



Downtown Concord streets contribute to maintaining a livable community.

Highway Element

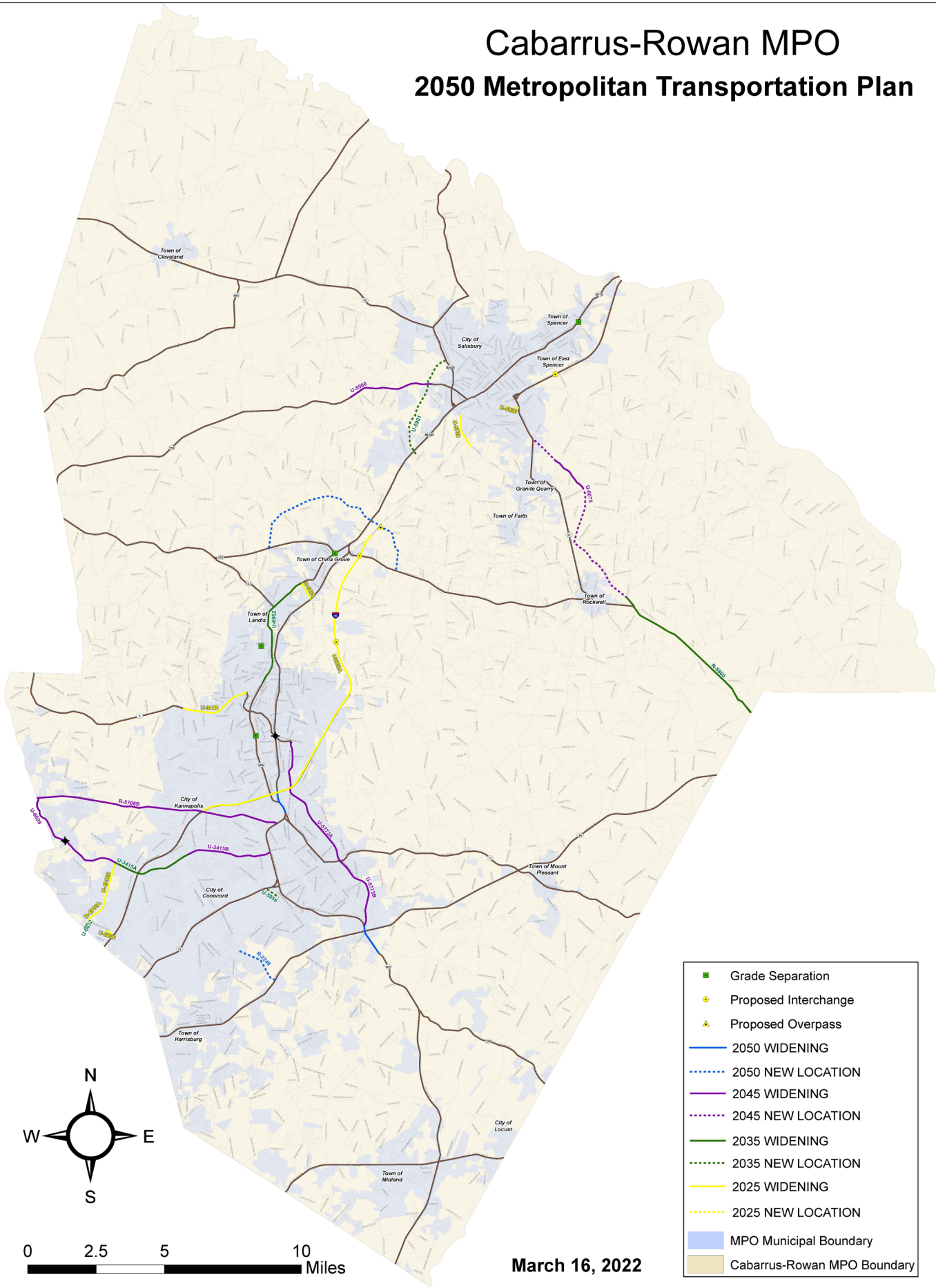
The Highway map is just one element of the Cabarrus-Rowan Urban Area Transportation Plan. The primary objective of the Highway map is to assure that the street system and highway improvements serve future travel desires and as those needs arise opportunities to make improvements are made available. The Cabarrus-South Rowan Thoroughfare Plan was first mutually adopted in June 1996 with an amendment in December 1998. (The rest of Rowan and Cabarrus Counties were not part of the MPO at this time). The Plan was the culmination of local and state coordination, engineering modeling analysis, and extensive public involvement. NCDOT completed a Comprehensive Transportation Plan (CTP) in 2011 (updated in 2017, 2019, and 2021) that supplanted the Thoroughfare Plan and MPO Street Appendix.

The MPO has developed a fiscally constrained MTP that allocates projects or groups of projects by horizon year. Each table represents a horizon

year as stated in NCDOT requirements. The horizon years are 2016-25, 2026-35, 2036-45, and 2046-50. These horizon years are consistent with the Regional Travel Demand Model and federal regulations in 40 CFR93.106 (A) (1). According to these requirements, the first horizon year may be no more than 10 years from the base year. The projects for each horizon year were selected based on the following sources:

- Current and projected funding levels/cost estimates (see Financial Plan)
- Revenue from the 2020-2029 NCDOT State Transportation Improvement Program (STIP) and the Metropolitan Transportation Improvement Program (TIP);
- Project schedules from the current 2020-2029 NCDOT TIP
- Projects deemed necessary through the Regional Travel Demand Model;
- The Cabarrus-Rowan Urban Area SPOT Priority List
- The 2045 Cabarrus/Rowan Metropolitan Transportation Plan
- Cabarrus County Public Transportation Master Plan

Cabarrus-Rowan MPO 2050 Metropolitan Transportation Plan



March 16, 2022

The thoroughfares on the recommended map can be divided into five types of roads. They are freeways, expressways, boulevards, major thoroughfares, and minor thoroughfares. All other streets are considered collector or local streets and can be included in small area plans by the CR MPO membership.

Freeways and Expressways

The freeway and expressway system is intended for fast and efficient movement of large volumes of traffic in and around an urban area. Properly located freeways and expressways can help relieve overburdened radials and move traffic from one suburb to another around the central core.

There is only one controlled-access Interstate highway in the area. Interstate 85 runs north and south through the center of the urban area and the State connecting several of its urban areas. I-85 was recently widened to eight lanes through the City of Charlotte and through northern Rowan County. The remaining sections are under construction now including the remaining portion in southern Rowan. The projected traffic on I-85 for the design year warrants widening to at least eight lanes throughout the planning area. I-85 has been the top priority in the MPO for several years.

There are sixteen existing interchanges on I-85 through the planning area. Exit 68 at NC 152 was recently expanded to a full interchange to accommodate increased traffic flows. A new interchange was opened at Old Beatty Ford Road (I-3804) near Landis/China Grove to provide greater access to southeastern Rowan County. There is a five-mile stretch with 3 interchanges stretching from Lane Street to NC 152. Industrial land uses are being planned along China Grove Road increasing the potential for truck and other vehicular traffic in the area. The new interchange included a safety project (W-5516) to realign Old Beatty Ford Road with a new bridge over I-85.

A Sub-area Study Report of I-85 released in December 2000 recommended some additional improvements for the corridor between Charlotte and Concord/Kannapolis. Auxiliary lanes should be added to I-85 between I-485 and Speedway Boulevard. The ramps

at the NC 73 interchange were to be improved and widened. The Report also suggests possible high occupancy vehicle lanes as far north into Cabarrus County as the US 29-601 interchange (Exit 58) as well as implementation of ITS improvements and an integrated Regional Incident Management Program. The MPO was a funding partner in the Fast Lanes Study to assess managed lanes in the Metrolina Region. I-85 from Mecklenburg County to exit 68 in Rowan County was carried into Phase III for consideration of managed lanes as part of this study. Managed lanes have been elsewhere in the Charlotte region including on I-77 north.

For a copy of the I-85 Sub-area Study Final Report or the Fast Lanes Study, contact the MPO office at (704) 791-0608.

Boulevards and Major Thoroughfares

The boulevards and major thoroughfares are the principle traffic carriers throughout the urban area. Their primary function is to carry traffic, but they also may service abutting property. Too much property access, though, requires too many traffic signals. Too many traffic signals reduce the travel speed, capacity, and efficiency of a thoroughfare.

Minor Thoroughfares

The minor thoroughfare system collects local traffic from the residential neighborhoods, commercial and industrial districts, and collector streets and distributes it to the major thoroughfare system. These streets also access abutting property more frequently than the major thoroughfare system. They cannot carry large volumes of traffic as well as the major thoroughfares can.

Appendix 5-1 shows the Adopted Cabarrus Rowan MPO Comprehensive Transportation Plan Highway Map and Table

Bridge Replacements

A growing portion of the Metropolitan TIP is the bridge replacement projects. The following criteria are used to evaluate bridges when utilizing federal funds:

- Sufficiency Rating must be less than 50
- Bridge must be rated as either Structurally Deficient or Functionally Obsolete

- Structure length must be longer than 20' (clear span)
- The candidate structure must not have been rehabilitated with federal funds within the previous 10 years

The criteria for state funds is much simpler and is more based on need and current level of service compared to desired level of service. There is also an expectation to improve the overall rating of the bridges in the Division. For Division managed projects, both BD (federally funded) and state funded the Division gets a candidate list from the Structures Management Unit that includes bridges that meet the federal guidelines. From this list the Division prioritizes replacement projects based on the needs throughout the Division. The Division coordinates with bridge maintenance staff to determine problem/deficient bridges and then with roadway maintenance engineers to determine any future widening needs. Next, the prioritized list is reviewed and approved by the Structures Management Unit to be programmed as a division-managed project.

For bridges listed as a B project in the STIP, the Division reviews the list of candidate bridges from the Structures Management Unit and prioritizes the list based on the Division's needs/desires. This list is then sent to the Structures Management Unit and Program Development Unit for them to evaluate the list to determine which bridges will be programmed in the next TIP cycle. The Division priorities are a key element to the decision-making process for funding.

Appendix 5-2 includes the Division 9 and 10 Bridge Replacement Schedules

Complete Streets Policy

NCDOT adopted a new Complete Streets Policy and guidelines in 2019 and is in the process of coordinating Complete Streets guidance into the Integrated Project Delivery (IPD), Roadway Design Manual and ATLAS (Advancing Transportation through Linkages, Automation and Screening). In February 2022, NCDOT released the updated methodology for Complete Streets Review with MPO and local project coordination.

Appendix 5-3 includes current Complete Streets Policy Goals with Review and Screening guidance

Bicycle and Pedestrian Elements

Bicycle and pedestrian mobility is of particular importance to the CR MPO. An element of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the subsequent FAST Act and Bipartisan Infrastructure Bill requires that the Bicycle and Pedestrian Plan be fully integrated within an urban area's Transportation Plan. As a result of federal requirements and strong local interest, the first comprehensive bicycle and pedestrian plan for the MPO was completed in 2002. The Plan known as the Livable Community Blueprint encompassed all of Cabarrus County and the following municipalities within the CR MPO area: Concord, Kannapolis, Landis, Mt. Pleasant, China Grove, and Harrisburg. (The rest of Rowan County was not part of the MPO at the time this Plan was initiated). Cabarrus County pursued an update to this Plan thru a countywide Greenway Master Plan that was completed in the fall of 2009 and Rowan County completed a countywide plan in the summer of 2015.

The purpose of the Livable Community Blueprint (LCB) was to provide the CR MPO with a bicycle and pedestrian facilities inventory and method for implementation of improvements over the next decade. The Plan included a strong public involvement element that produced 4,000 surveys from a random sample. From these surveys, "access to safe Bicycle and Pedestrian Transportation Routes" was identified as a high priority for residents. The study defined close to 200 individual destinations that are desirable to be linked by bicycle or pedestrian routes and over 200 miles of on-road and off-road routes. The Plan was necessary to identify desirable bicycle and pedestrian projects within the urban area, which may be eligible for funding under the Metropolitan Transportation Improvement Program or other State and Federal funding programs. A total of \$5,639,858 of bicycle and pedestrian projects was highlighted by this study. This figure did not include land acquisition or design and engineering estimates, which can be costly.

Appendix 5-4 is the Inventory of the Livable Community Blueprint

For additional information and a list of proposed bicycle and pedestrian projects in the Planning Area, please refer to the Livable Community Blueprint, Carolina Thread Trail Master Plan and NCDOT Statewide Bike Route Map.

The State TIP identifies two types of bicycle projects: independent and incidental. Independent or Enhancement projects are stand-alone bicycle and pedestrian facilities. Incidental projects are improvements tied to specific TIP road projects.

An example of an incidental project would be the NC 49 widening in the Town of Harrisburg where the Town requested that NCDOT build sidewalks as part of the widening project. With the adoption of the Strategic Transportation Initiative (STI), NCDOT will be closely monitoring the state matching provision for non-highway capital projects. With that said, all independent bicycle and pedestrian projects will be scored and ranked locally with other modes under the Division Tier (only) list of projects.

The current 2020-2029 Transportation Improvement Program identifies seven independent bicycle and pedestrian projects in the CR MPO. The projects are listed below:

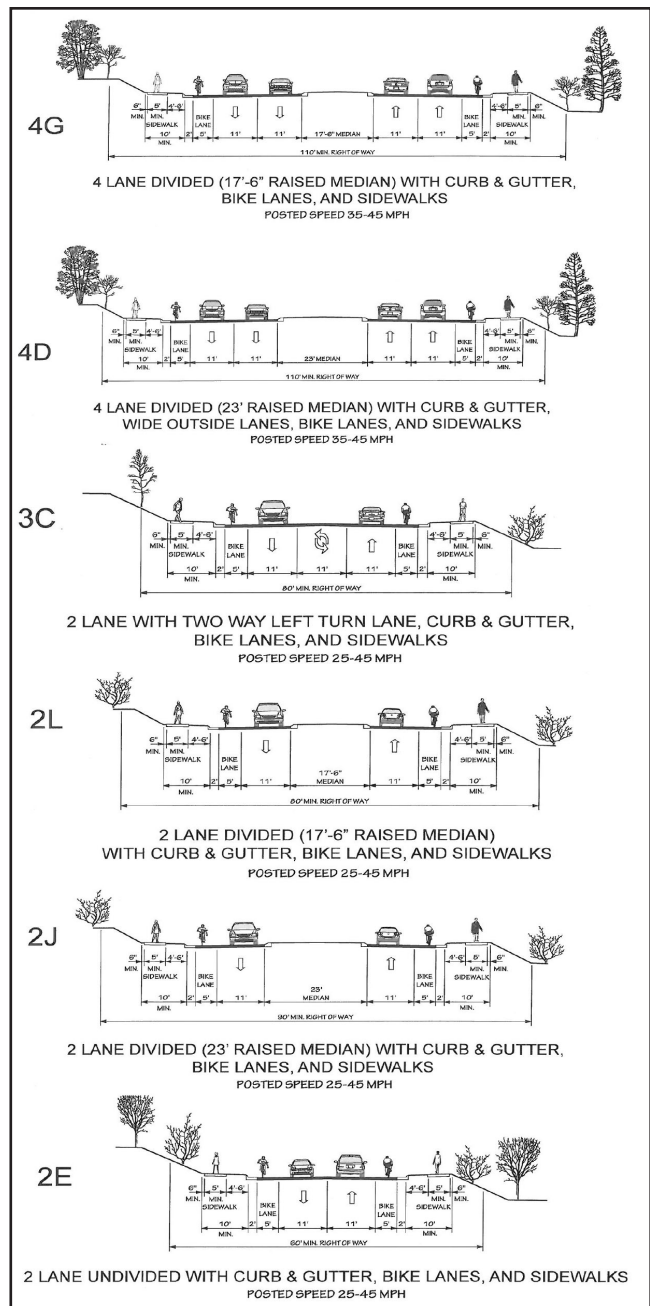
Table 5-1 Independent Projects

TIP Number	Project Description
EB-5732	Sidewalk on both sides of Bruton Smith Blvd and Concord Mills Blvd including a portion of Weddington Road
EB-5902	Concord Downtown pedestrian signal upgrades
EB-5903	Sidewalk on Union Street
EB-5619	Greenway near Catawba College
EB-5861	Greenway along US 29 to the Yadkin River
EB-5844	Sidewalk along Little Texas Road
EB-5821	Sidewalk along North Main Street in Kannapolis

The CR MPO developed and adopted criteria for

ranking bicycle and pedestrian projects in 2004. This criteria is based on 8 measures that range from percent of right-of-way owned to amount of project design complete. Each of the 8 measures was given a point total based on level of importance and relative rank. Points could range from 1 to 25 depending on the scored measure. The purpose of this criteria and point totals was to highlight the projects that were most feasible and generated the most utility within the community.

Figure 5-1 NCDOT Typical Bicycle and Pedestrian Cross Sections



With the last STIP, the CR MPO evaluated a total of 2 projects that were submitted to NCDOT for the 2020-2029 STIP through the Strategic Transportation Investments (STI) evaluation. The projects are as follows:

MPO Bicycle/Pedestrian List

1. Town Creek Greenway - Town of East Spencer
2. N. Main Street Sidewalk - City of Kannapolis

Appendix 5-5 includes the CR MPO Bicycle and Pedestrian Priorities and the criteria used to rank these projects.

Appendix 5-6 includes the CR MPO CMAQ Bicycle and Pedestrian Project Proposals

Due to the non-attainment designation for Cabarrus and Rowan Counties, NCDOT has suballocated approximately \$10 million to the MPO for Congestion Mitigation and Air Quality Improvement (CMAQ) projects. These funds are limited to projects that reduce vehicle emissions and improve air quality, which is consistent with most bicycle and pedestrian projects. The CR MPO identified and endorsed 16 bicycle or pedestrian projects that would be funded through CMAQ program. Four of these projects remain in the 2020-2029 STIP for implementation.

In addition, there are local initiatives to improve bicycle and pedestrian connectivity. The City of Concord maintains a Pedestrian Improvement Program (PIP) that is funded through the 2 cent property tax levied

by the City for transportation projects. The PIP serves as a direct way to build and leverage additional public and private funds for pedestrian improvements in new and existing development. Several CR MPO jurisdictions including the City of Concord are also beginning to use their development review authority to promote more pedestrian-friendly development. Cabarrus County, the Unified Development Ordinance has integrated sidewalk requirements into its local development regulations. Concrete sidewalks are required along major and minor thoroughfares and frontage streets identified on the Cabarrus-Rowan Transportation Plan. The City of Salisbury and Town of Granite Quarry in Rowan County also require sidewalks in all new development projects within their planning jurisdiction.

In 2021, the City of Salisbury was selected as one of 2 communities across the state for a Local Pedestrian Safety Initiative in an urbanized MPO area. This Initiative will 1) collect data and describe risk, 2) assess conditions and prioritize problems, and 3) develop countermeasures and recommendations. The pedestrian crash rate in Salisbury is 5.65, which is higher than cities of similar size in NC. The East Innes Street corridor has been identified as having a high crash density as part of this Initiative, which should be complete in the spring of 2022.



Bridge replacement project with new sidewalk- Raging Ridge Road at Stallings Road in Harrisburg.

Freight and Rail Transportation Element

Regional Strategic Freight Network

A key element of Freight Planning is the identification of the regional Strategic Freight Network (SFN). By definition, a SFN is a system of infrastructure critical to the successful movement of freight. For the Freight Plan, this SFN serves as the network around which the region currently moves freight and plans to continue to support safe, efficient movement of freight into the forecast plan years. Many recommendations related to infrastructure improvements are limited to the SFN. With consideration of limited resources for infrastructure projects, the Freight Plan focuses on this network identified as critical to the CR MPO and Greater Charlotte Region.

Illustrated in **Figure 5-2** and **Figure 5-3**, the CR MPO SFN encompasses all modes of freight moving transportation. In partnership with the Coordinating Committee, the following criteria were used to finalize the roadway and other modal components of the SFN:

Highways

- Those on the National Multimodal Freight System (NMFS) and/or all Interstates
- Those designated as truck routes by NCDOT
- Approved Intermodal Connectors on the National Highway System
- Those identified by planning agencies as critical to local freight movement

Railroads

- All active freight railroads
- All active intermodal rail terminals

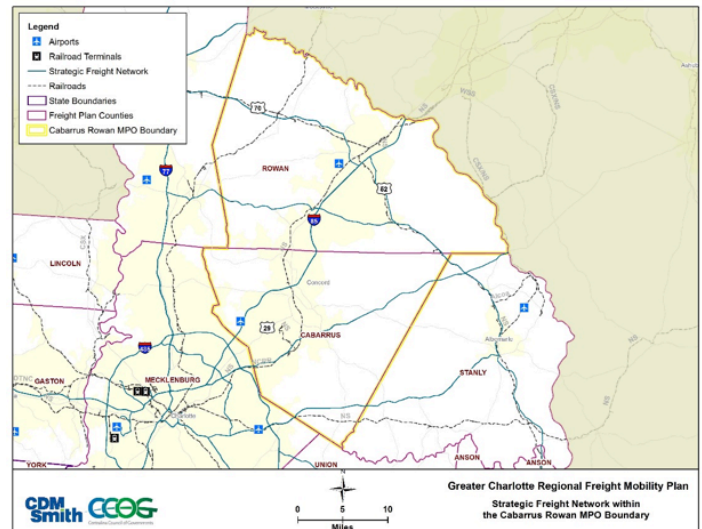
Aviation

- All commercial service airports

Critical Rural and Urban Freight Corridors

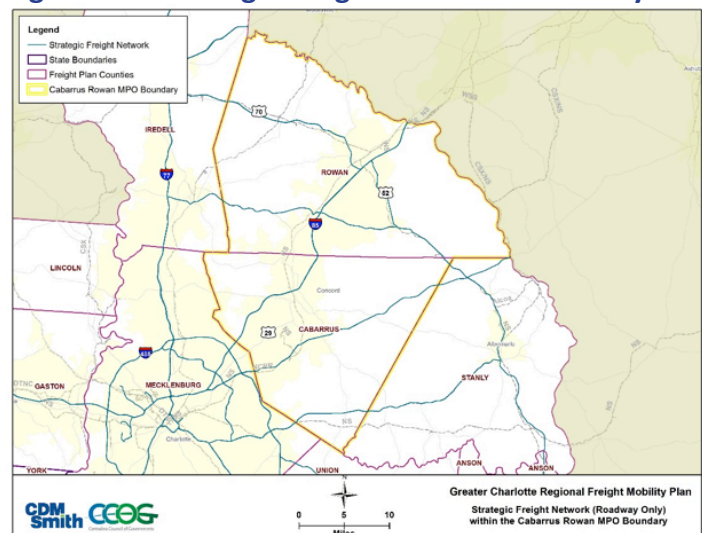
According to the latest available guidance from USDOT, Fast Act Section 1116 [Critical Urban Freight Corridor (CUFC) and Critical Rural Freight Corridor (CRFC) Guidance] and based on coordination with the state DOTs, the Freight Plan presents the

Figure 5-2 - Strategic Freight Network in CRMPO



Source: NCDOT and SCDOT

Figure 5-3 - Strategic Freight Network - Roadways

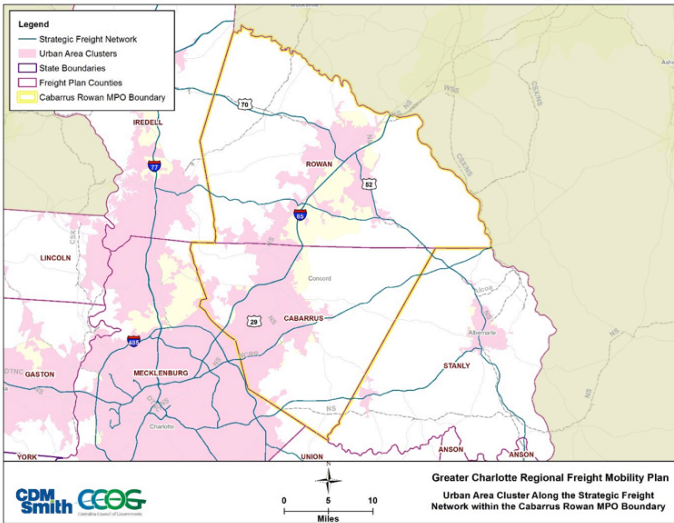


Source: NCDOT and SCDOT

following data on suggested facilities for inclusion in the state level CUFC/CRFC designations. **Figure 5-4** illustrates the SFN within the CR MPO region (roadways only) broken out by urban and rural land use designation, based on 2010 Census Urban and Rural classification data. These roadway segments are provided for consideration in the state designated multimodal critical rural and urban freight corridors yet to be determined.

Further detail on the CUFCs and CRFCs are included in the **Final Plan, Table 5-4**.

Figure 5-4 - Strategic Freight Network - Roadways and Urban Area Clusters in CR MPO Region



Source: 2010 Census Urban and Rural classification data, NCDOT and SCDOT

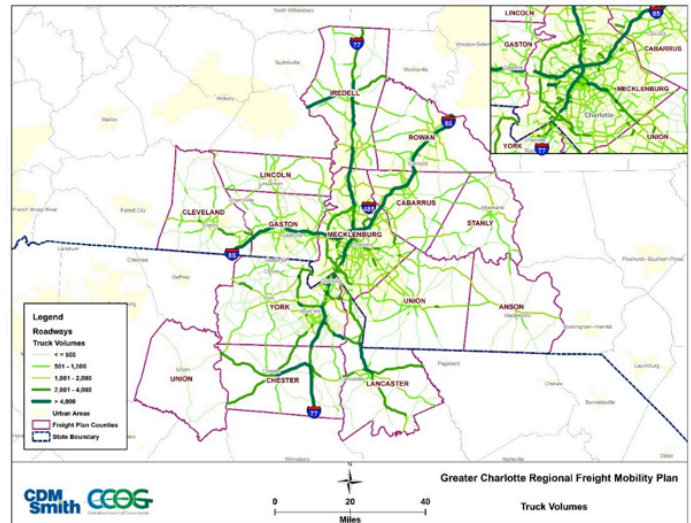
Existing Conditions in the Cabarrus Rowan MPO
 The existing conditions analysis provided a compilation of data on the transportation infrastructure system for the Greater Charlotte Bi-State region. Highlights, by mode, are provided at a regional level with additional detail for the CR MPO region.

Trucking

The interstates carry the bulk of the region’s daily truck traffic as shown in **Figure 5-5**. I-85 and I-77 constitute the most critical freight corridors throughout the region. Other roadways that play a critical role in the movement of truck freight are I-485, US 74, US 321, NC 160 (near the Charlotte-Douglas airport), and SC 9 through Chester and Lancaster, SC. Delay, safety, and access issues raise costs for shippers, carriers, manufacturers and consumers alike.

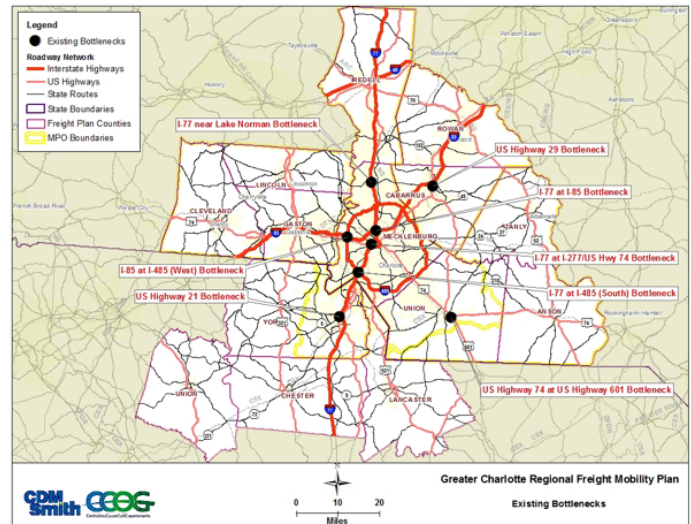
Figure 5-6 shows the only truck related bottlenecks identified within the freight transportation system in the CR MPO is in the corridor of US 29 near I-85. In addition to this segment of the SFN within the CR MPO currently defined as bottlenecks, some segments also present some challenges for the trucking of goods in terms of bridge conditions and safety. Functionally obsolete bridges are bridges that no longer meet the current standards, such as narrow lanes or low load-carrying capacity. These bridges have not been designed for the current loads/trucks that currently traverse the freight highway system.

Figure 5-5 - Regional Truck Average Daily Truck Volumes (2012)



Source: NCDOT and SCDOT

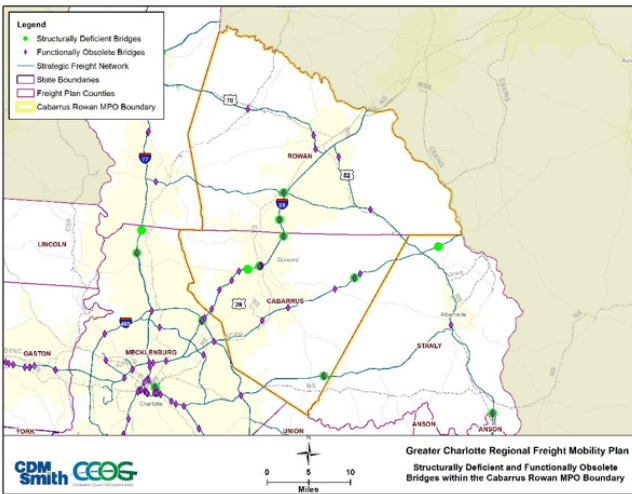
Figure 5-6 - Regional Truck Bottlenecks in CR MPO



Source: American Transportation Research Institute (ATRI), October 2015

Structurally deficient bridges require significant maintenance, rehabilitation or replacement and are unable to carry certain freight loads. For these reasons, they can serve as constraints to the freight highway network and are therefore important to include in freight network analyses. **Figure 5-7** illustrates the 19 functionally obsolete and seven structurally deficient bridges in the CR MPO Region. These existing conditions of highway performance, safety and bridge conditions are important to identify as they can limit the mobility of freight-carrying vehicles, particularly if they are carrying oversize or overweight cargo.

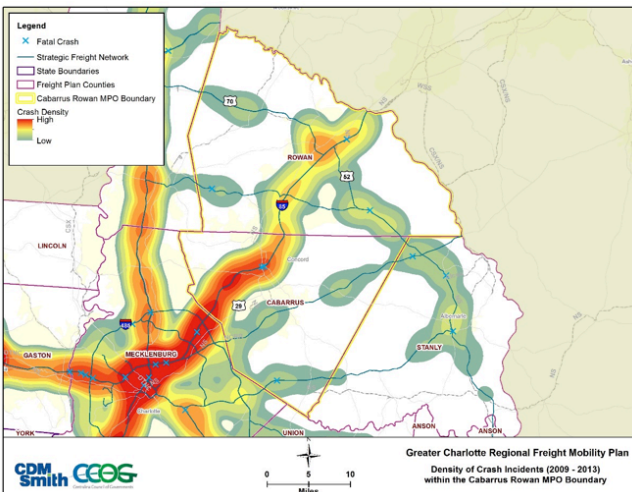
Figure 5-7 - Structurally Deficient and Functionally Obsolete Bridges in CR MPO



Source: NCDOT and SCDOT

Figure 5-8 illustrates commercial vehicle crash hotspots from 2009 to 2013. Corridors with slightly higher than medium densities of crashes involving commercial vehicles include I-85, as well near the interchange of I-85 and US 70 and US 52.

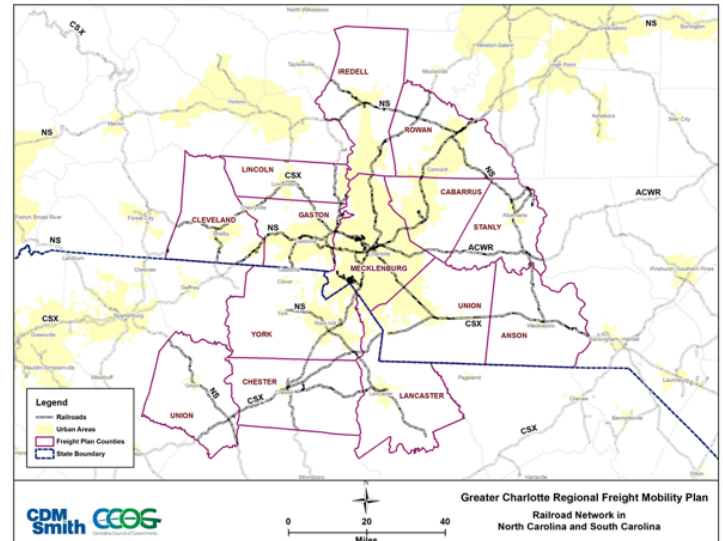
Figure 5-8 - Commercial Vehicle Crash Hotspots (2009 - 2013)



Rail

Within the greater Charlotte Region there are a number of key railroad corridors and facilities. Both NS and CSXT have key rail corridors and intermodal yards. Figure 5-9 illustrates the Greater Charlotte regional rail network which includes the CR MPO area.

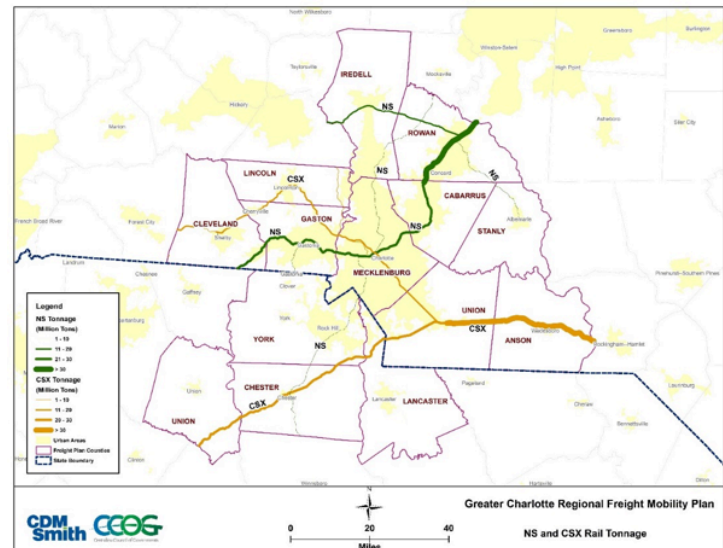
Figure 5-9 - Greater Charlotte Regional Rail Network



Source: National Transportation Atlas Database, 2015

For NS, the Main Line operating through Kannapolis, Charlotte and Gastonia serving the Charlotte-Douglas International Airport's Intermodal Yard is one of the busier corridors along the east coast. The CSXT SE Line connects to the Port of Wilmington and Hamlet Yard. Figure 5-10 shows the regional Class I rail annual volumes.

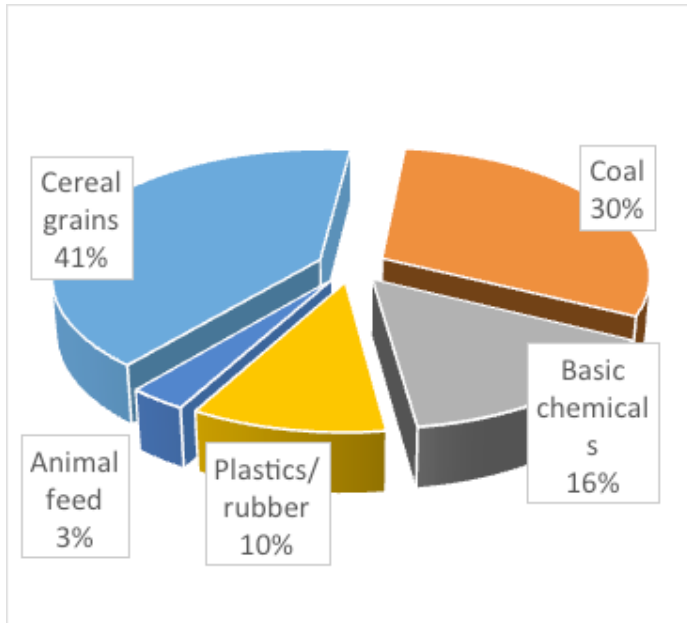
Figure 5-10 - Regional Class I Annual Rail Freight Volumes (2014)



Source: NCDOT

Grains, Coal and chemicals make up the bulk of the regional rail tonnage (Figure 5-11). Over 5 percent of all freight moves by rail in the region.

Figure 5-11 - Regional Rail Freight Top Commodities (By Weight)



Source: FaF4, NCDOT and WSP|Parsons Brinckerhoff

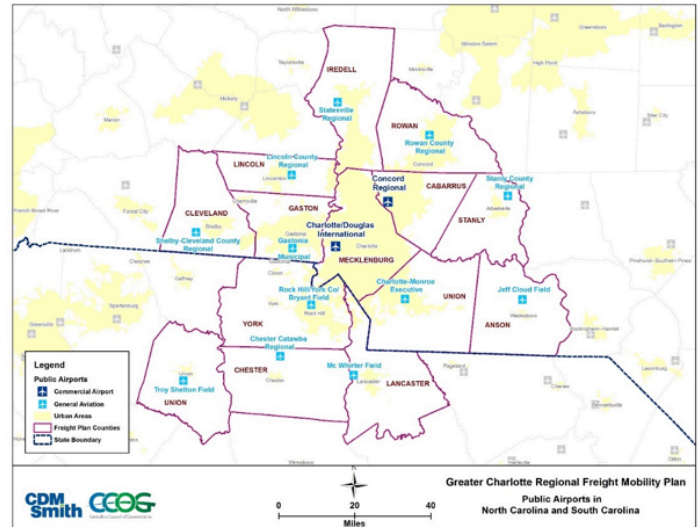
Within the CRMPO, NS and ACWR are the principal rail facilities providing access to the larger network of railroads. Local planners need to consider this for land use planning around the alignment, and transportation planners must consider the access limitations and safety concerns near these rail freight corridors.

Air Cargo

There are two commercial service airports and twelve general aviation airports located in the Greater Charlotte Region. The two commercial service airports are Charlotte-Douglas International Airport (CLT) and Concord-Padgett Regional. CLT handles virtually all air cargo in the Greater Charlotte Region. **Figure 5-12** illustrates the airports in the Greater Charlotte Region.

Though small in volume, airborne freight has by far the highest value per ton of any mode. Typical commodities include goods from the pharmaceutical, automotive, and high-tech manufacturing sectors as well as the consumer parcel delivery services, as illustrated in **Figure 5-13**. Moving goods by air is expensive and the industry responds to the forces of supply and demand. This is not unique to the region but an industry wide trend.

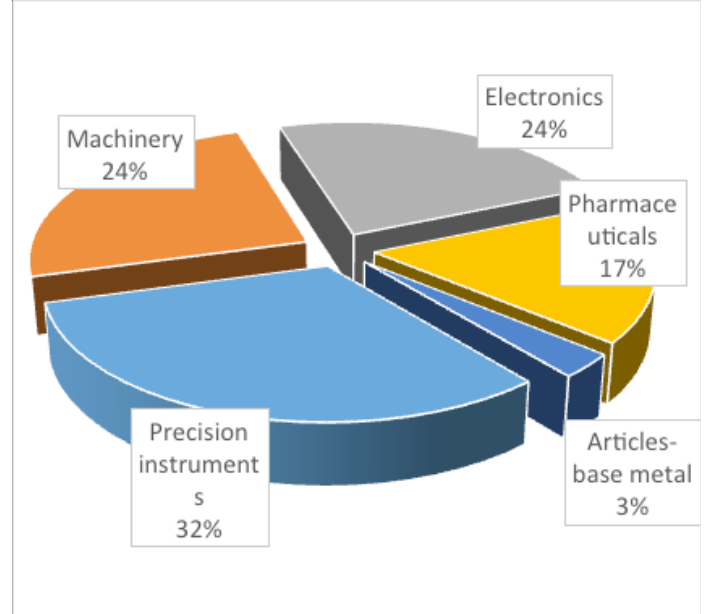
Figure 5-12 - Greater Charlotte Regional Public Airports



Source: Federal Aviation Administration

Concord-Padgett Regional commercial airport and the Rowan County Regional general aviation airport serve CR MPO. Similar to railroads, intermodal connectivity should be maintained and supported, consistent with the recommendations of the Freight Plan.

Figure 5-13 - Regional Air Cargo Top Commodities (By Value)



Source: FaF4

Passenger Rail Element

Existing Passenger Service

The State of North Carolina, which sponsors two Amtrak-operated passenger trains in the CR MPO area, provides passenger service: The Piedmont and the Carolinian. The Amtrak Silver Crescent line also travels through the CR MPO area with stops at Kannapolis and Salisbury.

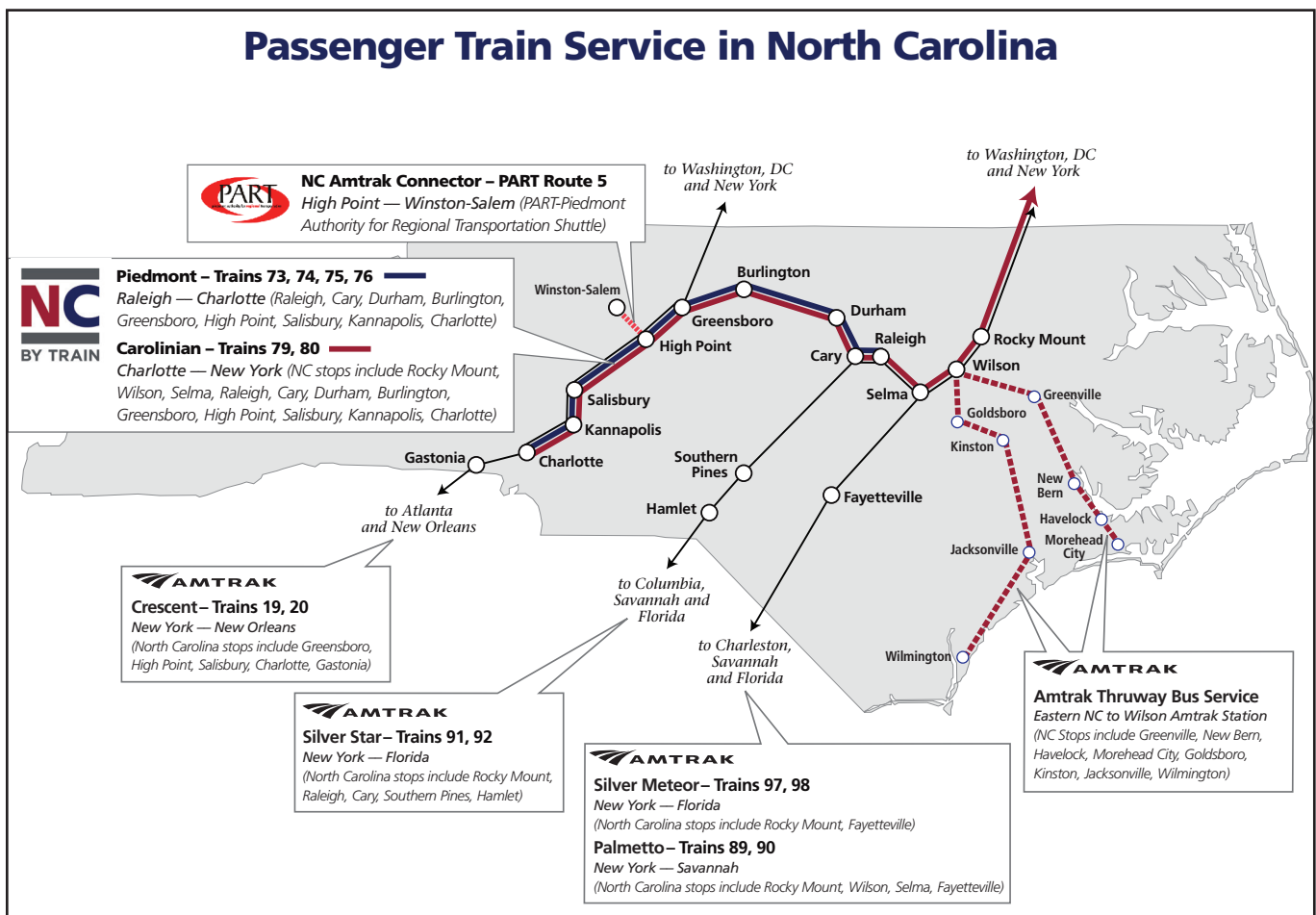
Map 5-2 shows existing rail lines

The Piedmont makes three daily round trips between Raleigh and Charlotte by way of Kannapolis and Salisbury. The State owns and contracts for maintenance of the equipment for the Piedmont and contracts with Amtrak for operations of the train. The Carolinian makes one daily trip each

way between Charlotte and New York City by way of Kannapolis and Salisbury. The Carolinian uses Amtrak equipment and is Amtrak-maintained.

Both Depots in Kannapolis and Salisbury serve as focal points of the downtowns and central business districts. The Kannapolis Depot has undergone improvements to become a first class hub for passenger rail. The Rider Transit System also maintains a bus stop at this Depot providing daily bus service Monday through Sunday. The Salisbury Depot has become a tourist and business attraction as a staple in the redeveloped downtown area. Salisbury Transit also provides local bus service in close proximity to the Depot on a regular schedule Monday through Saturday. A new Depot is scheduled to be built in the Town of Harrisburg soon.

Map 5-2 - Existing Amtrak Service in North Carolina



Piedmont High-Speed Corridor

The NCDOT Rail Division, in conjunction with the North Carolina Railroad and Norfolk Southern, has plans to improve the busy (freight and passenger) Raleigh to Charlotte rail corridor to reduce travel time for both freight and passenger trains. The goal was to implement two-hour passenger service between the two major cities by 2010. In September 1997, a detailed evaluation of the Piedmont High-Speed Corridor (PHSC) was presented in the Piedmont High-Speed Corridor Rail Study Status Report.

The PHSC is a 477-mile federally designated high-speed rail corridor running from Washington, D.C. through Richmond, VA; Raleigh; Greensboro; Kannapolis; and on to Charlotte, NC. The report indicated that the potential for ridership and revenue along the PHSC would be greater than any other illustrative high-speed route in the United States.

Because of the studies, this corridor has been designated as one of eight national rail corridors currently identified for improvements to high-speed status under the previous FAST Act. This effort has rightfully led to the adoption of a NCDOT resolution to protect the integrity of the PHSC. The approved resolution endorses the concept of providing better separation between vehicle and train movements at existing and proposed crossings of the rail corridor, which improves safety. Additionally, traffic separation studies have been performed by NCDOT within individual jurisdictions in the Urban Area. These studies have identified which crossings need to be closed or improved. The purpose of these closings is to assist in reducing train travel time to two hours between Raleigh and Charlotte. The resolution lists the following directives:

- That any new intersection of the Federally-Designated High-Speed Rail Corridor be grade-separated and supports the closure of redundant and/or unsafe highway/rail at-grade crossings on this route;
- That municipalities be encouraged to implement crossing consolidation projects; and

- The Department (NCDOT) will make every effort to provide grade-separated alternatives to enhanced warning or traffic control devices (four-quadrant gates, median barriers, longer gate arms, and intelligent signal systems) as a part of the widening of existing highway/rail at-grade crossings.

The NCDOT Division 9 TIP Priority List included the following grade separation projects:

- Kimball Road
- Peeler Road
- Klumac Road
- Long Ferry Road

Three of these projects were funded in the STIP: Kimball Road, Peeler Road, and Klumac Road through the American Recovery and Reinvestment Act (ARRA), but the other one remains unfunded at the present time. The City of Kannapolis has also given priority to a grade separation at Rogers Lake Road, scheduled for construction in FY 2020, as well as at 22nd Street, scheduled for construction in FY 2026. A new grade separation was scheduled for construction as part of the I-85 widening project at Winecoff School Road. The City of Kannapolis has long lobbied NCDOT for this project. Replacement of additional at-grade crossings with grade separated structures will be evaluated and considered through the planning and engineering process.



Amtrak stops at Kannapolis and Salisbury Stations in the CR MPO

Potential NC Commuter Rail Service

The NCDOT Rail Division in January 1999 conducted a study that addressed the need for commuter rail service. The purpose of the study was to identify potential rail commuter corridors throughout the State that would serve a sizeable suburban population with a substantial central city.

Future commuter/passenger rail planning in the Urban Area may include the Northeast Blue Line Extension which would be a part of the Charlotte Transit System. The Blue Line Extension would be a major “spine” of the entire light rail system. Running from northeast to southwest in the CR MPO area, this line and extension begins in downtown Charlotte and continues parallel to US Highway 29 towards Concord and terminates on the campus of UNCC. The extension could cross I-485 one day and continue past the Lowes Motor Speedway and potentially to the Concord Mills Mall. In the interim, Rider Transit has plans for an express bus route to the end of the Blue Line Extension that will begin in March 2018.

For a copy of the commuter rail study and additional information regarding the Rail Improvement Program, contact the NCDOT Rail Division at (919) 733-4713, or visit their web-site at www.bytrain.org.

Public Transportation Element

Concord/Kannapolis Area Transit

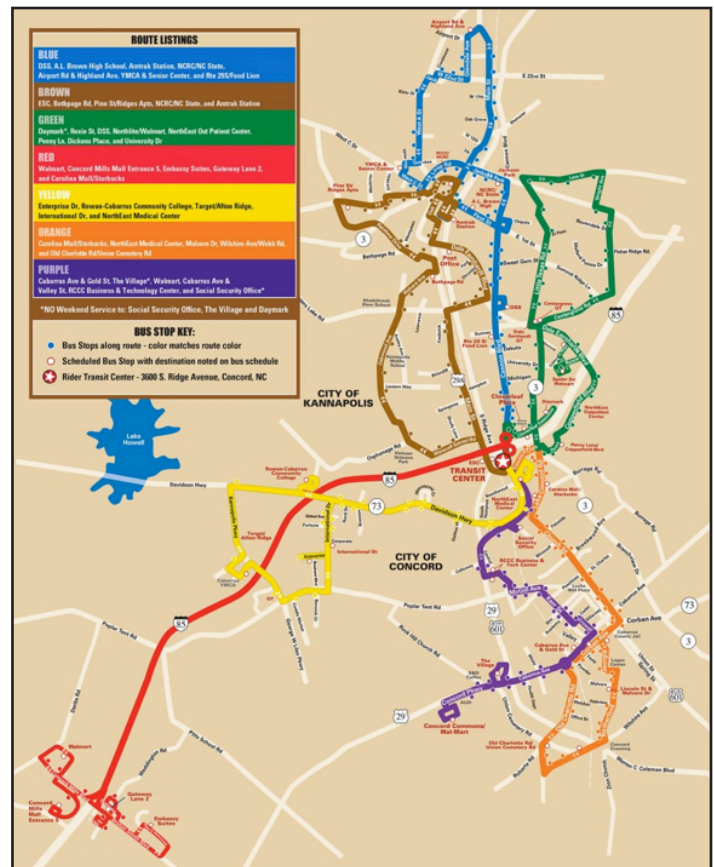
The cities of Concord and Kannapolis began a fixed route transit service in April of 2004 almost 20 years ago. The RIDER Transit System is a joint partnership between the two cities, FTA and NC DOT. The Concord Kannapolis Transit Commission (CKTC) manages the system. Two elected officials from each municipality serve on the Commission while each Mayor rotates annually as the CKTC Chairman. RIDER operates seven routes each weekday from 5:30 AM to 8:30 PM, and Saturdays & Sundays (added Fall 2013) from 8:30 AM to 8:30 PM. Ridership data indicates an average 1,300 trips per weekday, 900 on Saturdays, and 800 on Sundays. Total ridership for FY 21 was

336,512. The service is operated by a private service provider TransDev, which includes all maintenance and operations and associated personnel, of RIDER. In 2010 the Rider Transit Center opened, located at 3600 S. Ridge Avenue in Concord. This is the main transfer hub and operations center for RIDER operations.

The eight routes operate on sixty (60) minute headways and meet each hour at the central RIDER hub located in Concord in the AM and late PM, and seventy-five (75) minute headways in the afternoon. The system operates with a \$1.25 fare and also offers a reduce fare of \$.60 to seniors, students, Medicare card holders and disabled citizens. The Charlotte Area Transit System Northeast Blue Line Light Rail Transit System opened in 2018 and RIDER partnered with CATS to connect to the Blue Line Extension with a new, 7 day a week, all day regional express service known as the CCX.

Map 5-3 shows the existing Rider Transit Routes

Map 5-3 - Existing CK Rider Transit Routes



In 2020, Rider partnered with Cabarrus County on a new county wide Long Range Public Transportation Master Plan. This plan would create a seamless singular system to meet the mobility needs of all Cabarrus County residents as well as the northern section of Kannapolis. The Plan marries the growth needs of Cabarrus County (doubled over the past 30 years) with the levels of transit service and investment over the next 20 years. The Plan states unequivocally that “without the proposed one cent dedicated sales tax, Value Capture and other means of generating revenue, very little outlined by the plan can be achieved and transit will continue to serve only a fraction of the community”. The 2050 MTP has assumed the implementation and schedule of this Master Plan as well as the financial tools to make it a reality!

Public Transit in Cabarrus County Today

- Two separate, disconnected systems
- Unserved areas and underserved areas
- 38 Vehicles (10 buses, 28 Demand Response)
- 92 employees
- \$7.71M annual budget (combined)
- ~525,000 passenger trips annually
- 60-75 minute frequency (at or below minimum acceptable U.S. transit industry stands)

Public Transit in Cabarrus County after full plan implementation (The Vision)

- One system
- No unserved areas
- 194 vehicles (108 buses, 86 Demand Response)
- 559 employees
- \$70.56M annual budget (Plan Year 20)
- 6,400,000 to 6,900,000 passenger trips annually – not including HCT
- High Capacity Transit (one or more modes)
- World Class Level Transit Service

For a copy of the Cabarrus County Long Range Public Transportation Master Plan, please visit the CK Rider website at www.ckrider.com

Salisbury Transit

Salisbury City Council governs the Salisbury Transit System. Since the 1970’s, the City has provided transit service in the cities of Salisbury, Spencer, and East Spencer. The Salisbury Transit Department is responsible for all transit services in the City. The City provides the fixed-route bus transit service and the ADA complementary paratransit service. The transit service area population is approximately 38,637 persons.

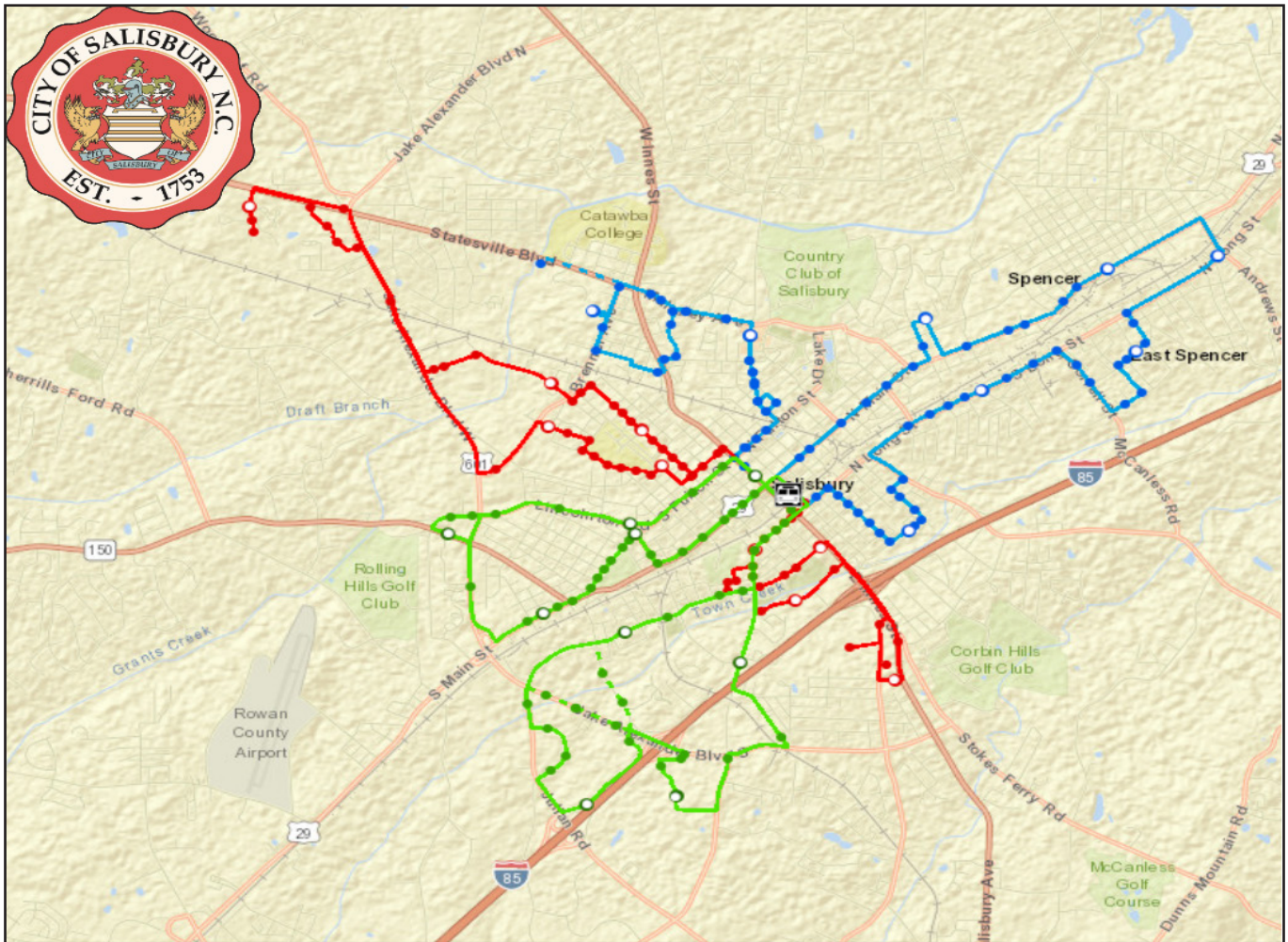
The City’s fixed-route bus service has three local routes and two express routes. Each of three local routes departs and arrives at a transfer site in downtown Salisbury. Service is provided 6:00 a.m. to 7:04 p.m. Monday thru Friday; 9:30 a.m. to 3:20 p.m. on Saturdays. From early August through mid-May, two weekend express bus routes provide service from 3:20 p.m. to 11:15 p.m. on Fridays and Saturdays, and from 9:55 a.m. to 7:15 p.m. on Sundays. The base fare is \$1.00, with a half fare of \$0.50 for senior citizens, persons with disabilities, and Medicare card holders.

The City’s ADA complementary paratransit service on the same days and hours as the City’s fixed route service. The fare for this service is \$2.00. The City operates a fleet of six FTA-funded vehicles for its fixed route service. All of these vehicles were obtained with Section 5311 funds thru NCDOT. The ADA complementary paratransit service is operated with cut-a-way vehicles which were purchased with Section 5339 funds.

The City operates from a single maintenance and administration facility at 300 West Franklin Street. This facility was funded with FTA assistance through NCDOT. The downtown transfer site consists of three bus shelters with amenities that were also funded with Section 5311 funds.

Annual Operating Statistic	Fixed-Route Service	ADA Complementary Paratransit Service
Unlinked Passengers	113,938	8,095
Revenue Hours	10,062	7,027

Map 5-4 - Existing Salisbury Transit Routes



In 2018, Salisbury Transit conducted a 20-year long-range public transportation master plan. The planning study was to provide analysis and recommendations to improve the STS service coordination, financial position, operational functionality and service delivery of both fixed route and complimentary ADA paratransit service operating within the service area. Through the study process it was determined that a 20-year comprehensive plan would need to include some county and out-of-county service to address the growing regional population and need for improved connective mobility options. The master plan identified the following service-related issues:

- The need to provide more frequent and service schedules
- The need to create new schedules to connect with other routes other than at the Depot Transfer Site location

- Expand connective service to areas within the city limits
- Technology challenges
- Implement a mobile ride tracker system
- Update the fare collection process
- Serve the local colleges with an Uber/Lyft-type service delivery model
- Address new vehicle types and how these vehicles could be deployed to provide zonal, microtransit service
- Improve the existing transfer location and work with both Greyhound and Amtrak for improved coordination
- Create local partnerships and seek to achieve a dedicated local funding source

For a copy of the Salisbury Long Range Public Transportation Master Plan, please visit the City of Salisbury website at www.salisburync.gov/Government/Transit.

Rowan Transit

The Rowan Transit System (RTS) was established in January of 1988 for the purposes of consolidating human services vehicles under one administrative unit that manages the entire fleet. The RTS mission addresses a variety of non-emergency public transportation services that are targeted towards life sustaining services including: human service agencies, medical access for rural general public passengers, dialysis centers, and Medicaid transportation.

The rural general public service is called RITA, which stands for Rowan Individual Transportation Assistance. RITA operates in a demand/response mode using grants that subsidizing services for seniors, disabled, and rural general public passengers. The majority of RITA trips are in county with the occasional exception of South Rowan residents who often have medical and personal business in the adjacent towns of Kannapolis and Concord in Cabarrus County. RITA services are rationed to the amount of funding that is available for each fiscal year. Each area of the county has access to RITA one day per week.

RTS has an Advisory Committee of between six to nine members appointed by the Board of Commissioners. User agencies include the Department of Social Service, Health Department, Parks and Recreation, Adult Day Care Center, Senior Center and Rowan Vocational Opportunities. There are also four at large member positions.

In the past Rowan County utilized a private transportation management company for the operational side. On October 1st, 2020 RTS moved to a full in-house operation with all drivers and dispatchers employed by the County. The system continues to use a rate per mile charge with a built-in adjustment to account for variable prices in fuel. The per mile rate at the time of this report is \$2.50 (fully allocated cost). RTS has an active fleet of 28 vehicles traveling approximately 500,000 miles per year providing over 45,000 trips per year.

Cabarrus County Transportation

CCTS has been serving the residents of Cabarrus County since 1988 by interfacing with large number of core agencies to provide both public and human service transportation. Individual agencies work with CCTS to certify clients who require trips to various appointments.

Over the years CCTS has seen a tremendous increase in demand for it's services, DSS, Aging, and Cabarrus Vocational Opportunities all just a few of the agencies that partner with CCTS to meet the needs of their clients.

In 2004, Cabarrus County took steps to bring transportation services in-house by becoming a Community Transportation Provider. This was the first step in realizing its goal to provide solutions for the overall transportation system in Cabarrus County. In the years since this transition, Cabarrus County Transportation Services (CCTS) has seen a demand for its services increase in many areas. In the 2020- 2021 Budget year, CCTS provided 49,946. A considerable drop to due the pandemic.

Even as CCTS experiences increased demand for services from the community, it has developed a service model that effectively and efficiently services the needs of those in Cabarrus County who require point-to-point transportation services. CCTS has now reached a juncture in its growth that necessitates the agency begin looking at more conducive service types to continue to respond to demand and maximize available resources. CCTS was awarded the Federal 5310 Grant through the City of Concord in October 2016. CCTS is now a Large Urban System and will begin receiving Federal Section 5307 Funds.

Cabarrus County Transportation Services is governed by the Cabarrus County Board of Commissioners with a Transportation Advisory Board consisting of representatives of local governments, social service agencies, schools and the general public.

Public Transportation Operations/Planning Activities

With the release of the 2010 Census data, Rider Transit was moved into the status of a Large Urban Transit System and is now a direct recipient of 5307 and 5339 funds from FTA. Up to 80% of bus and bus facility capital projects, FTA capital and transit-planning studies are funded with Section 5307 funds, along with a 10% State match (when available) and a 10%-20% local government match. Up to 75% of 5307 Federal funds can be used to cover the net cost of urban public transportation services for systems operating less than 50 vehicles at peak service (Rider currently operates 8 beginning in 2018).

The State provides assistance for the operation of services through the State Maintenance Assistance Program (SMAP), which is allocated on the basis of number of passengers, number of service hours, amount of fares and local government support and an equity share. The City of Concord and the City of Kannapolis are the current funding partners for the necessary local match for each grant.

The City of Concord provided local funds to support the operation of the peak hour Concord Express to Charlotte, which began on February 1, 1999. Passengers were charged \$4.40 for each trip, which resulted in a farebox recovery of about 20 percent of the total cost. The initial service was funded with a grant from the Public Transportation Division of the NCDOT and the cities of Concord and Charlotte. As the grant expired, net costs were split between Concord and Charlotte, with each paying 50 percent of the net operating costs.

The service was run by Charlotte Area Transit Service, which provided 4 trips in the morning peak and 4 trips in the afternoon/early evening. Ridership peaked in 2008 with 106,688 annual trips. This service was replaced by the new CCX Express service to the CATS J.W. Clay Station or LYNX/Blue Line Light Rail Extension in March 2018. This new service runs 7 days a week, and matches the local service schedule and fare structure of RIDER's other 7 local bus routes.

Public Transportation Funding Programs in the Urban Area

Section 5307 Urbanized Funds City of Concord, City of Salisbury, Rowan County, and Cabarrus County

The City of Concord is the designated recipient for these funds and apportions to the 4 urban systems in the UZA based on a mutually agreed upon formula/agreement. Based on the approved Interlocal Agreement, Concord and Kannapolis share in the payment of the local match to manage and operate the RIDER Transit System. The Concord Kannapolis Transit Commission (CKTC) is the governing body for RIDER operations. The City of Salisbury is a direct recipient of Section 5307 funds. Rowan County and Cabarrus County also receive Section 5307 funds through an arrangement with NCDOT. The NCDOT has indicated that this arrangement may be transitioned in 2022 to the County systems. The County Commissioners are the governing bodies for these systems.

Section 5339 Bus and Bus Facilities Grant City of Concord

The City of Concord is the designated recipient for these funds and apportions to the 4 urban systems in the UZA based on a mutually agreed upon formula/agreement. The funds address urban capital needs in the UZA for the 4 transit systems. Local matching funds are provided by the respective local government entity.

Section 5310 Enhanced Mobility Urban Grant City of Concord

These funds are targeted for urban senior transportation and individuals with disabilities transportation options, which exceed the ADA requirements. The City of Concord is the designated recipient for these funds and administers this program through a competitive grant selections process.

Section 5303 Transit Planning Grant City of Concord

These funds are used for transit administration and planning for the RIDER system. The local match is shared between the City of Concord and the City of Kannapolis.

Section 5307 Transit Funds

City of Salisbury

In 2015, The City became a direct recipient of FTA Section 5307 funds. Prior to that time, the City received Section 5311 funds through the North Carolina Department of Transportation (NCDOT). Capital items are funded at 80 percent, operation items at 50 percent. The State provides assistance for operations through the State Maintenance Assistance Program (SMAP), which is allocated on the basis of number of passengers, number of service hours, amount of fares and local government match. Salisbury Transit also provides ADA Paratransit service.

Section 5303 Transit Planning Grant

City of Salisbury

These funds are used for transit administration and planning. The local match is provided by Salisbury.

Congestion Mitigation and Air Quality Improvement Funds Cabarrus-Rowan MPO

The CR MPO is scheduled to receive at least \$1 million per year from NCDOT for projects that improve traffic congestion and air quality. Transit services/expansions qualify for this program. With this allocation, the CR MPO provided funding for the following 4 projects beginning in 2004:

- Express peak hour transit service between downtown Kannapolis and downtown Salisbury with stops in south Rowan. Service will be operated by the Rowan Transit System.
- Free transit service during Ozone Action Days in Salisbury
- Saturday and Sunday service for the RIDER bus system in Concord and Kannapolis
- Free transit service on the RIDER bus system during the Race Weeks at Charlotte Motor Speedway

These projects represented over 14 percent of the total allocation during the initial years of the CMAQ allocation. Each CMAQ Transit project has boosted transit ridership for each of 2 fixed route systems and 2 county providers. The MPO hopes to continue these types of CMAQ initiatives with future allocations to the CR MPO.

Rowan Transit Funding

With support of the MPO's Transportation Advisory Committee (TAC), the Rowan Transit System (RTS) submits an annual Community Transportation Program (CTP) application to the NC Public Transportation Division. The Rowan County Board of commissioners is the official applicant for these funds. The annual CTP application requests grant support for administrative costs under 5311, 5310 State/Rural funding to support transportation for Rowan Vocational Opportunities, Trinity Living Center and increasing demand for dialysis transportation (no local match), and 5310 Federal/Urban in support of preventative maintenance of the fleet.

The FY 23 application will apply for an estimated \$250,300 in administrative funds, \$211,520 in capital funds and \$385,000 in operating funds. Transportation program grants require a 15 percent local match for Administrative and 10 percent local match for Capital funds and 50 percent match for Operating funds. Each program project period is for July 1, 2022 to June 30, 2023.

RTS also submits an annual application for Rural Operating Assistance Program (ROAP). In FY22 the NC Board of Transportation released the application indicating Rowan County is eligible for \$252,187:

Elderly & Disabled Transportation Program (EDTAP)	\$117,907
Employment Transportation Assistance	\$36,865
Rural General Public Program (RGP)	\$97,424

EDTAP has no local match requirement and provides additional transportation for Elderly & Disabled (RTS retains majority of these funds for operations and Trinity Living Center and Therapeutic Recreation are sub-allocations determined with the input from the TAC).

Employment Transportation is also 100 percent grant funding, and is utilized specifically for transportation to work and/or other qualifying employment related destinations. The RGP portion requires a local match of 10 percent, therefore \$10,825 will be requested from the County as part of the FY 22 application. These funds must be used

to provide general public transportation for rural county residents who travel to any public destination. RGP is used for our RITA service. Passengers are picked up at their home for life sustaining trips to doctors, pharmacies, grocery shopping, public agency appointments, and dialysis. Public passengers under 60 years of age pay a \$2.00 fare that goes towards the program match. The balance of matching funds from the county is in the approved RTS Operating Budget.

Cabarrus County Transportation Funding

Cabarrus County Transit System submits an annual Community Transportation Program (CTP) application to the NC Public Transportation Division. The CTP funding incorporates the Federal Section 5310 and 5311 programs and the State Rural Capital Program into a single application package. The Official applicant agency is the Cabarrus County Board of Commissioners.

CCTS submits an annual application for Rural Operating Assistance Program funds often referred to as the ROAP application. In FY 22 the NC Board of Transportation awarded the following grants:

Elderly & Disabled Transportation Program (EDTAP)	\$111,989
Work First Employment Transportation Assistance	\$46,635
Rural General Public Program (RGP)	\$77,960

EDTAP and Work First require no local matching. The RGP funds require a 10% local match which is derived from passenger fares and County match.

Future Urban Service and Study

The Charlotte Regional Authority for Transportation (CRAFT) has been formed by the regional MPO agencies. CRAFT was created by resolution by all four TAC bodies and includes the four MPOs in the Metrolina region: Cabarrus/Rowan, Gaston/Lincoln/Cleveland, Charlotte (Mecklenburg/Union/Iredell), and the Rock Hill-Ft. Mill (SC) Urban Area. CRAFT’s role is to enhance communication among local and regional entities, promote awareness of regional concerns, and to provide an educational

forum in the Charlotte metropolitan bi-state region that addresses significant common issues.

One goal of CRAFT is to evaluate mobility options throughout the metro region and into South Carolina. In recent times, the CR MPO jointly funded the Connect Beyond Study to look at transportation options in the region and for the existing Charlotte Area Transit System (CATS). CATS currently provides regional bus service to surrounding counties with the exception of the CCX which is jointly funded and operated by CK Rider Transit to connect to the JW Clay Station of the LYNX/Blue Line Extension. In addition, the CR MPO was previously a partner in a regional study to evaluate HOV/HOT lanes on I-85, which would make express bus service more competitive from a time standpoint with the single occupant vehicle. This study known as the Fast Lanes Study was completed in 2009 and the City of Charlotte has progressed into 2 additional phases of the study that includes federal funding through the FHWA Value Pricing Program. In addition to bus service, the future extension of the LYNX/Blue Line Extension will shape cross commuting behavior in Cabarrus and to the rest of the Metrolina Region including the proposed LYNX/Silver Line to Charlotte-Douglas Airport.

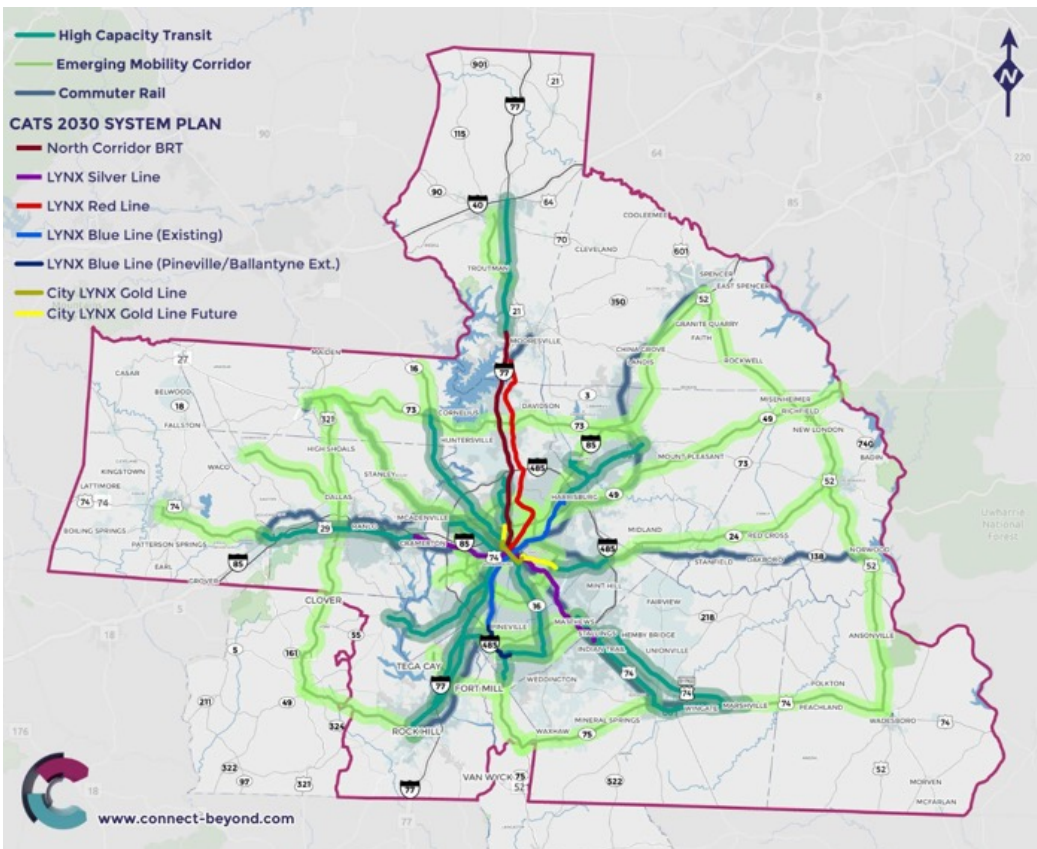
In 2021, the MPO partnered with the other MPOs and transit agencies in the region on a transit plan known as Connect Beyond to create a total mobility network. This network would provide residents and visitors with a variety of alternative mobility options to travel seamlessly around the 12-county region. A total mobility network would help improve transportation choice and enhance mobility for everyone in the region, creating a shared regional transit vision.

A key component of this study was the identification of High Capacity Transit (HCT) Corridors. HCT is a form of public transit that offers more passenger capacity and operates at higher speeds with fewer stops than traditional local bus services. A total of 13 HCT corridors were identified in this study with many extending beyond Mecklenburg County.

These corridors were evaluated through a 2 step process that included a Level 1 corridor evaluation and a Level 2 regional analysis. The main objective of the Level 1 step was to assess each candidate corridors' readiness (or preparedness) for HCT service. Both qualitative and quantitative measures were used to evaluate the corridors and assign a score for each criterion with an overall score. The Level 2 step used the regional travel demand model data and the findings from the Travel Market Analysis to project travel demand and future roadway capacities, population and employment growth trends, and considered where transit services could be most successful based on traditional transit planning performance indicators that created a picture of where HCT could be most effective. As an example, the Travel Market Analysis indicated that there was about a 40 percent capture rate of home based work trips between the "Northeast Charlotte" market and the "Cox Mill" market, which was the 8th highest external trip volume outside Mecklenburg County. In comparison, the capture rate is projected at 14 percent between the "Airport" market and the "Belmont" market in Gaston County.

For a copy of the Travel Market Analysis, contact the MPO office at (704) 791-0608.

One of the main performance indicators was evaluating the relationship between vehicle travel volumes and roadway operating capacity or volume to capacity ratios. **Connect Beyond** identified candidate corridors that could help offset increased travel demand by implementing these new or enhanced HCT solutions. One of the key HCT corridor recommendations emerging from this process was Highway 29 North or Recommended HCT Corridor I. This corridor would extend service from the current LYNX Blue Line terminus north of UNCC into Cabarrus County. Two route options are possible: an extension to the Concord-Padgett Regional Airport and/or an extension into downtown Concord. This corridor had an overall composite score of "medium" in the Connect Beyond study. (It scored "high" in 3 of 10 criteria for the Level 1 part.) Nine other HCT corridors scored in this range in the region, with 7 of those corridors extending outside Mecklenburg County.



Map 5-5
Connect Beyond
Mobility Corridors

In January 2021, the MPO adopted a Comprehensive Transportation Plan (CTP) amendment to include the Highway 29 North HCT corridor, or include a Fixed Guideway element of the MPO’s Public Transportation and Rail map for the first time ever. In addition, the Financial Plan for this MTP includes revenue beginning in the year 2046 to begin operation of fixed guideway service to the Charlotte Motor Speedway complex as an initial step. This service would supplement or possibly replace the current CCX connection to the LYNX Blue Line. Most importantly, the region’s Metropolitan Commission (MTC) of CATS adopted the regional map of HCT corridors as part of the overall Connect Beyond Study in October 2021 (Figure 3). Additional study will be required of the Highway 29 North HCT as was originally intended in 2002 before the MTC’s

decision to terminate the Blue Line Extension south of I-485 due to cost savings.

For a HCT Corridor, the MPO or transit agency would need to initiate the local planning process outlined above, adopt a locally preferred alternative into the long-range plan, and apply for FTA funding. In addition to the other criteria, corridors will need to demonstrate strong ridership forecasts to make the investment a strong candidate in the very competitive CIG process. As such, a key first step to bring a HCT corridor to life is to build up transit ridership in the identified corridors by implementing new express and local bus services like the CCX.

For a copy of the Connect Beyond Regional Plan, contact the MPO office at (704) 791-0608.

Figure 5-14 Planning Process for High Capacity Transit Corridors



Table 5-2 Essential Actions in Each Capital Investment Grants (CIG) Phase

Phase	Essential Action
Planning & Programming (Alternatives Analysis)	<ul style="list-style-type: none"> Complete Alternatives Analysis <ul style="list-style-type: none"> Select Locally Preferred Alternative FTA guidance / Travel Demand Forecast Adopting Locally Preferred Alternative into fiscally constrained Long Range Transportation Plan
NEPA (30% Engineering)	<ul style="list-style-type: none"> Gain Commitments of non-New Starts funding Complete sufficient engineering and design
Final Engineering	<ul style="list-style-type: none"> Complete engineering design plans Complete 3rd Party Agreements Recommended for Construction Grant Agreement
Construction	<ul style="list-style-type: none"> Construct HCT line Complete any required Operating and Maintenance Agreements Final systems testing
Initiate Revenue Service	<ul style="list-style-type: none"> Complete vehicle testing

Aviation Element

Concord-Padgett Regional Airport

The Concord-Padgett Regional Airport (CPRA), owned by the City of Concord, is ranked as the 3rd busiest towered airport in North Carolina. In 2020 the operations at the airport totaled 71,882 of which 2331 were air carrier operations and 6,001 were air taxi operations and 50,662 were classified as transient aircraft operations. Concord-Padgett Regional is a FAA certified Part 139 Class I airport with Index C firefighting and rescue capability. The Concord-Padgett Regional Airport is an important local development tool for economic development and has an estimated annualized economic impact on the Cabarrus County regional economy of over \$831 million and supports over 5,000 jobs.

Map 5-6 shows the Concord-Padgett Regional Airport

The CPRA is home to several corporations, NASCAR racing teams, and 170 privately owned aircraft. The main entrance is located on Derita Road. The CPRA is primarily accessed from Exit 49 and 52 off I- 85 at Poplar Tent Road or Concord Mills Blvd or Exit 28 from I-485. Land development and economic growth around the CPRA consists of industrial, commercial, and motorsports related organizations. Airport revenue is generated by the renting of hangar space, office space, ramp space, ground services, pilot supplies, the sale of aviation fuel, and by fees and from landings, services, and parking.

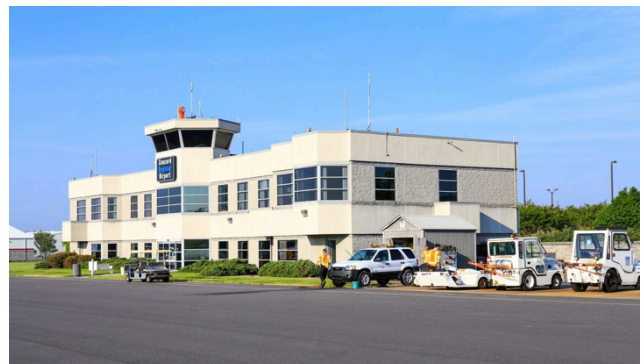
In 2013, CPRA received an FAA Part 139 Class I Airport Operating Certificate and was reclassified from a general aviation airport to a Non-Hub Primary Commercial Airport that allows scheduled airlines to service the airport. In December 2013, Allegiant Airlines began scheduled passenger service with twice weekly service to the Orlando Sanford International Airport with 166 passenger MD-80 aircraft. That service proved to be sustainable and in 2015-2016 the City of Concord, NCDOT, and FAA made infrastructure investments in airline passenger facilities that included a large aircraft parking apron, 32,000 square foot two gate terminal building, entrance roadway, and a 700-space parking garage. Allegiant has utilized these new facilities and

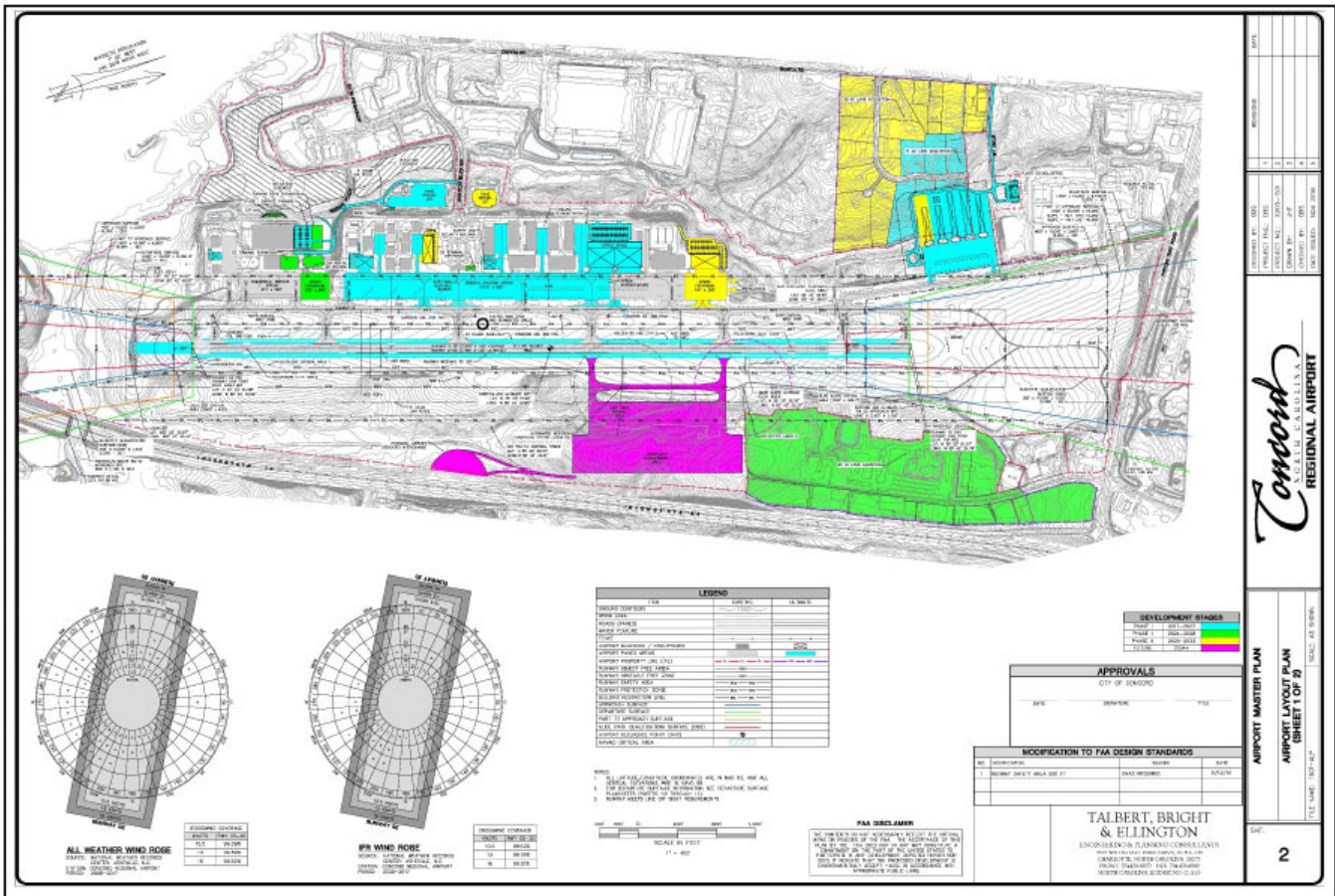
expanded their service at CPRA to over 30 weekly flights to nine non-stop destinations with 177 passenger Airbus A-320 aircraft. These flights continue to average over 75% of capacity.

The airport is also utilized by many general aviation users including private aircraft owners, corporations, and flight schools. NASCAR race teams continue to be important airport users. UNCC sports teams now regularly use commercial charter services out of CPRA to away games around the country.

In 2019, the airport celebrated its 25th Anniversary and City Council passed a resolution changing the name of the airport to Concord-Padgett Regional Airport in honor of long-time Concord mayor Scott Padgett. CPRA has made numerous airfield improvements, including lengthening and strengthening the runway and aircraft parking areas to accommodate larger aircraft and in facilities that expand the airport's capacity. In 2019, the airport completed a Master Plan update that will guide a new round of airfield improvements including a runway widening, apron expansion, and fuel storage tank area expansion.

Because of its close proximity to I-85, I-485, Charlotte Motor Speedway at Concord, Charlotte Metro area, and the North Carolina Research Campus, CPRA remains attractive to corporations in the CR MPO area. The MPO Transportation Plan includes the widening of Derita Road and adding traffic signals to accommodate the current and future growth of the CR MPO area. Upon the completion of the widening of Derita Road (TIP# U-4910), the street network should improve access and mobility around the CPRA facility.





Map 5-6 - Concord Padgett Regional Airport Master Plan

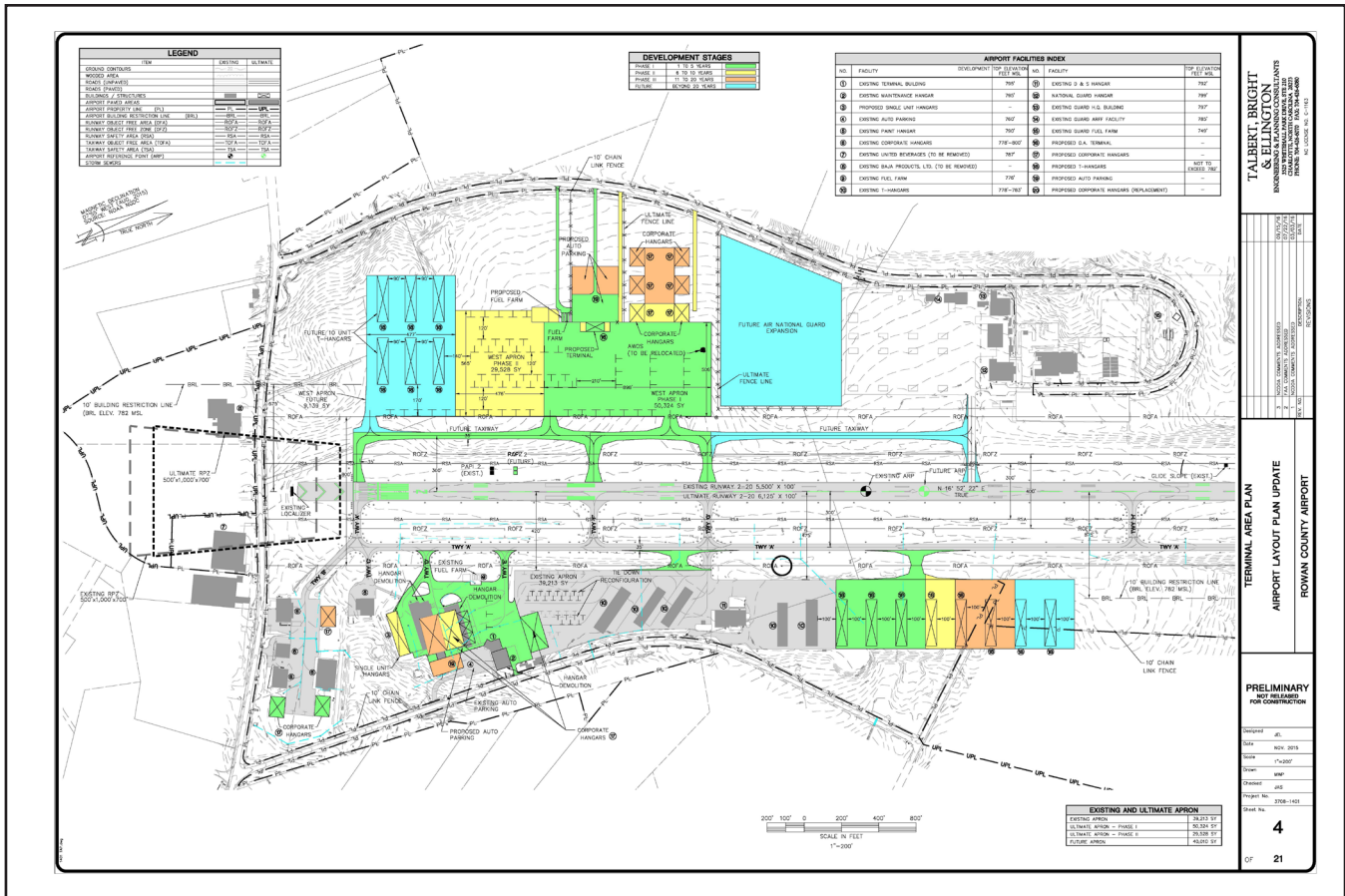


Mid-Carolina Regional Airport

The Mid-Carolina Regional Airport (RUQ) is a general aviation airport located in the heart of the highest populated corridor of the Piedmont region, RUQs proximity to I-85, I-77 and I-40 offers convenient access to Charlotte, Winston-Salem, Greensboro and High Point. The completed

widening project of Interstate 85 in Rowan County to eight lanes provides even more efficient travel from surrounding communities to the airport. The population within 30 minutes of the airport is now over 480,000.

Map 5-7 shows the Mid-Carolina Regional Airport



Map 5-7 - Mid-Carolina Regional Airport Master Plan

The airport and FBO are operated, maintained, and preserved by Rowan County for the benefit of the community and all airport users. RUQ provides a cost-effective environment for air transportation while contributing to and generating economic benefit by acting as a gateway to Rowan County. The airport strives to be self-sufficient with revenues generated from leasing hangars, tie-down spaces, ground services, sale of fuel, and other airport related services.

The RUQ offers a 5500' X 100' newly resurfaced (crowned and grooved) runway, with ILS/RNAV and approaches, and a full-length taxiway in support of corporate, military and private aviation. In addition to flight operations the airport is home to compatible business uses, such as flight training, skydiving, aircraft maintenance, avionics installation and aircraft refinishing (paint & upholstery). The North Carolina Highway Patrol Flight Operations as well as the North Carolina Army National Guard's Army Aviation Support Facility are based at RUQ. As of the time of this

report the airport has over 90 based aircraft, including corporate flight operations for Food Lion and Shoe Show. There are more than 51,000 aircraft operations per year. The economic impact of RUQ in 2021 is \$146 million, which includes: 850 jobs supported, \$5.2 million in tax revenue and \$43.2 million in personal income.

The current widening project of Interstate 85 in Rowan County to eight lanes will provide easier accessibility from surrounding communities to the MCRA, including the Greensboro/Winston-Salem/High Point and Charlotte Metro regions.

Private Transport

There are approximately sixteen (16) taxicab companies operating in the MPO planning area. These privately owned companies provide on-demand and client based transportation services. Various fares are charged on a per mile basis. Local governing boards oversee and regulate certain fees and service areas on a license basis.