

Charlotte Area Transit System

TRANSIT VISION

2030 TRANSIT CORRIDOR SYSTEM PLAN





One of the fastest growing areas in the United States, the Charlotte region has been experiencing explosive growth for the past two decades. From 2007 to 2017, Mecklenburg County's population grew at a rate of 24 percent* and today, an estimated 100 people are moving to the region each day. Currently, the Charlotte region is home to more than 1.8 million people and is expected to grow to over 2.5 million by 2030. This has created a city that is abundant with vibrant neighborhoods; local, regional and global businesses; various academic institutions; entertainment venues; and employment and cultural opportunities.

With the benefits of growth however, come problems of increased congestion, poor air quality and longer commute times. As a City, providing a strong transportation network with mobility options for residents, businesses and employees is critical to remaining competitive and offers alternatives that improve air quality and mitigate traffic congestion.

So how do we as a transit agency successfully support sustainable growth in the region?

In 1998, the County created the 2025 Transit-Land Use Plan and enacted the ½ cent sales tax as a blueprint for investing in public transit projects to proactively address these potential “growing pains.” The belief was this: by integrating rapid transit system with land-use planning along five strategic corridors, it would support economic growth in a way that encourages sustainable environments, improves the quality of life and attracts businesses and people to the region. And thus, the 2030 Transit Corridor System Plan was born.

CATS continues to update the 2030 Transit System Plan while implementing rapid transit project improvements and strengthening the current bus network. These investments increase access and mobility options through the expansion of transit services, enhancing customer amenities at stops, creating pedestrian-friendly neighborhoods in close proximity to light rail stations, and integrating transit oriented development policies.

But there is more to accomplish. As the region continues to grow, CATS is poised to fulfill the transit vision of the 2030 Corridor System Plan that leaders established decades ago, creating an exciting era in the Charlotte region's history.

**2019 MECKLENBURG COUNTY COMMUNITY PULSE REPORT*

Rapid Growth



CONNECTING TRANSIT AND LAND USE

Integrated land-use planning and transit oriented development (TOD) are the cornerstones of the 2030 Transit Corridor System Plan and a key component in moving the region forward. Successful TOD creates pedestrian-friendly environments near rapid transit stations that connect to residential, retail and employment opportunities. Making these strategic land use decisions inspires residents to use transit as an alternative for their daily and occasional travel. These environments create a sense of place or community and support a better live, play and work lifestyle.

The primary benefits of TOD include:

- Reducing sprawl and protecting existing neighborhoods
- Reducing commute times and traffic congestion
- Improving environmental quality and open space preservation
- Encouraging pedestrian activity and discouraging automobile dependency

Since light rail opened in 2007, more than \$2.8 billion in new private development in retail, office, and residential units are planned or have completed construction within ½ mile of the LYNX Blue Line. These investments have revitalized the South End, bringing in new tax revenues to the city and county which are reinvested in education, police, fire, roads and other public programs other than transit.

In December of 2018, the Federal Transit Administration (FTA) approved the City of Charlotte for a \$920,000 grant to plan for TOD along the proposed LYNX Silver Line light rail alignment. CATS will work with regional stakeholders to examine multimodal connectivity, accessibility, mixed-use development opportunities that supports and stimulates growth along the LYNX Silver Line.



A COMPREHENSIVE APPROACH

In order to complete the 2030 Transit System Plan, additional funding will need to be identified from local, state and federal sources.

The first step to creating a rapid transit network is to understand the public’s transit and land use vision for the region. CATS prioritized this comprehensive approach in 1998 with the adoption of CATS’ first rapid transit plan, the Centers, Corridor’s and Wedges Plan.

In 2006, and many iterations of rapid transit plans later, CATS adopted the current 2030 Transit System Plan. As CATS looks forward to 2030, and beyond, it is critical to advance multiple rapid transit projects to meet the need of our current and future residents.

But Charlotte isn’t the only City prioritizing transit. Los Angeles, Atlanta, Denver, and Seattle are rapidly advancing ambitious transit plans. Their plans are similarly funded utilizing a variety of sources, including federal funds. To be competitive on the national stage, the Charlotte region must continue the comprehensive land-use and transit planning approach.

The Federal Funding Process

Major transit infrastructure projects have the ability to compete for federal funding from the Federal Transit Administration (FTA). Prior to entering into this process, it is a requirement that the design and engineering of a project be in its advanced stages. This is to ensure reliability of the project scope and cost.

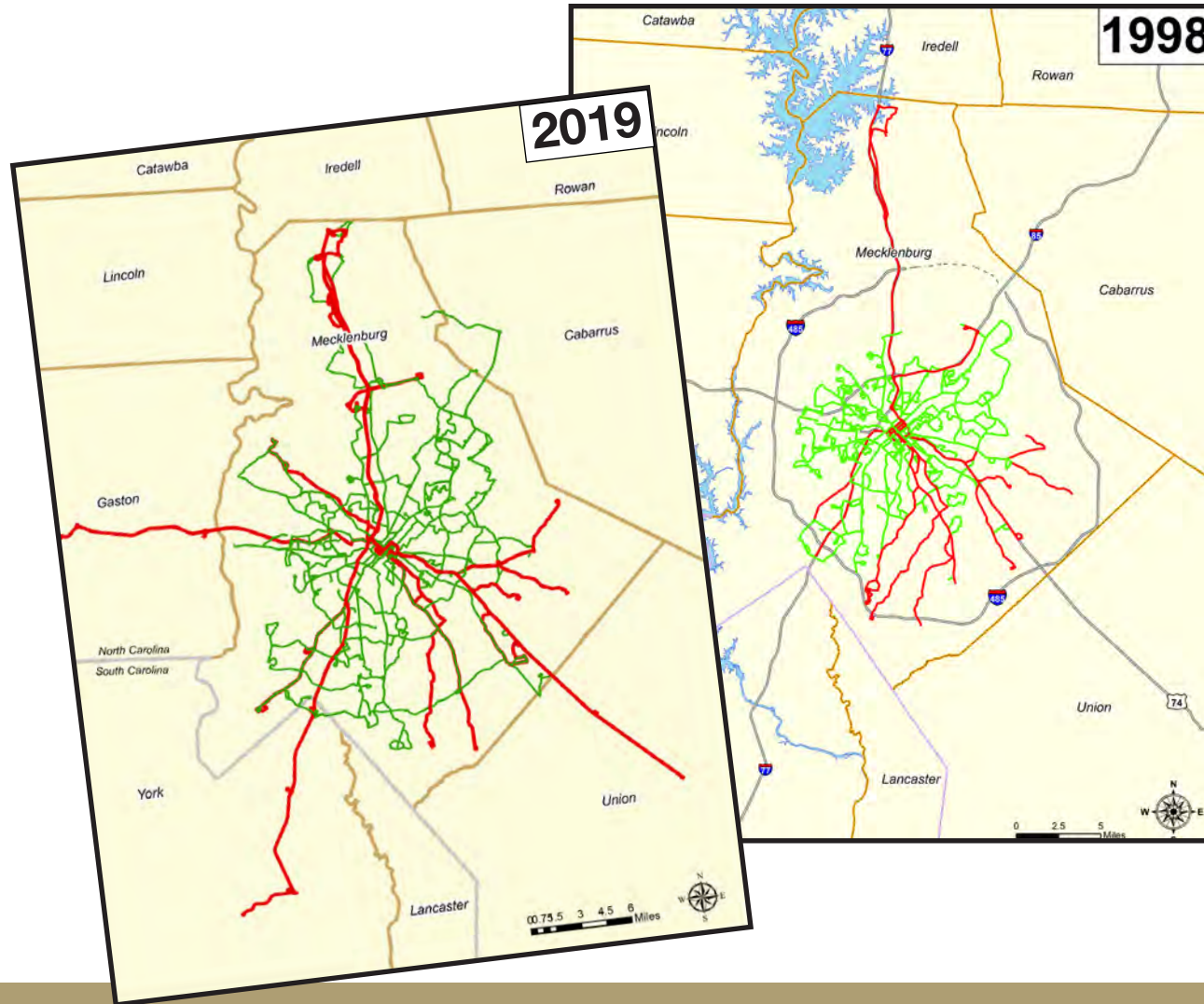
The LYNX Silver Line is entering into the pre-project development phase, which will be followed by project development before it is eligible for federal funding.

Federal Funding Key Facts

- The Project Development Phase must be completed within two years
- At the beginning of the Engineering Phase, the FTA locks in the federal commitment amount



YESTERDAY AND TODAY



Since the citizens of Mecklenburg County enacted a local sales tax dedicated to public transit, much has been accomplished to increase services, enhance customer amenities, and create a more reliable and safe transit system. More than \$1.2 billion in local tax dollars has been invested with the following results:

- Ridership has more than doubled to over 21 million riders in FY2019
- Kicked-off a bus-system redesign to increase frequency and cross-town connections
- Created funding partnerships with the surrounding counties to create regional express bus service
- Expanded service hours and improved service frequency and reliability
- Built four new community transit centers
- Built and operate the state's first light rail line, the LYNX Blue Line, carrying more than 28,000 each weekday
- Started the region's first limited stop enhanced bus service, the Sprinter, from Center City to Charlotte Douglas International Airport
- Began construction of a second phase of the CityLYNX Gold Line Streetcar and future Charlotte Gateway District and Multimodal Station
- Completed the LYNX Silver Line Rapid Transit Study and Pineville Ballantyne Rapid Transit Study adopting two new light rail lines into the 2030 Transit Corridor System Plan
- Built 10 new CATS owned and operated park and ride facilities
- Expanded the fleet to over 500 bus, rail and vanpool vehicles

Community Improvements



CONNECTING THE VISION


The Transit Corridor System Plan

In 2006, the Metropolitan Transit Commission (MTC) updated and adopted the 2030 Transit Corridor System Plan, furthering the vision outlined in the 2025 Integrated Transit/Land Use Plan from 1998.


The 2030 Transit Corridor System Plan consists of multiple transit modes in five corridors, a series of improvements in Charlotte's Center City and bus service and facility improvements to link our area's key centers of economic activity.

Once completed, this plan will encompass 25 miles of commuter rail, 45 miles of light rail, 10 miles of streetcar, and an expanded network of buses and other transit services.


Transit Modes




LYNX Red Line
North Corridor
Center City to Mount Mourne
25-mile commuter rail line




LYNX Blue Line (Operating)
Northeast & South Corridor
I-485 at South Blvd to UNC Charlotte – Main
18.9-mile light rail line



CityLYNX Gold Line (Operating 1.5 miles)
Center City
10-mile streetcar line

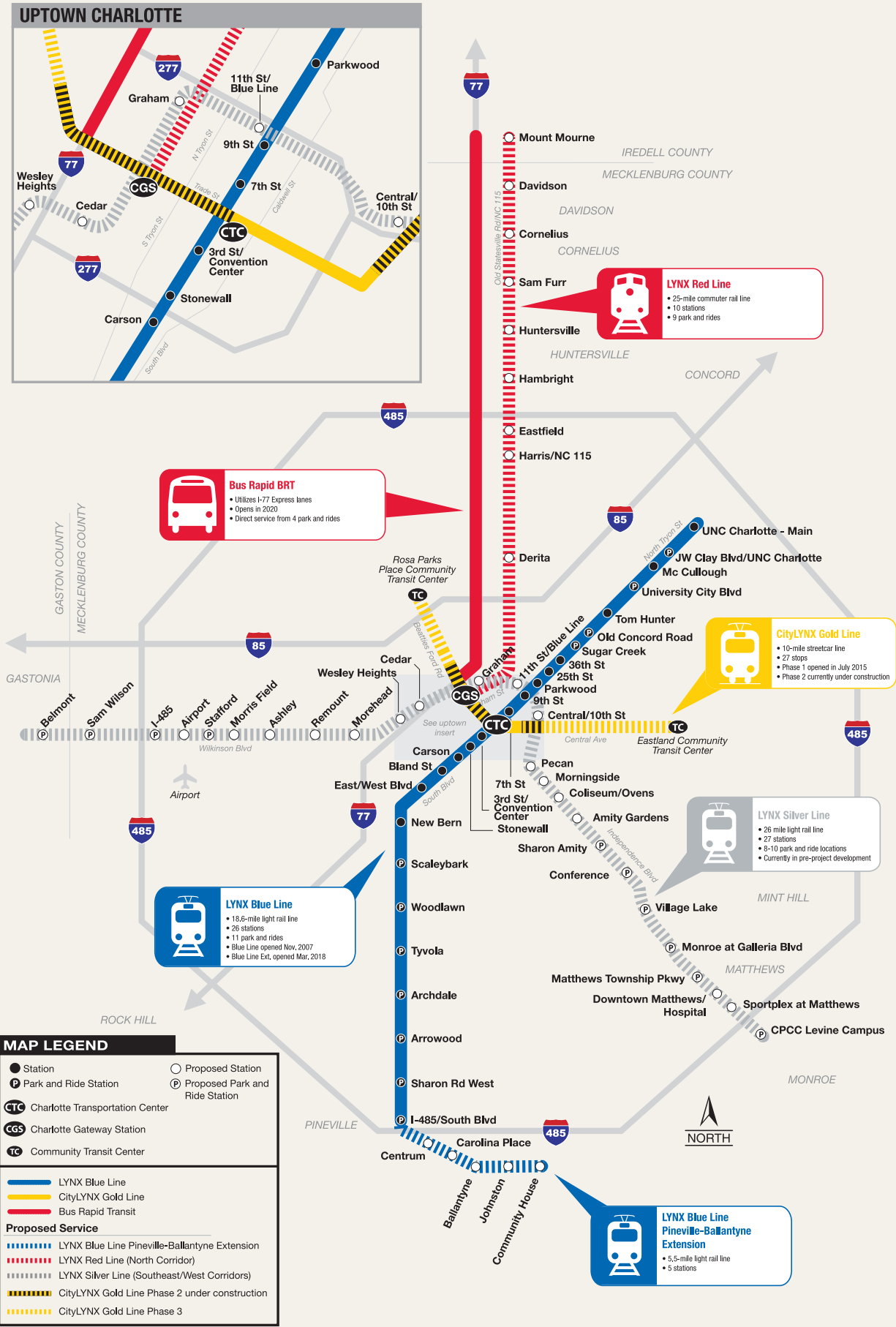


MetroRAPID (Opening Feb. 3, 2020)
North Corridor
Center City to North Mecklenburg County
Bus Rapid Transit



LYNX Silver Line
Southeast & West Corridor
Matthews to Belmont
26-mile light rail line

2030 Transit Corridor System Plan



CONNECTING TODAY



LYNX Blue Line

In 2007, the Charlotte region entered a new era in public transportation with the opening of North Carolina’s first light rail line, the 9.5-mile LYNX Blue Line. In the first year of operation, 72% of LYNX riders previously drove alone which helped ridership exceed first year projections by 56%. The original South corridor initially operated with 15 stations from the I-485 Station into a 7th Street Station in Uptown Charlotte.



In March 2018, a 9.3-mile Northeast extension of the LYNX Blue Line opened, connecting the LYNX Blue Line terminus at 7th Street, to UNC Charlotte’s main campus in University City. Today, the entire LYNX Blue Line now runs almost 20 miles long, with 26 stations, including 11 park and ride locations. The LYNX Blue Line operates trains every 7.5 minutes during rush hour and provides a congestion-free commute over 28,000 riders each day.

With the construction of the light rail line, City of Charlotte include overall capital investments projects, including road, sidewalk, bike lanes, skip trail, storm drainage, and beautification improvements along the entire corridor. Also, with the opening of the extension, CATS redesigned its bus network so that over 30 bus routes are timed to connect with trains at the LYNX Blue Line stations.

The LYNX Blue Line has helped to reinvigorate North Charlotte. In addition to attracting riders, the LYNX Blue Line has generated over \$2.8 billion in completed, permitting and under construction private development. Current projections include 12,000 new housing units, 3.8 million square feet of new office space and over 1.3 million square feet of retail space by 2035.

I-485 at South Blvd to UNC Charlotte – Main

LYNX Blue Line Highlights

- 18.9 miles
- 26 stations
- 11 park and rides
- Over 6,000 parking spaces
- Service: 7 days a week, 5:00 a.m. – 2:00 a.m. on weekdays

LYNX Blue Line Benefits:

The Charlotte area is poised for significant growth and the LYNX Blue Line will benefit the region by providing:

- Access to Employment – 72% increase expected within the light rail station areas
- Access to non-work activities – education, health and human services, cultural facilities.
- Network Mobility – increased transit network
- Improved Air Quality – reduced vehicle miles traveled by single-occupant vehicles
- More commute choices – improved mobility and travel time savings

Destinations



- Spectrum Arena
- BB&T Ballpark
- NASCAR Hall of Fame
- Bank of America Stadium



- Carolinas Medical Center – University



- Bechtler Museum
- Blumenthal Performing Arts Center
- Discovery Place
- Harvey B. Gantt Center
- Mint Museum



- Blumenthal Performing Arts Center
- ImagiON The Joe and Joan Martin Center
- Charlotte Convention Center
- Carolina Pavilion



- UNC Charlotte Center City Campus and Main Campus
- Historic North Davidson

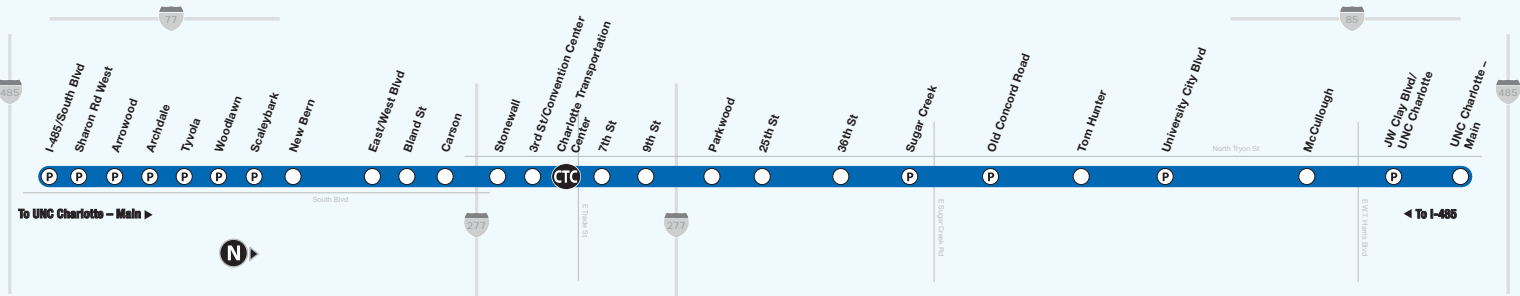


- Historic North Davidson
- Historic South End

South End at Morehead



New Bern at 3030 South



CONNECTING THE FUTURE



LYNX Blue Line Pineville-Ballantyne Extension

In Spring 2019, CATS evaluated rapid transit opportunities to serve Pineville and Ballantyne. This study evaluated both light rail options (as an extension of the LYNX Blue Line) and bus-based options (utilizing future express lanes on I-485).

Through extensive public engagement, CATS asked citizens to provide feedback on a number of alignment options that would meet the corridor goals. Through thorough analysis, CATS has recommended a long-term light rail alignment and short-term bus rapid transit concept.

This extension of the LYNX Blue Line would provide close access to more existing and potential activity center by serving Carolina Place Mall and integrating into Ballantyne Corporate Park, potentially crossing over Route 521.

Next steps:

- Secure funding
- Advance to design phase
- Establish a vision for the future station areas

LYNX Blue Line Pineville-Ballantyne Extension Highlights

- 5.5 miles
- 5 stations
- Recommended up-fit of existing Blue Line stations to accommodate 3-car trains
- Expanded parking at I-485
- Other parking & station area plans have not yet been established

Destinations



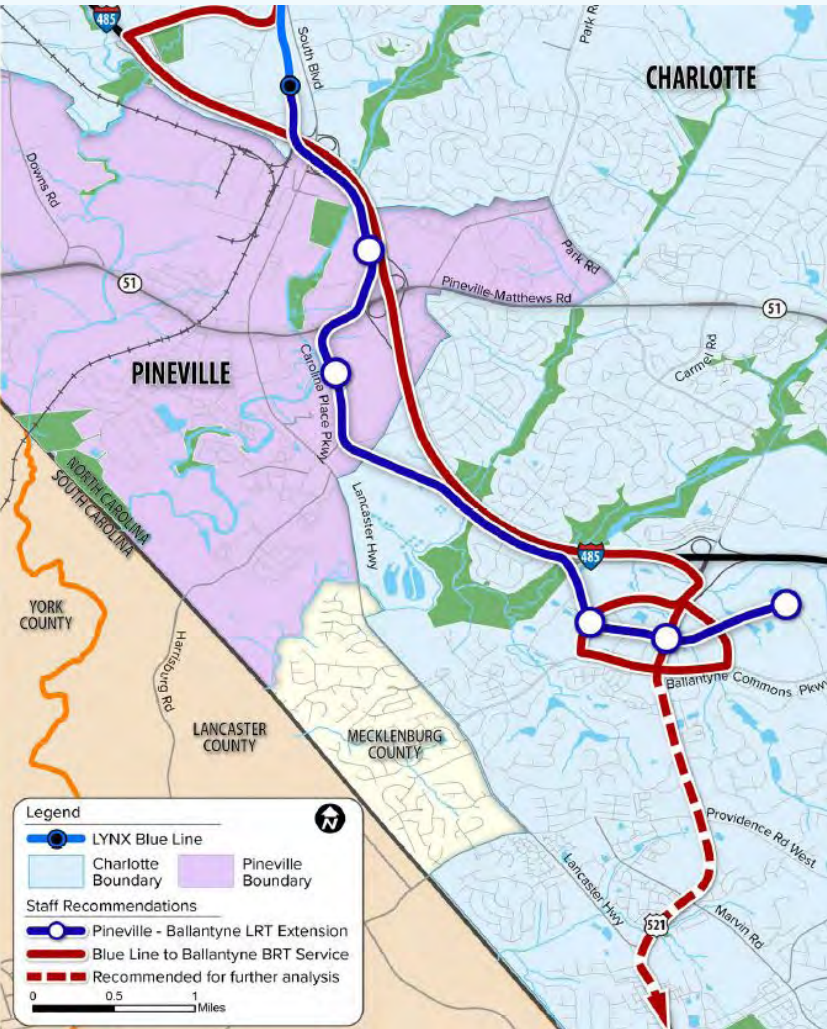
- Carolina Place Mall
- Ballantyne Corporate Park



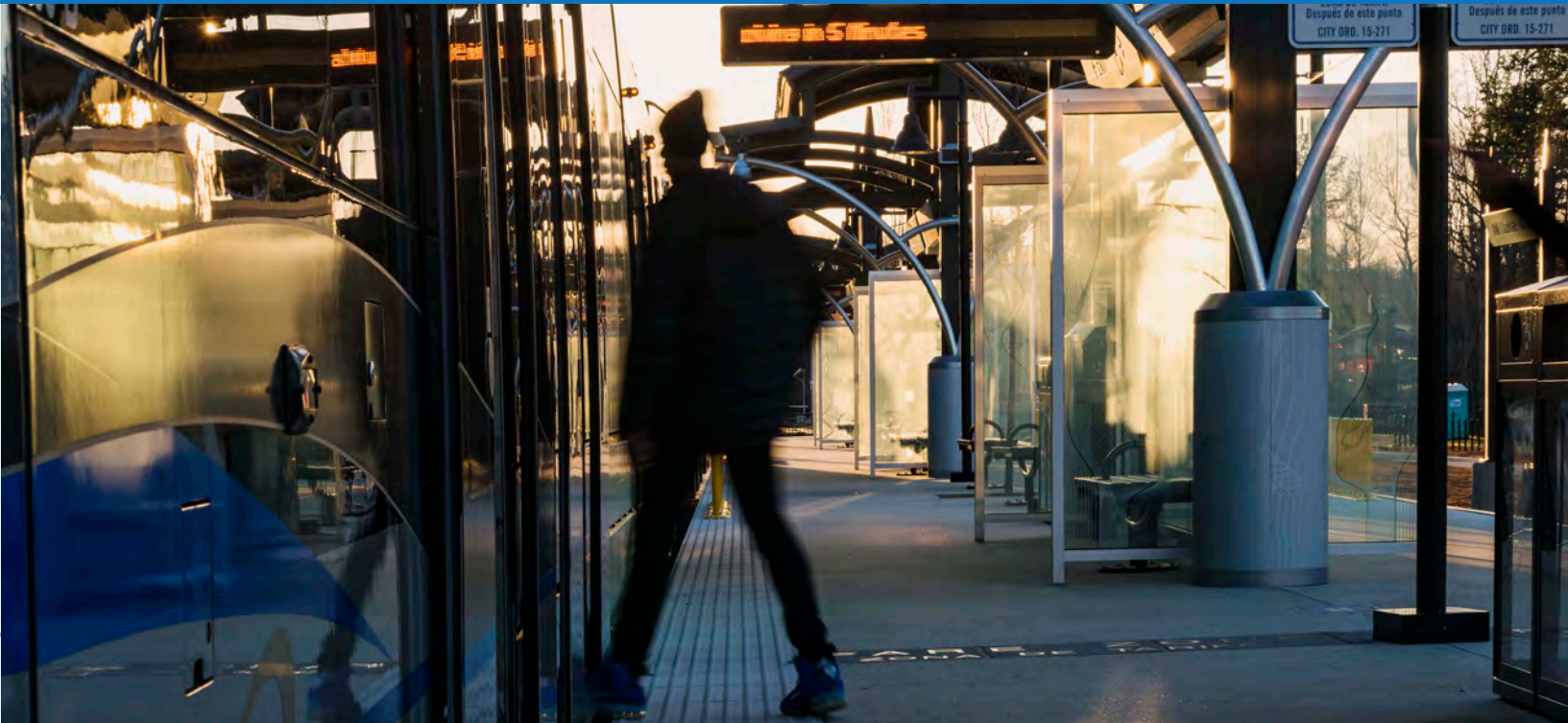
- Downtown Pineville



- Atrium Health - Pineville



LYNX Blue Line Extension Highlights



CONNECTING THE FUTURE



LYNX Red Line

From bustling Center City to the beautiful Lake Norman area to roaring Race City, USA, the LYNX Red Commuter Rail Line will connect the towns of Davidson, Cornelius and Huntersville to Center City Charlotte at the proposed Charlotte Gateway Station. The commuter rail line would operate along Norfolk Southern Railroad's O-Line rail corridor. Once at the Charlotte Gateway Station, customers will have access to arts, sports, cultural and employment opportunities through connections on the CityLYNX Gold Line along with connections to CATS bus routes and intercity rail and bus lines.

While the LYNX Red Line remains the locally preferred alternative, CATS will also implement the rapid transit option in the North, including MetroRAPID Enhanced Bus.

Center City to Mount Mourne

- 25 miles
- 10 stations
- 9 park and ride locations
- 1,200 parking spaces
- 4,600 estimated daily ridership

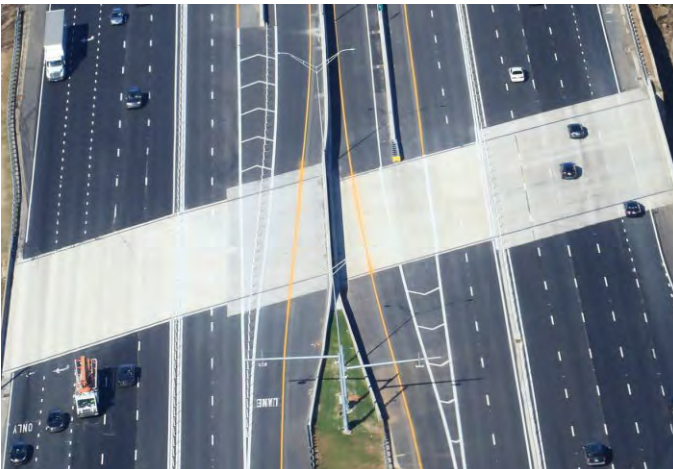


MetroRAPID Bus Rapid Transit

In 2020, CATS will introduce enhanced bus services to North Mecklenburg County with MetroRAPID Bus Rapid Transit service. Twelve new MCI over-the-road coach buses will serve the 48X Northcross Express, 53X Northlake Express, 63X Huntersville Express, and 77X North Mecklenburg Express.

Center City to North Mecklenburg County

- Component of CATS Envision My Ride initiative
- Addition of 4th Express Bus Route to North Mecklenburg County
- Utilize I-77 Express Lanes; cost included in CATS fare
- Direct service from all 4 park and ride locations in North Mecklenburg
- Routes to operate every 10-20 minutes during rush hour



The Hambright Direct Connect provides direct access to I-77

Center City to Mount Mourne

Center City to North Mecklenburg County

Destinations



- CPCC Huntersville
- Davidson College



- Lowes Corporate Headquarters



- Lake Norman Regional Medical Center
- Novant-Huntersville Hospital

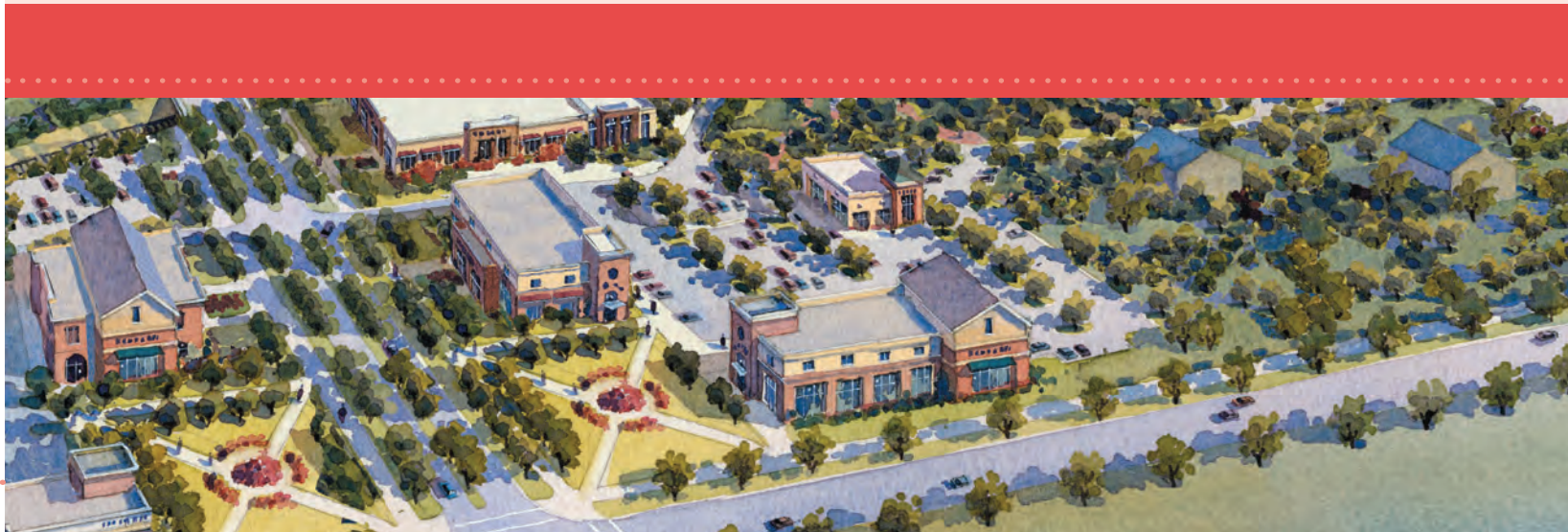
Community Investments by 2035



- 16,391 new residential units
- 3.1 million sq. ft. new office space
- 2.3 million sq. ft. new retail space



- \$5.4 billion transit oriented development



CONNECTING THE FUTURE



LYNX Silver Line

In 2016, light rail replaced bus rapid transit as the locally preferred alternative for the LYNX Silver Line/southeast corridor. During that time, the Metropolitan Transit Commission (MTC), directed CATS to perform an analysis to extend the LYNX Silver Line to the west.

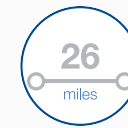
In 2019, the MTC approved light rail for the west corridor creating the LYNX Silver Line as it is adopted today, a single 26-mile light rail corridor from Matthews, through Uptown, extending westward to the airport and terminating in Gaston County. During this time, Charlotte City Council also approved \$50 to enter the project into pre-project development.

Current Status: Pre-Project Development

During the pre-project development phase, CATS staff will further refine the adopted alignment. These refinements are necessary to better understand project scope, cost and impact, all of which is required prior to entering into the federal funding process. Staff will conduct surveying, determine cross-sections, grade separations, and evaluate environmental impacts.

During this phase, staff will also identify transit-oriented development (TOD) opportunities, station locations, and define a rail trail opportunities. During this phase, staff will also evaluate extending the line into neighboring Union County.

LYNX Silver Line Highlights



Destinations



- Bojangles Coliseum
- Bank of America
- BB&T Ballpark
- Ovens Auditorium



- Novant-Matthews Hospital



- CPCC Central and Levine campuses



- Bank of America
- Charlotte Gateway District



- LYNX Blue Line

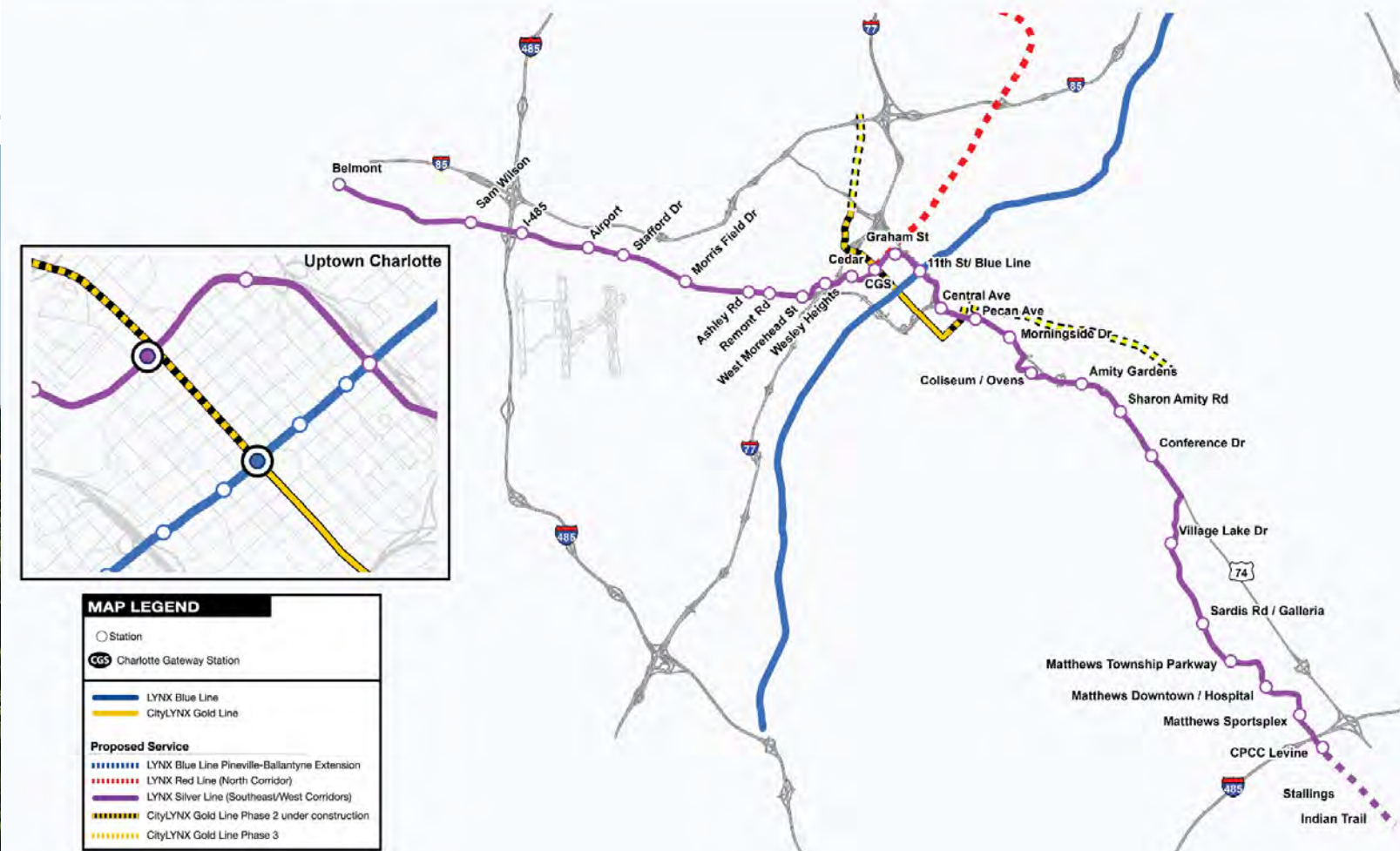


- Town of Matthews



- Charlotte Douglas International Airport

LYNX Silver Line Alignment



CONNECTING THE FUTURE



CityLYNX Gold Line

The CityLYNX Gold Line is a 10-mile streetcar system that is an integral part of the 2030 Transit Plan and is being built in phases. Once completed, it will connect east and west Charlotte with key destinations throughout Uptown. The alignment will connect with all current and future rapid transit lines, including the LYNX Blue Line, Red Line, and the West Corridor. The CityLYNX Gold Line will serve west Charlotte beginning at the Rosa Parks Place Community Transit Center and continue along Beatties Ford Road to Trade Street. It will proceed east to Elizabeth Avenue extending along Hawthorne Lane to Central Avenue and end at the Eastland Community Transit Center.

The first phase of the CityLYNX Gold Line opened in 2015 to ridership above projections. This 1.5 mile route from Center City serves the Charlotte Transportation Center, CPCC and Novant Hospital providing a total of six stops while connecting to the LYNX Blue Line.

Phase 2 of the CityLYNX Gold Line extends the streetcar line from the Charlotte Transportation Center west to French Street beyond Johnson C. Smith University and east from Novant Hospital to Sunnyside Avenue. Phase 2 broke ground in January 2017 and is expected to open for service in 2021. Future phases of the streetcar require additional funding to design and construct.



CityLYNX Gold Line

- 10 miles
- 37 stops
- Service: 5:00 a.m. – 1:00 a.m.; 7 days a week
- 16,000 projected daily ridership by 2030
- Novant Hospital to Charlotte Transportation Center in 2015

Community Investments by 2035



- Over 2,000 small businesses within 1/4 mile of line



- Property tax values increase up to \$7M
- 21,800 sq. ft. new retail space
- 276,700 sq. ft. new office space

Destinations



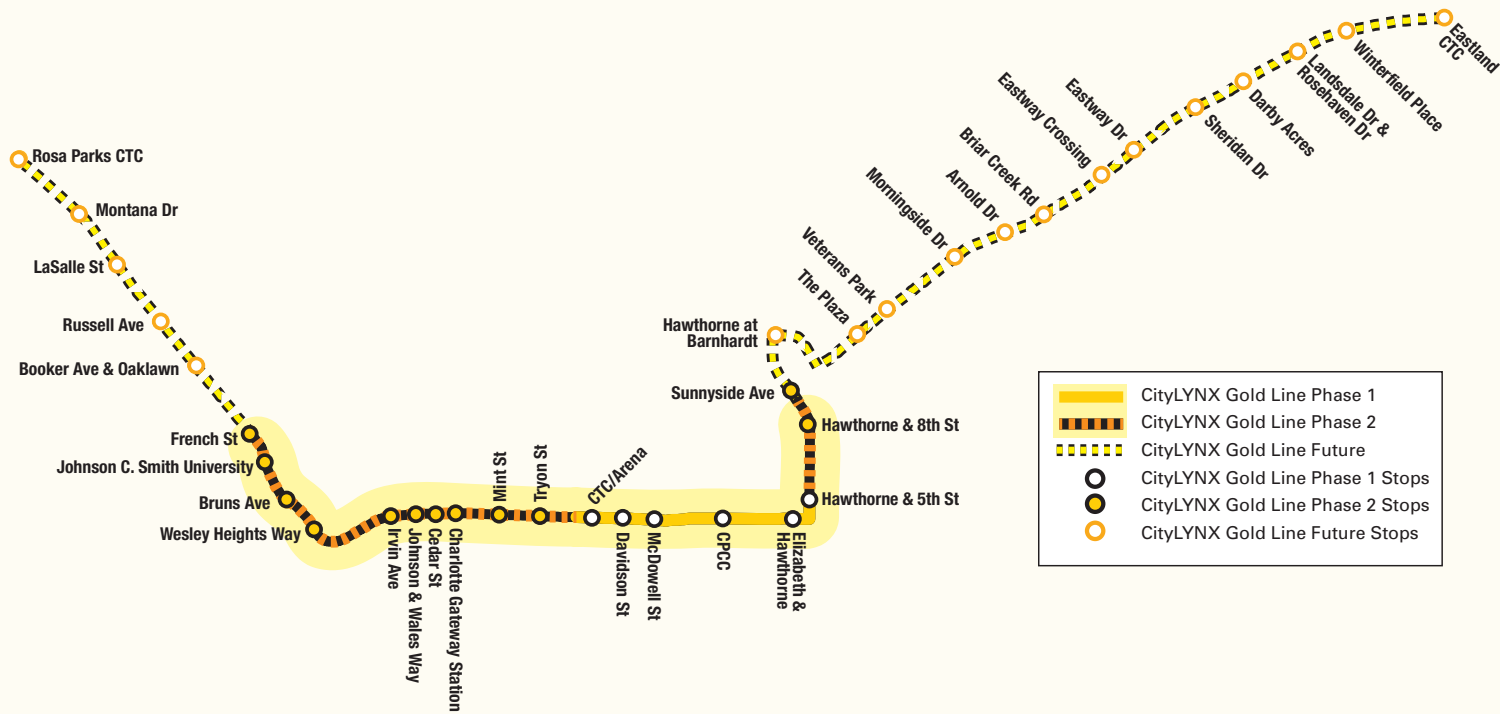
- Hornets
- Knights
- NASCAR Hall of Fame
- Panthers



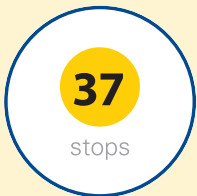
- Bechtler Museum
- Blumenthal Performing Arts Center
- Discovery Place
- Harvey B. Gantt Center
- ImaginOn
- Mint Museum



- CPCC Central Campus
- Johnson & Wales University
- Johnson C. Smith University
- Northeastern University
- UNC Charlotte Center City Campus
- Wake Forest University



CityLYNX Gold Line Highlights



CONNECTING THE FUTURE



Envision My Ride

Bus transit has existed in Charlotte since the 1930s, but it wasn't until 2000 with the creation of the Charlotte Area Transit System (CATS) that the framework of the current bus network took shape. Prior to 2016, CATS operated a hub-and-spoke bus system. Over time, this model became inefficient, but created long commutes for bus riders. The City's landscape has changed drastically over the past two decades requiring CATS to take a fresh look at how to best operate a bus network.

The *Envision My Ride initiative* was launched in 2016 to redesign the bus network. Through extensive public outreach and Remix planning technology, CATS staff created a three-phased approach to create a more reliable, consistent and efficient bus network.

Phase 1 - Structure: In 2017 and 2018, CATS restructured its entire bus system. Existing bus routes were altered to provide cross-town connections, more direct service, increased connections to the LYNX Blue Line, and increased frequency on various routes.

- 100+ public meetings
- 46 bus routes adjusted
- 9 new routes established
- 600+ bus stops altered/discontinued
- Access to public increased by 22%

Phase 2 – Frequency: Several of CATS bus routes still operate with a 45-minute average frequency. CATS aims to increase the frequency of all routes thus increasing reliability. In 2019, City Council voted to dedicate an additional million dollars to increase frequency on 4 high-ridership routes. To increase the frequency of additional routes, more funding is needed.

Phase 3 – Efficiency: With reimagined route structures and increased frequency, CATS will address efficiency. Through a bus priority study slated to begin in early 2020, CATS will evaluate several enhancements to the system which may include dedicated bus lanes, amenity enhancements and more.



Charlotte Gateway District and Multimodal Station

Charlotte Gateway District and Multimodal Station will be located in Uptown Charlotte and one-third mile west of the City's geographic center. The station will consolidate public transit and intercity transportation modes in Uptown Charlotte while catalyzing a robust urban neighborhood between the Third and Fourth Ward neighborhoods. The development of this second transportation hub will make Charlotte a two-hub city with the Charlotte Transportation Center continuing to serve the majority of CATS bus service. The project is a joint-effort between the City of Charlotte, NCDOT and local stakeholders.

Phase 1: Rail Infrastructure

Will separate passenger trains from freight operations

- Paid for via Federal TIGER Grant as well as local and state funds
- Broke ground in July 2019
- Project completion slated for September 2022

Phase 2: Station and District Development

Project team will procure a private-sector partner to develop the station and surrounding district

- RFQ submissions due in September 2019
- Short-list announced/RFP released in Fall 2019
- RFP submissions due in Spring 2020
- Development Team Notice to proceed in Fall 2020

The station will accommodate:

- LYNX Silver Line light rail
- CityLYNX Gold Line streetcar
- Amtrak rail service
- CATS Express and Local bus service
- Intercity Bus connections

Destinations



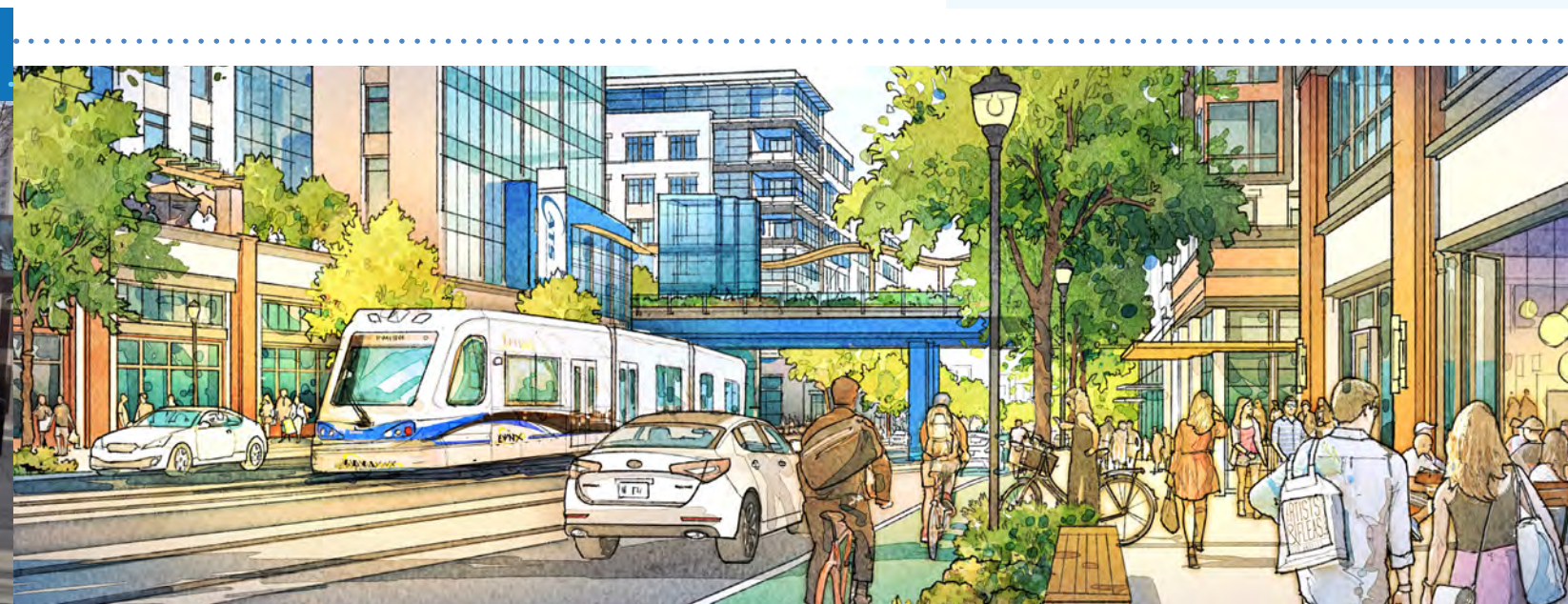
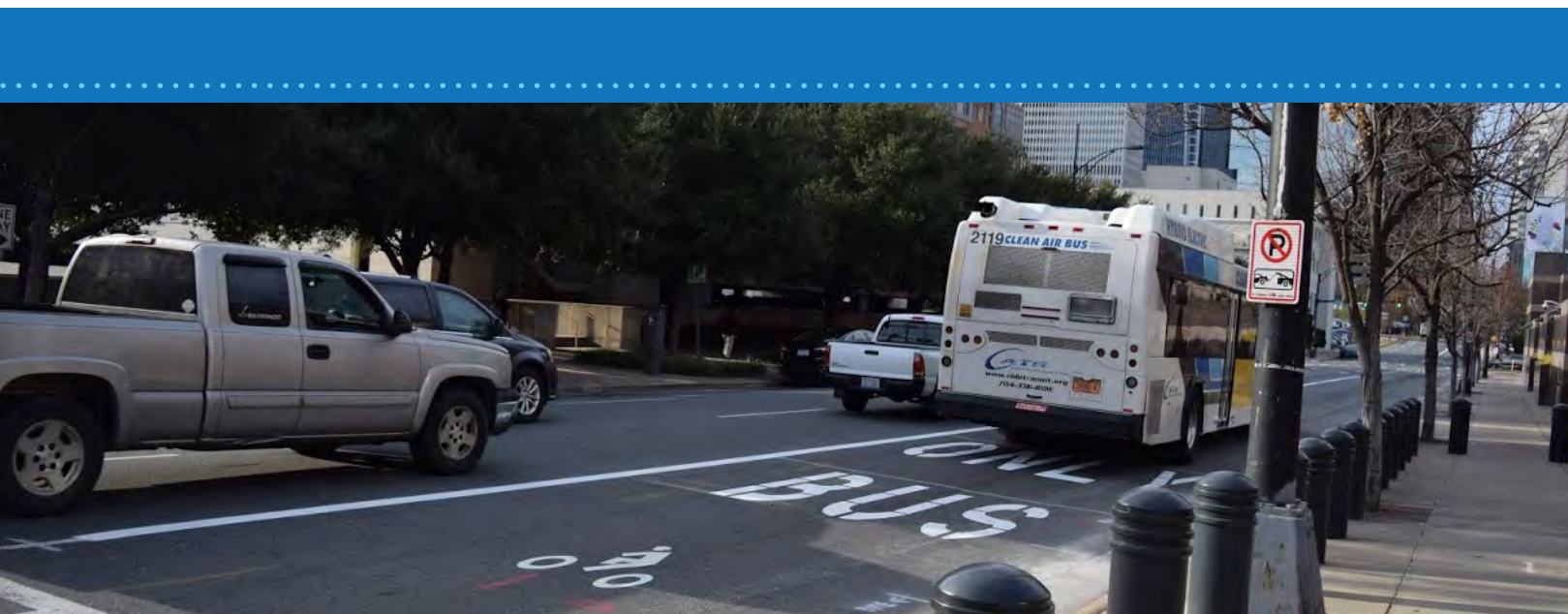
- Panthers
- Knights



- Harvy B. Gantt Center
- Mint Museum
- Bechtler Museum
- Romare Bearden Park



- Johnson & Wales University





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