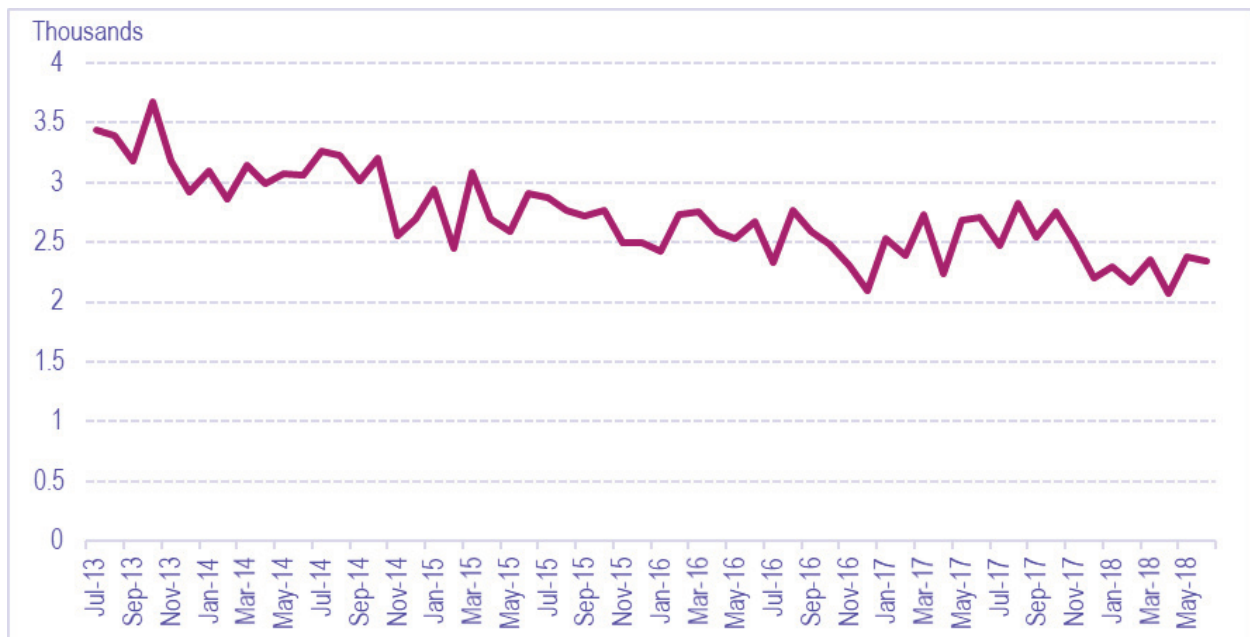
## Service Performance

Table 25 presents service performance information for Anson County. The County considers a demand response trip as late if the vehicle does not arrive within one minute of appointment time, but it did not provide on-time performance data for FY 2018.

**TABLE 25. SERVICE PERFORMANCE BY MODE – ACTS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand response | 0.1 | 1.6 | $30.78 | 1% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

## Cabarrus County Transportation Services

Background

Under Cabarrus County's curb to curb service program, Medicaid covers transportation costs to doctor appointments and pharmacy visits (for prescription pickups only). Work First Family Assistance covers costs for transport to job searches and to work for a certain amount of time; and Adult and Aging Services covers the costs to doctor appointments and pharmacy visits (for prescription pickups only) for adults aged 60+ who do not receive Medicaid. The Lunch Plus Club and Rural General Public programs support individuals living in rural areas who do not qualify for transportation through any of the above programs or who need transportation within Cabarrus County to destinations not covered by their specific program. Like Rider, CCTS is part of the EMS for Cabarrus County. If needed, CCTS staff can utilize chains on tires and may double up on drivers in inclement weather since they provide passenger transportation to life-sustaining facilities.[25] The County's general transportation profile is provided in Table 26.

### TABLE 26. AGENCY PROFILE – CCTS

| Profile | CCTS |
|---------|------|
| Service frequency | On demand |
| Span & level of service | Normal business hours, six days a week. Only dialysis, life sustaining, or other critical appointments will be scheduled on county holidays. |
| ADA coverage area | Countywide; out-of-county can also be scheduled |
| Fare structure | Rural General Public trip is $3.00 |

CCTS also provides out-of-county trips on Tuesdays, Wednesdays, and Thursdays with early appointment times (8:00 a.m. to 1:00 p.m.) and return trips no later than 3:00 p.m. In FY 2018, out-of-county trips accounted for four percent of all trips provided by CCTS, with the highest number of trips to Rowan County, primarily to medical facilities in Salisbury.

During FY 2018, Cabarrus County operated on a $2 million annual budget to provide transportation services to 82,120 riders who took an average trip length of 6.7 miles. Its services are mostly funded by a combination of directly generated local funds (from established agencies and businesses) and federal funds. Table 27 provides a breakdown of the County's funding by source.

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[25] https://www.cabarruscounty.us/departments/transportation
http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf

Specific sources listed in the Cabarrus County Long Range Transportation Plan include:

- Federal Transit Administration Section 5310 and 5311
- North Carolina Public Transit Division Program Funds
- North Carolina Department of Health and Human Services – Medicaid
- Cabarrus County

**TABLE 27. AGENCY FUNDING – CCTS, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $23,810 | 1% |
| Total local funds earned during period | $310,965 | 16% |
| Total state funds earned during period | $1,384,603 | 70% |
| Total federal funds earned during period | $260,226 | 13% |
| Total funds earned during period | $1,979,604 | 100% |

Service Performance

Figure 11 depicts the monthly ridership for FY 2014–2018. The five-year period recorded a 0.06 percent increase in annual ridership.

**FIGURE 11. AGENCY MONTHLY RIDERSHIP – CCTS, FY 2014–2018**
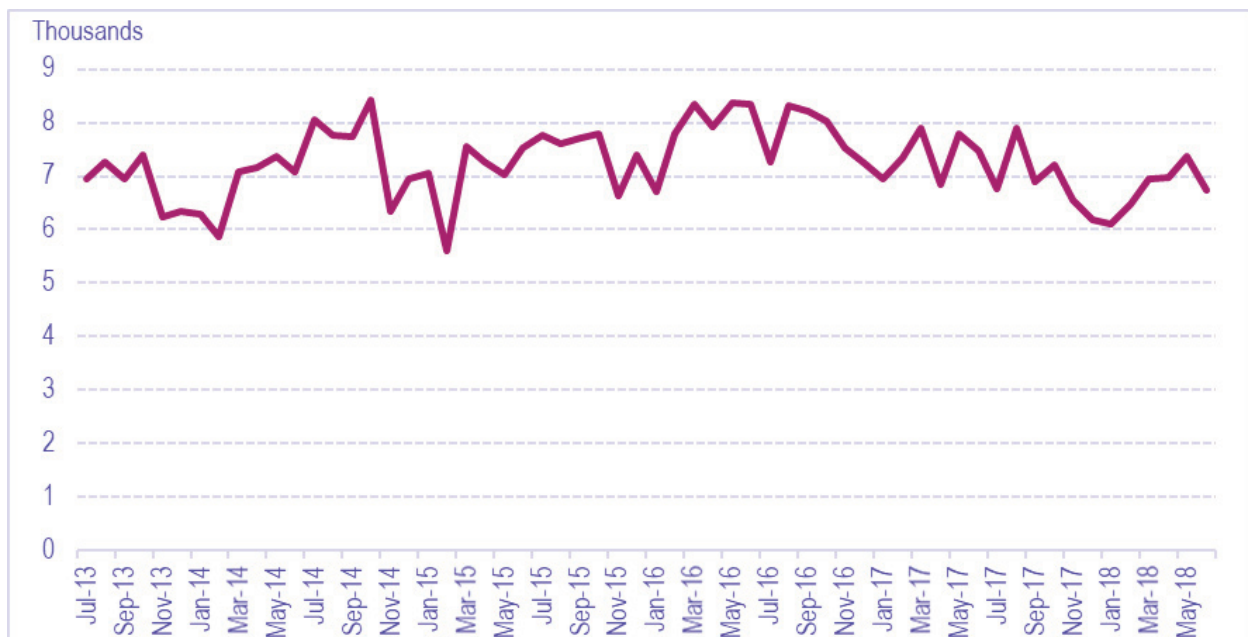
Table 28 shows CCTS' service performance information for FY 2018. Any trip arriving one minute or later is considered late.

**TABLE 28. SERVICE PERFORMANCE BY MODE – CCTS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand response | 0.2 | 2.3 | $24.11 | 1% | 100% |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

CCTS reported 6.5 years of useful life remaining for their revenue vehicles (out of ten years) in FY 2018.

## Gaston County ACCESS Central Transportation

Background

In 1981, the Board of County Commissioners in Gaston County created the department of Central Transportation for the primary purpose of maximizing the use of existing transportation resources to provide economical transportation services for Human Service Agencies and the general public. Since that time, the department has been renamed as ACCESS.

ACCESS provides two types of transportation options. Subscription routes provide daily van service to and from the same destination. The Gaston College/Transit deviated fixed route provides service from Gastonia Transit to Gaston College, Dallas High School, Gaston County Museum, Food Lion, Gastonia Farmers Market, apartment buildings, and more.[26] ACCESS also provides demand response, individual service for one-time scheduled trips to medical appointments, service agencies, etc.[27] ACCESS' service profile is provided in Table 29.

### TABLE 29. AGENCY PROFILE – ACCESS

| Profile | ACCESS |
|---|---|
| Service frequency | Monday–Sunday, 75-100 minutes |
| Span & level of service | Monday–Friday, 4:00 am to 6:00 pm<br>Salisbury VA: Tuesday and Thursday<br>Gaston College route: every hour 7:30 am to 4:30 pm at the Transit Station |
| ADA coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | $1.00 for base subscription route fares |

In FY 2018, ACCESS operated on a $2.1 million annual budget to provide transportation services to 107,340 riders. Its services were mostly funded by directly generated and local funds. Table 30 provides a breakdown of ACCESS' funding by source.

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[26] NTD notes that subscription route as shared use transit service operating in response to on-going reservations made by passengers to the transit operator, who can schedule in advance a consistent trip to pick up the passenger and transport them to their destination. Such route should be considered demand response. ACCESS is offering deviated fixed route service and it is considered bus mode by NTD. ACCESS should consider clarifying its description regarding subscription route and deviated fixed route to ensure that the correct mode is being reported to both NTD and NCDOT.

[27] https://www.gastongov.com/government/departments/health_and_human_services/social_services/access.php

TABLE 30. AGENCY FUNDING – ACCESS, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $887,263 | 42% |
| Total local funds earned during period | $655,858 | 31% |
| Total state funds earned during period | $291,775 | 14% |
| Total federal funds earned during period | $281,878 | 13% |
| Total funds earned during period | $2,116,774 | 100% |

Subscription bus routes accounted for eight percent of total ridership and operated using four percent of total expenses, while demand response accounted for 92 percent of total ridership and 96 percent of total operating expenses. Table 31 outlines the general characteristics of the services by mode.

TABLE 31. SERVICE CHARACTERISTICS BY MODE – ACCESS, FY 2018

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Subscription bus routes | 8% | 4% | 4.5 |
| Demand response | 92% | 96% | 19.1 |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.*

Service Performance

Between FY 2014 and FY 2018, ACCESS reported a six percent and four percent drop in ridership for demand response and bus service, respectively. While ACCESS does not provide monthly ridership data by mode to NTD; the agency monthly ridership (with both modes combined) from NCDOT are reported in Figure 12.[28]

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[28] Public Transportation Division County Community Transportation Operating and Financial Statistics Reports. https://connect.ncdot.gov/business/Transit/Documents/Forms/AllItems.aspx

**FIGURE 12. AGENCY MONTHLY RIDERSHIP – ACCESS, FY 2014–2018**



ACCESS' service performance metrics from FY 2018 are reported in Table 32. Operating cost per trip for demand response was over twice as costly as subscription route services. Gaston County does not collect on-time performance data.

**TABLE 32. SERVICE PERFORMANCE BY MODE – ACCESS, FY 2018**

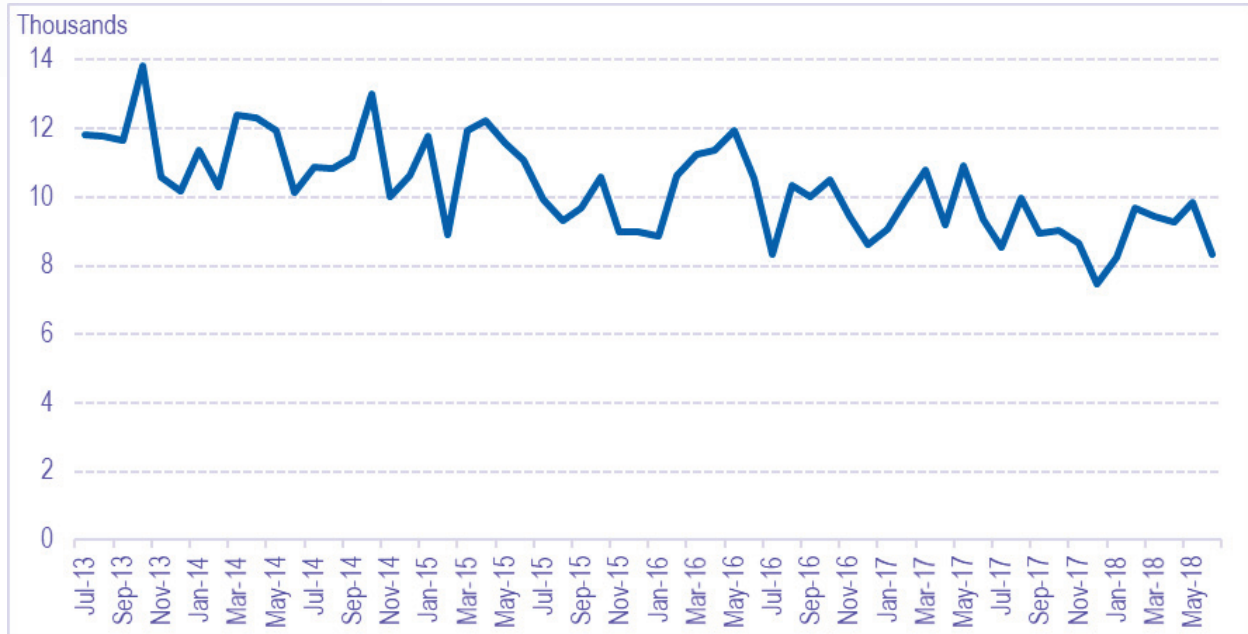| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Subscription bus routes | 0.3 | 4.2 | $8.10 | N/A | N/A |
| Demand response | 0.2 | 3.6 | $17.78 | 1.6% | N/A |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org*

ACCESS reported five and 2.5 years of useful life remaining (out of 10 years) respectively for fixed route and demand response vehicles in FY 2018.

## Iredell County Area Transportation System

Background

Iredell County Area Transportation System (ICATS) is a community transportation program serving both human service agencies and the general public. ICATS operates as a ride-sharing system that enables routes and schedules to be structured to transport multiple passengers to multiple destinations. Services are provided through five fixed routes, subscription routes, and demand response service trips. The fixed loops or shuttle services have designated stops but can deviate to accommodate the needs of their passengers. [29] Express bus route service began in 2017 and provides connection to CATS routes.

Demand response is available to residents who qualify for certain grants or support from human service agencies. The Medicaid Transportation Program is administered by the Iredell County Department of Social Services. ICATS vans travel throughout Iredell County daily. ICATS also provides out of county medical trips on the following schedule: Monday–Charlotte, Tuesday–Concord/ Salisbury, Thursday–Salem/Winston, and Friday–Conover/Hickory. ICATS' service profile is provided in Table 33.

**TABLE 33. AGENCY PROFILE – ICATS**

| Profile | ICATS |
|---|---|
| Service frequency | Monday–Sunday, 75-100 minutes |
| Span & level of service | Express routes: three trips during AM and PM peak, 5:00 am to 8:30 pm<br>Bloom: four trips daily 9:00 am to 4:00 pm<br>Mooresville Main: seven trips 7:00 am to 6:00 pm<br>Community Connection: eight trips a day 6:30 am to 4:00 pm<br>Shuttle to VA Hospital in Salisbury: Tuesdays 8:30 am to 4:00 pm |
| ADA coverage area | Federally mandated within 3/4 mile of fixed route services |
| Fare structure | $1.25 for base fixed route fares, $0.60 reduced fare and $2.00 for paratransit fares. 5310-Urban Elderly & Disabled program and Job Access and Reverse Commute (JARC) program charges $1.00 one way. $3,00 for express and $1.50 reduced fare. |

ICATS operated with a $2.3 million annual budget to provide transportation services to about 127,400 riders in FY 2018. Its services are mostly funded by directly generated funds (contract revenue from Medicaid Iredell County Department of Social Services, human service agencies, non-profits, seniors living centers, medical facilities) and federal funds. Table 34 provides a breakdown of the ICATS' funding by source.

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[29] https://www.co.iredell.nc.us/DocumentCenter/View/486/Iredell-County-Comprehensive-Transportation-Plans-PDF?bidId=

### TABLE 34. AGENCY FUNDING – ICATS, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
| --- | --- | --- |
| Total directly generated funds earned during period | $1,187,975 | 53% |
| Total local funds earned during period | $0 | 0% |
| Total state funds earned during period | $280,619 | 12% |
| Total federal funds earned during period | $778,562 | 35% |
| Total funds earned during period | $2,247,156 | 100% |

Bus (both fixed route and subscription route services) accounted for 42 percent of total ridership and 80 percent of total operating expenses. Table 35 outlines the general characteristics of the services by mode. ICATS does not track monthly ridership.

### TABLE 35. SERVICE CHARACTERISTICS BY MODE – ICATS, FY 2018

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
| --- | --- | --- | --- |
| Bus | 42% | 80% | N/A |
| Demand response | 58% | 20% | 4.5 |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.

Service Performance

When the ICATS express began, bus ridership grew 424 percent from FY 2016 to FY 2017 (from 7,611 trips to 39,848) and then 35 percent from FY 2017 to FY 2018 (39,848 trips to 53,993). At the same time, revenue grew at 130 percent (between the annual average of FY 2017-2018 and FY 2014-2016) while operating cost grew 89 percent. This shows that ICATS was able to address significant latent demand through adding an express service without comprising its operating efficiency. However, it is difficult to differentiate the performance of express service from local bus because they are reported together in NTD. ICATS' express routes may function more like a commuter route.[30]

While ICATS does not provide monthly ridership data by mode to NTD, the agency monthly ridership from NCDOT is presented in Figure 13.[31] The upward shift in the chart starting on July

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[30] NTD defined Commuter Bus as: local fixed-route bus transportation primarily connecting outlying areas with a central city. Characterized by a motorcoach (aka over-the-road bus), multiple trip tickets, multiple stops in outlying areas, limited stops in the central city, and at least five miles of closed-door service.

[31] Public Transportation Division County Community Transportation Operating and Financial Statistics Reports. https://connect.ncdot.gov/business/Transit/Documents/Forms/AllItems.aspx

2016 represents the increase in agency ridership due to the introduction of the express bus service.

**FIGURE 13. AGENCY MONTHLY RIDERSHIP – ICATS, FY 2014–2018**
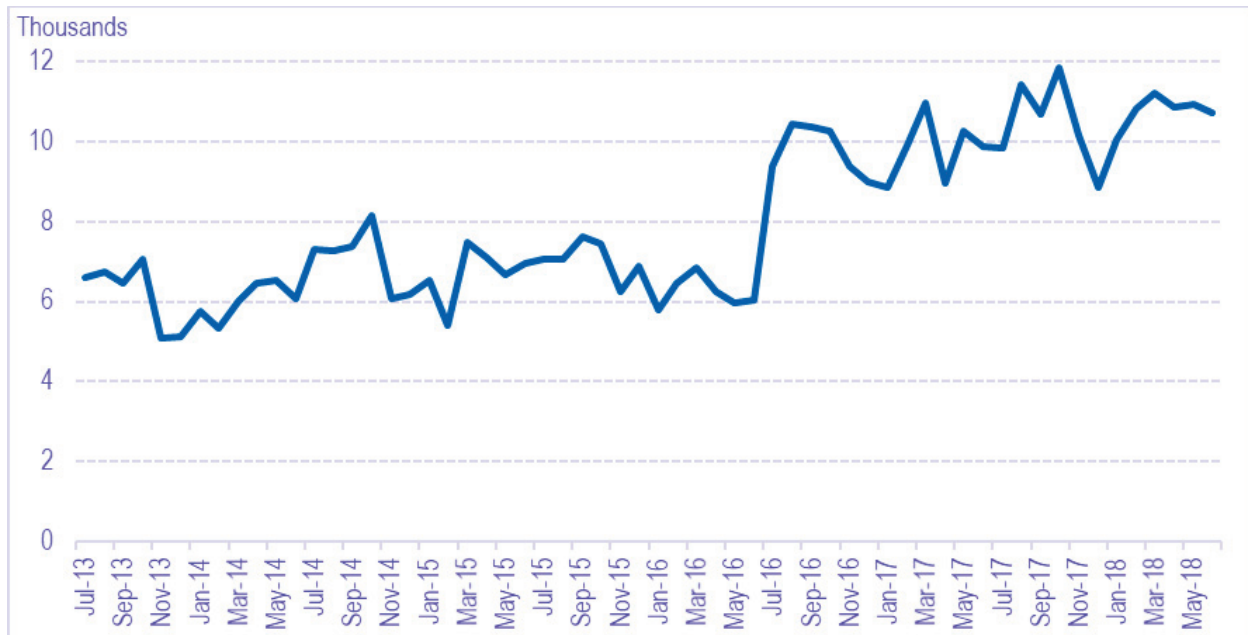


The County's demand response services were almost three times as costly per trip as its fixed route services while serving less than half of the riders per hour (Table 36). ICATS reported its demand response service as being 93 percent on-time (arriving less than one minute after appointment time) but did not provide on-time performance data for buses (arriving less than five minutes after scheduled time).

**TABLE 36. SERVICE PERFORMANCE BY MODE – ICATS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Bus | 0.3 | 5.4 | $7.06 | 2.5% | N/A |
| Demand response | 0.1 | 1.9 | $20.30 | 1.6% | 93% |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org*

ICATS' asset conditions are reported in Table 37. Its two facilities (administrative and maintenance) were rated "Poor" and vehicles had shorter useful life than the national average of seven years. Having recently invested in providing express bus service, it is important for ICATs to revisit capital reinvestment options and maintain assets in a state of good repair.

**TABLE 37. ASSETS CONDITIONS – ICATS, FY 2018**

| Facilities TERM-LITE Score | Vehicles Useful Life Remaining – Fixed Route Bus | Vehicles Useful Life Remaining – Demand Response |
|:---:|:---:|:---:|
| 1.0 | 0.6 | 0.6 |

## Lancaster Area Ride Service (Zone 5)

Background

Lancaster Area Ride Service (LARS) is operated by the Lancaster County Council on Aging with funding from the South Carolina Department of Transportation (SCDOT) and Lancaster County. Service is provided by zones and Zone 5 (the zone within the CONNECT Beyond study area) operates on Friday.[32] The service profile for LARS is provided in Table 38.

### TABLE 38. AGENCY PROFILE – LARS

| Profile | LARS |
|---|---|
| Service frequency | On demand |
| Span & level of service | Monday–Friday, 9:00 am to 3:00 pm |
| ADA coverage area | Countywide; out-of-county services for medical treatments only |
| Fare structure | $2 one way for trips within Lancaster County; $5 one way to and from Rock Hill; and $10 to and from Columbia or Charlotte |

In FY 2018, LARS operated on a $0.9 million annual budget to provide transportation services to about 24,790 riders. Its services were mostly funded by directly generated and state funds (SCDOT and Lancaster County). Table 39 provides a breakdown of the LARS' funding by source.

### TABLE 39. AGENCY FUNDING – LARS, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $432,172 | 50% |
| Total local funds earned during period | $21,538 | 3% |
| Total state funds earned during period | $337,944 | 39% |
| Total federal funds earned during period | $67,984 | 8% |
| Total funds earned during period | $859,638 | 100% |

Service Performance

For FY 2014-2018, the system reported a two percent drop in annual ridership. LARS' service performance metrics from FY 2018 are reported in Table 40. Lancaster County does not collect on-time performance data, monthly ridership, or trip length data.

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[32] https://www.lancastercoa.org/transportation

**TABLE 40. SERVICE PERFORMANCE BY MODE – LARS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand response | 0.1 | 0.7 | $22.06 | 3.7% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

LARS reported 5.4 years of useful life remaining for their revenue vehicles (out of 10 years) in FY 2018.

### Mecklenburg Transportation System

Background

Mecklenburg Transportation System (MTS) is a service within the Mecklenburg County Department of Social Services (DSS) that provides approved non-emergency subscription route and demand response transportation to eligible residents within Mecklenburg County. Some service is also provided by a coordinated effort with neighboring county transportation systems.[33] The system provides trips for anyone in the non-urbanized area of the county. Door to door (demand response or contracted demand taxi) service is provided between non-urbanized locations and local CATS stops, as well as trips to and from medical appointments, grocery shopping, and Mecklenburg County senior residents' nutrition sites. Specific services include:

- Elderly Disabled Transportation Assistance Program (EDTAP) – dialysis or chemotherapy trips for adults aged 60+ and children and adults with a disability ($1.50 one way).
- Enhanced Mobility of Seniors & Individuals with Disabilities (5310) – medical facilities, paid employment, and grocery shopping trips for adults aged 65+ or individuals with a disability ($1.50 one way).
- Trips for developmentally disabled adults to participating agencies that provide employment and enrichment opportunities (paid for by sponsoring agency).
- Medical trips for adults and children authorized to receive Medicaid transportation ($0).
- Veterans Affairs hospitals in North Carolina and to and from medical clinics in Charlotte trips for qualified veterans ($0).
- Elderly General Purpose (EGP) – medical appointments and grocery shopping ($1.50 one way).
- Mecklenburg County Park and Recreation/Senior Centers trips for adults aged 60+ who are not living in an assisted living facility or nursing home ($1.50 one way).

MTS' general transportation profile is provided in Table 41.

**TABLE 41. AGENCY PROFILE – MTS**

| Profile | MTS |
| --- | --- |
| Service frequency | On demand |
| Span & level of service | Monday–Sunday, 5:00 am to 7:00 pm |
| ADA coverage area | Countywide |

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[33] https://www.mecknc.gov/dss/admin/Pages/MecklenburgTransportationSystem.aspx

| Profile | MTS |
|---|---|
| Fare structure | $1.50 one way, with some trips covered by different agencies. No fare to veterans, Medicaid transportation, nor nutrition congregate. |

During FY 2018, MTS operated on a $11.6 million annual budget to provide transportation services to about 412,900 riders. Its services were mostly financed by state and local funds. Table 42 provides a breakdown of MTS' FY 2018 funding by source.

**TABLE 42. AGENCY FUNDING – MTS, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $137,396 | 1% |
| Total local funds earned during period | $3,159,891 | 27% |
| Total state funds earned during period | $6,648,557 | 57% |
| Total federal funds earned during period | $1,678,456 | 14% |
| Total funds earned during period | $11,624,300 | 100% |

Demand taxi made up 83 percent of total ridership, but only 49 percent of total expenses. Trip length for both modes is similar, at around eight to nine miles. Table 43 outlines the general characteristics of the services by mode.

**TABLE 43. SERVICE CHARACTERISTICS BY MODE – MTS, FY 2018**

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Demand taxi | 83% | 49% | 8.0 |
| Demand response | 17% | 51% | 9.2 |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.*

Service Performance

Figure 14 and Figure 15 depict MTS' monthly ridership for demand taxi and demand response services for FY 2017-2018. Earlier data were not reported to NTD and the aggregate data reported to NCDOT was signficantly different (20–31 percent higher per year). The FY 2015–2018 period recorded a seven percent increase in annual ridership.[34] This trend is primarily driven by an eight percent annual ridership growth from demand taxi, whereas demand response grew at one percent per year.

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[34] FY 2014 data on demand taxi not reported.

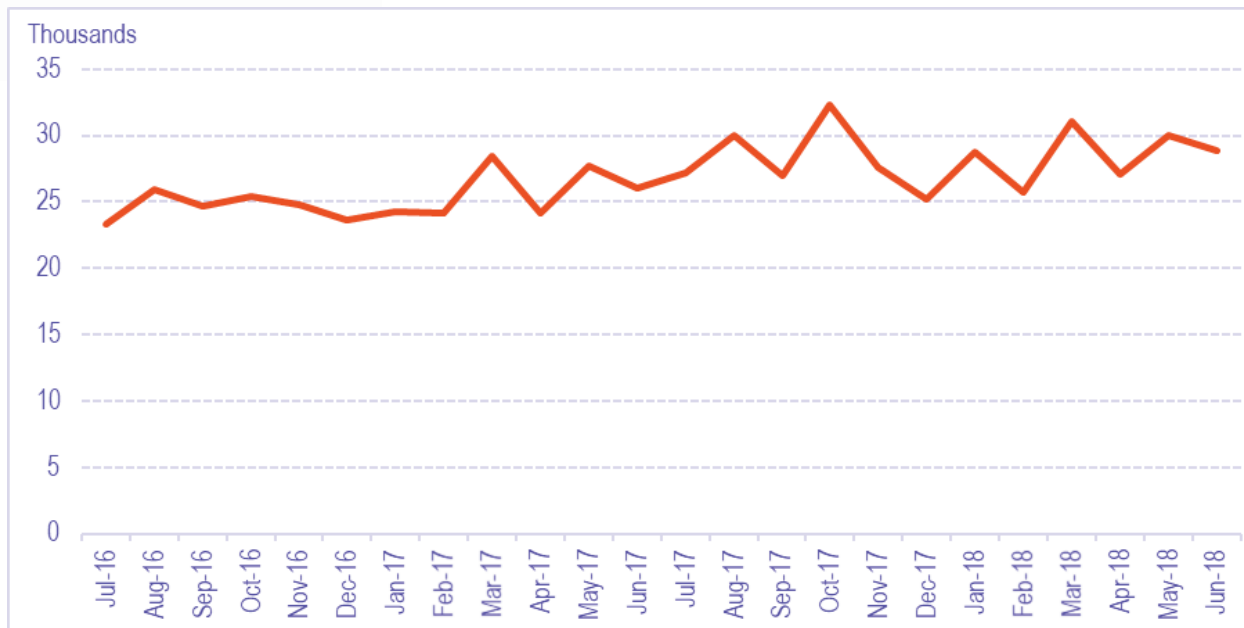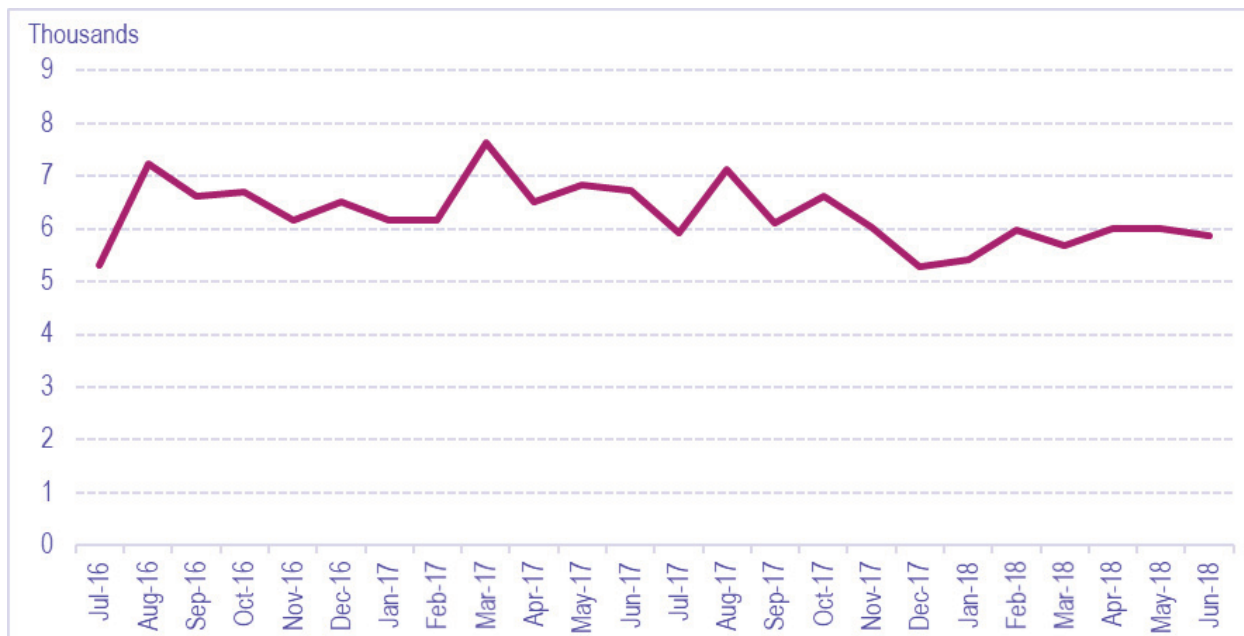## FIGURE 14. AGENCY MONTHLY RIDERSHIP – MTS – DEMAND TAXI, FY 2017–2018



## FIGURE 15. AGENCY MONTHLY RIDERSHIP – MTS – DEMAND RESPONSE, FY 2017–2018

MTS' demand response service was five times more costly per trip than its demand taxi service while providing half as many trips per revenue hour, as reported in Table 44. MTS does not report on-time performance.

**TABLE 44. SERVICE PERFORMANCE BY MODE – MTS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand taxi | 0.1 | 5.0 | $9,87 | 2.2% | N/A |
| Demand response | 0.2 | 2.4 | $49.22 | 1.1% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

MTS reported four years of useful life remaining (out of 10 years) for its demand response fleet in FY 2018. MTS also reported having 76 automobiles for demand taxi; no other fleet information was reported.

## Rowan Transit System

Background

RTS is a non-emergency public transportation service for Rowan County residents. The mission of the RTS is to provide safe, efficient, and affordable mobility choices to Rowan County residents through a consolidated transportation system managed by the Rowan Transit System with input from user agencies under the direction of the Rowan County Board of Commissioners.

The system provides express service between China Grove, Kannapolis, Landis, and Salisbury through a joint funding partnership which each municipality. The RTS route connects Rowan County passengers with the STS, Employment Security Commission, China Grove Town Hall, China Grove Food Lion, Landis Town Hall, Amtrak in Kannapolis, Concord Kannapolis Rider, and Amtrak in Salisbury.[35]

Demand response service is separated by trip purpose such as doctor and medical appointments; grocery and general shopping; health, social services or other county offices; bank, post office, bill payment centers; or connection via Rowan Express to China Grove, Landis, Kannapolis, Concord Kannapolis Rider; Salisbury Transit Bus Depot, or Amtrak Station.[36] Salisbury Transit System provides the complimentary ADA paratransit service. The Medicaid Transportation Program is administered by the Rowan County Department of Social Services. RTS' general transportation profile is provided in Table 45.

**TABLE 45. AGENCY PROFILE – RTS, FY 2018**

| Profile | RTS |
|---|---|
| Service frequency | Express: five morning and five afternoon trips are provided Monday through Friday that connect the Depot Transfer Site in Salisbury to the Amtrak station in Kannapolis. |
| Span & level of service | Demand Response: Tuesday–West Rowan; Wednesday–North Rowan; Thursday–South Rowan; Friday–East Rowan; 7:30 am to 5:00 pm<br>Express: Monday–Friday, every hour 5:19 am to 9:19 am and 1:19 pm to 5:19 pm |
| ADA coverage area | Countywide |
| Fare structure | Express: $1.00<br>Demand response: $2 one way except for those eligible for certain grant funded programs or Medicaid |

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[35] https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf
[36] https://www.rowancountync.gov/DocumentCenter/View/1621/Rowan-Individual-Transportation-Assistance-RITA-Brochure-PDF?bidId=

During FY 2018, RTS operated on a $1.5 million annual budget to provide transportation services to about 92,750 riders. Its services are mostly funded by a combination of local and federal funds. Table 46 provides a breakdown of RTS' FY 2018 funding by source.

**TABLE 46. AGENCY FUNDING – RTS, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $123,290 | 8% |
| Total local funds earned during period | $719,547 | 47% |
| Total state funds earned during period | $314,845 | 21% |
| Total federal funds earned during period | $364,202 | 24% |
| Total funds earned during period | $1,521,884 | 100% |

Bus accounted for 17 percent of total ridership and 12 percent of total operating expenses. Average trip length is not presented because vehicle miles were reported as passenger miles; therefore, true passenger trip length could not be calculated. Table 47 outlines the general characteristics of the services by mode.

**TABLE 47. SERVICE CHARACTERISTICS BY MODE – RTS, FY 2018**

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Bus | 17% | 12% | N/A |
| Demand response | 83% | 88% | N/A |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.*

Service Performance

Figure 16 depicts RTS' monthly ridership from July 2017 to December 2018. While a longer period of monthly data is not available, the FY 2014–2018 five-year period NTD annual data reported a two percent drop in ridership. Fixed route bus reported 13 percent drop in annual ridership while demand response grew at two percent.

**FIGURE 16. AGENCY MONTHLY RIDERSHIP – RTS – FIXED ROUTE BUS, JULY 2017–DECEMBER 2018**
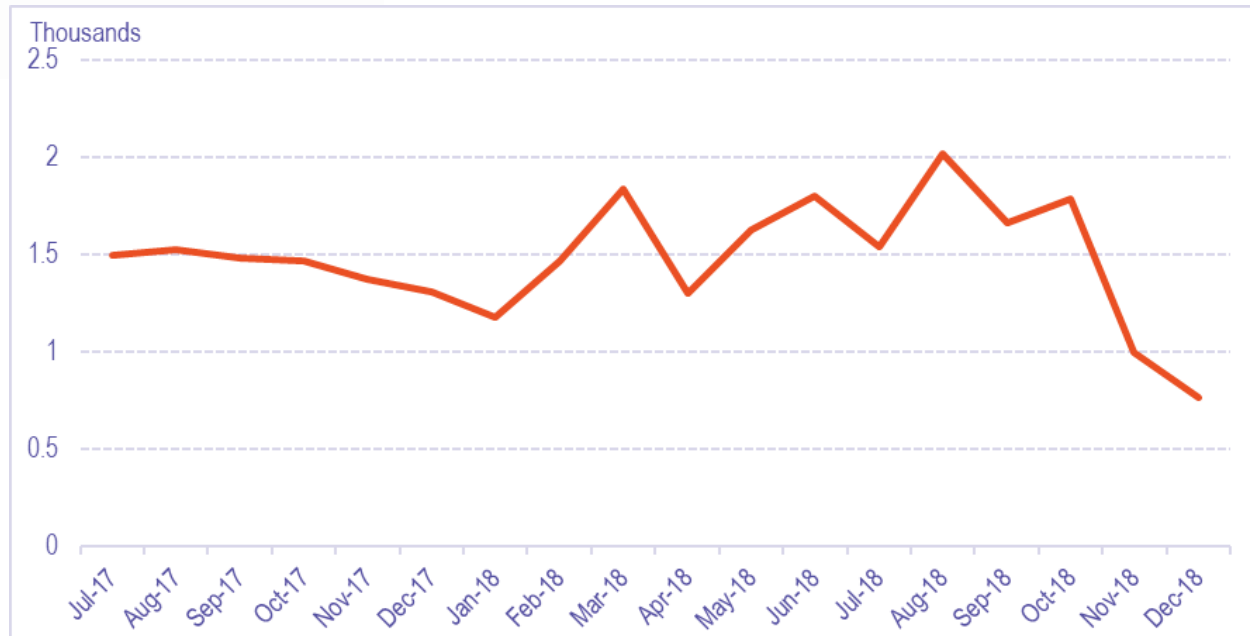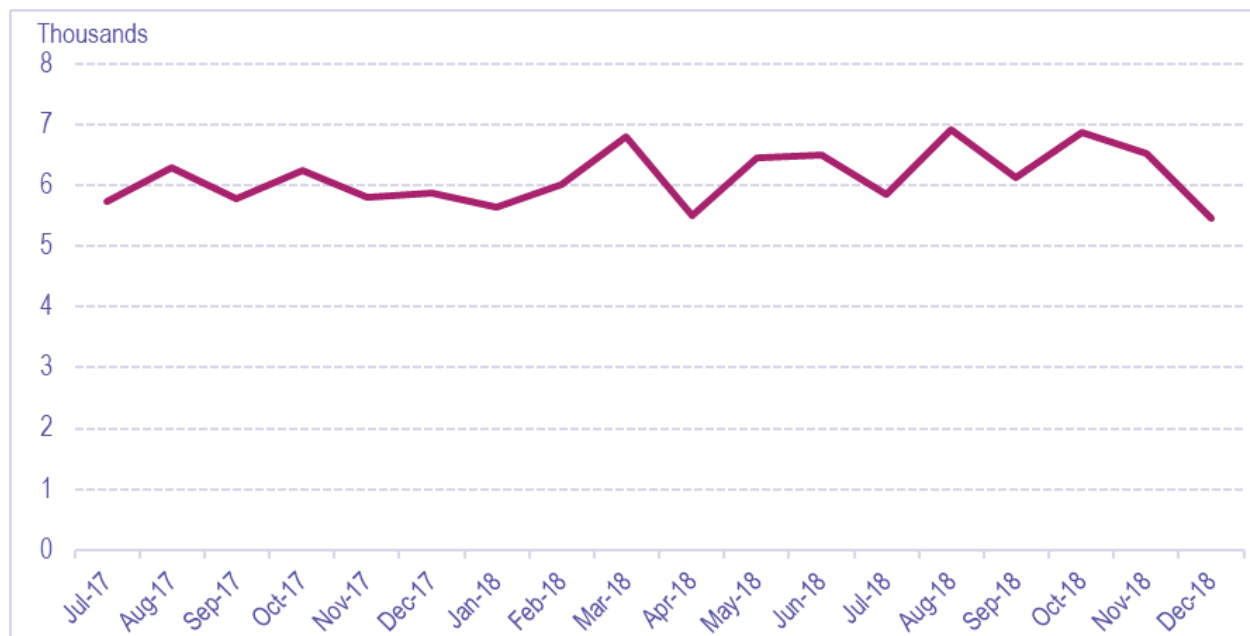


**FIGURE 17. AGENCY MONTHLY RIDERSHIP – RTS – DEMAND RESPONSE, JULY 2017–DECEMBER 2018**

RTS' demand response services were 1.5 times more costly per trip than its fixed route services while serving 66 percent fewer riders per hour (Table 48). The system does not separate the on-time performance metric by mode; a trip is considered not on-time if it is early or late (definition by time in minutes not provided). However, as RTS demand response service requires clients to be ready at least 30-minutes before their scheduled departure, it is likely that early trips would relate only to the fixed route service.

**TABLE 48. SERVICE PERFORMANCE BY MODE – RTS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|------|---------|---------|---------|------|------|
| Bus | 0.2 | 2.9 | $9.46 | 8% | 81% |
| Demand response | 0.1 | 1.8 | $14.12 | 2% | 81% |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org*

The asset conditions for RTS are reported in Table 49 with its administrative facility rated as "Good". Its fixed route bus fleet had, on average, 6.5 years of useful life remaining and its demand response fleet had 5.5 years (out of 10, except for two buses out of 27 with 14 years of useful life remaining).

**TABLE 49. ASSETS CONDITIONS – RTS, FY 2018**

| Facilities TERM-LITE Score | Vehicles Useful Life Remaining – Fixed Route Bus | Vehicles Useful Life Remaining – Demand Response |
|------|------|------|
| 4.0 | 6.5 | 5.5 |

## Stanly County Transportation Services – Stanly County Umbrella Services Agency

Background

Under the Stanly County Umbrella of Services Agency (SCUSA) transportation program, trips are provided to and from agencies, employment sites, businesses, medical centers (in and out of the county), Stanly Community College, the Stanly County Senior Center, nutrition sites, dialysis centers, nursing homes, daycares, etc. Services are provided through subscription and demand response routes using both vans and buses. Vehicles are available to better serve the disabled population.[37] The County's general transportation profile is provided in Table 50.

**TABLE 50. AGENCY PROFILE – SCUSA**

| Profile | SCUSA |
|---|---|
| Service frequency | On demand |
| Span & level of service | Monday–Friday, 8:30 am to 5:00 pm |
| ADA coverage area | Countywide |
| Fare structure | One-way tickets range from $1.50 to $6.50 based on origin and destination |

During FY 2018, Stanly County operated on a $0.9 million annual budget to provide transportation services to about 45,540 riders a year with an average trip length of 6.3 miles. Its services were mostly funded by a combination of directly generated (from established agencies and businesses) and federal funds. Table 51 is a breakdown of the County's FY 2018 funding by source.

**TABLE 51. AGENCY FUNDING – SCUSA, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $454,963 | 48% |
| Total local funds earned during period | $113,116 | 12% |
| Total state funds earned during period | $189,751 | 20% |
| Total federal funds earned during period | $188,341 | 20% |
| Total funds earned during period | $946,171 | 100% |

Service Performance

Figure 18 depicts the monthly ridership for FY 2015–2018. The four-year period recorded a -0.3 percent drop in annual ridership.

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[37] https://www.stanlycountync.gov/transportation

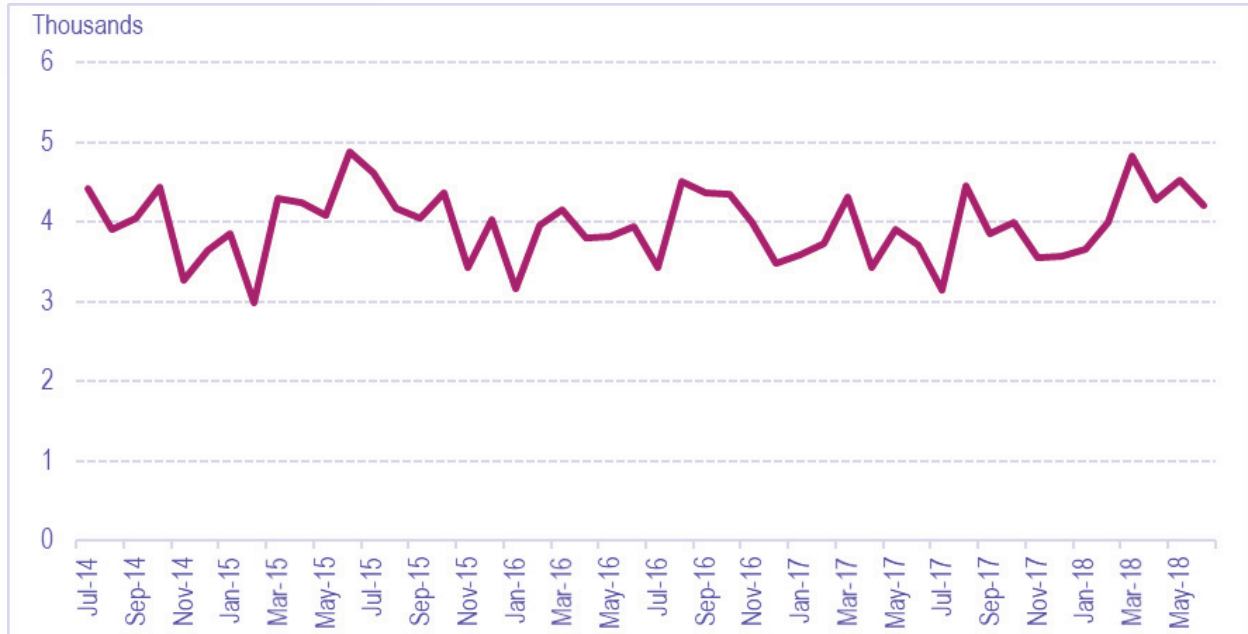**FIGURE 18. AGENCY MONTHLY RIDERSHIP – SCUSA, FY 2015–2018**



Table 52 presents the County's service performance information in FY 2018.

**TABLE 52. SERVICE PERFORMANCE BY MODE – SCUSA, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|------|---------------------------|---------------------------|---------------------------|---------------|---------------------|
| Demand response | 0.2 | 2.6 | $19.90 | 2.4% | 99% |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.*

## Transportation Administration of Cleveland County

Background

The Transportation Administration of Cleveland County (TACC) provides fixed route, deviated fixed route, and demand response for paratransit services. West End REACH Transit is a free, limited stop, fixed route service provided by the TACC.[38] The deviated fixed route is called Cleveland County Transit (CCT) – Shelby Public Transportation Route. TACC's service profile is provided in Table 53.[39]

#### TABLE 53. AGENCY PROFILE – TACC

| Profile | CCT |
|---------|-----|
| Service frequency | CCT: Four trips<br>West End REACH: Seven trips a day every 45 minutes |
| Span & level of service | CCT: Monday–Friday, 7:15 am to 3:08 pm<br>West End REACH: Monday–Wednesday–Friday, 9:15 am to 2:45 pm |
| ADA coverage area | Federally mandated within ¾ mile of fixed route services |
| Fare structure | CCT: $1.00 for base fixed route fares, $2 per deviation<br>West End REACH is zero fare<br>Demand response base rate is $1.67 per van mile in or out-of-county |

TACC operated on a $2.0 million annual budget in FY 2018 to provide transportation services to about 64,430 riders. Its services were mostly funded by a combination of directly generated and local funds. Table 54 provides a breakdown of Cleveland County's funding by source.

#### TABLE 54. AGENCY FUNDING – TACC, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|----------------|--------------------|--------------------|
| Total directly generated funds earned during period | $719,830 | 36% |
| Total local funds earned during period | $691,869 | 35% |
| Total state funds earned during period | $235,371 | 12% |
| Total federal funds earned during period | $334,728 | 17% |
| Total funds earned during period | $1,981,798 | 100% |

Demand response accounted for 93 percent of both ridership and total operating expenses. Table 55 outlines the general characteristics of the services by mode. Demand response trips were on average twice as long (in distance) as those by bus.

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[38] https://cdn.website.thryv.com/10f7e69f77fb40169f939e56071a221e/files/uploaded/1153802-739064-cct_map_8_23_2016.pdf
[39] https://www.taccshelbync.com/

## TABLE 55. SERVICE PROVIDED BY MODE – TACC, FY 2018

| Mode | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Bus | 7% | 7% | 5.4 |
| Demand response | 93% | 93% | 10.8 |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.*

Service Performance

Figure 19 and Figure 20 depict TACC's monthly ridership of fixed route bus and demand response for FY 2014–2018. The five-year period recorded a 0.2 percent drop in annual ridership. Fixed route service reported an 11 percent drop in annual ridership, while demand response grew at one percent.

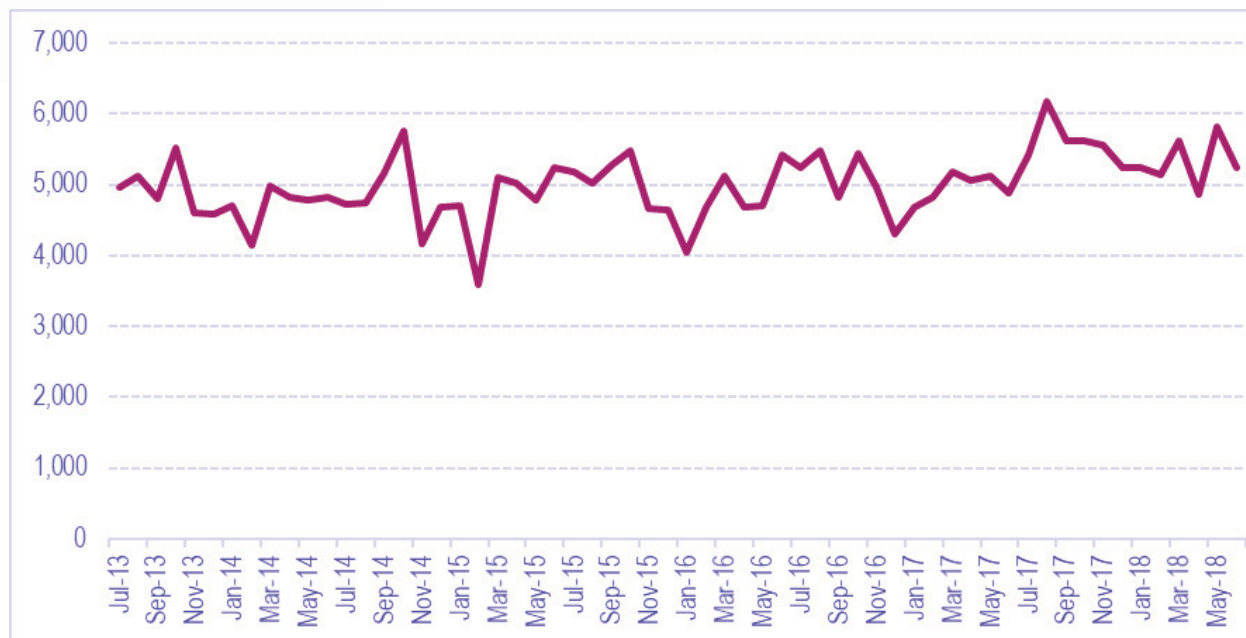## FIGURE 19. AGENCY MONTHLY RIDERSHIP – TACC – FIXED ROUTE BUS, FY 2014–2018
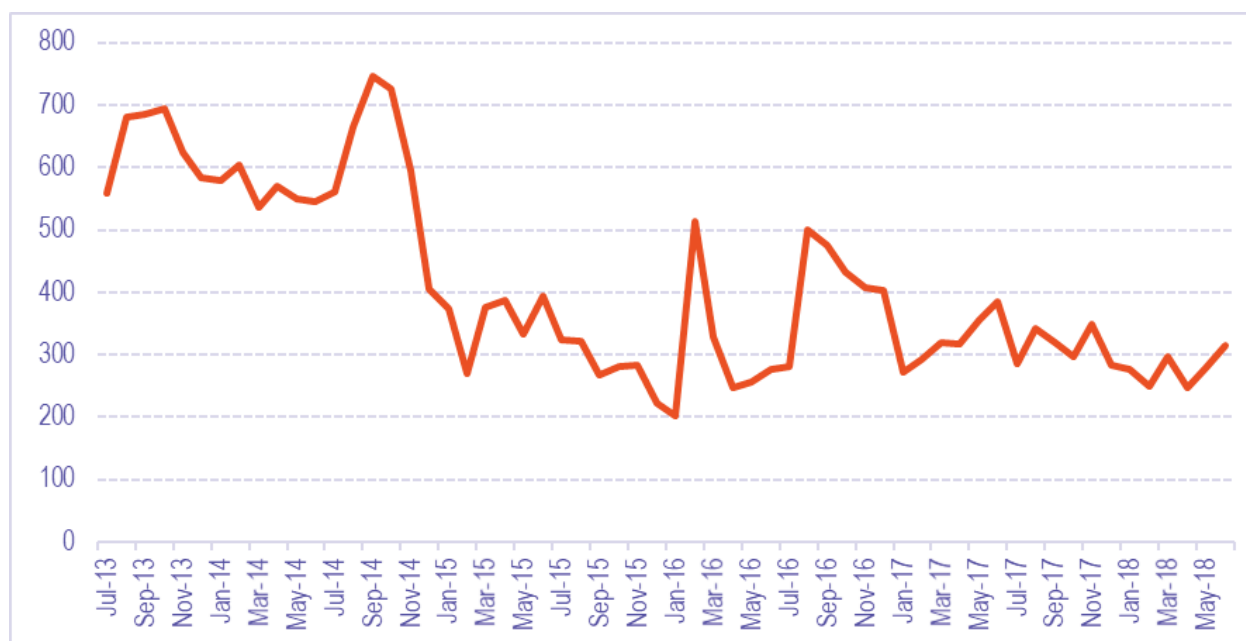
**FIGURE 20. AGENCY MONTHLY RIDERSHIP – TACC – DEMAND RESPONSE, FY 2014–2018**



TACC's demand response services were less costly than its fixed services, a trend that is highly unusual compared with the other agencies in the CONNECT Beyond study area (Table 56). The reason is unclear, but fixed route bus expenses more than doubled from 2016 to 2017 while ridership, revenue hours, and revenue miles did not change by more than one percent. TACC does not collect on-time performance data for bus.

**TABLE 56. SERVICE PERFORMANCE BY MODE – TACC, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Bus | 0.2 | 2.1 | $30.10 | 3% | N/A |
| Demand response | 0.1 | 1.5 | $28.80 | N/A | 88% |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org

## Transportation Lincoln County

Background

Transportation Lincoln County (TLC) serves all of Lincoln County including the municipalities within its borders. TLC offers subscription route and demand response transportation by contractual agreements with the following human service organizations:

- Senior Services
- Services for the Blind
- Department of Social Service,
- Veterans Services
- Gaston Skills/Salem Industries

Rural General Public service is available on all subscription routes if the route deviates no more than 3/4-mile and is open to any Lincoln County resident. RGP services are also available in the City of Lincolnton on the town route. All services are accessible to persons with disabilities.

TLC also provides out-of-county demand response service to the City of Charlotte, Catawba County, Cleveland County, and Gaston County with limited services to the towns of Huntersville and Mooresville.[40] TLC's general transportation profile is provided in Table 57.

### TABLE 57. AGENCY PROFILE – TLC

| Profile | TLC |
|---|---|
| Service frequency | Subscription and on-demand |
| Span & level of service | Demand Response: Monday–Friday, 6:00 am to 5:00 pm; out-of-county, 9 am to 3:00 pm<br><br>Out-of-county trips are available for certain locations depending on the day; residents can call TLC Dispatch to schedule an appointment. |
| ADA coverage area | Countywide |
| Fare structure | Rural, general public trips change price depending on zone. Most trips paid by human service agency contract. |

During FY 2018, TLC operated on a $1.1 million annual budget to provide transportation services to about 45,750 riders. Its services are mostly financed by directly generated funds. Table 58 provides a breakdown of TLC's FY 2018 funding by source.

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[40] http://www.lincolncounty.org/DocumentCenter/View/12586

## Table 58. Agency Funding – TLC, FY 2018

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $635,064 | 57% |
| Total local funds earned during period | $57,094 | 5% |
| Total state funds earned during period | $212,109 | 19% |
| Total federal funds earned during period | $209,421 | 19% |
| Total funds earned during period | $1,113,688 | 100% |

Deviated fixed route carried about 11 percent of total ridership and operated using eight percent of total operating expenses. Even with deviations allowed, its fixed route service served only on average one mile per trip, compared to 13 miles per trip by demand response. Table 59 outlines the general characteristics of the services by mode.

## Table 59. Service Characteristics by Mode – TLC, FY 2018

| Modes | Percentage of Ridership | Percentage of Operating Expenses | Passenger Miles per Trip |
|---|---|---|---|
| Deviated fixed route bus | 11% | 8% | 1.0 |
| Demand response | 89% | 92% | 13.3 |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.

Service Performance

Figure 21 and Figure 22 depict TLC's monthly ridership for FY 2014-2018. The five-year period recorded a nine percent drop in annual ridership but there was a change in reporting method for fixed route service in FY 2017. No information regarding the change was provided. Demand response ridership grew at one percent a year.

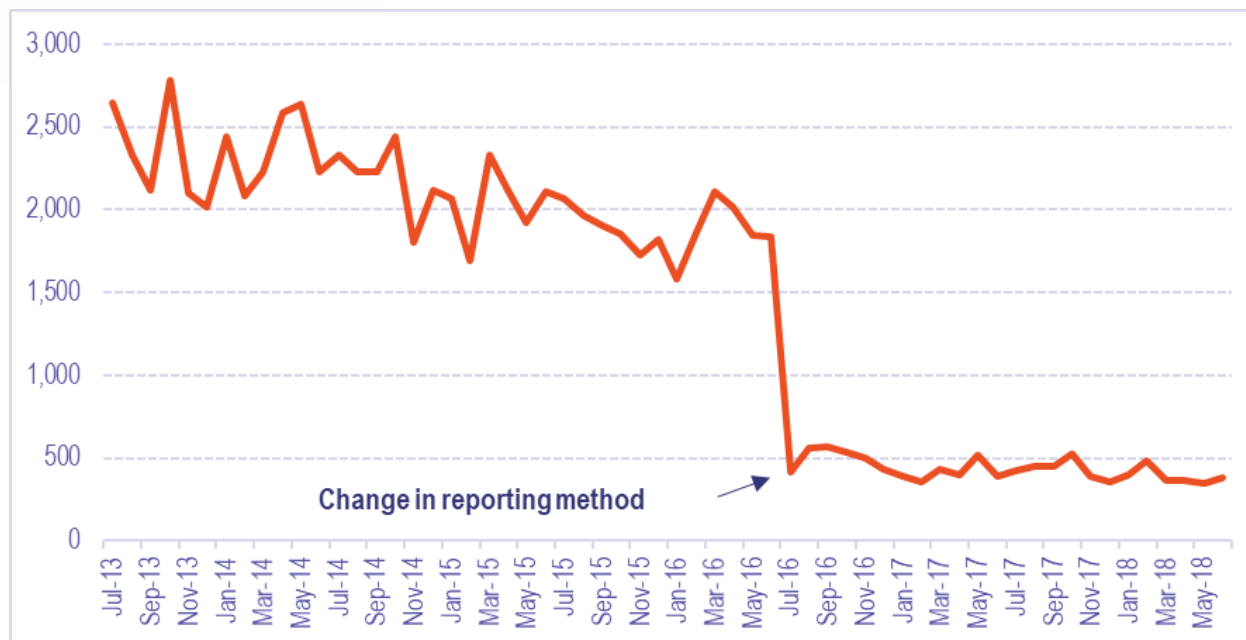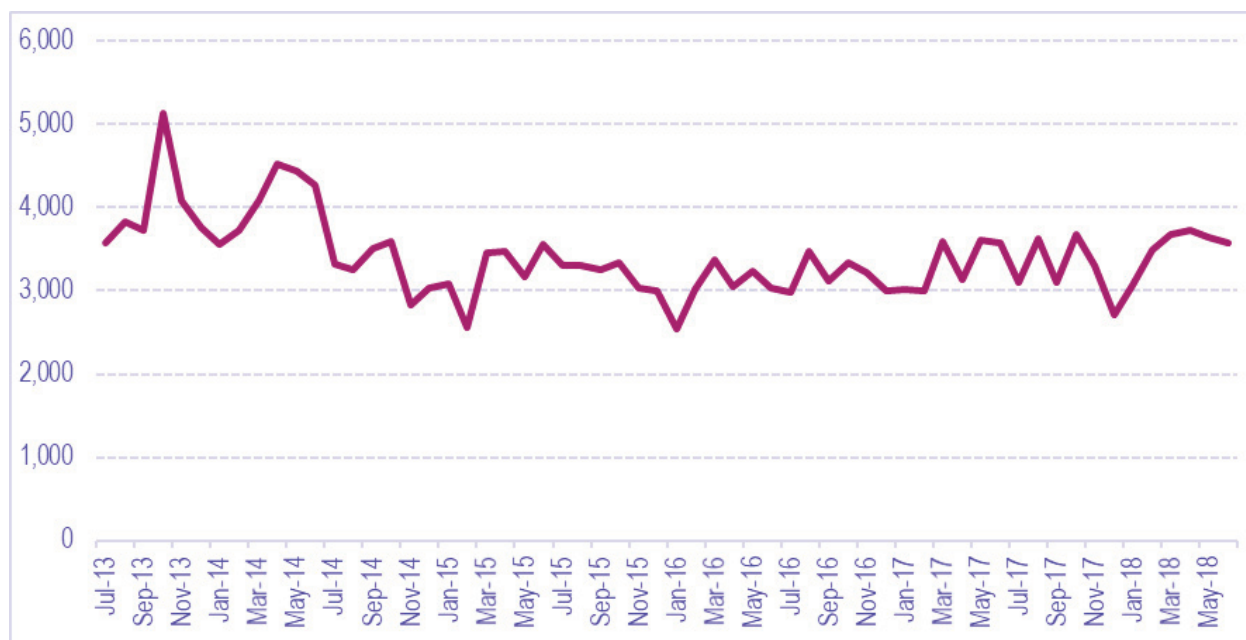**FIGURE 21. AGENCY MONTHLY RIDERSHIP – TLC, FY 2014–2018**



**FIGURE 22. AGENCY MONTHLY RIDERSHIP – TLC, FY 2014–2018**



TLC's demand response service was 40 percent more costly per trip than its deviated fixed route service while serving 60 percent fewer riders per revenue mile, as summarized in Table 60. The system does not report on-time performance.

## TABLE 60. SERVICE PERFORMANCE BY MODE – TLC, FY 2018

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Deviated fixed route bus | 0.2 | 2.0 | $17.15 | N/A for FY 2018 | N/A |
| Demand response | 0.1 | 1.3 | $23.85 | 0.5% | N/A |
| National average – bus | 2.6 | N/A | $4.98 | 25% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. National average from TransitCenter.Org. Demand response performance not available on TransitCenter.Org

## Union County Transportation

Background

Union County Human Services' Transportation Division provides transportation services to all County residents 18 years of age and older who are clients of local human service agencies including, but not limited to, the Department of Social Services, Union Diversified Industries, Vocational Rehabilitation and Veteran Services. Union County Transportation (UCT) serves Charlotte, Matthews, Salisbury, and Union County, with occasional trips to the Veterans Affairs Medical Center in Asheville or Durham. Limited service is available for the general public of Union County who are not eligible for service through a human service agency. To qualify, a person must be a senior citizen at least 60 years of age, a developmentally or physically disabled adult, a Medicaid client, or a veteran eligible for medical treatment at a VA hospital or clinic. Under the Rural General Public program or Elderly & Disabled program, qualification is also based upon availability of space and funding as determined by Union County Transportation.[41] The County's general transportation profile is provided in Table 61.

### TABLE 61. AGENCY PROFILE – UCT

| Profile | UCT |
|---|---|
| Service frequency | On demand |
| Span & level of service | Monday–Friday, 6:00 am to 5:00 pm. Only dialysis, life sustaining, or other critical appointments will be scheduled on county holidays. |
| ADA coverage area | Countywide |
| Fare structure | $2 one way for RFP and EDTAP clients and $0 for human service agency clients |

During FY 2018, the County operated on a $1.7 million annual budget to provide transportation services to about 73,793 riders with an average trip length of 9.4 miles. Its services are mostly funded by a combination of directly generated local funds (from established agencies and businesses) and federal funds. Table 62 is a breakdown of the County's funding by source.

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[41] https://www.unioncountync.gov/departments/transportation

**TABLE 62. AGENCY FUNDING – UCT, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $24,823 | 1% |
| Total local funds earned during period | $1,095,329 | 62% |
| Total state funds earned during period | $223,108 | 13% |
| Total federal funds earned during period | $428,514 | 24% |
| Total funds earned during period | $1,771,774 | 1% |

Service Performance

Figure 23 depicts the monthly ridership for FY 2014–2018. The five-year period recorded a three percent drop in annual ridership.

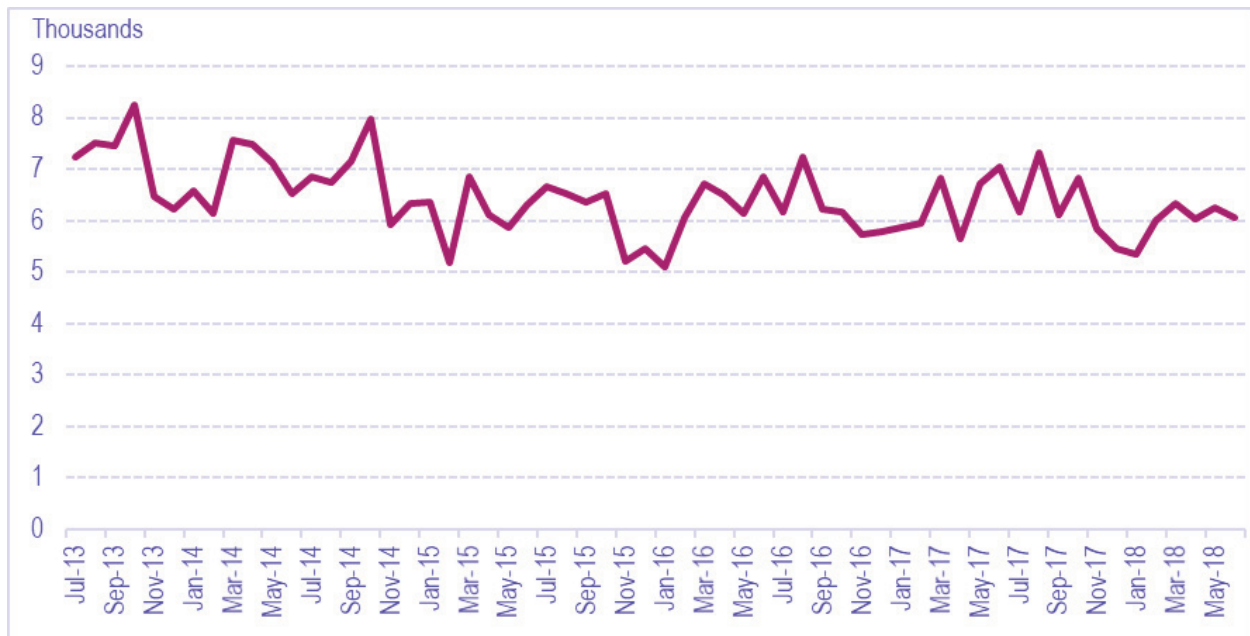**FIGURE 23. AGENCY MONTHLY RIDERSHIP – UCT, FY 2014–2018**

Table 63 summarizes service performance metrics for FY 2018. For on-time performance, any trip arriving one minute or later is considered late.

**TABLE 63. SERVICE PERFORMANCE BY MODE – UCT, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand response | 0.1 | 1.8 | $21.56 | 1% | 90% |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

UCT reported 5.8 years of useful life remaining for their revenue vehicles (out of 10) in FY 2018.

## York County Access / York County Council on Aging

Background

York County Access provides public transportation for residents of York County and the City of Rock Hill. York County Access is operated by the York County Council on Aging (YCCOA) and represents a cooperative effort between York County and the City of Rock Hill. Essential Service provides transportation countywide for people who need a ride to the doctor, medical treatment facilities, pharmacy, or grocery store. Ride-to-Work service is offered only within the city limits of Rock Hill.[42] York County Access' service profile is provided in Table 64.

**TABLE 64. AGENCY PROFILE – YORK COUNTY ACCESS**

| Profile | York County Access |
|---|---|
| Service frequency | On demand |
| Span & level of service | Monday–Friday, 6:00 am to 6:00 pm<br>Ride-to-Work: 5:30 am to 9:00 am; 3:30 pm to 6:00 pm |
| ADA coverage area | Countywide; out of county service available |
| Fare structure | $2.50 each way; trips outside York County will be determined on an individual basis |

In FY 2018, York County Access operated on a $0.9 million annual budget to provide transportation services to about 22,476 riders. Its services were mostly funded by directly generated and federal funds. Table 65 provides a breakdown of the York County Access' funding by source.

**TABLE 65. AGENCY FUNDING – YORK COUNTY ACCESS, FY 2018**

| Funding Source | FY 2018 Amount ($) | Percentage of Total |
|---|---|---|
| Total directly generated funds earned during period | $315,258 | 37% |
| Total local funds earned during period | $32,204 | 4% |
| Total state funds earned during period | $198,593 | 23% |
| Total federal funds earned during period | $314,479 | 37% |
| Total funds earned during period | $860,534 | 100% |

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[42] https://www.yorkcountygov.com/697/Transportation

Service Performance

During FY 2014–FY 2018, York County Access' ridership dropped at an annual rate of five percent. Service performance metrics from FY 2018 are reported in Table 66. The County does not report/collect on-time performance data, monthly ridership, or trip length data.

**TABLE 66. SERVICE PERFORMANCE BY MODE – – YORK COUNTY ACCESS, FY 2018**

| Mode | Ridership per Revenue Mile | Ridership per Revenue Hour | Operating Expense per Trip | Fare Recovery | On-Time Performance |
|---|---|---|---|---|---|
| Demand response | 0.1 | 1.9 | $21.79 | 12% | N/A |

Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

York County Access reported 6.1 years of useful life remaining for their revenue vehicles (out of 10 years) in FY 2018.

## Other Service Providers

### Amtrak

Amtrak connects the CONNECT Beyond region with multiple destinations in the Carolinas and along the East Coast. In FY 2018, Amtrak provided over 213,000 trips to the region. This represents about a two percent drop in annual ridership compared to FY 2014.[43] Nationally, ridership grew at about one percent a year between FY 2014 and FY 2018. The two routes that service the study area, Piedmont and Carolinian, reported on-time performance in FY 2018 at 53 and 47 percent respectively.[44]

The following counties in the study area are served by Amtrak (routes and stations are depicted in Figure 24):

- Rowan County: Five northbound and five southbound trains stop at the Salisbury Train Station daily. The train routes serving the station include the Piedmont with service between Charlotte and Raleigh, and the Carolinian which operates between Charlotte and New York. Rider, CCTS, and RTS each provide bus service from the train station to multiple locations in the region. RTS express service connects STS, Employment Security Commission, China Grove Town Hall, China Grove Food Lion, Landis Town Hall, Amtrak in Kannapolis, Rider, and Amtrak in Salisbury.
- Cabarrus County: Four northbound and four southbound trains stop at the Kannapolis Train Station daily. The train routes serving the station also serve Salisbury in Rowan County. The Town of Harrisburg and the North Carolina Railroad (NCRR) Company are planning for a future passenger rail station along Highway 49.[45]
- Mecklenburg County: CATS fixed route and light rail modes serve the Amtrak Charlotte station. Amtrak serves Mecklenburg County with three different routes: Carolinian, Crescent, and Piedmont, with five northbound and five southbound trains per day. The state-owned Piedmont and the state-subsidized Carolinian are primarily financed through funds from NCDOT.[46] The Federal Railroad Administration, NCDOT, and the City of Charlotte have partnered to fund a new Charlotte Gateway Station adjacent to Charlotte's Uptown, with service at the new station site before 2024.[47]

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[43] https://www.amtrak.com/state-fact-sheets
[44] https://connect.ncdot.gov/resources/Rail-Division-Resources/Pages/Data.aspx
[45] https://www.harrisburgnc.org/DocumentCenter/View/502/Harrisburg-Train-Station-Location-Study-PDF
[46] https://www.greatamericanstations.com/stations/charlotte-nc-clt/
[47] https://www.charlottegatewaydistrict.com/;
https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/NORTHCAROLINA17.pdf

- **Gaston County:** The Amtrak Crescent route services Gaston County at the Gastonia Station (one train per day), which is connected through Gastonia transit fixed route bus service.

Trips from Salisbury in Rowan County to Gastonia in Gaston County (northmost and southmost ends of the stations within the study area) is about $15.00 one way.

**FIGURE 24. NORTH CAROLINA INTERCITY RAIL ROUTES**
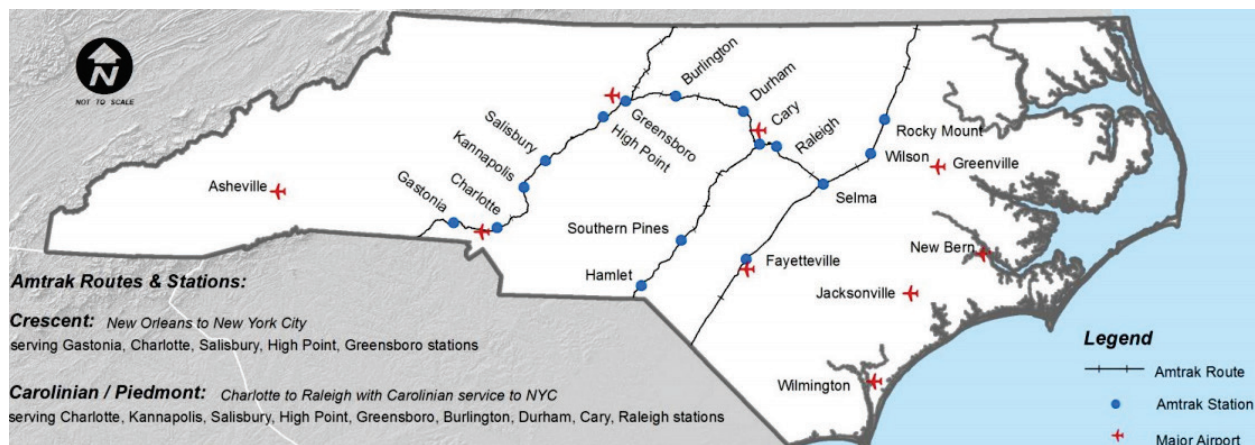


*Source: NCDOT Comprehensive State Rail Plan. 2015. https://www.ncdot.gov/divisions/rail/Pages/rail-plan.aspx*

Intercity Bus

In the Gaston-Cleveland-Lincoln Metropolitan Planning Organization (GCLMPO) area, there are two providers of intercity transit service: Greyhound Bus Lines and Sunway Charters (previously Coach America). These services operate seven days a week, with two round trips made each day. Each service provides options to travel between distant cities, with stops spaced farther apart than commuter-oriented services. This service provides additional opportunities for residents in Anson County (Wadesboro), Iredell County (Statesville), and Union County (Monroe), areas with relatively fewer transportation options in the study area. Intercity bus routes are depicted in Figure 25.

**FIGURE 25. REGIONAL INTERCITY BUS ROUTES**
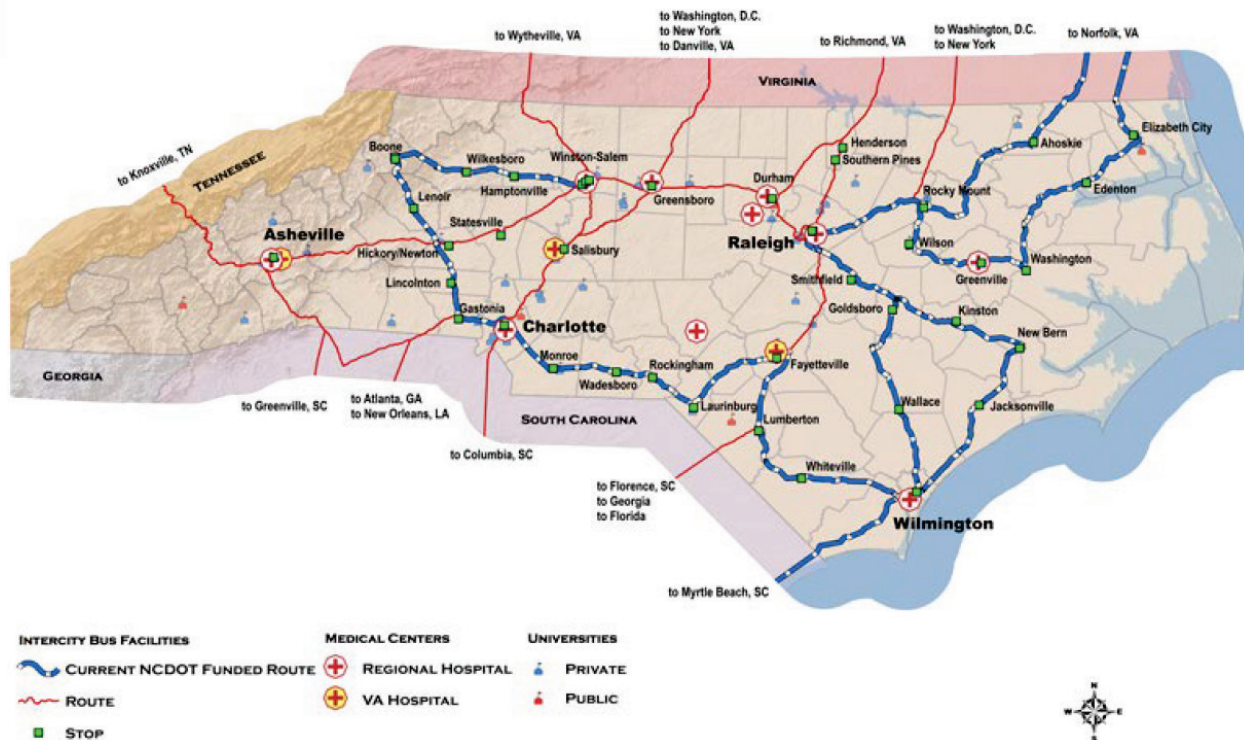


Source: GCLMPO | 2045 Metropolitan Transportation Plan. https://gclmpo.org/wp-content/uploads/Chapter-13-Public-Transportation-1.pdf

# System Level Performance

The following sections provide insight from a review of peer agencies across the United States and system level operational analysis of services and trends within the region.

## Peer Level Review

A high-level peer comparison was conducted with FY 2018 data from urbanized areas of Houston, Texas; Madison, Wisconsin; Phoenix, Arizona; Raleigh, North Carolina; and Seattle, Washington. These peer systems were identified using the FTIS peer selection tool and selected based on system design and rural connectivity.

In FY 2018, the CONNECT Beyond region invested over $200 million in the operation of transit services. For ridership and operational expenditure, the region was on-par with the peers reviewed. The peer comparison trend is depicted in Figure 26. This trend suggests if the CONNECT Beyond region were to invest twice as much in transit connectivity, the return of investment in terms of ridership, could more than double (to around 61.9 million from 24.4 million).

**FIGURE 26. RIDERSHIP AND OPERATIONAL EXPENDITURE – PEER SYSTEMS, FY 2018**
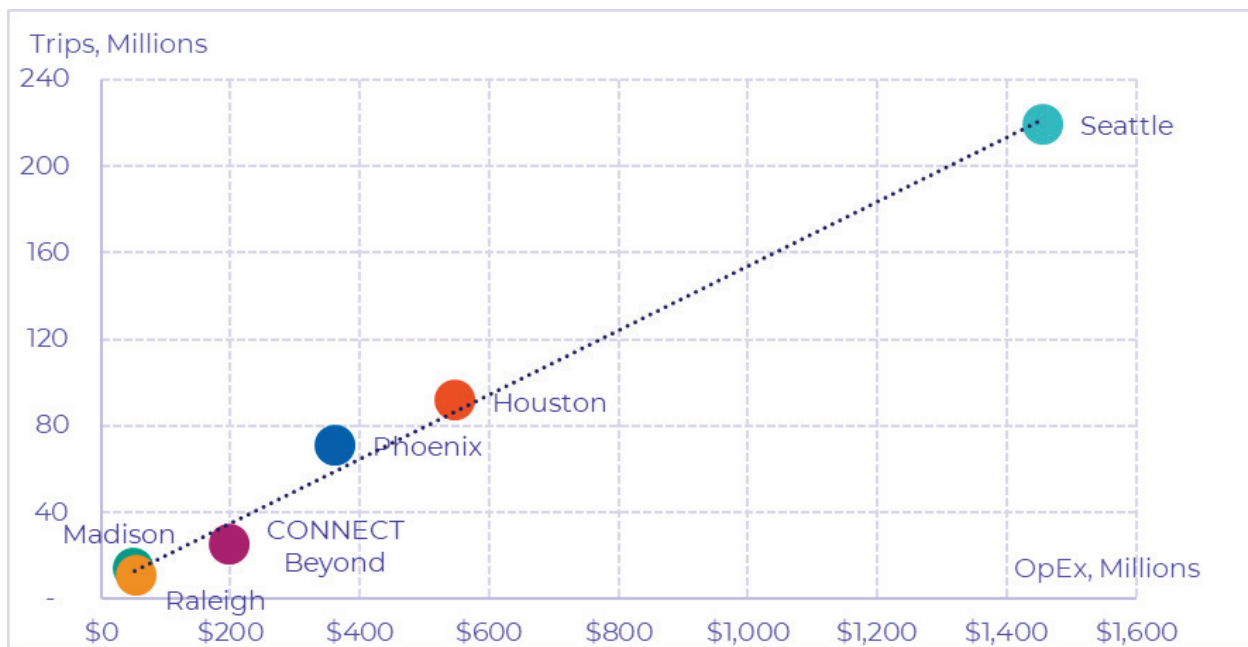


However, while greater spending generates higher ridership, it does not necessarily equate to greater efficiency of service. Data from the peer review indicate that efficiency seems to

increase initially, but then diminishes as the system becomes larger. This is likely because there is a limit to the level and capacity of services an agency can provide without expanding the system through capital investment. Figure 27 shows such a trend generated by the peer systems. The trend suggests CONNECT Beyond would not see a one-to-one return for an increase in spending; revenue miles only increase by 53 percent when operational spending doubles.

**FIGURE 27. VEHICLE REVENUE MILES AND OPERATIONAL EXPENDITURE – PEER SYSTEMS, FY 2018**
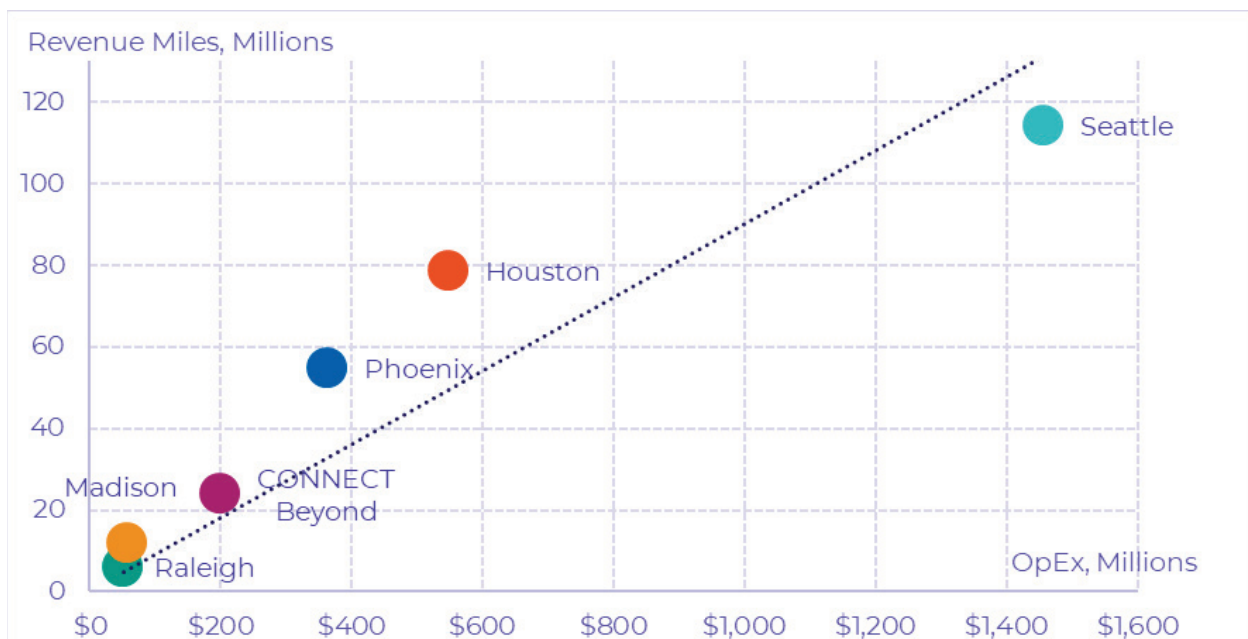


## Funding & Revenue

In FY 2018, transportation providers in the study area relied on $322 million of directly generated, local, state, and federal funding for capital investment and operations.[48] Over 44 percent of the $322 million came from local funding. Agencies that relied on these local funds for a significant portion of their funding in FY 2020 include CATS, STS, Union County, and RTS[49] (each over 44 percent), as well as Rock Hill (over 48 percent).

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[48] Excluding Rock Hill data from FY 2020.
[49] Mecklenburg County has a ½ percent sales tax that is used for funding transportation.

Urban Services Providers had almost $294 million in funding in FY 2018.[50] Excluding CATS and Rock Hill, the remaining total equaled about $10 million.[51] These providers were mostly funded through local and federal funds (31 percent and 55 percent respectively).

For Community Transportation Providers, a total of $28 million was collected to fund transportation capital and operations in FY 2018, of which 62 percent came from local and state funding sources. Figure 28 depicts the funding proportion for both types of transit providers.[52]
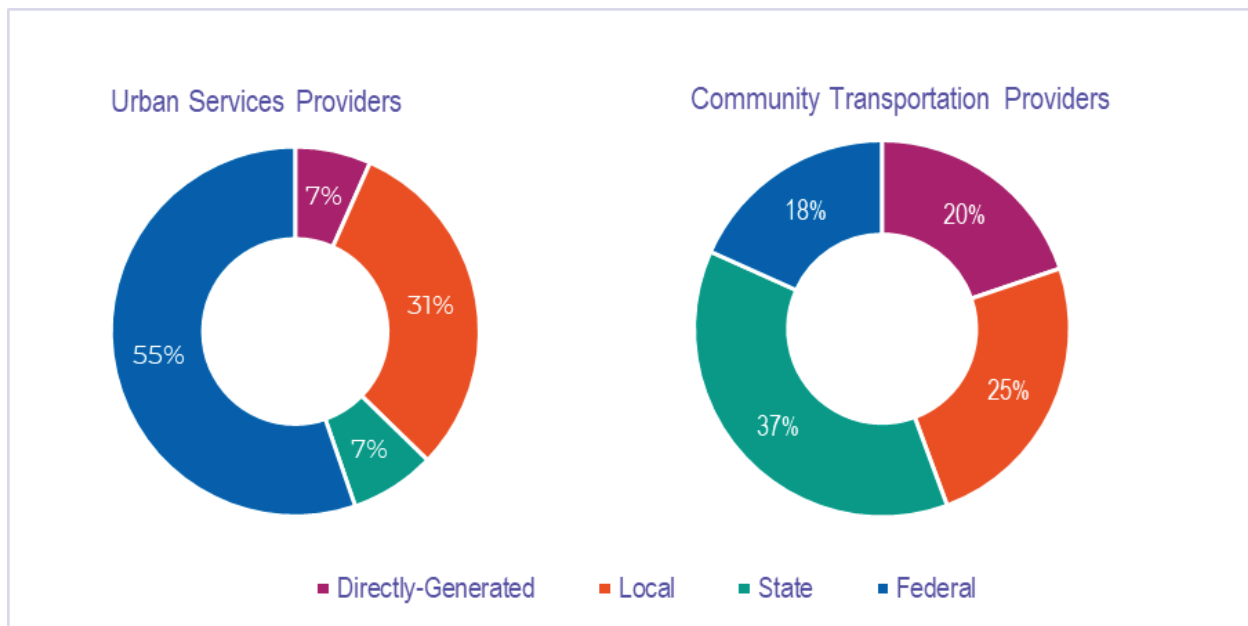
*Note: CATS and Rock Hill are not included.*

The region expended over $200 million in funding. Excluding CATS and Rock Hill, the total expense for operations equaled over $33 million.[53] The distribution of funding sources is similar to the total capital and operations funding as depicted in Figure 29. For Urban Services Providers, trip costs were subsidized 91 percent by local, state, and federal sources at $6.30 per

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[50] Excluding Rock Hill data from FY 2020.

[51] As CATS dominated most of the data representation and Rock Hill did not operate in FY 2018.

[52] Directly generated funds are funds that a transit agency earns from non-governmental sources, including passenger fares, funds related to transit (park-and-ride parking revenue, advertising and concessions, charter service, etc.), funds unrelated to transit (subsides from other sectors, investment income and interests, etc.), dedicated funds (applicable to transit agencies that are independent political entities and have the ability to impose taxes, such as non-local, County tax to transit). Local and State funds include funds from local and State government annual budgets that are not dedicated to transit. Federal funds typically include amounts that agencies receive from the Federal government on a cost-reimbursement basis.

[53] CATS had almost $168 million in operations cost in FY 2018 and Rock Hill had $1.8 million in FY 2020.

trip on average. Services by Community Transportation Providers, on the other hand, were subsidized at 78 percent, or $17.76 per trip.

**FIGURE 29. FUNDING SOURCES (OPERATIONS ONLY), FY 2018**
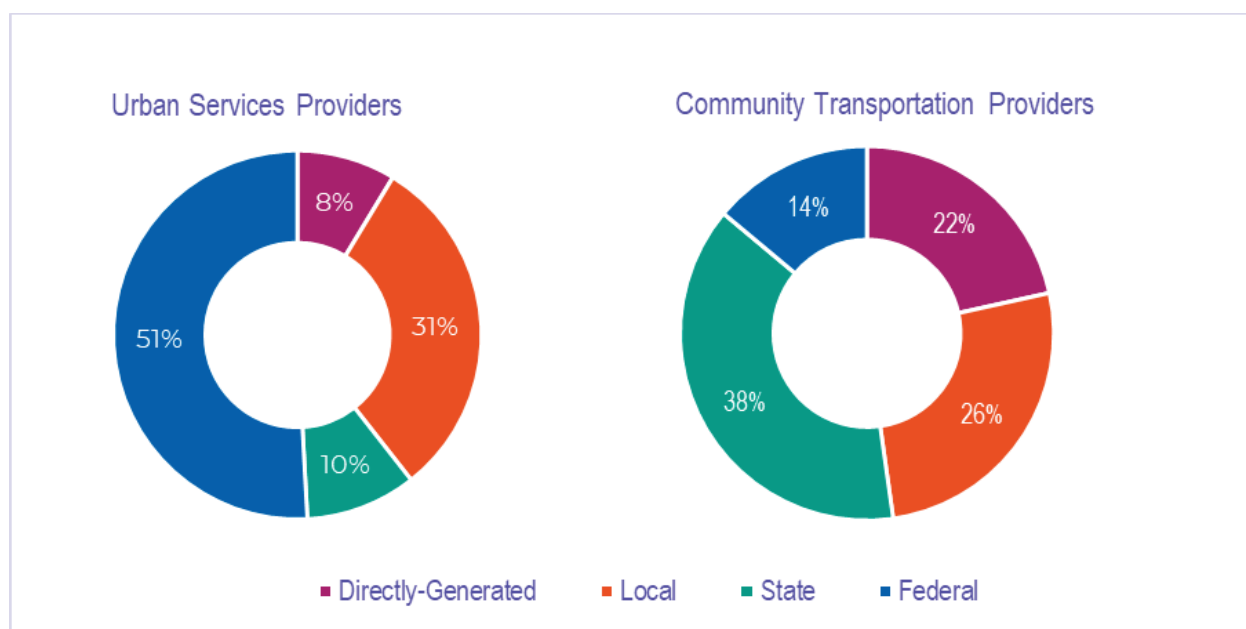


For service efficiency, agencies in the study area achieved an 18 percent fare recovery rate on fixed route services in FY 2018, while the nationwide average was estimated at 25 percent. Fare recovery for demand response was much lower, estimated at about three percent. The agencies spent an average of $6.26 providing each fixed route bus trip, an estimate that is about 26 percent higher than the national average.[54] Further investigation into fare recovery and cost per trip is important for understanding opportunities for operational improvements.

During the same fiscal year, agencies spent five times more on each demand response trip than on fixed route bus. Trips from Urban Services Providers are on average eight times more expensive than fix route bus. Since per trip expenses ranged from $24.00 to over $50.00, an assessment of demand-response operating cost will help address how to keep spending low. These data are reported in Table 67.

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[54] Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.

**TABLE 67. EXPENSE & REVENUE SUMMARY**

| Providers | FY 2018 Fare Recovery | | FY 2018 Expense per Rider | |
| --- | --- | --- | --- | --- |
| | Fixed Route Bus | Demand Response | Fixed Route Bus | Demand Response |
| Urban services | 18% | 6% | $6.26 | $50.14 |
| Community transportation | 3% | 7% | $9.33 | $24.28 |
| Overall | 18% | 7% | $6.28 | $31.59 |
| National average (transitcenter.org) | 25% | N/A | $4.98 | N/A |

*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements.*

State and federal funding is projected to be limited as a result of COVID-19, resulting in an increased need to generate local funds. Previous funding initiatives across North Carolina include dynamic pricing for demand and revenue management (Charlotte with micro mobility services and Raleigh-Durham International Airport with parking, for example) and transit-dedicated sales tax investments.[55,56,57] The following counties in North Carolina have implemented a 1/2-cent sales tax dedicated to transit:[58]

- 1998: Mecklenburg County
- 2011: Durham County
- 2012: Orange County
- 2016: Wake County

Targeted research and development are necessary to identify additional potential funding and financing mechanisms to support regional transit while promoting economic development across the study area. The City of Charlotte's Charlotte MOVES Task Force Report is one resource that has explored funding and financing mechanisms and can be a guiding framework for CONNECT Beyond.[59]

## Ridership

In FY 2018, Community Transportation Providers in the study area served over 24.4 million riders. The five-year trend since FY 2014 showed an annual decrease of just under six percent. As noted in the Cabarrus County Long Range Transportation Plan, the decrease in fuel costs

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[55] https://www.charlotteobserver.com/news/politics-government/article228392044.html
[56] https://www.rdu.com/ideas-enables-raleigh-durham-international-airport-to-transform-its-parking-business/
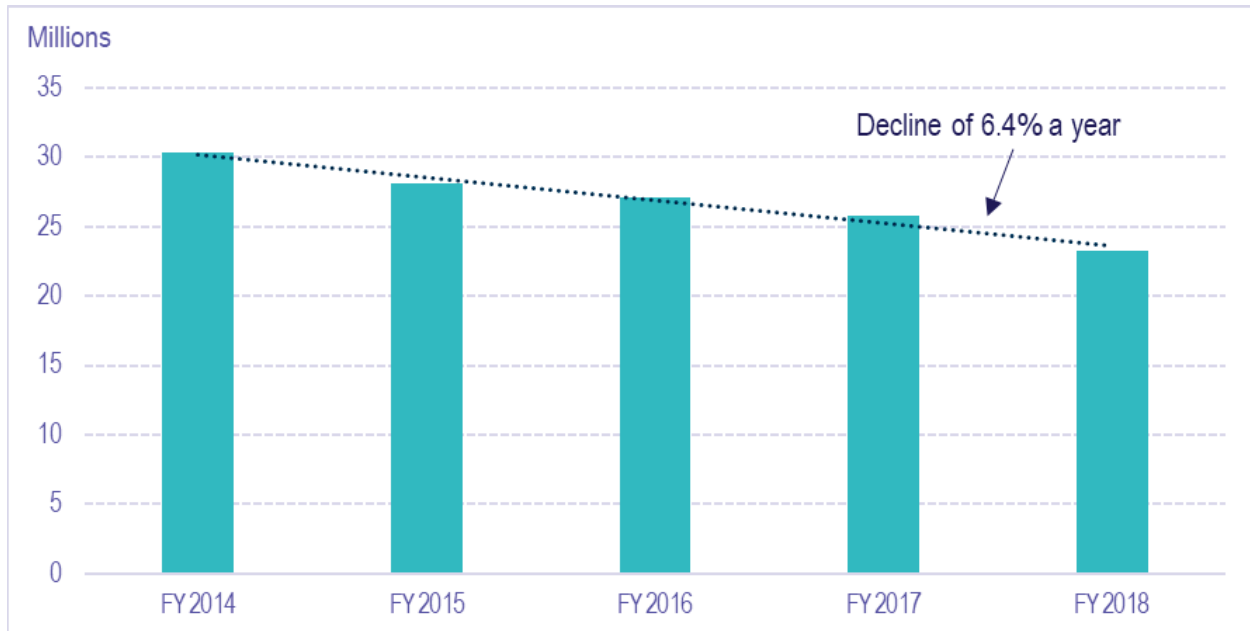[57] https://goforwardnc.org/county/wake-county/about/
[58] https://www.ncdor.gov/taxes-forms/sales-and-use-tax/sales-and-use-tax-rates-other-information/sales-and-use-tax-rates-effective-october-1-2020
[59] https://citycharlottencgov.azureedge.net/Charlotte_MOVES_Task_Force_Report_December_2020.pdf

and increased availability of auto loans has made personal vehicle ownership more accessible since 2014, and therefore, more competitive with transit, particularly bus. Transportation network companies, e-commerce, and alternative work arrangements have also contributed to transit ridership decline.[60]

Urban Services Providers served about 23.3 million riders and saw an overall drop in ridership of over 6 percent per year during FY 2014–2018. Figure 30 and Figure 31 depict the trends for the respective transportation providers. All the agencies experienced declines in the past five years, except for Rider Transit in FY 2015 and City of Salisbury in FY 2017.
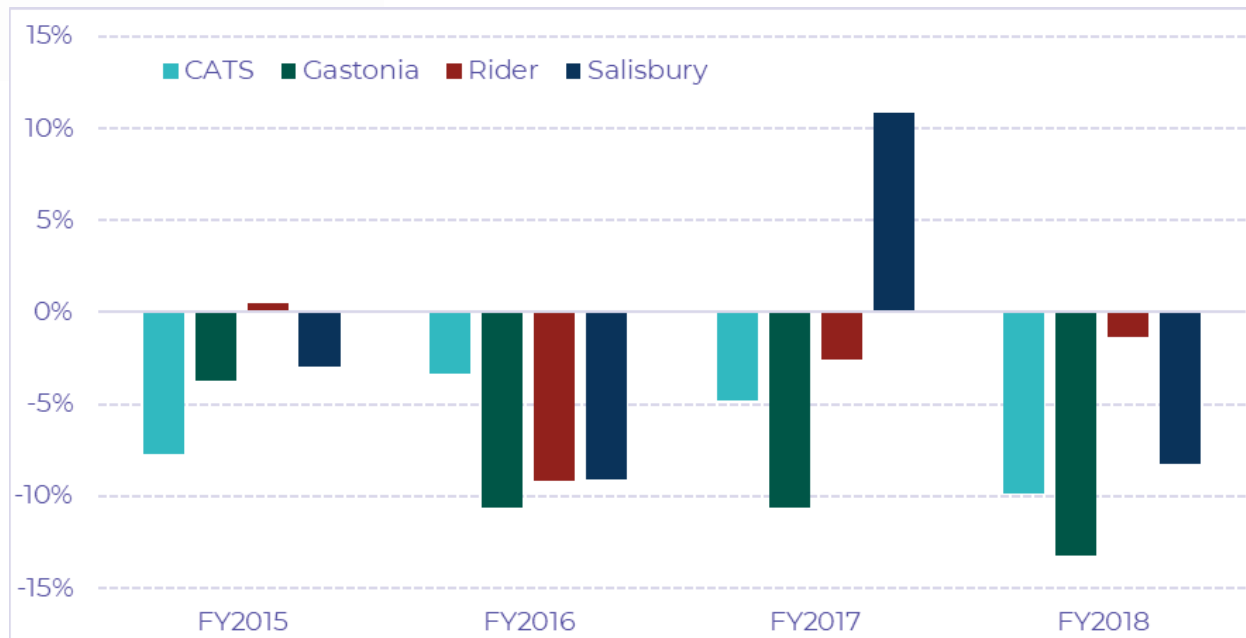
*Note: Does not include Rock Hill.*

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[60] http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf

FIGURE 31. RIDERSHIP GROWTH – URBAN SERVICES PROVIDERS, FY 2015–2018

For Community Transportation Providers, ridership over the FY 2014–2018 period grew at about nine percent per year and reached over 1.1 million in FY 2018, as depicted in Figure 32. The large growth is due to MTS' introduction of demand response taxi in FY 2015. Excluding the impact from FY 2014, ridership grew at 1.7 percent per year since FY 2015. Several other agencies also had significant changes to ridership and five with relatively large deviations from the general growth trend (Figure 32) are depicted in Figure 33. For TLC, the large decline was due to a change in reporting methods, but the details were not provided.

These trends show a growing need for demand response services as well as subscription routes that connect riders to employment centers, medical facilities, and other essential services. Meanwhile, the increased popularity of urban areas has displaced transit dependent riders to suburban areas which are less accessible by transit.[61]

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[61] http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf

**FIGURE 32. TOTAL RIDERSHIP – COMMUNITY TRANSPORTATION PROVIDERS, FY 2014–2018**
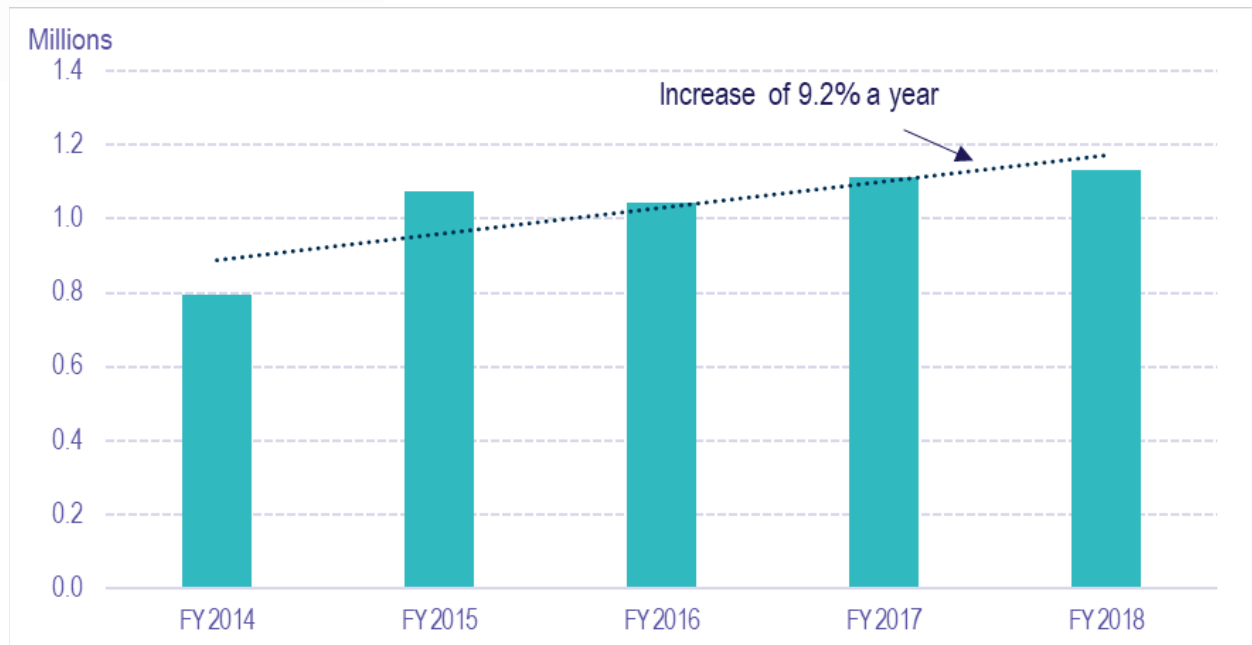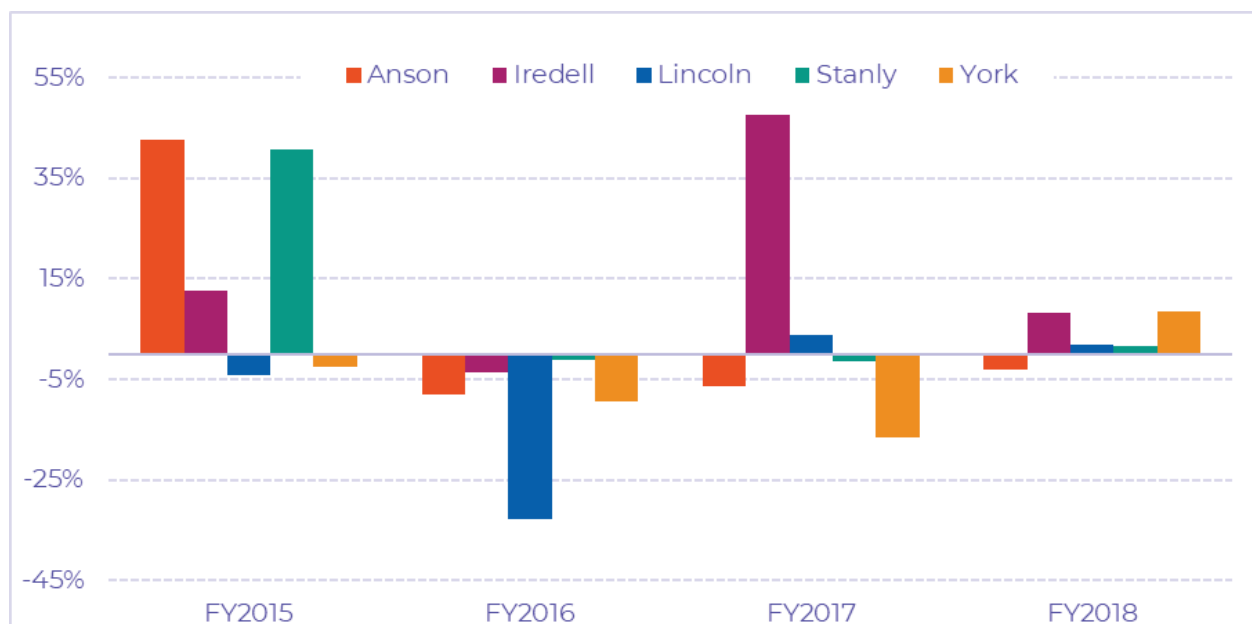


**FIGURE 33. RIDERSHIP GROWTH – SELECTED COMMUNITY TRANSPORTATION PROVIDERS, FY 2015–2018**

Ridership data can be further broken down by mode. For fixed route bus services provided by Urban Services Providers, there was a 10 percent drop in annual ridership during FY 2014–FY 2018. For demand response trips, Urban Services Providers served passengers at an annual growth rate of four percent. In FY 2018, fixed route bus trips averaged about five miles per ride, while demand response trips averaged about 10 miles.

For Community Transportation Providers, demand response trips declined one percent per year during FY 2014–2018, while fixed route trips increased three percent per year. The overall upward trend for these providers was driven by Mecklenburg County's demand response taxi, as it carried over one-third of all providers' ridership and recorded a six percent increase in annual ridership. Fixed route trips averaged almost three miles while demand response trips averaged almost eight in FY 2018. The summary is reported in Table 68.

#### TABLE 68. TRIP SUMMARY, FY 2018

| Providers | Ridership Change from FY 2014 | | Trip Length, Miles | |
| --- | --- | --- | --- | --- |
| | Fixed Route Bus | Demand Response | Fixed Route Bus | Demand Response |
| Urban services | -10% | +4% | 4.6 | 9.9 |
| Community transportation | 3% | -1% | 2.6 | 7.8 |
| Overall | -10% | +1% | 4.6 | 8.4 |
| National average (transitcenter.org) | -2% | 0% | 5.6 | |

*Note: National average from TransitCenter.Org. Mode specific trip length not available on TransitCenter.Org*

For standardized performance, agencies in the study area served 1.3 riders per revenue mile on fixed route services in FY 2018, an estimate that was just over half of the nationwide average (Table 69). The agencies served about 19 riders per revenue hour on fixed route services, which suggests that there may be capacity to accommodate more riders before crowding becomes an issue.

#### TABLE 69. TRIP PERFORMANCE, FY 2018

| Providers | Rider per Revenue Mile | | Rider per Revenue Hour | |
| --- | --- | --- | --- | --- |
| | Fixed Route Bus | Demand Response | Fixed Route Bus | Demand Response |
| Urban services | 1.4 | 0.1 | 18.9 | 1.8 |
| Community transportation | 0.3 | 0.1 | 4.0 | 1.9 |
| Overall | 1.3 | 0.1 | 18.5 | 1.9 |
| National average (transitcenter.org) | 2.6 | N/A | N/A | |

*Note: National average from transitcenter.org. Demand response performance and revenue hour not available on TransitCenter.Org*

## Connectivity

The comparison of trip length, reported in Table 68, shows that riders in the region took shorter fixed route bus trips than the national average. The difference is even more pronounced with services provided by Community Transportation Providers. Since the region is not a dense metropolitan area, the comparison suggests there may be additional opportunities to connect riders and expand the transit network. Current regional connections are summarized by county as follows.

- Anson County (Wadesboro), Iredell County (Statesville), Union County (Monroe): Greyhound Bus Lines and Sunway Charters provide intercity bus service to other areas.[62]
- Cabarrus County:
  - Rider Transit partners with the NCDOT Rail Division to offer a transit pass providing last mile connectivity from the Kannapolis Train Station. The pass allows train passengers to connect to the Rider bus service free of charge from the train station.[63]
  - Concord Charlotte Express provides a regional express route that connects passengers traveling from Cabarrus County to the Charlotte metropolitan area.
- Gaston County:
  - CATS 85X Gastonia Express provides express bus service for Gaston-Cleveland-Lincoln metropolitan planning organization (GCLMPO). It connects passengers from Gastonia to Uptown Charlotte with a stop in Belmont.[64] It is currently the only express route in the GCLMPO area.
  - Passenger rail (Amtrak) and Greyhound (regional bus service) provide connective opportunities to Gastonia residents
- Lincoln County: TLC provides out-of-county service to Catawba County, Charlotte, Cleveland County, and Gaston County with limited services to Huntersville and Mooresville.
- Mecklenburg County: Door to door service is provided between a non-urbanized location and a local CATS stop.

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[62] https://www.ncdot.gov/divisions/public-transit/Pages/local-transit-search.aspx
[63] https://www.cabarruscounty.us/departments/transportation
http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf
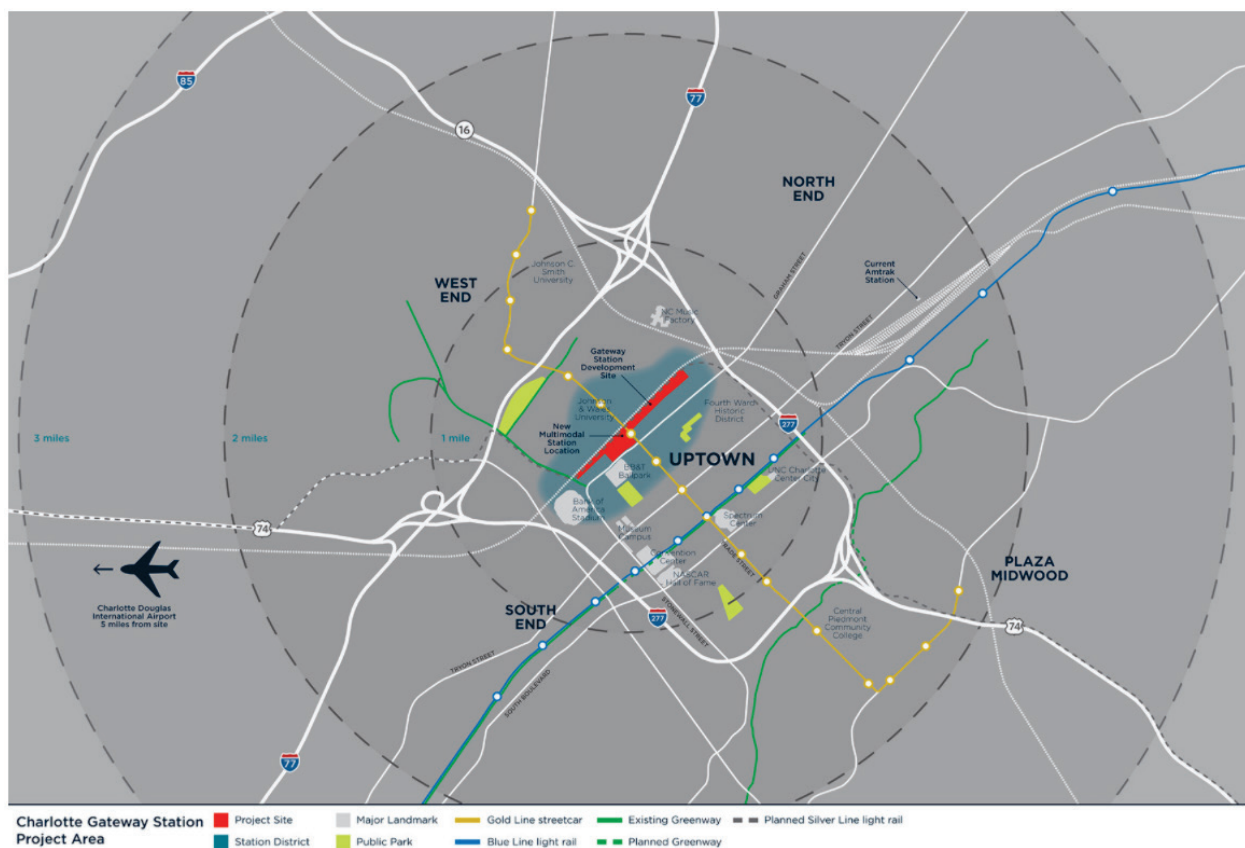[64] https://gclmpo.org/wp-content/uploads/Chapter-13-Public-Transportation-1.pdf

o   CATS coordinates vanpools for commuters from Cabarrus County, Cleveland County, Gaston County, Iredell County, Lincoln County, Rowan County, Stanly County, Union County, York County, to Mecklenburg County.[65]

o   Once completed, Charlotte's Amtrak Gateway Station will be a multimodal transit center with connections to bicycle and pedestrian greenway, streetcar, light rail, regular and express bus, intercity bus, taxi and rideshares, and highway.[66,67] Figure 34 depicts the Charlotte Amtrak Gateway Station Area Project.

**FIGURE 34. CHARLOTTE AMTRAK GATEWAY STATION PROJECT AREA**



*Source: https://www.charlottegatewaydistrict.com*

• Rowan County:

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[65] https://charlottenc.gov/cats/commuting/vanpool/Pages/default.aspx
[66] https://www.charlottegatewaydistrict.com
[67] https://charlottenc.gov/cats/transit-planning/charlotte-gateway-station/Pages/gateway-station.aspx

- Passenger rail (Amtrak) and Greyhound (regional bus service) provide connective opportunities to Salisbury residents.[68]
  - Rowan Transit System provides express service between China Grove, Landis, Kannapolis, and Salisbury and connects STS and Rowan County passengers with Concord Kannapolis Rider Transit in Cabarrus County.
- Multicounty connections: Intercity bus services are noted under the Service Inventory section of this report. These services, together with express bus, Amtrak, and light rail, are expected to converge at Charlotte's Gateway Station. The Statewide 5310 Locally Coordinated Plan (2018) points to several recommendations applicable to agencies in the study area (some as being implemented):[69]
  - Coordinate with county agencies and neighboring counties.
  - Expand eligibility for demand response services to serve a wider range of trip purposes and customers.
  - Improve facilitation of transfers at major transfer points.
  - Increase distribution of information about available services and eligibility, especially to underserved communities (notably Stanly County and Cleveland County with limited connections).
  - Provide connections to intercity bus transit and other fixed route services.
  - Expand number of trips to out-of-county and out-of-town destinations.

## Asset Conditions

Agencies report information about assets for which they have capital responsibility for maintenance and replacement. This asset information is available from NTD. Key assets being considered here were facilities and revenue vehicles. According to the FTA, the FY 2018 national average of facility condition rating was 3.0 and the useful life remaining for bus service vehicles was 7.6 years.[70] For Urban Services Providers, the FY 2018 data showed a 3.4 average (over all facilities) out of the FTA five-point scale.[71] Both fixed route buses and demand response vehicles had about five years of useful life remaining from respective 14 years and 8-10 years of useful life. Figure 35 shows the asset conditions for the agencies that reported in FY 2018.

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[68] https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf
[69] https://connect.ncdot.gov/business/Transit/Documents/LCP_Full%20Final_30July2018.pdf
[70] FTA requires transit agencies to assess and report facility condition to the NTD based on the five-point scale used in the Transit Economic Requirements Model (TERM). The TERM scale indicates that an asset is considered in good repair if it has a rating of 3 (adequate), 4 (good), or 5 (excellent); it is not considered to be in good repair if it has a rating of 1 (poor) or 2 (marginal). https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/asset-management/146671/tam-2018-ntd-extended_2.pdf
[71] Ibid.

**FIGURE 35. ASSET CONDITIONS – URBAN SERVICES PROVIDERS, FY 2018**
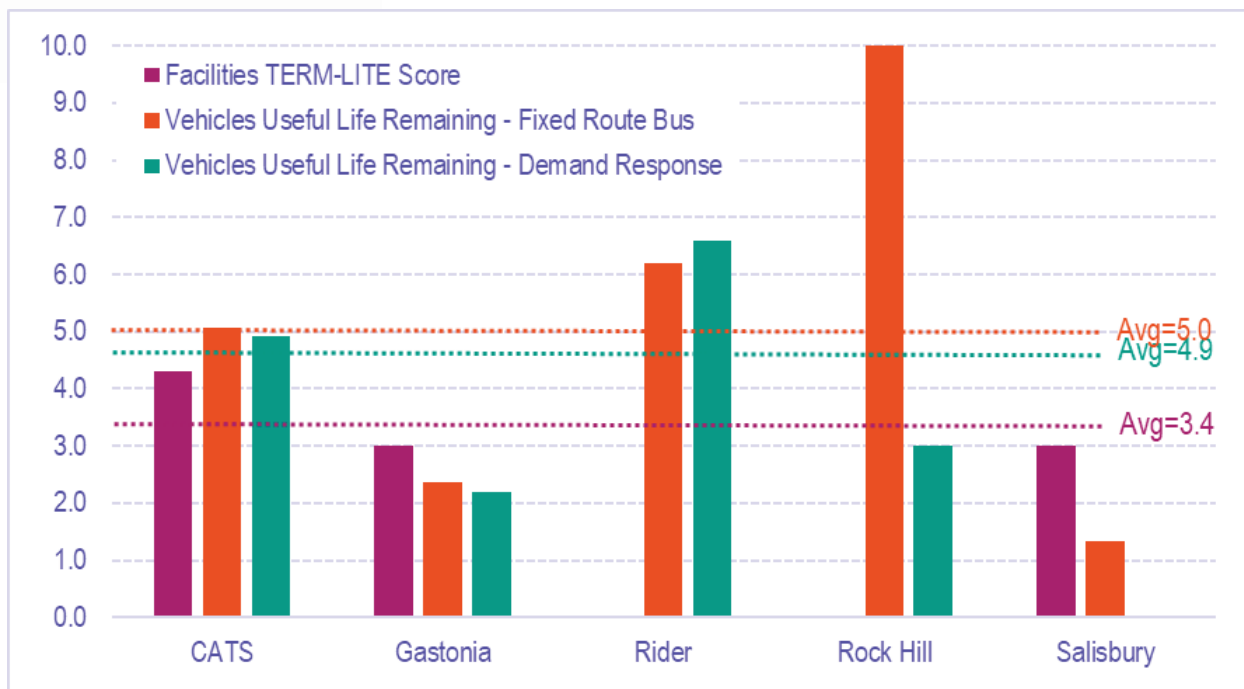


Note. Rock Hill My Ride data from FY 2019.

For Community Transportation Providers, fixed route revenue vehicles had about 2.9 years of useful life remaining on average while demand response vehicles had 4.5 years. The average facility score from two agencies was 2.5 years. The data by agencies who reported in FY 2018 and the overall averages are depicted in Figure 36.

## FIGURE 36. ASSET CONDITIONS – COMMUNITY TRANSPORTATION PROVIDERS, FY 2018
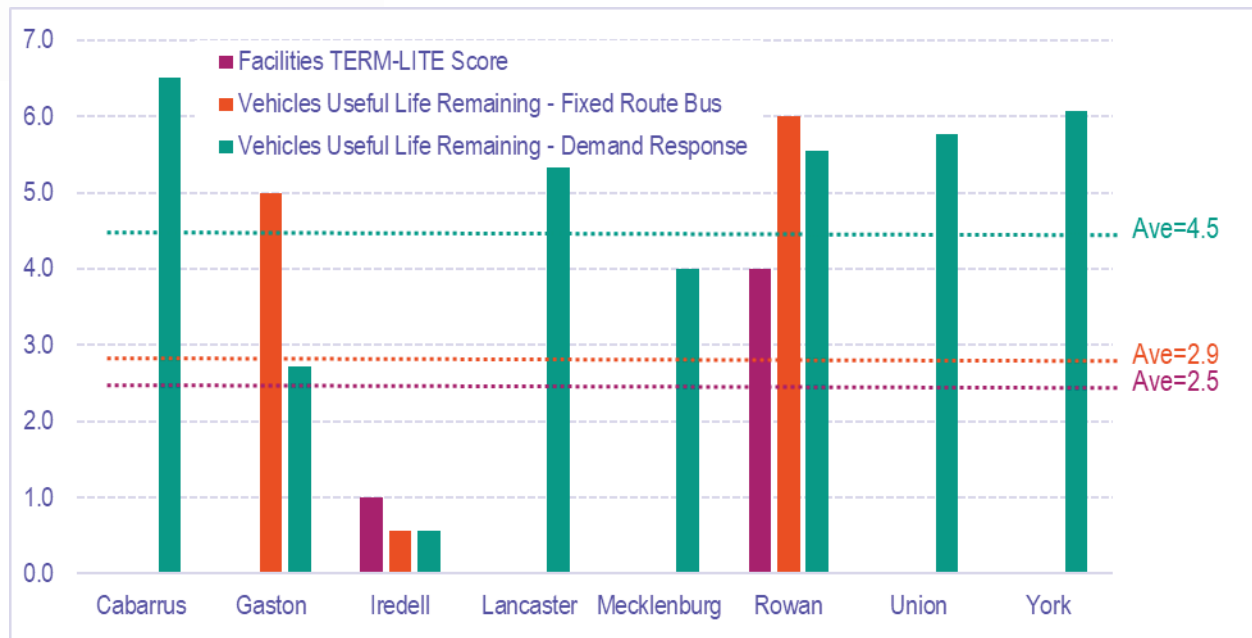
# Preliminary Concepts

The following represents a summary of findings and observations from the regional transit system evaluation conducted for the CONNECT Beyond study area.

- There is need for a structured and coordinated approach to collect, store, validate, and manage data pertinent to regional transit planning in order to successfully develop a seamless transit system for the region.[72]
- To preserve historical data and improve knowledge transfer, it is important to ensure data management is consistent and shared between agencies.
- If related services are provided by multiple agencies, it is important to establish a clear and separate service data reporting process to avoid double counting.
- Based on the inventory process, it appears that on-time performance is not being collected or reported consistently across the region. It is important that a process on reporting this metric is established.
- Service effectiveness and efficiency can be improved by collecting and analyzing stop-level performance.
- It is important for each service provider to review their capital reinvestment backlog periodically and ensure assets are maintained in a state of good repair.
- There is potential latent demand for commuter service, as demonstrated by ICATS express.
- It is difficult to differentiate the performance of express services from local bus service because the data are combined in the NTD.
- There is growing mobility demand in rural areas; if this trend is sustainable, it is important to incorporate projections into future transportation planning.
- There is need for research and development of additional financing mechanisms to increase local funding for transit services.

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[72] The Gaston-Cleveland-Lincoln Metropolitan Planning Organization Coordinated Comprehensive Public Transportation (includes Iredell County) noted a general need for coordination and awareness in 2014. https://gclmpo.org/wp-content/uploads/GCLMPO-Coordinated-Comprehensive-Public-Transportation-Plan-FINAL-June-2014.pdf

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connect-beyond.com