



# **CONNECT Beyond**

A Regional Mobility Initiative

## **Regional Transit Inventory and Performance Analysis**

August 11, 2021



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## 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:



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- 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.

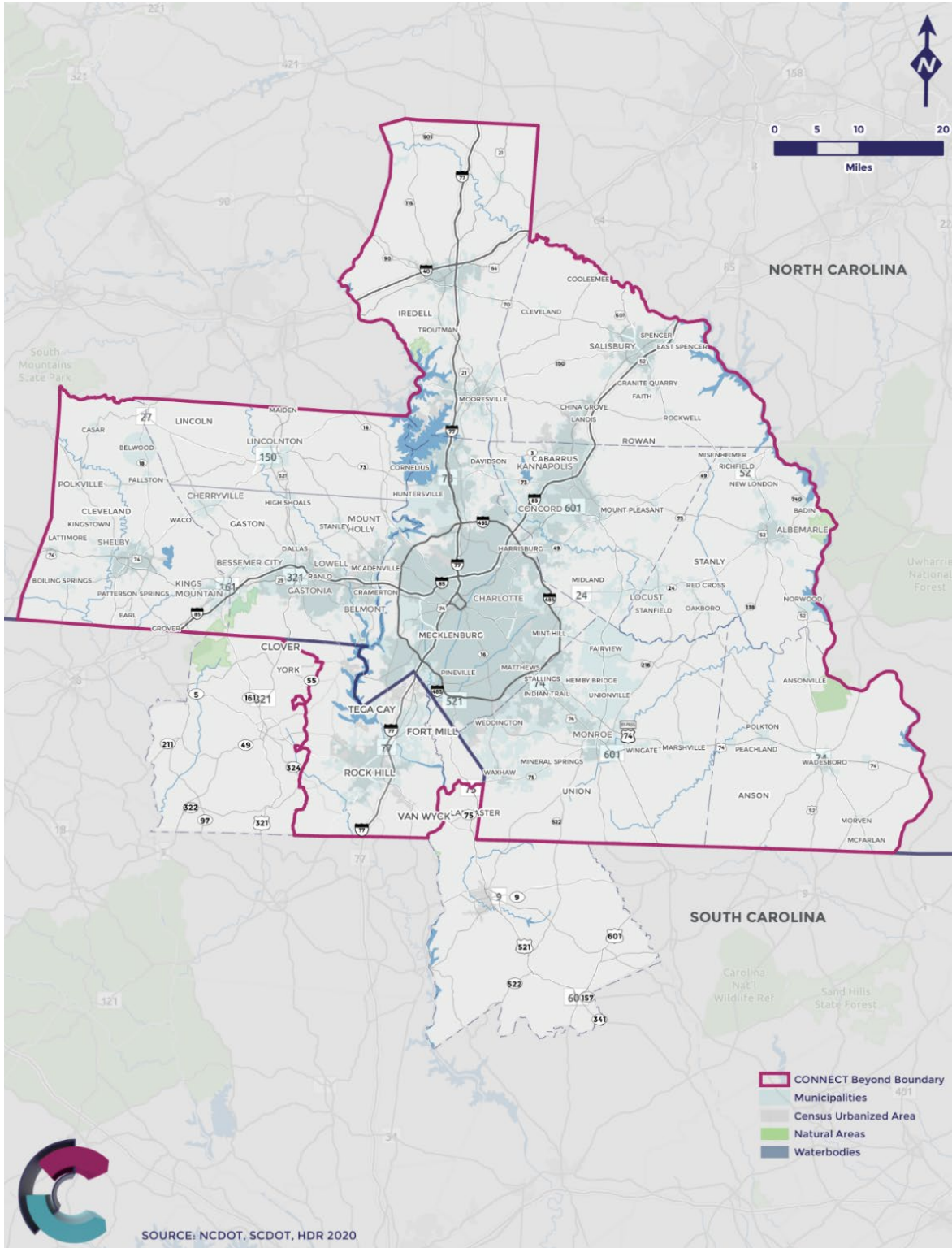




# CONNECT Beyond

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FIGURE 1. CONNECT BEYOND PROJECT STUDY AREA



## 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)<sup>1,2</sup>

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<sup>1</sup> 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](http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_report_88/guidebook.pdf)

<sup>2</sup> 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.<sup>3</sup>

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<sup>4</sup>, 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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<sup>3</sup> <https://www.ftis.org/Urban-iNTD-Tutorials/intd07.html>

<sup>4</sup> <https://www.transit.dot.gov/ntd/manuals>

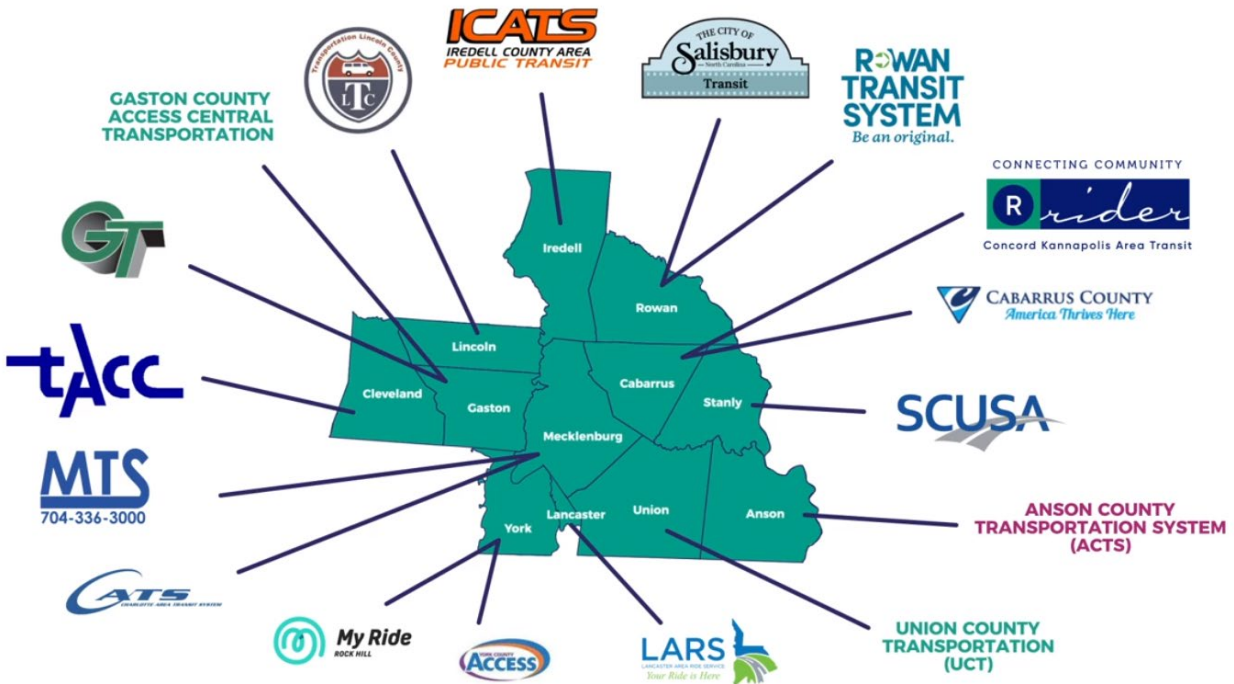


## Service Inventory

### 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 taxis, 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
<b>Urban Services Providers</b>							
Charlotte Area Transit System	✓	✓	✓		✓	✓	✓
Concord Kannapolis Area Transportation - Rider Transit	✓		✓				
City of Gastonia Transit	✓		✓				
Rock Hill My Ride	✓						
City of Salisbury Transit	✓						
<b>Community Transportation Providers</b>							
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
<b>Urban Services Providers</b>				
<b>Charlotte Area Transit System</b>	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
<b>Concord Kannapolis Area Transit – Rider Transit</b>	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
<b>City of Gastonia Transit</b>	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
<b>Rock Hill My Ride</b>	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
<b>City of Salisbury Transit</b>	Monday–Friday 70-80 minutes Saturday 70 minutes	Monday–Friday 6:00 am to 7:00 pm 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
<b>Community Transportation Providers</b>				
<b>Anson County Transportation System</b>	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
<b>Cabarrus County Transportation Services</b>	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
<b>Gaston County ACCESS Central Transportation</b>	Monday–Sunday 75-100 minutes	Monday–Friday 4:00 am to 6:00 pm Salisbury VA–Tuesday and Thursday only 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
<b>Iredell County Area Transportation System</b>	Monday–Sunday 75-100 minutes	Express routes– three trips during AM and PM peak 5:00 am to 8:30 pm Bloom– four trips daily 9:00 am to 4:00 pm Mooresville Main– seven trips daily 7:00 am to 6:00 pm Community Connection– eight trips daily 6:30 am to 4:00 pm 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
<b>Lancaster Area Ride Service (Zone 5)</b>	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
<b>Community Transportation Providers (continued)</b>				
<b>Mecklenburg Transportation System</b>	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.
<b>Rowan Transit System</b>	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
<b>Stanly County Transportation Services – Stanly County Umbrella Services Agency</b>	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
<b>Transportation Administration of Cleveland County</b>	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
<b>Community Transportation Providers (continued)</b>				
<b>Transportation Lincoln County</b>	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 Mooresville and Huntersville– Tuesday–Thursday 9:00 am to 2:00 pm 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.
<b>Union County Human Services’ Transportation Division (Union County Transportation)</b>	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
<b>York County Access</b>	On demand	Monday–Friday 6:00 am to 6:00 pm 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.<sup>5</sup> 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
<b>Service frequency</b>	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)
<b>Span &amp; level of service</b>	Monday–Saturday, 5:00 am to 2:00 am Sunday, 5:00 am to 1:00 am
<b>Americans with Disabilities Act (ADA) coverage area</b>	Federally mandated within 3/4 mile of fixed route services
<b>Fare structure</b>	\$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.<sup>6</sup>

<sup>5</sup> <https://charlottenc.gov/cats/transit-planning/Pages/default.aspx>

<sup>6</sup> 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 (subsidies 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

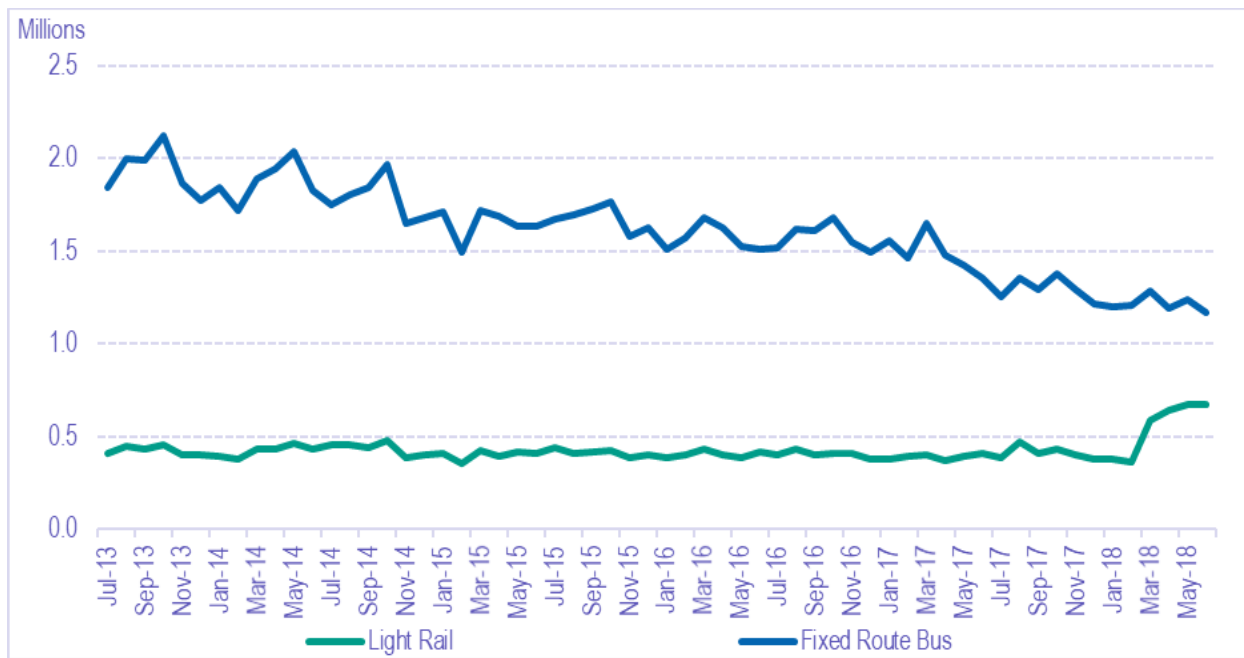
CATS' overall ridership decreased from FY 2014 to FY 2018 at a rate of seven percent per year. This trend was driven by a ten percent annual decrease in bus ridership, an estimate that was a significant departure from the national average of negative two percent over the same period.<sup>7</sup> The 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

<sup>7</sup> 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.<sup>8</sup>

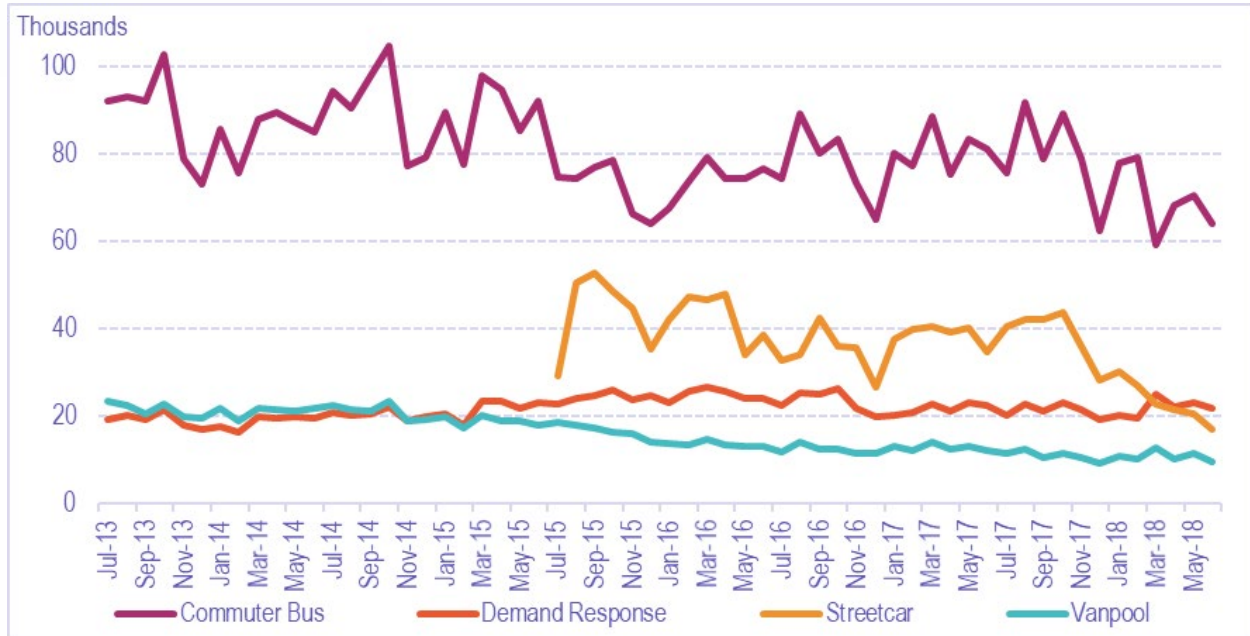
**FIGURE 3. AGENCY MONTHLY RIDERSHIP – CATS – BUS AND LIGHT RAIL, FY 2014–2018**



<sup>8</sup> 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.<sup>9</sup> 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.<sup>10</sup> 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%

<sup>9</sup> Data standardization was applied to put variables on the same scale for comparison. In addition 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.

<sup>10</sup> 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,<sup>11</sup> 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,<sup>12</sup>
- Transit Center (2018): all sampled agencies reported on-time performance below 75 percent.<sup>13</sup>

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).<sup>14</sup> 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.<sup>15</sup>

**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

<sup>11</sup> 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>

<sup>12</sup> 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-badbcb614de>

<sup>13</sup> <https://transitcenter.org/bus-time-even-mean/>

<sup>14</sup> 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](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/asset-management/146671/tam-2018-ntd-extended_2.pdf)

<sup>15</sup> 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.<sup>16</sup>

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 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%

<sup>16</sup> <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.*

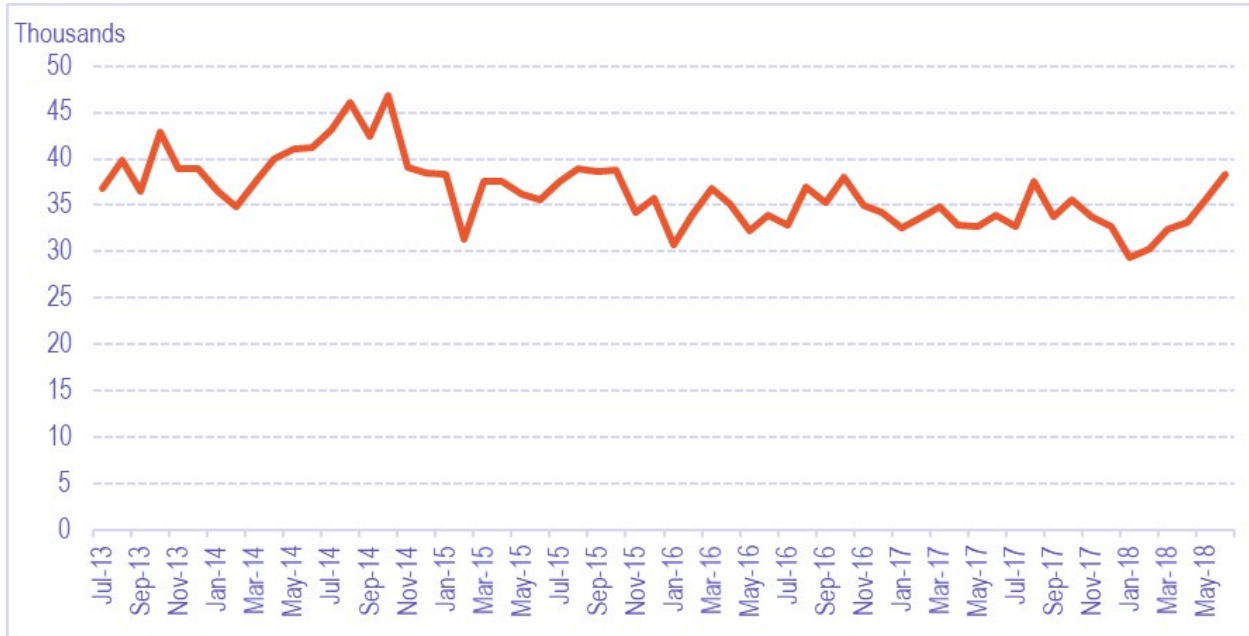
### Service Performance

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
<b>Bus</b>	0.7	11.0	\$7.79	8.5%	N/A
<b>Demand response</b>	0.1	1.4	\$56.90	3.4%	96%
<b>National average – bus</b>	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.<sup>17</sup> The City’s general transportation profile is provided in Table 12.

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

Profile	City of Gastonia
<b>Service frequency</b>	Monday–Friday, 60 minutes Saturday, 120 minutes
<b>Span &amp; level of service</b>	Monday–Friday, 5:30 am to 6:30 pm Saturday, 8:00 am to 6:00 pm
<b>ADA coverage area</b>	Federally mandated within 3/4 mile of fixed route services
<b>Fare structure</b>	\$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
<b>Total directly generated funds earned during period</b>	\$159,586	6%
<b>Total Local funds earned during period</b>	\$795,194	30%
<b>Total state funds earned during period</b>	\$243,565	9%
<b>Total federal funds earned during period</b>	\$1,460,176	55%
<b>Total funds earned during period</b>	\$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.

<sup>17</sup> <https://www.cityofgastonia.com/transportation-2.html>



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

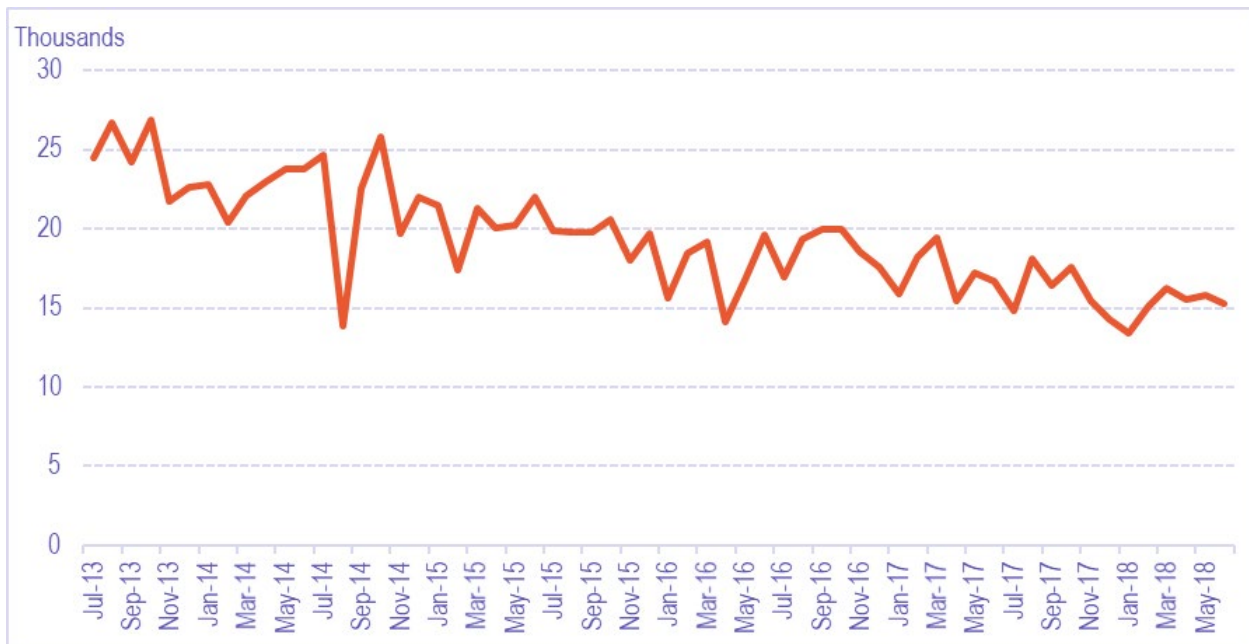
Mode	Percent Ridership	Percentage of Operating Expenses	Passenger Miles per Trip
Bus	97%	91%	12.1
Demand response	3%	9%	9.4

*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**

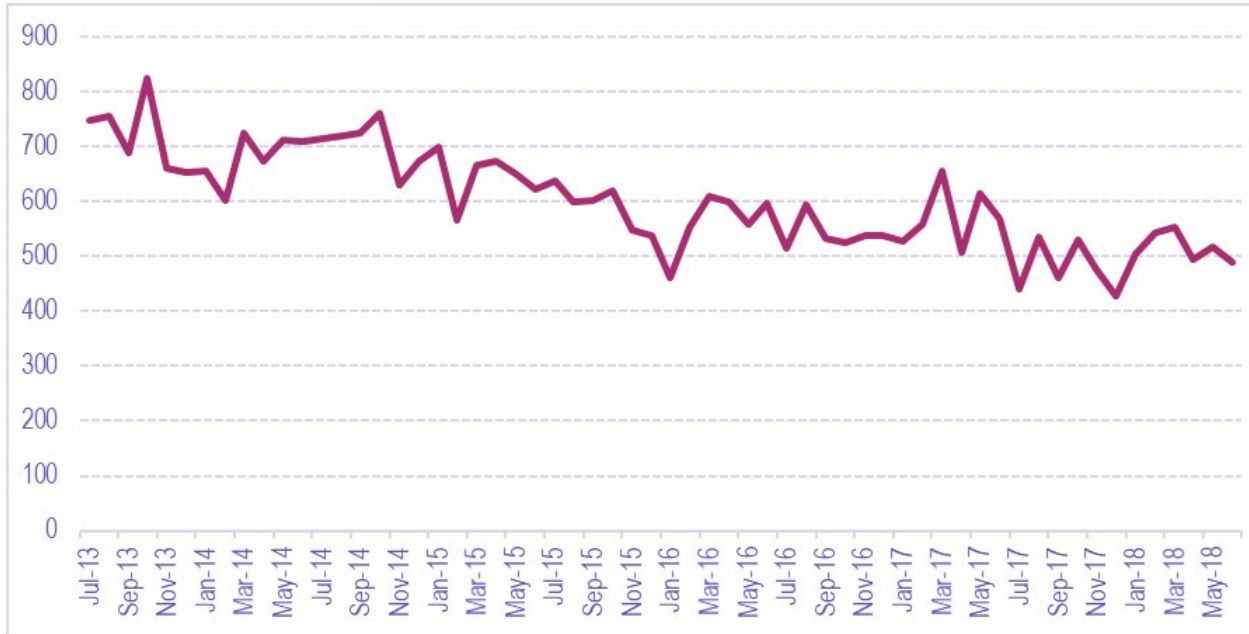
Figure 7 and Figure 8 depict the monthly ridership for FY 2014–2018 for fixed route bus and demand response services respectively. The five-year period recorded a 10 percent drop in annual ridership. Bus and demand response ridership declined at a rate of 10 percent and 8 percent respectively.

**FIGURE 7. AGENCY MONTHLY RIDERSHIP – CITY OF GASTONIA – FIXED ROUTE BUS, FY 2014–2018**





**FIGURE 8. AGENCY MONTHLY RIDERSHIP – CITY OF GASTONIA – DEMAND RESPONSE, 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.<sup>18</sup>

**TABLE 17. AGENCY PROFILE – MY RIDE**

Profile	My Ride
<b>Service frequency</b>	Monday–Saturday, 60 minutes
<b>Span &amp; level of service</b>	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.
<b>ADA coverage area</b>	Federally mandated within 3/4 mile of fixed route services
<b>Fare structure</b>	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.

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



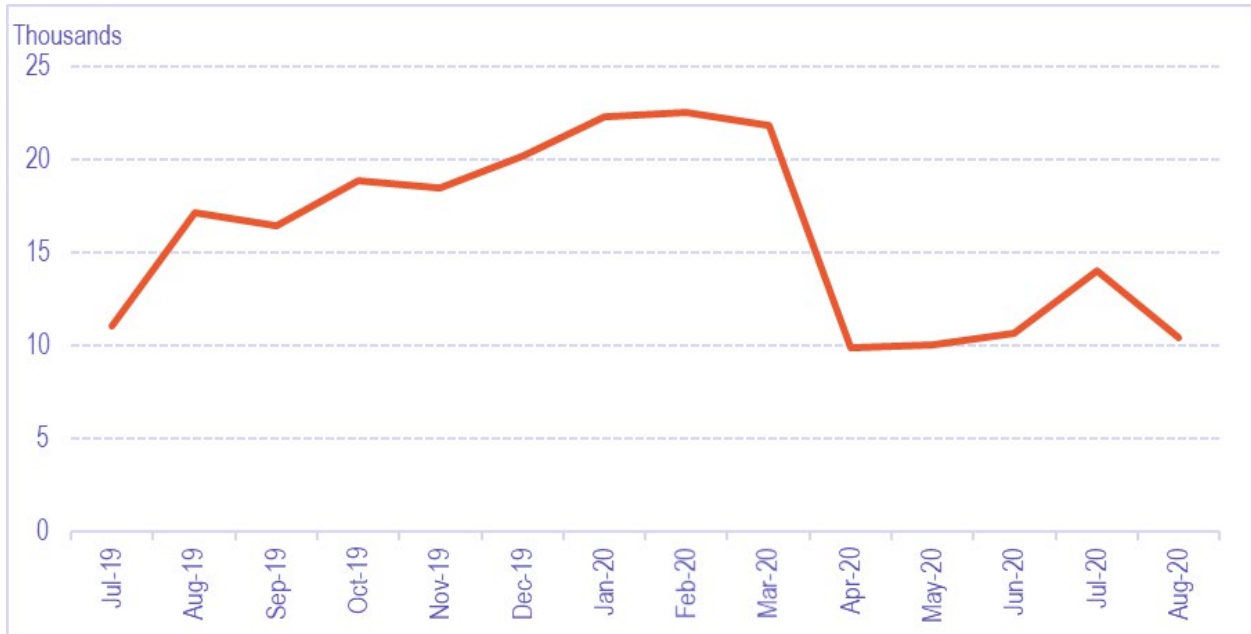
**TABLE 18. AGENCY FUNDING – MY RIDE, FY 2020**

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.<sup>19</sup> 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.<sup>20</sup> Service connections are available to Rowan Express, Mid-Carolina Regional Airport, Greyhound bus, Amtrak, and Concord Kannapolis Rider.<sup>21</sup> 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 Saturday, 70 minutes
Span & level of service	Monday–Friday, 6:00 am to 7:00 pm 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%

<sup>19</sup> Services assumed to have started in 2013 as NTD does not report data prior to that year.

<sup>20</sup> Demand response service information is reported by RTS.

<sup>21</sup> <https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf>

<sup>21</sup> <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.<sup>22</sup>

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.

<sup>22</sup> 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.<sup>23</sup> 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.<sup>24</sup> 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.

<sup>23</sup> 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).

<sup>24</sup> <http://www.co.anson.nc.us/199/Transportation>

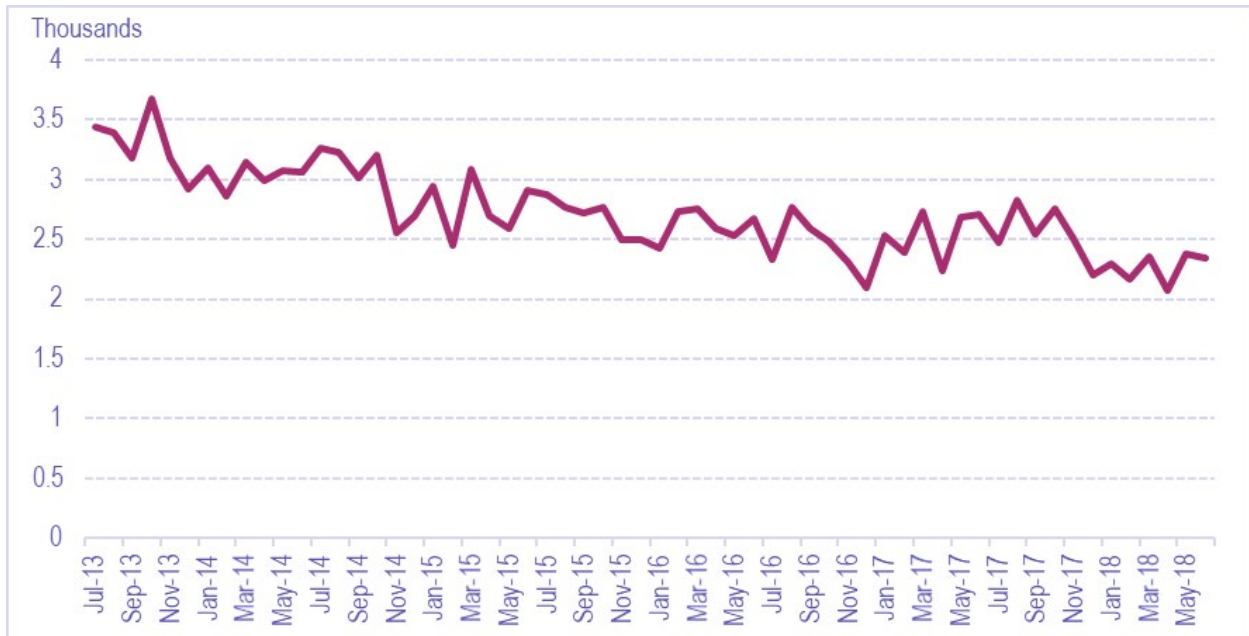


**TABLE 24. AGENCY FUNDING – ACTS, FY 2018**

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.<sup>25</sup> 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.

<sup>25</sup> <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**

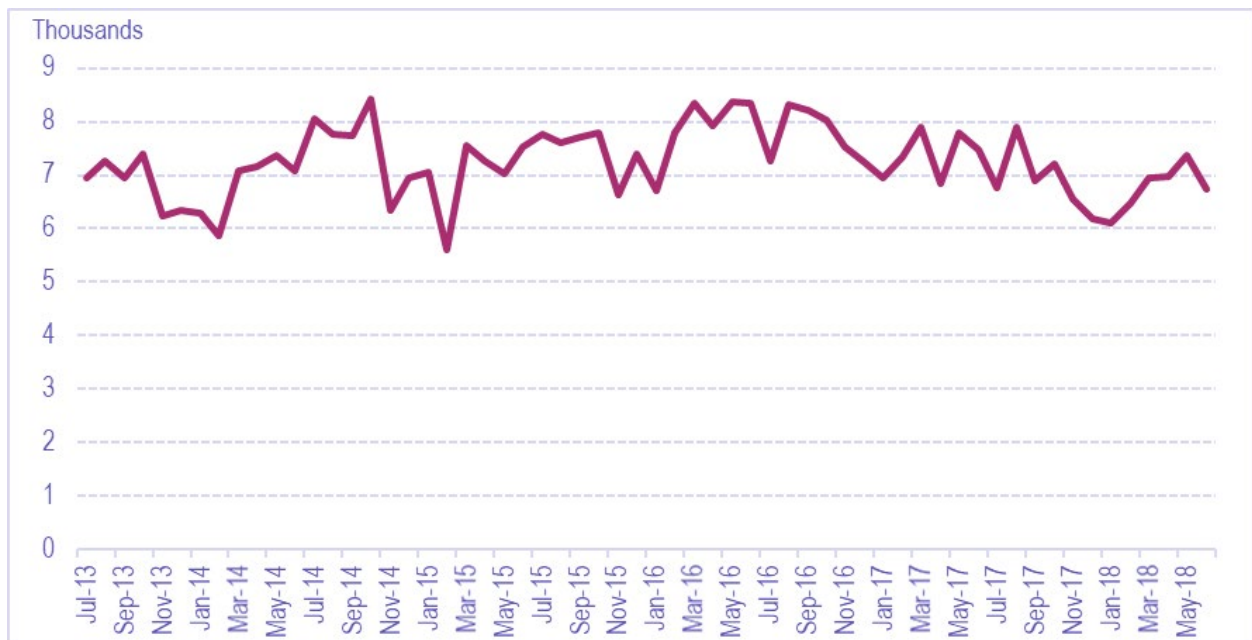






Table 28 shows CCTS' service performance information for FY 2018. Any trip arriving one minute or later is considered late.

**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.<sup>26</sup> ACCESS also provides demand response, individual service for one-time scheduled trips to medical appointments, service agencies, etc.<sup>27</sup> 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 Salisbury VA: Tuesday and Thursday 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.

<sup>26</sup> 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.

<sup>27</sup> [https://www.gastongov.com/government/departments/health\\_and\\_human\\_services/social\\_services/access.php](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.*

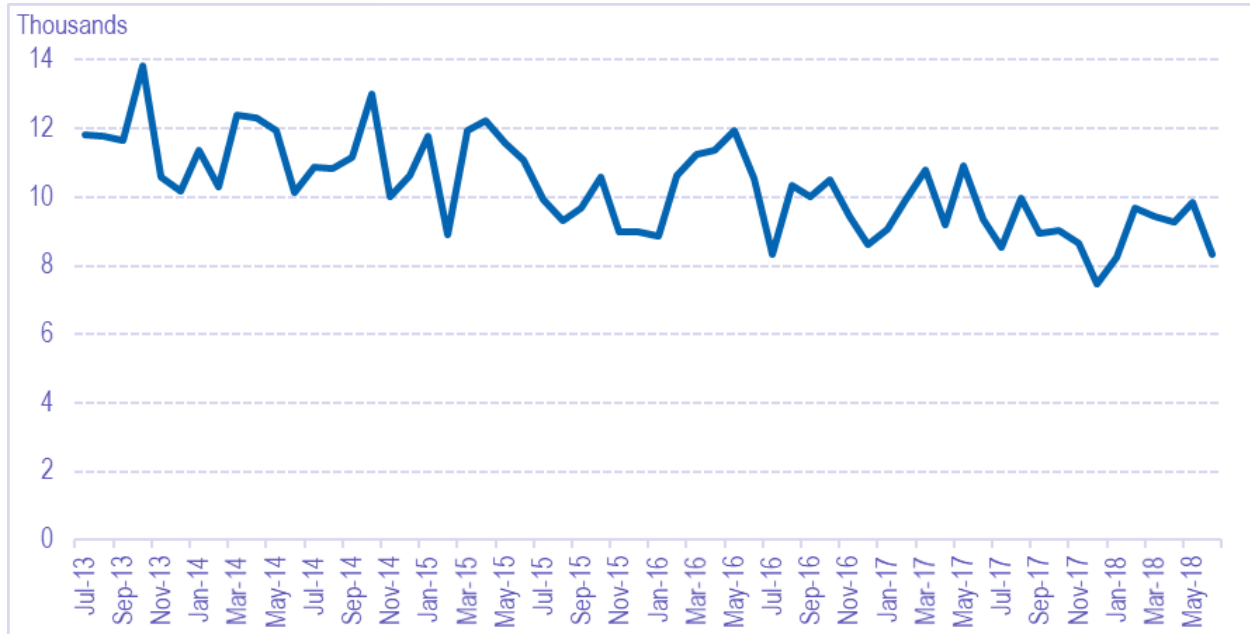
### Service Performance

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.<sup>28</sup>

<sup>28</sup> 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.<sup>29</sup> 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
<b>Service frequency</b>	Monday–Sunday, 75-100 minutes
<b>Span &amp; level of service</b>	Express routes: three trips during AM and PM peak, 5:00 am to 8:30 pm Bloom: four trips daily 9:00 am to 4:00 pm Mooresville Main: seven trips 7:00 am to 6:00 pm Community Connection: eight trips a day 6:30 am to 4:00 pm Shuttle to VA Hospital in Salisbury: Tuesdays 8:30 am to 4:00 pm
<b>ADA coverage area</b>	Federally mandated within 3/4 mile of fixed route services
<b>Fare structure</b>	\$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.

<sup>29</sup> <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.<sup>30</sup>

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

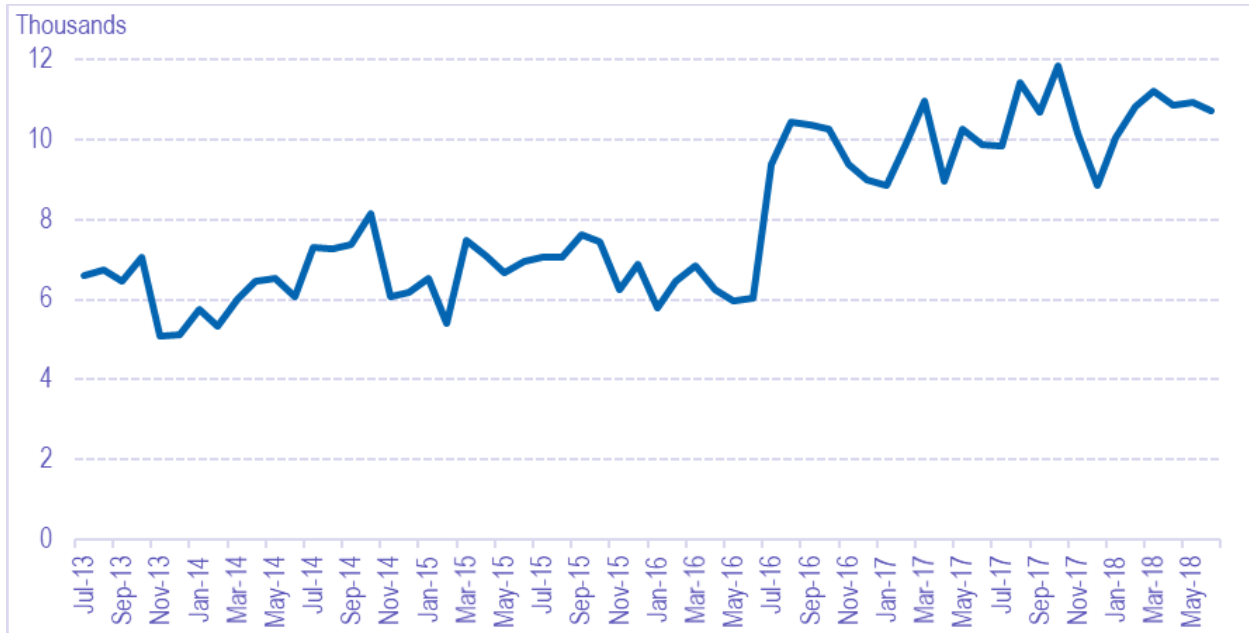
<sup>30</sup> NTD defined Commuter Bus as: local fixed-route bus transportation primarily connecting outlying areas with a central city. Characterized by a motorcoach (aka over-the-road bus), multiple trip tickets, multiple stops in outlying areas, limited stops in the central city, and at least five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

<sup>31</sup> 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.<sup>32</sup> 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.

<sup>32</sup> <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.<sup>33</sup> 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

<sup>33</sup> <https://www.mecknc.gov/dss/admin/Pages/MecklenburgTransportationSystem.aspx>



Profile	MTS
<b>Fare structure</b>	\$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.*

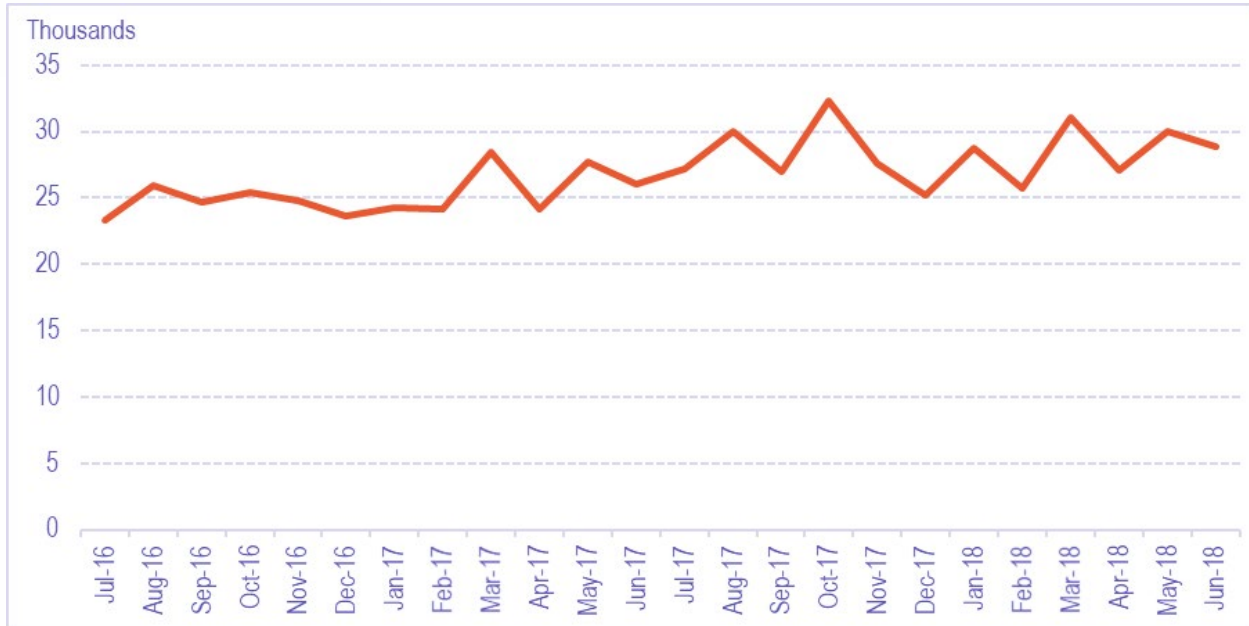
### Service Performance

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 significantly different (20–31 percent higher per year). The FY 2015–2018 period recorded a seven percent increase in annual ridership.<sup>34</sup> This trend is primarily driven by an eight percent annual ridership growth from demand taxi, whereas demand response grew at one percent per year.

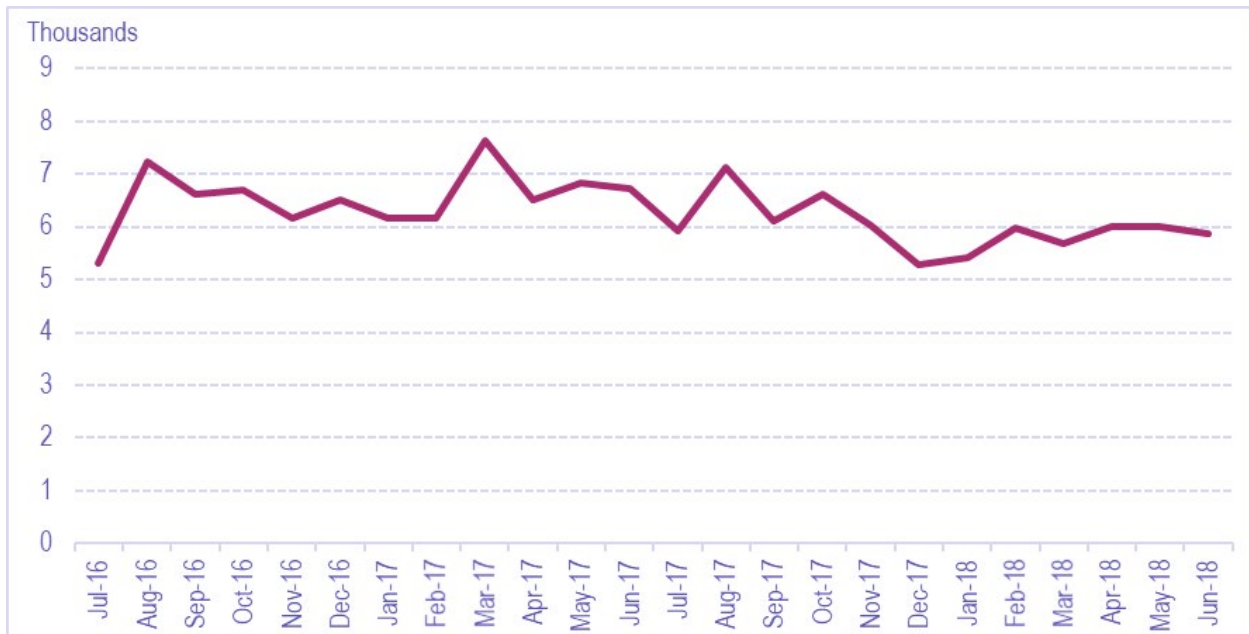
<sup>34</sup> FY 2014 data on demand taxi not reported.



**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.<sup>35</sup>

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.<sup>36</sup> 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
<b>Service frequency</b>	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.
<b>Span &amp; level of service</b>	Demand Response: Tuesday–West Rowan; Wednesday–North Rowan; Thursday–South Rowan; Friday–East Rowan; 7:30 am to 5:00 pm Express: Monday–Friday, every hour 5:19 am to 9:19 am and 1:19 pm to 5:19 pm
<b>ADA coverage area</b>	Countywide
<b>Fare structure</b>	Express: \$1.00 Demand response: \$2 one way except for those eligible for certain grant funded programs or Medicaid

<sup>35</sup> <https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf>

<sup>36</sup> <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.*

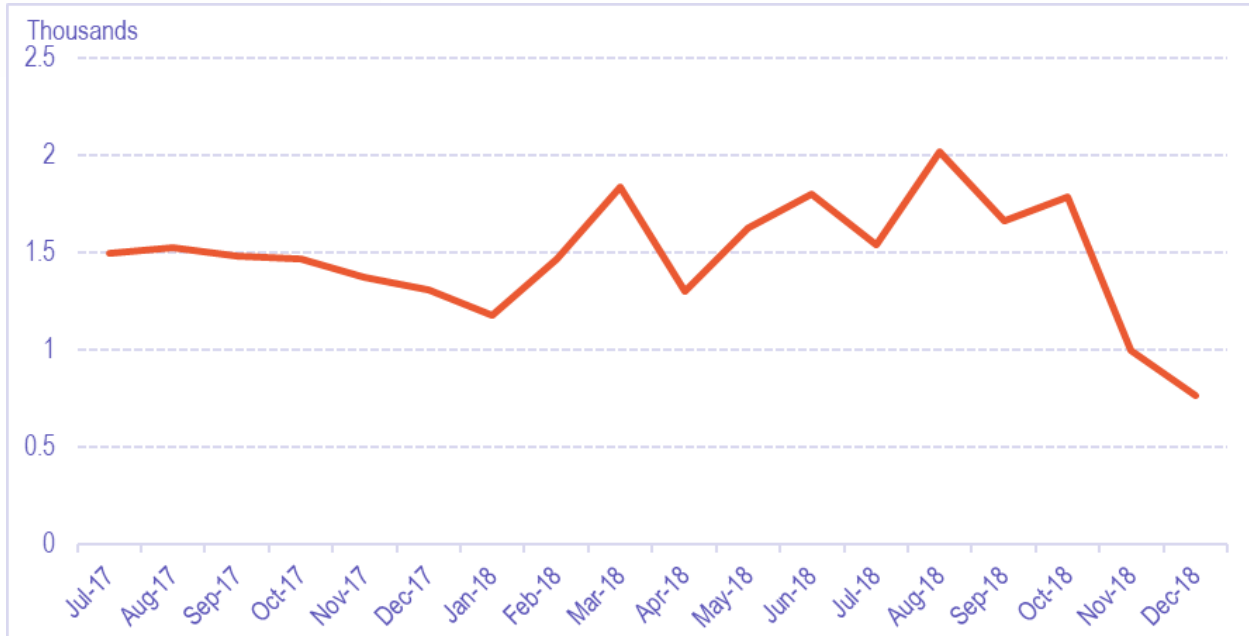
### Service Performance

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.

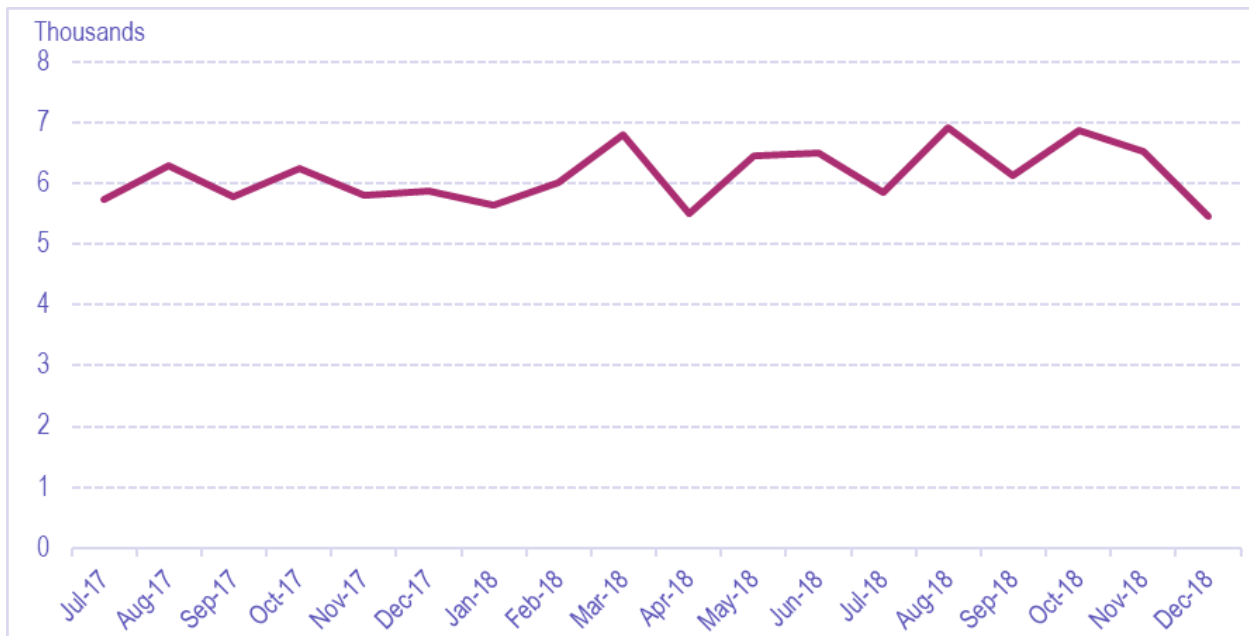




**FIGURE 16. AGENCY MONTHLY RIDERSHIP – RTS – FIXED ROUTE BUS, JULY 2017–DECEMBER 2018**



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





# CONNECT Beyond

A Regional Mobility Initiative

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.<sup>37</sup> 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.

<sup>37</sup> <https://www.stanlycountync.gov/transportation>



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

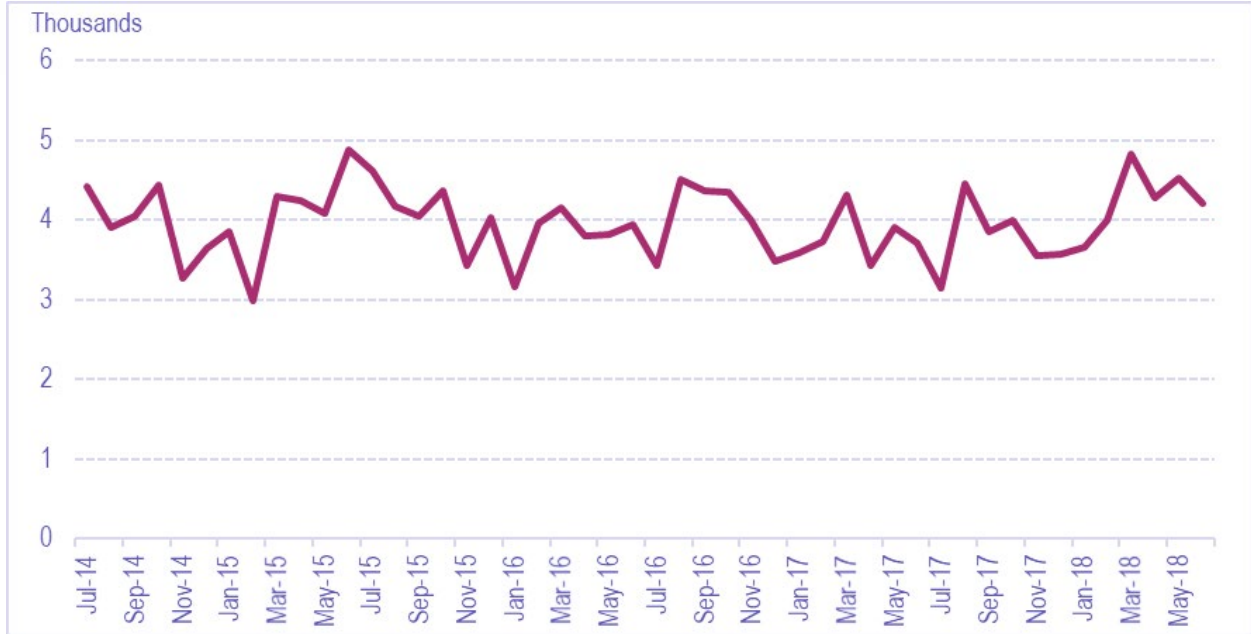


Table 52 presents the County's service performance information in FY 2018.

**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
<b>Demand response</b>	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.<sup>38</sup> The deviated fixed route is called Cleveland County Transit (CCT) – Shelby Public Transportation Route. TACC’s service profile is provided in Table 53.<sup>39</sup>

**TABLE 53. AGENCY PROFILE – TACC**

Profile	CCT
Service frequency	CCT: Four trips West End REACH: Seven trips a day every 45 minutes
Span & level of service	CCT: Monday–Friday, 7:15 am to 3:08 pm West End REACH: Monday–Wednesday–Friday, 9:15 am to 2:45 pm
ADA coverage area	Federally mandated within ¼ mile of fixed route services
Fare structure	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

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%

<sup>38</sup> [https://cdn.website.thryv.com/10f7e69f77fb40169f939e56071a221e/files/uploaded/1153802-739064-cct\\_map\\_8\\_23\\_2016.pdf](https://cdn.website.thryv.com/10f7e69f77fb40169f939e56071a221e/files/uploaded/1153802-739064-cct_map_8_23_2016.pdf)

<sup>39</sup> <https://www.taccshelbync.com/>



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.

**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

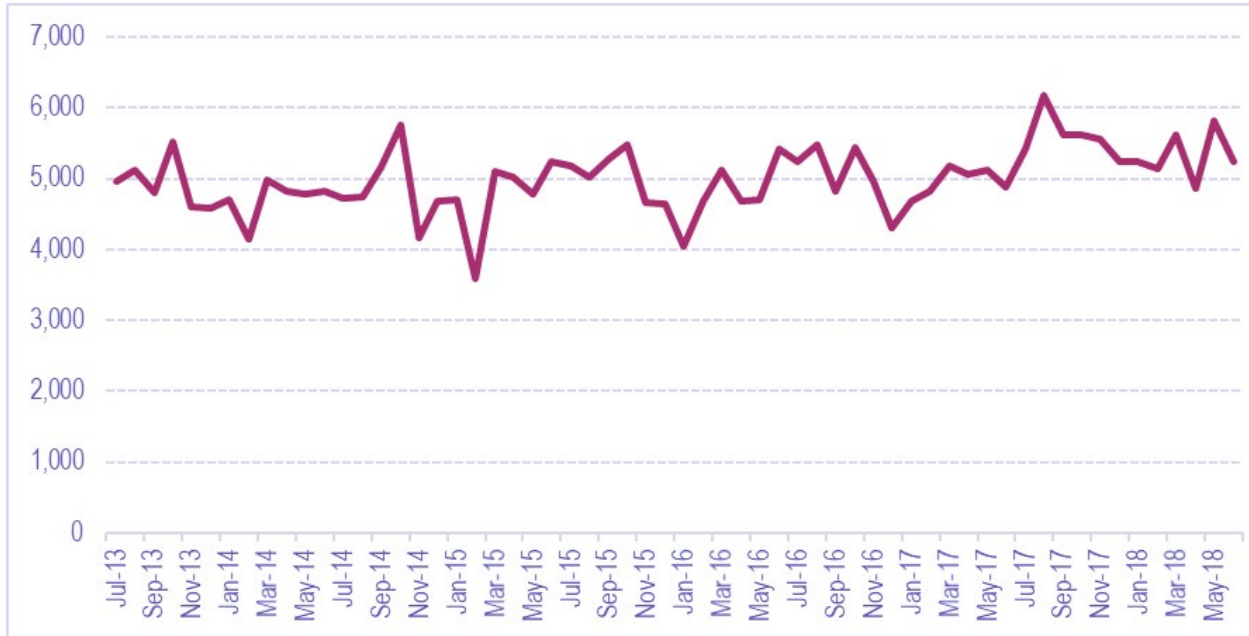
Figure 19 and Figure 20 depict TACC’s monthly ridership of fixed route bus and demand response for FY 2014–2018. The five-year period recorded a 0.2 percent drop in annual ridership. Fixed route service reported an 11 percent drop in annual ridership, while demand response grew at one percent.

**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
<b>Bus</b>	0.2	2.1	\$30.10	3%	N/A
<b>Demand response</b>	0.1	1.5	\$28.80	N/A	88%
<b>National average – bus</b>	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.<sup>40</sup> TLC’s general transportation profile is provided in Table 57.

**TABLE 57. AGENCY PROFILE – TLC**

Profile	TLC
<b>Service frequency</b>	Subscription and on-demand
<b>Span &amp; level of service</b>	Demand Response: Monday–Friday, 6:00 am to 5:00 pm; out-of-county, 9 am to 3:00 pm  Out-of-county trips are available for certain locations depending on the day; residents can call TLC Dispatch to schedule an appointment.
<b>ADA coverage area</b>	Countywide
<b>Fare structure</b>	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.

<sup>40</sup> <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

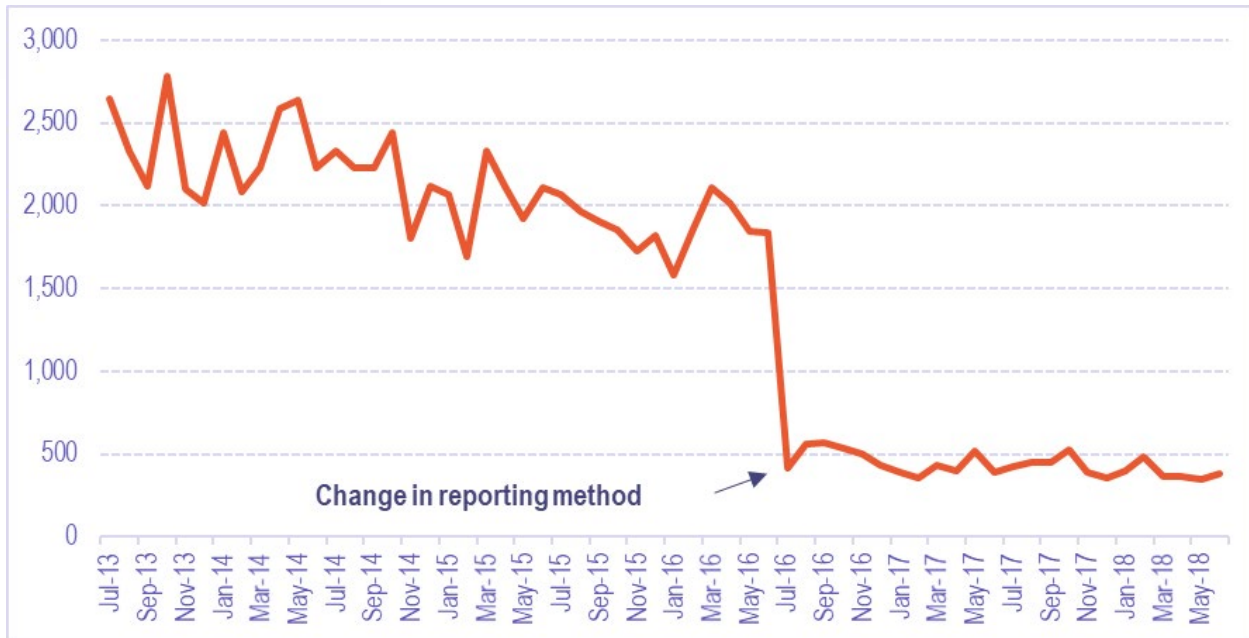
*Note: Operating expense by mode reported to NTD does not include reconciling items consistent with, or reconciled to, the reporting entity's audited financial statements. Trip length data from FY 2018 not available; reporting FY 2017 instead.*

### 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.<sup>41</sup> 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.

<sup>41</sup> <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**

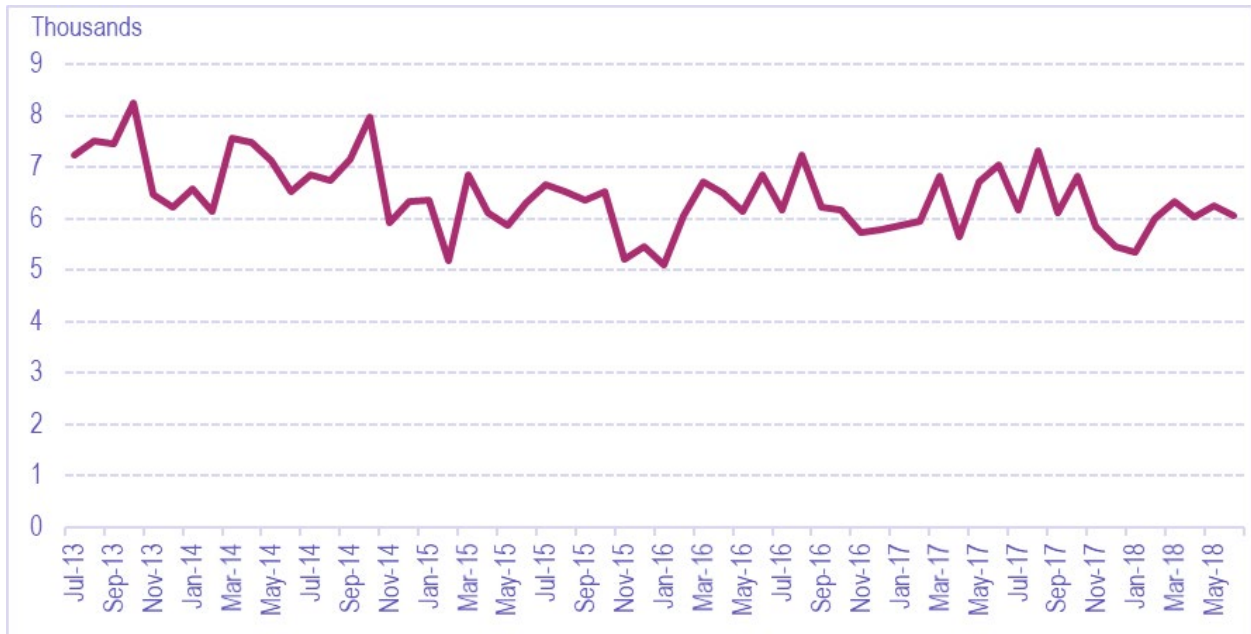




Table 63 summarizes service performance metrics for FY 2018. For on-time performance, any trip arriving one minute or later is considered late.

**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.<sup>42</sup> 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 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%

<sup>42</sup> <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.<sup>43</sup> 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.<sup>44</sup>

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 (NCR) Company are planning for a future passenger rail station along Highway 49.<sup>45</sup>
- 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.<sup>46</sup> 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.<sup>47</sup>

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<sup>43</sup> <https://www.amtrak.com/state-fact-sheets>

<sup>44</sup> <https://connect.ncdot.gov/resources/Rail-Division-Resources/Pages/Data.aspx>

<sup>45</sup> <https://www.harrisburgnc.org/DocumentCenter/View/502/Harrisburg-Train-Station-Location-Study-PDF>

<sup>46</sup> <https://www.greatamericanstations.com/stations/charlotte-nc-clt/>

<sup>47</sup> <https://www.charlottegatewaydistrict.com/>;

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/NORTHCAROLI NA17.pdf>



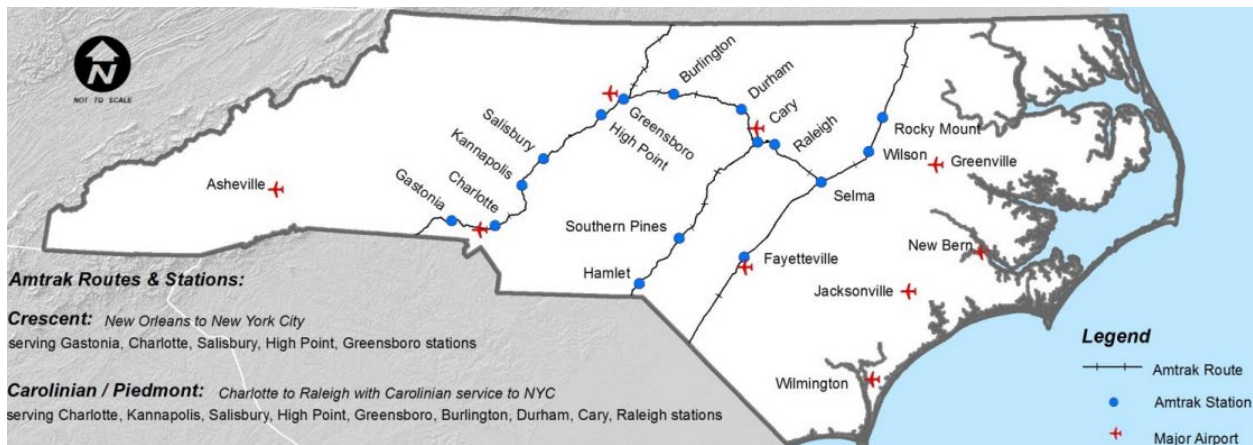
# CONNECT Beyond

A Regional Mobility Initiative

- 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**



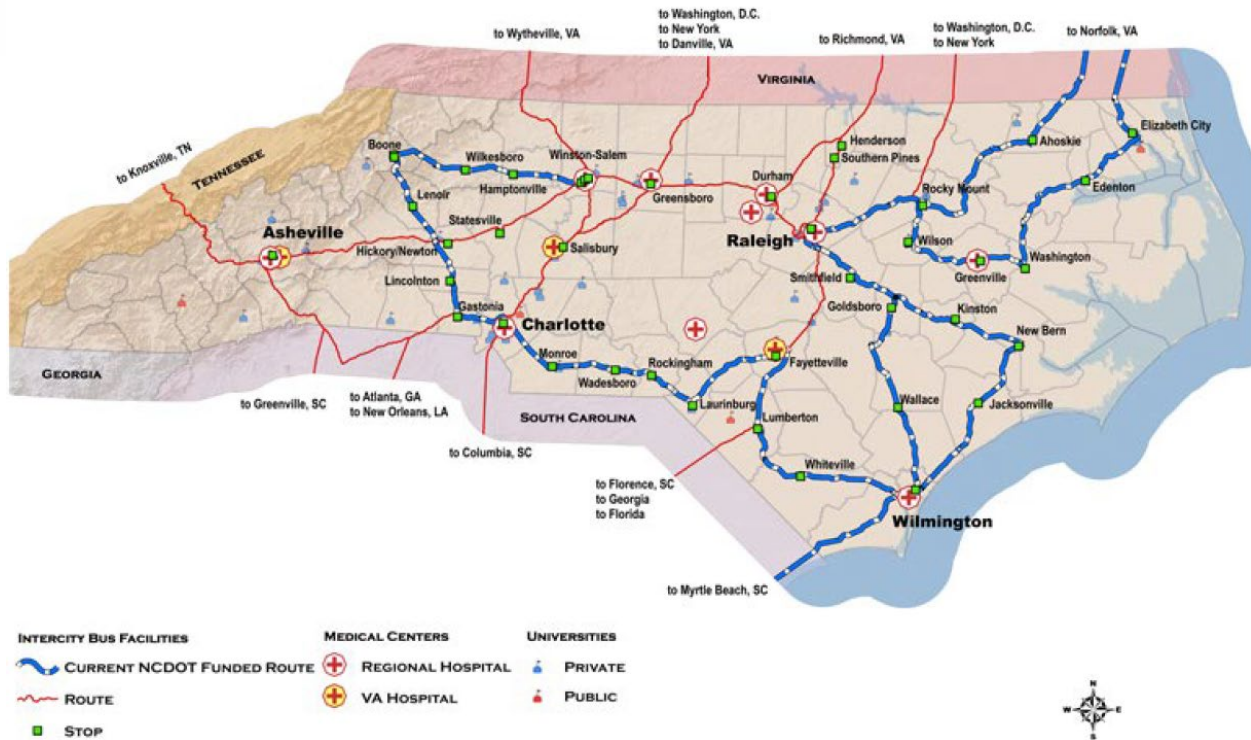
Source: NCDOT Comprehensive State Rail Plan, 2015. <https://www.ncdot.gov/divisions/rail/Pages/rail-plan.aspx>

## 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

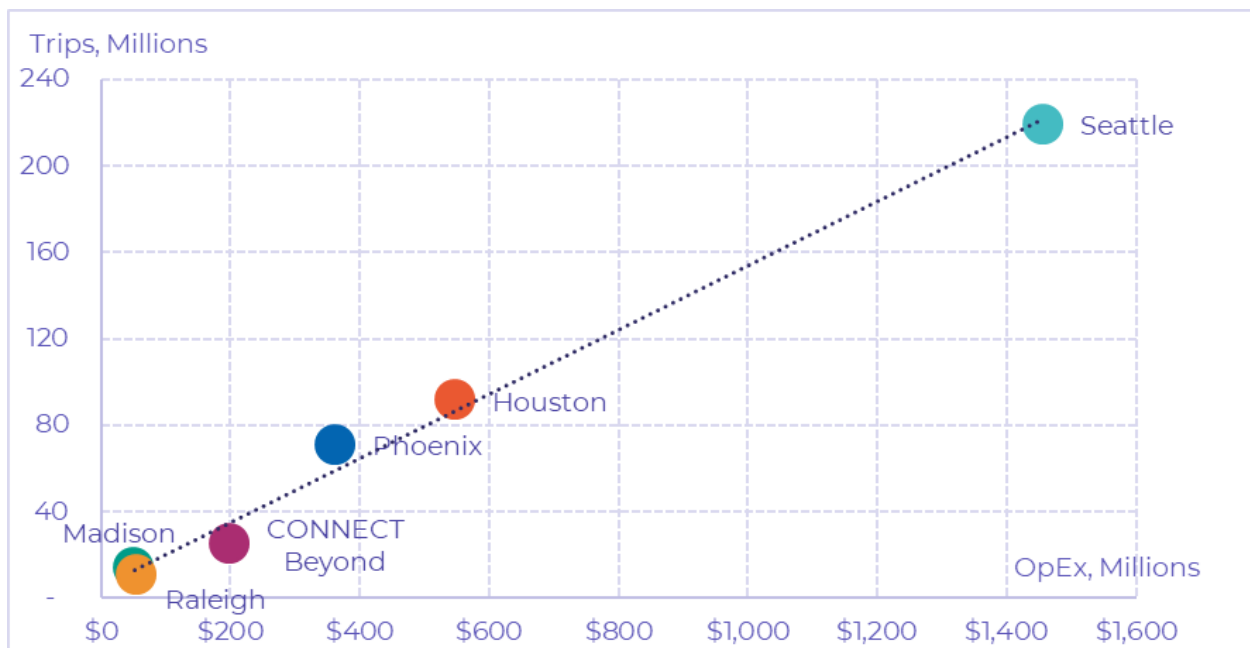
The following sections provide insight from a review of peer agencies across the United States and system level operational analysis of services and trends within the region.

### 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**

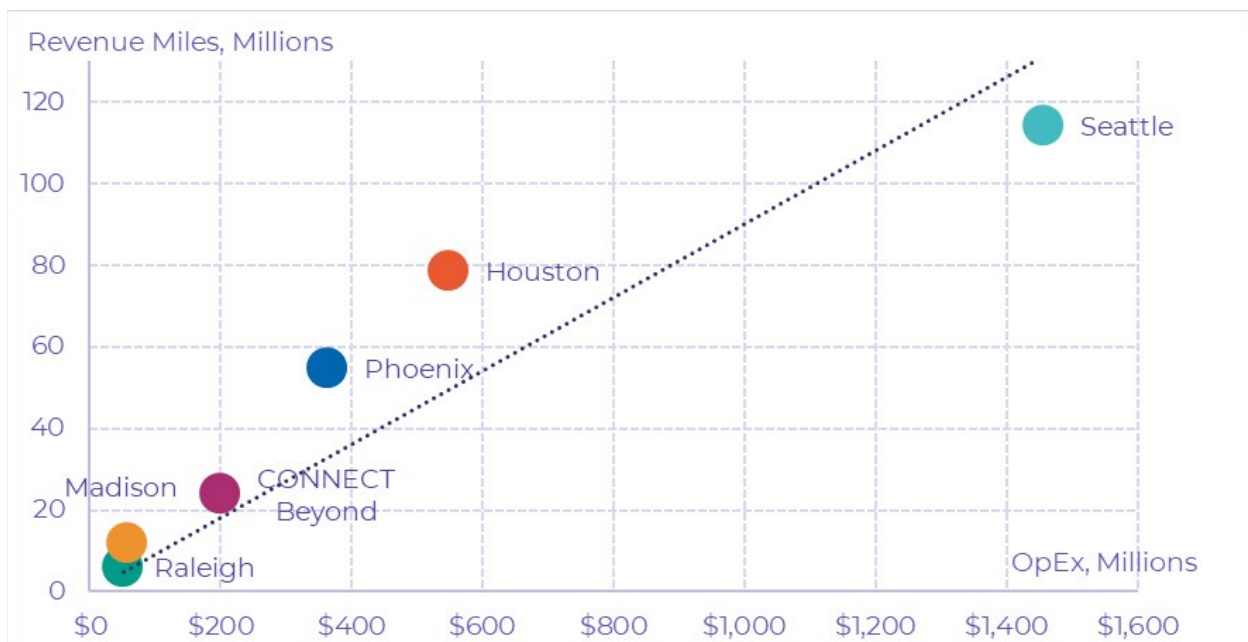


However, while greater spending generates higher ridership, it does not necessarily equate to greater efficiency of service. Data from the peer review indicate that efficiency seems to



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.<sup>48</sup> 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<sup>49</sup> (each over 44 percent), as well as Rock Hill (over 48 percent).

<sup>48</sup> Excluding Rock Hill data from FY 2020.

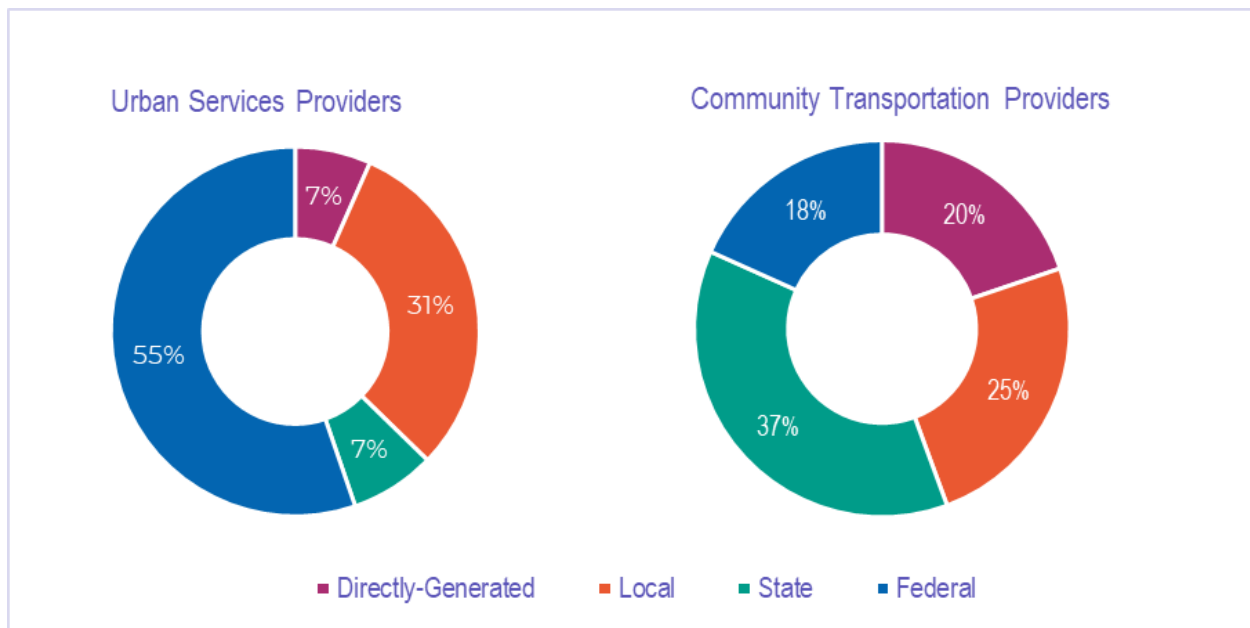
<sup>49</sup> Mecklenburg County has a ½ percent sales tax that is used for funding transportation.



Urban Services Providers had almost \$294 million in funding in FY 2018.<sup>50</sup> Excluding CATS and Rock Hill, the remaining total equaled about \$10 million.<sup>51</sup> 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.<sup>52</sup>

**FIGURE 28. FUNDING SOURCES (CAPITAL & OPERATIONS), FY 2018**



*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.<sup>53</sup> 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

<sup>50</sup> Excluding Rock Hill data from FY 2020.

<sup>51</sup> As CATS dominated most of the data representation and Rock Hill did not operate in FY 2018.

<sup>52</sup> 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 (subsidies 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.

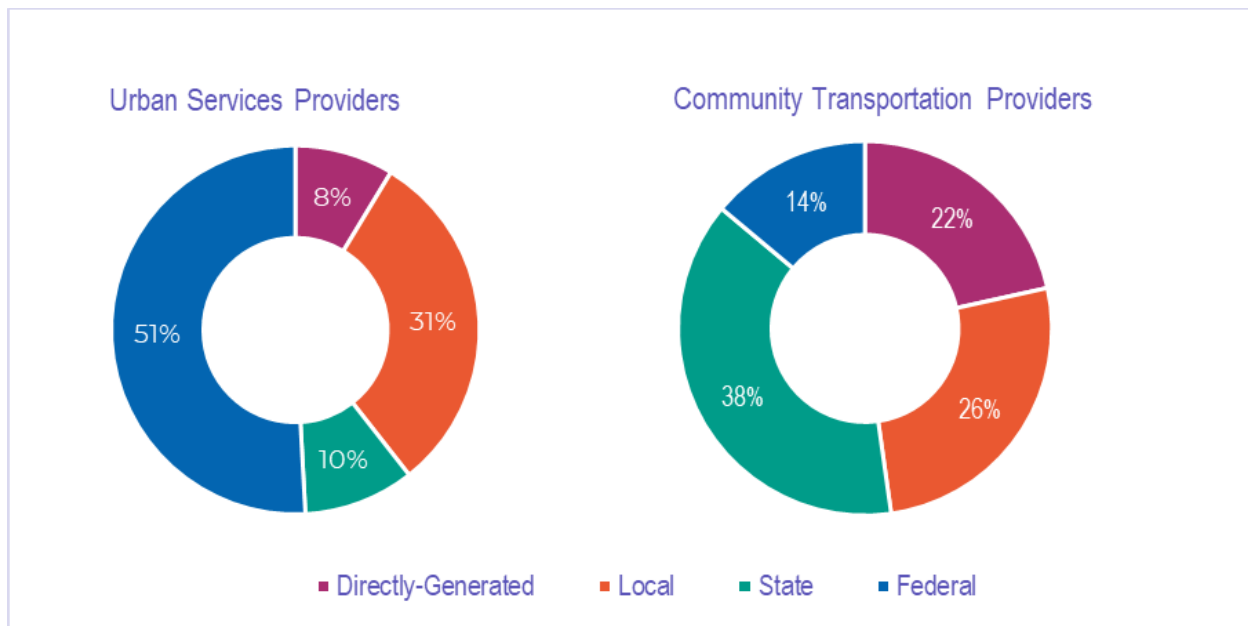
<sup>53</sup> CATS had almost \$168 million in operations cost in FY 2018 and Rock Hill had \$1.8 million in FY 2020.





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.<sup>54</sup> 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.

<sup>54</sup> 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.<sup>55,56,57</sup> The following counties in North Carolina have implemented a 1/2-cent sales tax dedicated to transit:<sup>58</sup>

- 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.<sup>59</sup>

## Ridership

In FY 2018, the study area's Urban Service Providers and Community Transportation Providers combined served over 24.4 million riders. The five-year trend since FY 2014 showed an annual decrease of just under six percent for the region (again, for Urban Service and Community

<sup>55</sup> <https://www.charlotteobserver.com/news/politics-government/article228392044.html>

<sup>56</sup> <https://www.rdu.com/ideas-enables-raleigh-durham-international-airport-to-transform-its-parking-business/>

<sup>57</sup> <https://goforwardnc.org/county/wake-county/about/>

<sup>58</sup> <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>

<sup>59</sup> [https://citycharlottencgov.azureedge.net/Charlotte\\_MOVES\\_Task\\_Force\\_Report\\_December\\_2020.pdf](https://citycharlottencgov.azureedge.net/Charlotte_MOVES_Task_Force_Report_December_2020.pdf)

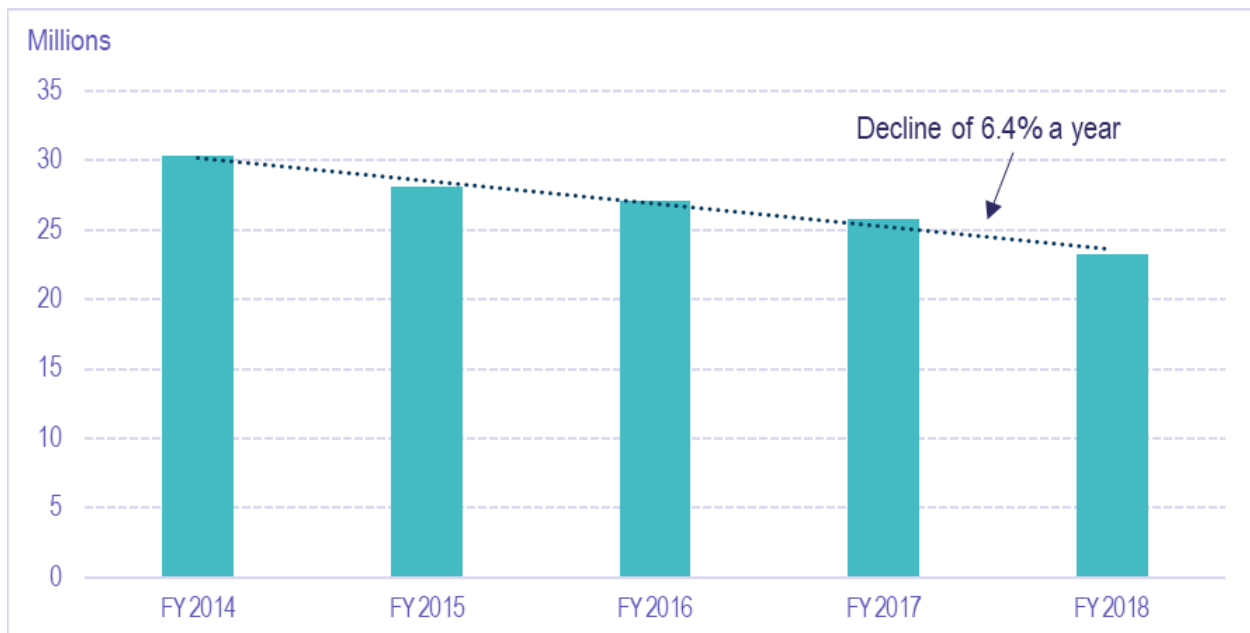




Transportation Providers combined). As noted in the Cabarrus County Long Range Transportation Plan, the decrease in fuel costs and increased availability of auto loans has made personal vehicle ownership more accessible since 2014, and therefore, more competitive with transit, particularly bus. Transportation network companies, e-commerce, and alternative work arrangements have also contributed to transit ridership decline.<sup>60</sup>

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.

**FIGURE 30. TOTAL RIDERSHIP – URBAN SERVICES PROVIDERS, FY 2014–2018**

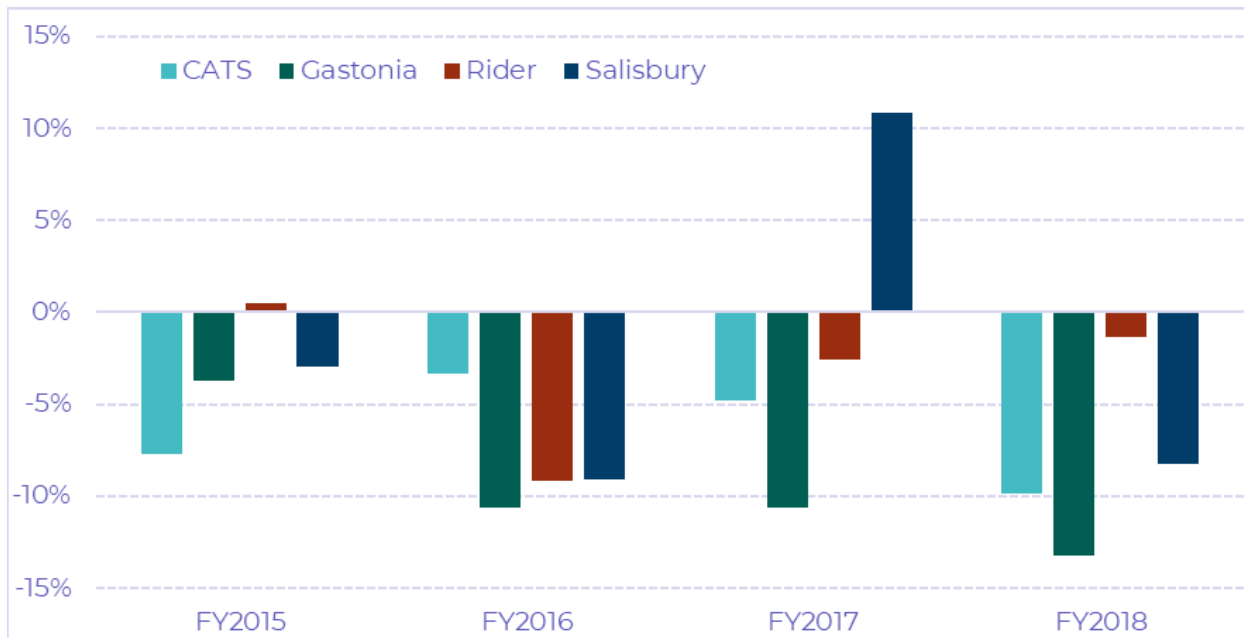


*Note: Does not include Rock Hill.*

<sup>60</sup> <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**



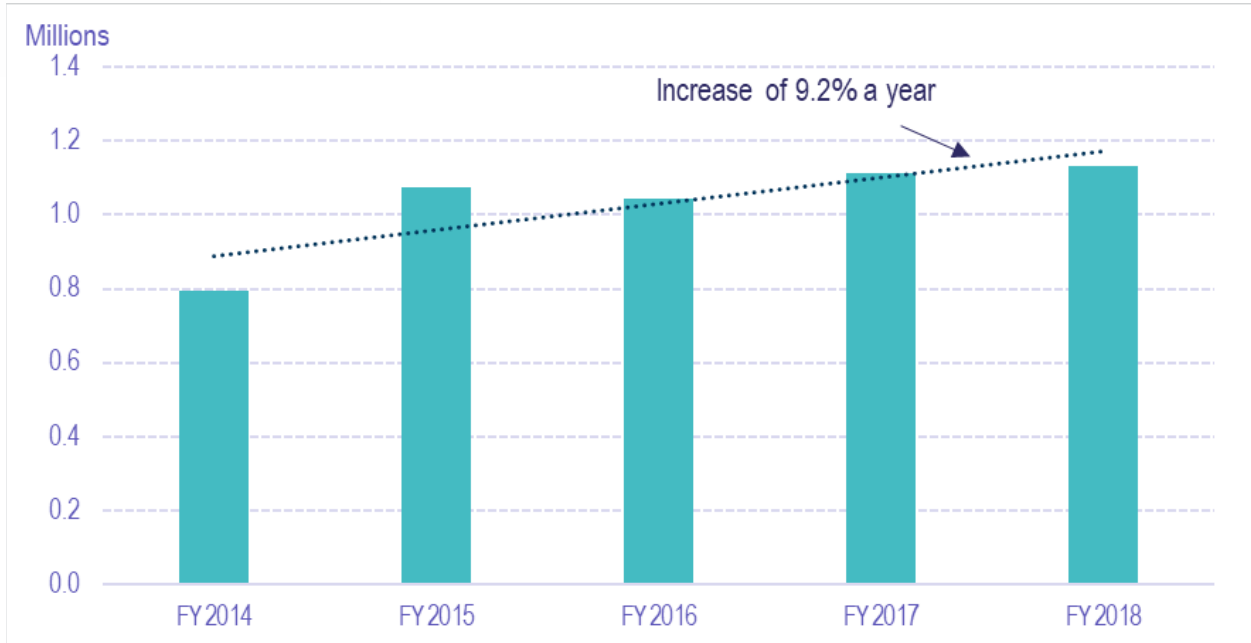
For Community Transportation Providers, ridership over the FY 2014–2018 period grew at about nine percent per year and reached over 1.1 million in FY 2018, as depicted in Figure 32. The large growth is due to MTS’ introduction of demand response taxi in FY 2015. Excluding the impact from FY 2014, ridership 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.<sup>61</sup>

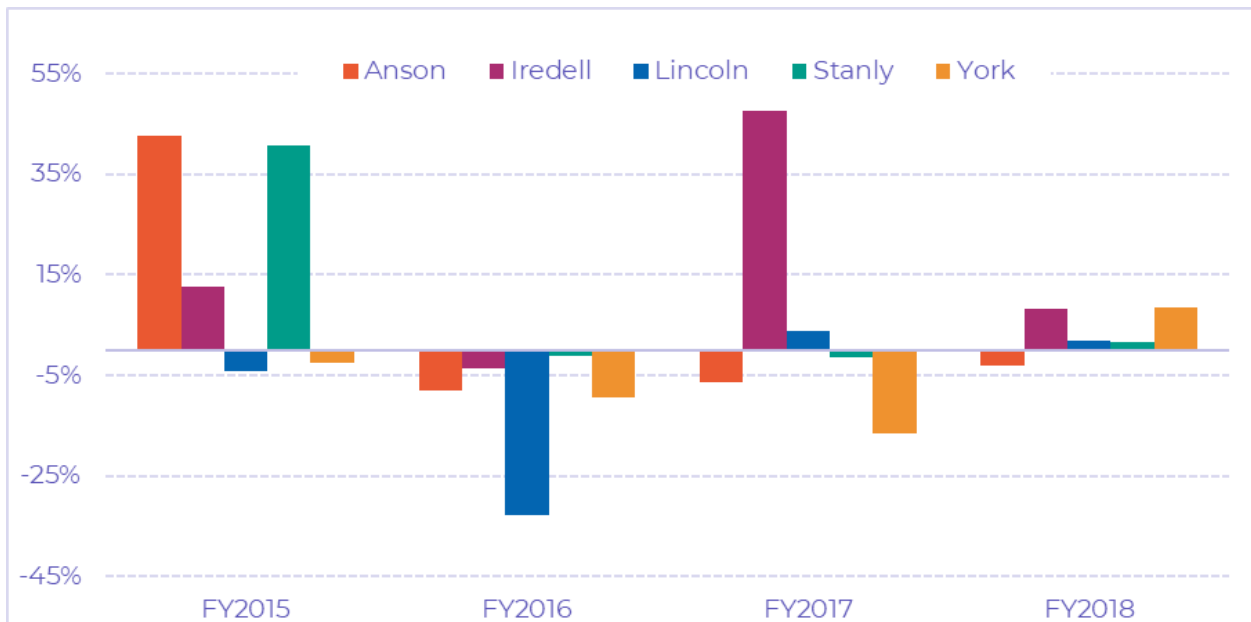
<sup>61</sup> <http://www.ckrider.com/wp-content/uploads/2020/03/2020.03.04-Cabarrus-County-Long-Range-Public-Transit-Master-Plan-7.0.pdf>



**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.<sup>62</sup>
- 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.<sup>63</sup>
  - 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.<sup>64</sup> 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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<sup>62</sup> <https://www.ncdot.gov/divisions/public-transit/Pages/local-transit-search.aspx>

<sup>63</sup> <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>

<sup>64</sup> <https://gclmpo.org/wp-content/uploads/Chapter-13-Public-Transportation-1.pdf>



# CONNECT Beyond

A Regional Mobility Initiative

- 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.<sup>65</sup>
  - 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.<sup>66,67</sup>
- 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:

<sup>65</sup> <https://charlottenc.gov/cats/commuting/vanpool/Pages/default.aspx>

<sup>66</sup> <https://www.charlottegatewaydistrict.com>

<sup>67</sup> <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.<sup>68</sup>
- 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):<sup>69</sup>
  - 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.<sup>70</sup> For Urban Services Providers, the FY 2018 data showed a 3.4 average (over all facilities) out of the FTA five-point scale.<sup>71</sup> Both fixed route buses and demand response

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<sup>68</sup> <https://salisburync.gov/Portals/0/Documents/Transit/Salisbury%20Transit%20Master%20Plan.pdf>

<sup>69</sup> [https://connect.ncdot.gov/business/Transit/Documents/LCP\\_Full%20Final\\_30July2018.pdf](https://connect.ncdot.gov/business/Transit/Documents/LCP_Full%20Final_30July2018.pdf)

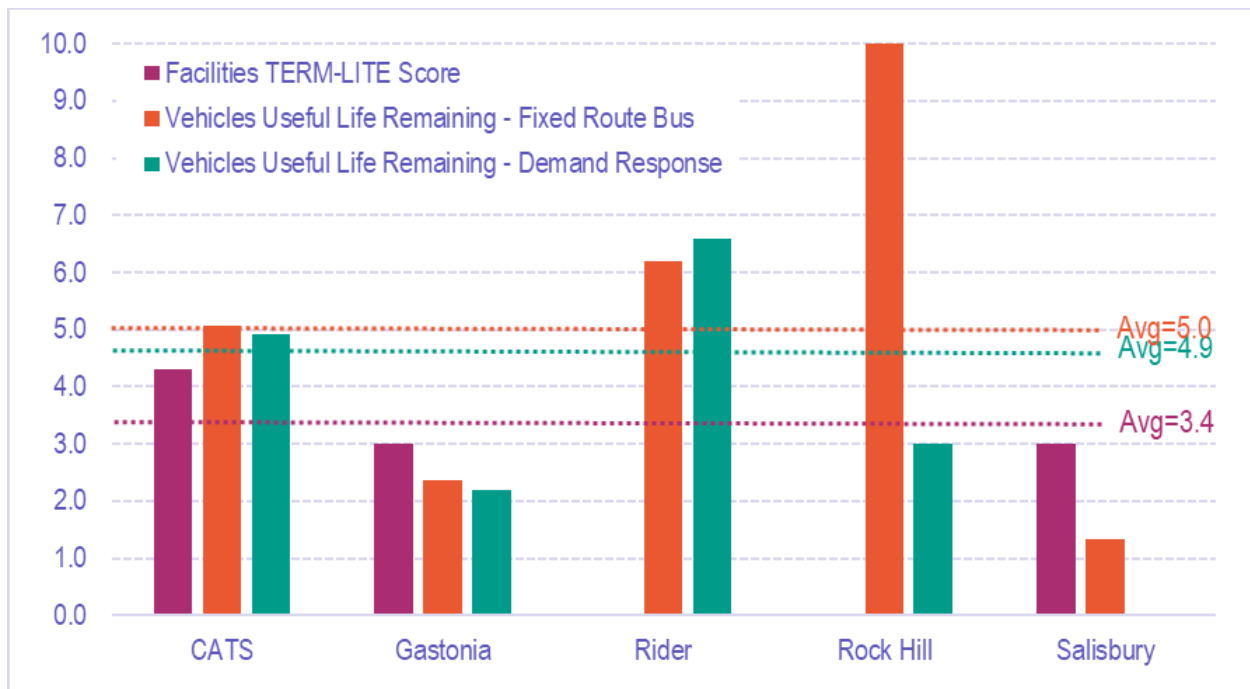
<sup>70</sup> FTA requires transit agencies to assess and report facility condition to the NTD based on the five-point scale used in the Transit Economic Requirements Model (TERM). The TERM scale indicates that an asset is considered in good repair if it has a rating of 3 (adequate), 4 (good), or 5 (excellent); 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](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/asset-management/146671/tam-2018-ntd-extended_2.pdf)

<sup>71</sup> Ibid.



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.

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



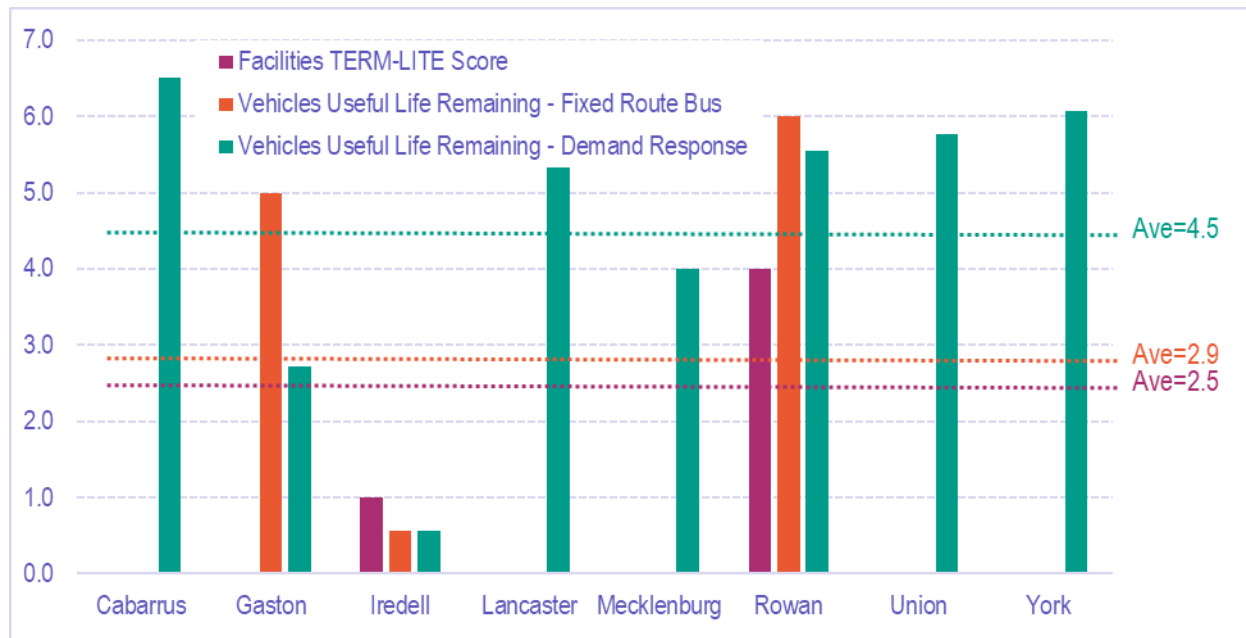
*Note. Rock Hill My Ride data from FY 2019.*

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.<sup>72</sup>
- 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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<sup>72</sup> 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](http://connect-beyond.com)