



# Better Bus Network Plan

May 2025





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# Introduction

The Better Bus Plan is the Charlotte Area Transit System's (CATS') bold commitment to modernize and reimagine the Charlotte region's bus network as the backbone of an equitable and connected transit system. It responds to urgent calls from the community for faster, more reliable, and more frequent bus service—especially in areas where transit is a lifeline to opportunity. As the largest comprehensive increase in service throughout CATS' history, the Better Bus Plan lays the groundwork for broader investments in light rail, streetcar, and commuter rail over the next 30 years. Rooted in public feedback and data-driven analysis, the plan focuses on delivering meaningful improvements in access, reliability, and rider experience—with major service upgrades to be implemented within the first five years of the plan.

**The Better Bus Plan delivers one of the most significant equity-driven transit transformations in Charlotte's history— expanding access, simplifying service, and creating faster, more reliable options across the region.**

By redesigning the network around where people live and work today, the plan ensures that CATS can serve more people with better service.

## THE BETTER BUS PLAN CONSISTS OF FIVE KEY ELEMENTS:

### MARKET ASSESSMENT



Illustrates where demand for transit exists and where to attract new riders.

### COMPREHENSIVE OPERATIONAL OPPORTUNITIES ANALYSIS



Identifies where and why transit is currently successful.

### PUBLIC ENGAGEMENT



Engages the public for input on what they need from a transit system.

### NETWORK RECOMMENDATIONS



Includes a comprehensive plan to address the transit needs of the community.

### IMPLEMENTATION PLAN



Incorporates a plan to implement the proposed services within the next five years, and monitor the progress of the new services.



# Areas of Opportunity

**CATS offers a diverse array of transit services designed to meet the mobility needs of the Charlotte metropolitan area.**

CATS covers a 675-square-mile service area, providing service not only to Charlotte, but across Mecklenburg County. Including to Davidson, Huntersville, Cornelius, Matthews, Pineville, and Mint Hill. In 2025, CATS provided approximately 9.3 million trips on its fixed-route system, marking a 56 percent increase in ridership since the pandemic's lowest point.

CATS' fixed-route bus network includes 63 routes categorized into four distinct service types: high-frequency routes, local routes, neighborhood/connector routes, and express routes. CATS also operates one microtransit zone.

In addition to bus service, CATS operates **light rail and streetcar**, namely the LYNX Blue Line and CityLYNX Gold line. It also operates **paratransit service** within a three-quarter mile of all fixed-route services.

## TRANSIT SNAPSHOT



**63**  
BUS ROUTES



**2**  
RAIL LINES



**1**  
MICROTRANSIT ZONE

## FACILITY SNAPSHOT



**4**  
TRANSIT CENTERS



**26**  
RAIL STATIONS



**17**  
PARK AND RIDES

## Four Existing Bus Service Types:



**High-Frequency Routes:** Designed for frequent service with headways of 15 minutes or less.



**Local Routes:** Provide consistent, all-day service throughout the week.



**Neighborhood/Connector Routes:** Serve as feeder lines connecting residential areas to the broader transit network.



**Express Routes:** Operate during peak hours with limited stops, catering to commuters traveling between major destinations.

# IMPROVED SERVICE

CATS ridership has been steadily increasing since the sharp loss of ridership during the COVID-19 pandemic. The top 15 bus routes carry over 60 percent of CATS ridership.

Transit trips have an average duration of 47 minutes, taking over twice as long as auto and taxi trips despite having similar trip lengths by distance. Currently, no regional corridors have any bus priority improvements, but six priority corridors were identified in the Envision My Ride - Bus Priority Study.

In 2019, slightly over half of all transit trips began during the morning and evening peak periods. By 2022, this pattern shifted, with more trips beginning outside of peak hours, indicating a more even distribution of transit travel throughout the day. Most off-peak services run at 60-minutes, compared to 30-minute peak services.

## PANDEMIC RIDERSHIP IMPACTS



**53%**  
DROP IN  
RIDERSHIP

Ridership dropped by more than half between 2019 and 2020, falling from just over 13 million annual trips to about 6 million.

## TRANSIT TRAVEL TIME CHANGES

Transit trips are now less commute-focused, with fewer starting during traditional peak hours and more spread across the day, reflecting hybrid work and non-work travel.



**3%** DROP IN PEAK  
TRANSIT TRIPS

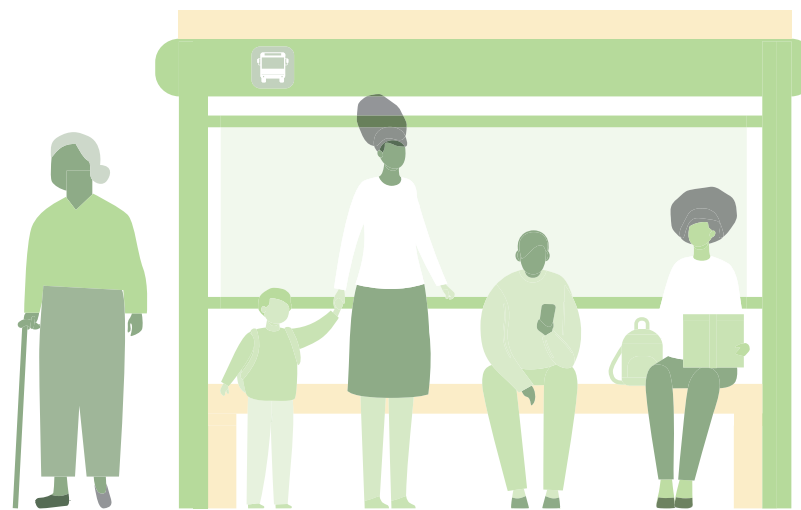


TRANSIT TRIPS TAKE  
**TWICE**  
AS LONG AS AN AUTO TRIP

## TOP 15 ROUTES



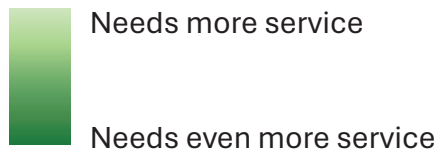
- |         |          |          |
|---------|----------|----------|
| Route 3 | Route 10 | Route 21 |
| Route 5 | Route 11 | Route 22 |
| Route 7 | Route 16 | Route 23 |
| Route 8 | Route 17 | Route 27 |
| Route 9 | Route 19 | Route 34 |



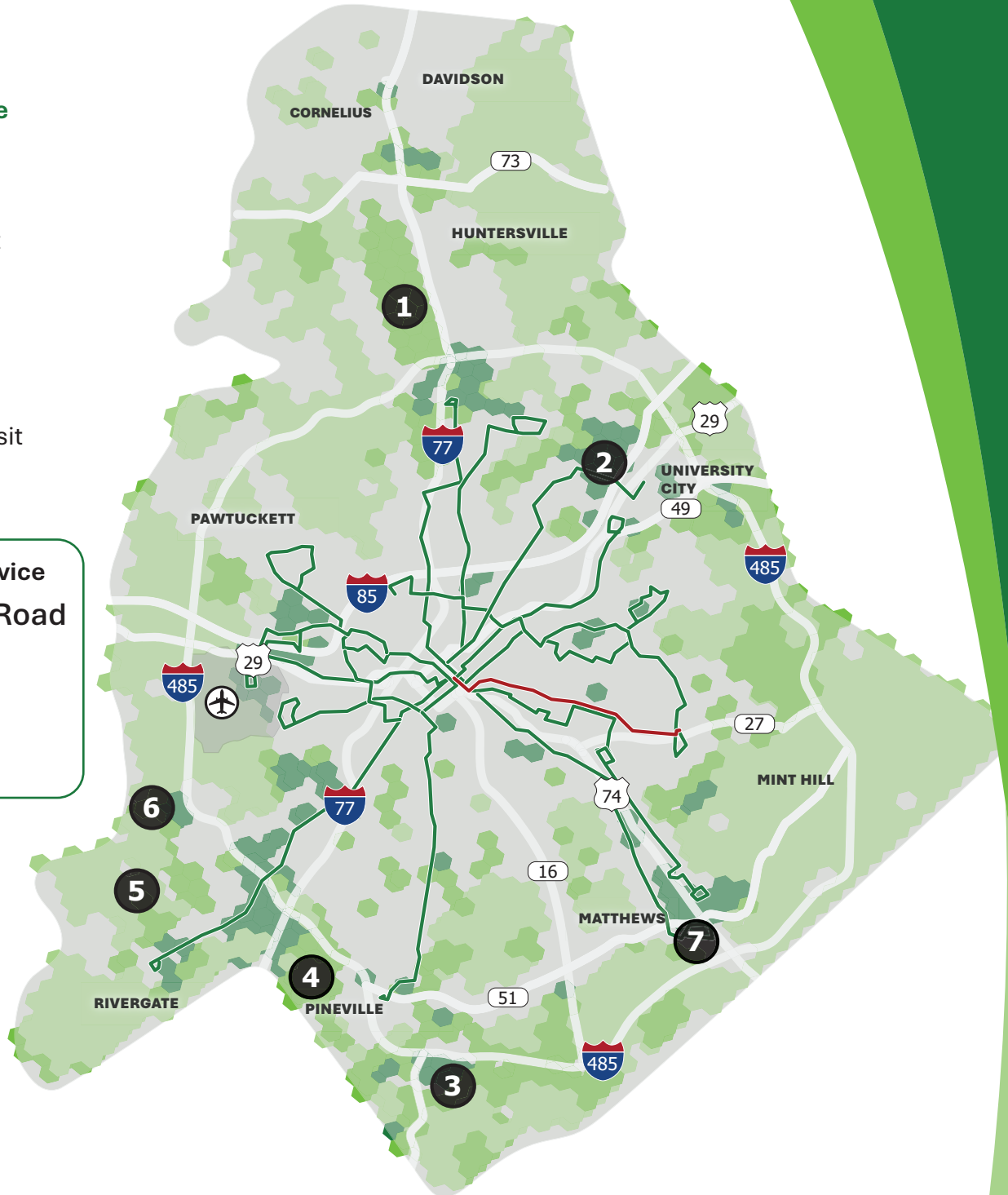
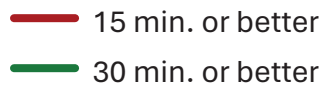
**There are areas in Mecklenburg County where the existing transit service does not satisfy transit need.**

A transit gap analysis comparing existing transit service with potential demand, based on demographics, found that during the weekday midday, weekday peak, and weekend midday periods there was a significant need across the region to add more service. The analysis also identified potential to better serve existing transit riders with better service along 15 high-use corridors.

- Areas that need improved or expanded service**
- ① Huntersville
  - ② University City
  - ③ Ballantyne
  - ④ Pineville
  - ⑤ Steele Creek Road
  - ⑥ River District
  - ⑦ Matthews



**Frequency of High Ridership Routes**



# GROWING NEW MARKETS

**Transit propensity reflects the likelihood that transit services will be used in a given area if reasonable options are available.** It helps identify where transit could be most successful by analyzing demographic and employment characteristics that influence transit use.

The analysis is built around four primary indices:

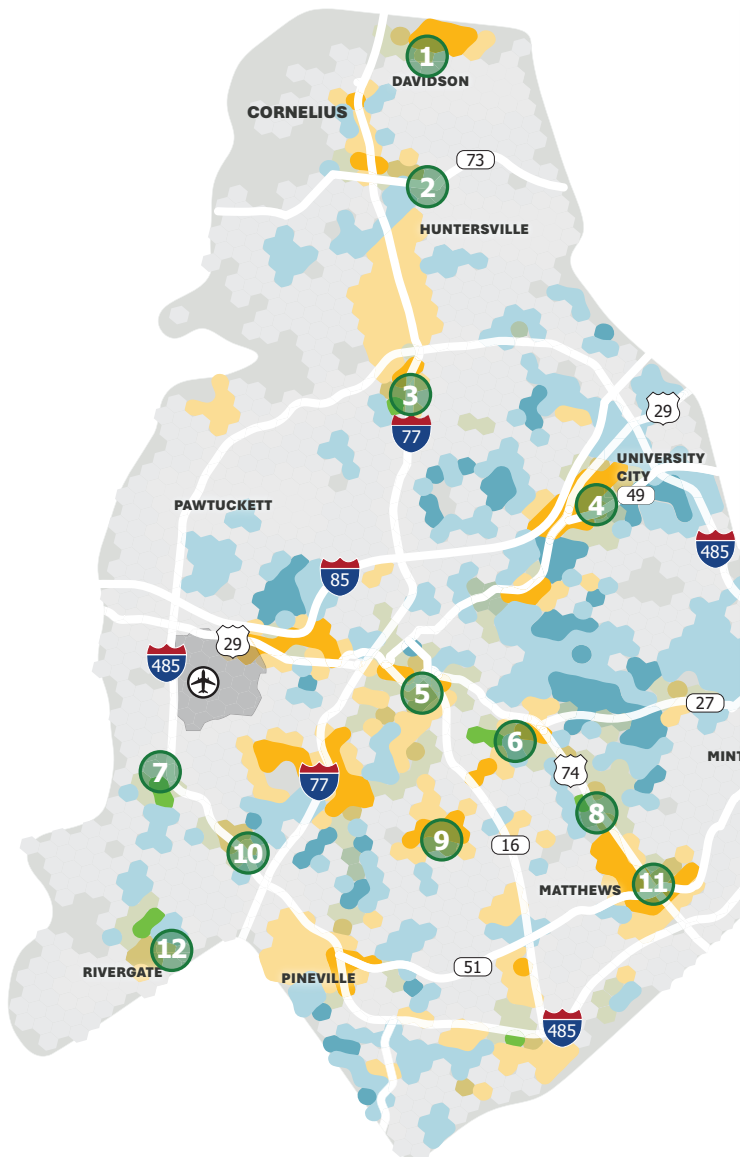
- **Transit-Dependent Population Origins Index:** Highlights areas with populations more likely to rely on transit due to factors such as age (seniors and youth), income, vehicle ownership, disability status, and population density.
- **Commuter Origin Index:** Identifies where working populations live, emphasizing those who regularly commute rather than work from home.
- **Employment Destination Index:** Pinpoints areas with high job density, indicating common destinations for work-related travel.
- **Activity Destination Index:** Focuses on areas with non-work trip generators like retail, healthcare, education, recreation, and government services.

These indices are further combined into two suitability indices:

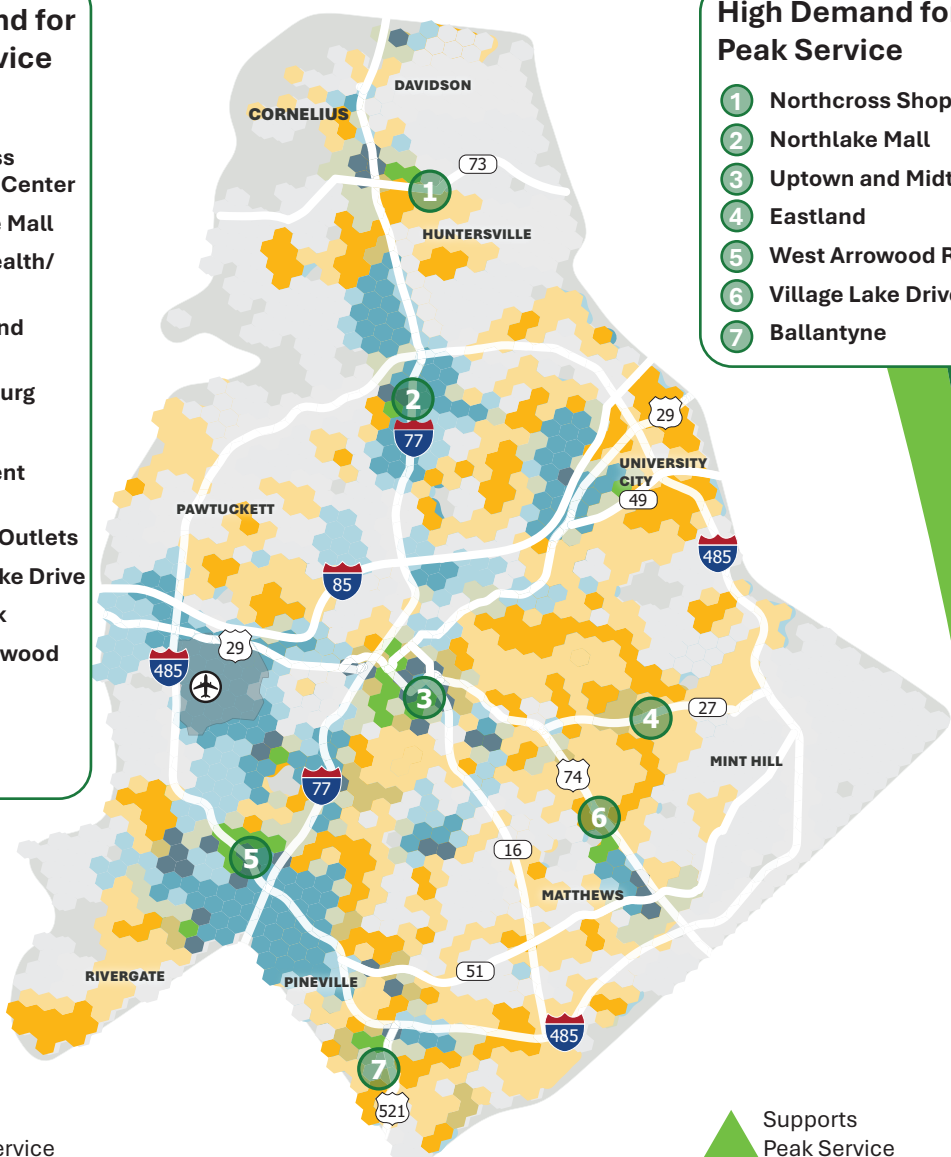
- **All-Day Service Index:** Combines transit-dependent origins and activity destinations to identify areas that would benefit from transit service throughout the day, including for shopping, recreation, and irregular work shifts.
- **Peak Service Index:** Merges commuter origins and employment destinations to highlight areas best served by peak-hour transit targeting traditional commuters.

This layered approach enables planners to tailor transit services to the specific needs and behaviors of different communities across Mecklenburg County.

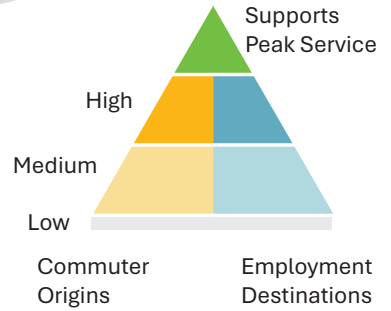
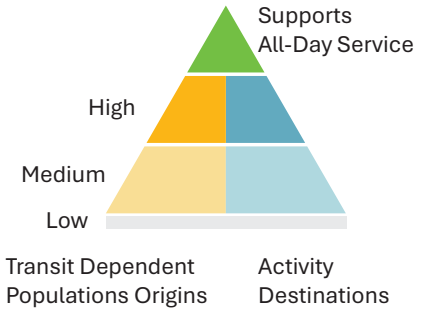




- ### High Demand for All-Day Service
- 1 Davidson
  - 2 Northcross Shopping Center
  - 3 Northlake Mall
  - 4 Atrium Health/CMC
  - 5 Uptown and Midtown
  - 6 Mecklenburg County Health Department
  - 7 Charlotte Premium Outlets
  - 8 Village Lake Drive
  - 9 SouthPark
  - 10 West Arrowood Road
  - 11 Matthews
  - 12 Rivergate



- ### High Demand for Peak Service
- 1 Northcross Shopping Center
  - 2 Northlake Mall
  - 3 Uptown and Midtown
  - 4 Eastland
  - 5 West Arrowood Road
  - 6 Village Lake Drive
  - 7 Ballantyne

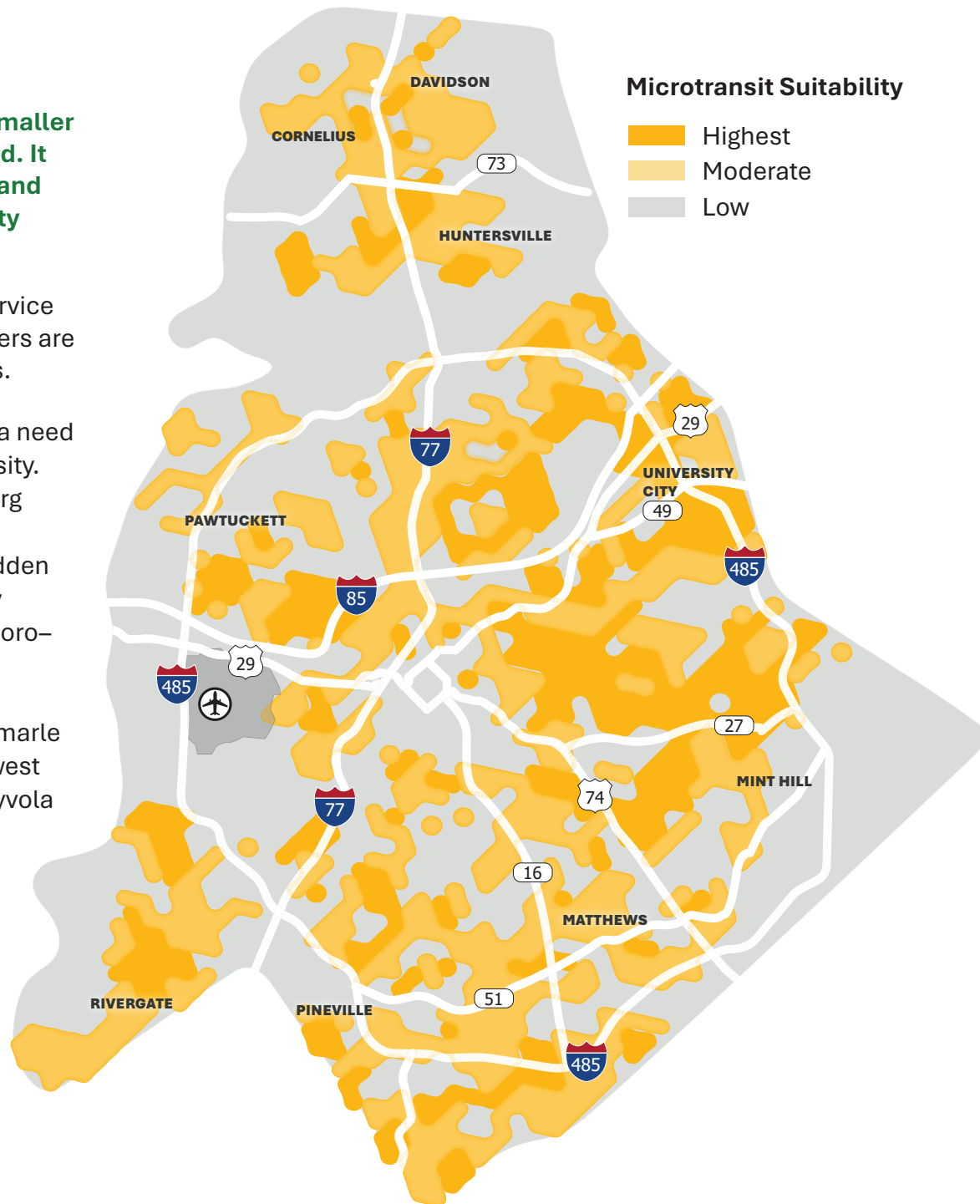


# EXPAND COVERAGE

**Microtransit provides flexible service via smaller vehicles that respond to passenger demand. It is more adaptable than fixed-route transit and can address first- and last-mile connectivity challenges from fixed-route transit trips.**

Similar to rideshare services, microtransit service is mostly on-demand, meaning that passengers are more directly connected to their destinations.

Microtransit works well in communities with a need for transit but without transit-supportive density. The suitable areas include: North Mecklenburg communities (Davidson, Cornelius, and Huntersville); Charlotte communities like Hidden Valley, Newell, University City, and Prosperity Village; Westside communities like Thomasboro-Hoskins and Pawtucket; East Charlotte communities like Plaza-Shamrock, Eastland, Hickory Grove, and Communities along Albemarle Road; and communities in South and Southwest Charlotte like Starmount, Yorkmount/West Tyvola Road.



# ENHANCED CONNECTIVITY

The Better Bus Plan aims to transform Charlotte’s transit network by expanding service and improving connectivity across Mecklenburg County. By increasing frequency and coverage, the plan will better serve both residents and visitors. These enhancements will significantly increase the number of buses traveling through Uptown—reinforcing its role as both a destination and a critical transfer point.

The Better Bus Plan will significantly enhance transit access to Uptown, expanding the number of people with access to Uptown within 60-minutes by 125,000 people.



The current Charlotte Transportation Center (CTC) has limited capacity to support this expanded service. To meet future needs, CATS must both retain the CTC and develop additional Uptown transfer facilities.

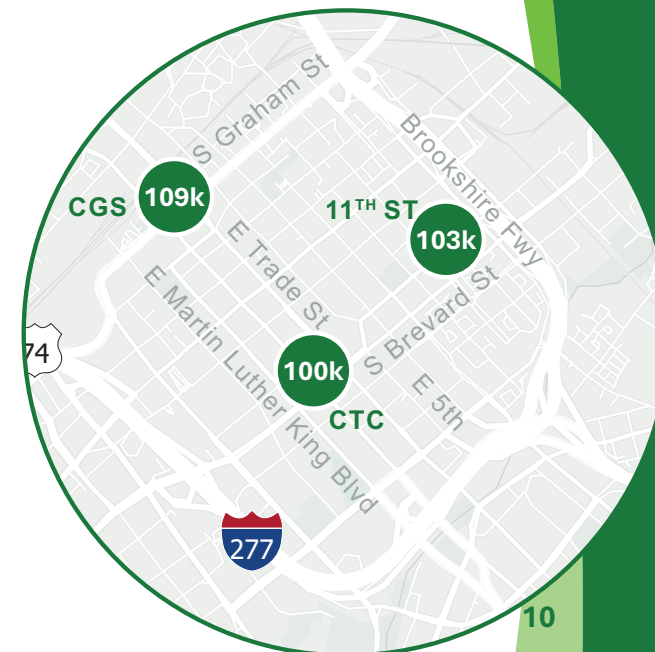
The Better Bus Plan recommends a multi-hub model to better support increased access to Uptown. Three hubs are recommended for a phased implementation, the CTC, Charlotte Gateway Station (CGS), and 11th Street. The map to the left illustrates approximate locations, and a count of general trip, across all modes, taken within a quarter-mile of each location.

The hubs are prioritized as follows:

**CTC - Near-Term Primary Location** - Located in central Uptown and adjacent to both the LYNX Blue Line and the CityLYNX Gold Line, the CTC has served as the central hub and main transfer point for CATS’ bus and rail services since 1995. The facility has 20 indoor bus bays and several on-street bays.

**CGS - Near-Term Secondary Location** - The Better Bus Plan envisions CGS as an intermodal hub featuring a train station for Amtrak and the proposed Red Line commuter service; rail stations for the CityLYNX Gold Line and the proposed LYNX Silver Line; and a bus facility for local, express, and intercity buses. Currently, CGS consists of Gateway Station, which serves the CityLYNX Gold Line at Trade Street and Wilkes Place, and a Greyhound bus terminal on 4th Street. There are currently plans to complete the build-out of this transit hub along with mixed-use development at the site.

**11th Street - Long-Term Secondary Location** - Under the Better Bus Plan, the 11th Street Station is a transit hub that would serve the LYNX Blue Line, the proposed LYNX Silver Line, and Better Bus proposed bus routes. The site is well-positioned within the street network and has easy access to both Uptown and I-277.





# Recommendations

**CATS is improving its bus service areas to ensure a more efficient and reliable commute.**

These enhancements aim to reduce travel times, increase accessibility, and better connect neighborhoods with key destinations. With these improvements, CATS is committed to fostering a more sustainable and connected community.

**The Better Bus Plan:**



**Expands Service**

*High-Frequency Network:* 15 bus routes improved to 15-minute or better frequency.

*Expanded Service Hours:* Longer hours of service on weekdays and significantly enhanced weekend service to better support second- and third-shift workers.



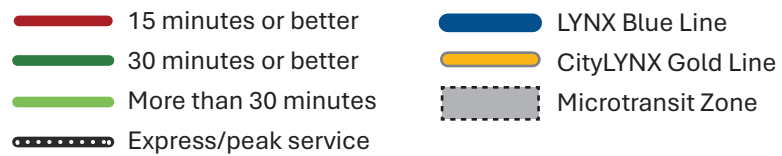
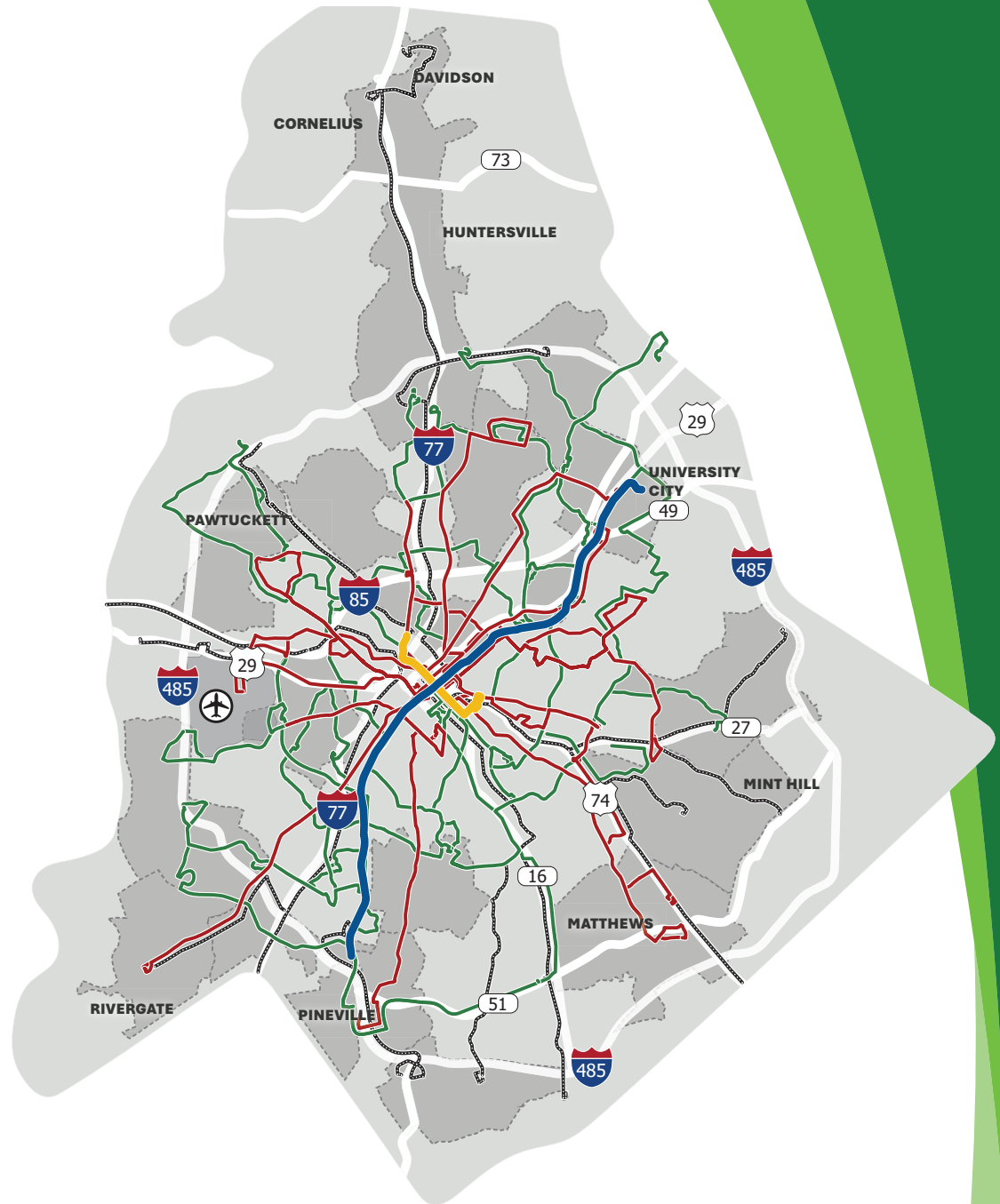
**Creates Bus Priority Corridors**

The plan identifies key corridors for bus priority infrastructure, including transit signal priority—reducing delays and improving reliability.



**Improves Regional Connectivity**

Continued investment in express routes including upgraded vehicles and park and ride facilities, supporting commuting across the Charlotte region.



# BETTER CORRIDORS

**Fifteen routes will improve to 15-minute or better frequency.** An estimated 350,000 people live within a half mile of high-frequency routes, with 91,000 more low-income individuals having access to 15-minute frequency compared to 19,000 today. Approximately, 200,000 more people of color will have access to 15-minute frequency compared to 40,000 today.

Six bus priority corridors will feature enhanced amenities at bus stops and along roadways to improve travel times. Improvements will include:

## SIGNAL PRIORITY

Allows buses to communicate with traffic signals to have priority at green lights before other traffic is permitted to move through the intersection.

## STOP SPACING

For high frequency routes, CATS stop spacing guideline is four stops per mile. Fewer stops per mile can reduce travel time and improve reliability for riders.

## COMPLETE STREET DESIGN

Includes a toolbox of elements, such as bus lanes, queue jumpers, accessible crossings, and enhanced intersections to improve travel along a corridor.



**50 miles of transit**  
priority improvements  
will be implemented.

## Freedom Drive

Connects riders in northwest Charlotte communities to Uptown and other key destinations. Proposed improvements include:

- 6 signal priority treatments
- 1 mobility hub
- 1 premium stop
- 35 stops will have enhanced amenities

## Ashley Road

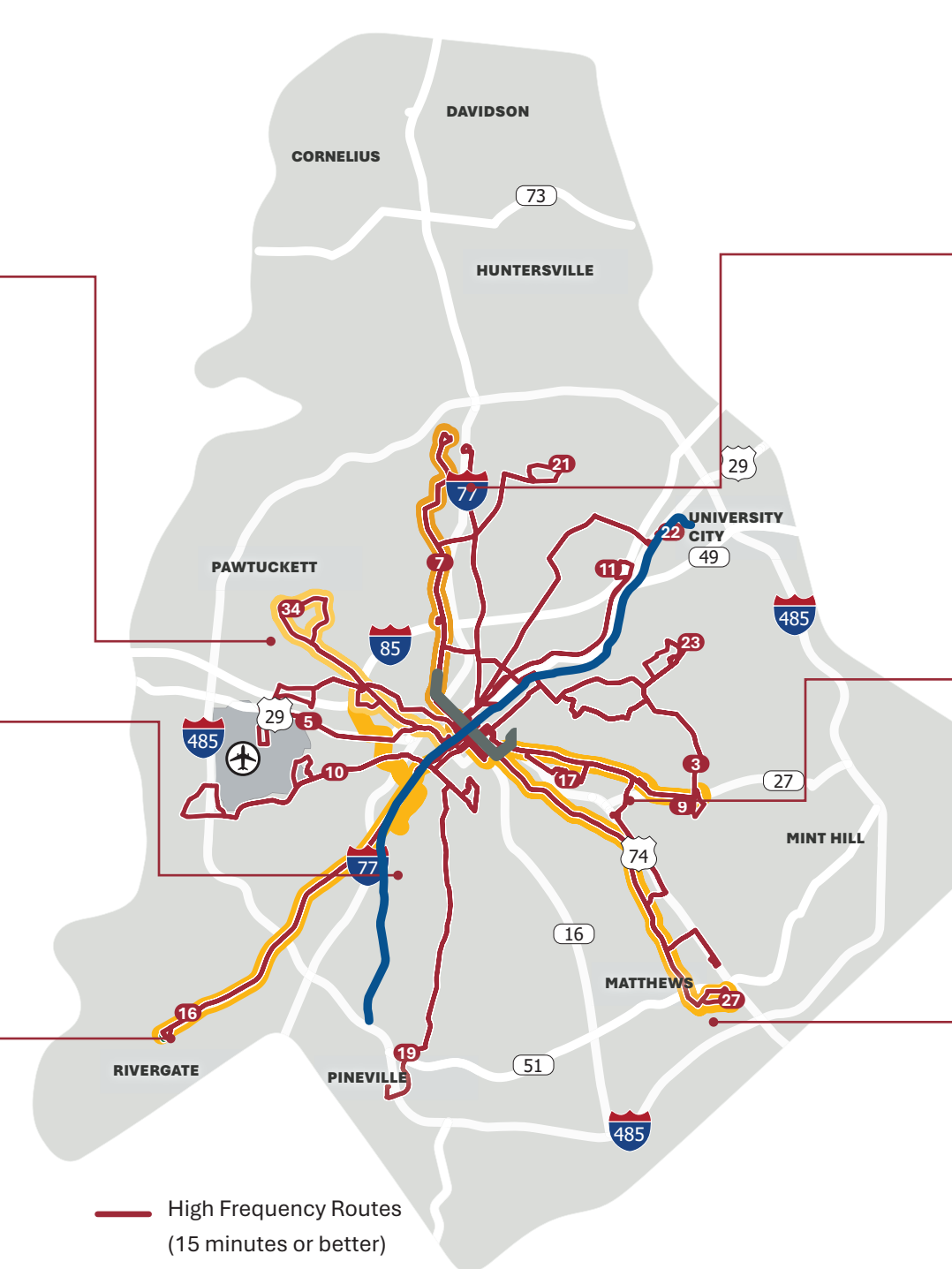
This crosstown route connects West Charlotte neighborhoods. Proposed improvements include:

- 8 signal priority treatments
- 1 mobility hub
- 7 premium stops
- 15 stops will have enhanced amenities

## South Tyron Street

One of the longest routes, stretching from Uptown to Steele creek. This route connects neighborhoods in southwest Charlotte to Uptown. Proposed improvements include:

- 25 signal priority treatments
- 1 mobility hub
- 8 premium stops
- 68 stops will have enhanced amenities



**Beatties Ford Road**

Connects Uptown to Charlotte’s historic westside neighborhoods. Proposed improvements include:

- 6 signal priority treatments
- 2 mobility hubs
- 2 premium stops
- 69 stops will have enhanced amenities

**Central Avenue/ Albemarle Road**

Connects Uptown to neighborhoods and activities on Charlotte’s east side. Proposed improvements include:

- 18 signal priority treatments
- 2 mobility hubs
- 3 premium stops
- 51 stops will have enhanced amenities

**Monroe Road**

Connects riders in Matthews and southeast Charlotte to Uptown. Proposed improvements include:

- 14 signal priority treatments
- 3 premium stops
- 82 stops will have enhanced amenities

- High Frequency Routes (15 minutes or better)
- Priority Corridors
- Gold Line
- Blue Line

# BETTER COVERAGE

The Better Bus plan will result in 90% of Mecklenburg County's population being covered by 30-minute or better fixed route and/or microtransit service.

To complement the fixed-route network, the Better Bus Plan introduces microtransit service, CATS Micro, across more than 100 square miles, bringing flexible, on-demand transit options to neighborhoods and job centers that previously had little or no service. This innovative expansion improves first-mile/last-mile connections to high frequency services and ensures access in lower density areas that traditional bus routes can't effectively reach.

The CATS Micro network will expand to 19 zones, providing transit access to an estimated 460,000 people. The microtransit expansion fulfills three coverage goals:



First/last mile zones provide people living in the zone access to LYNX rail and high-frequency service.



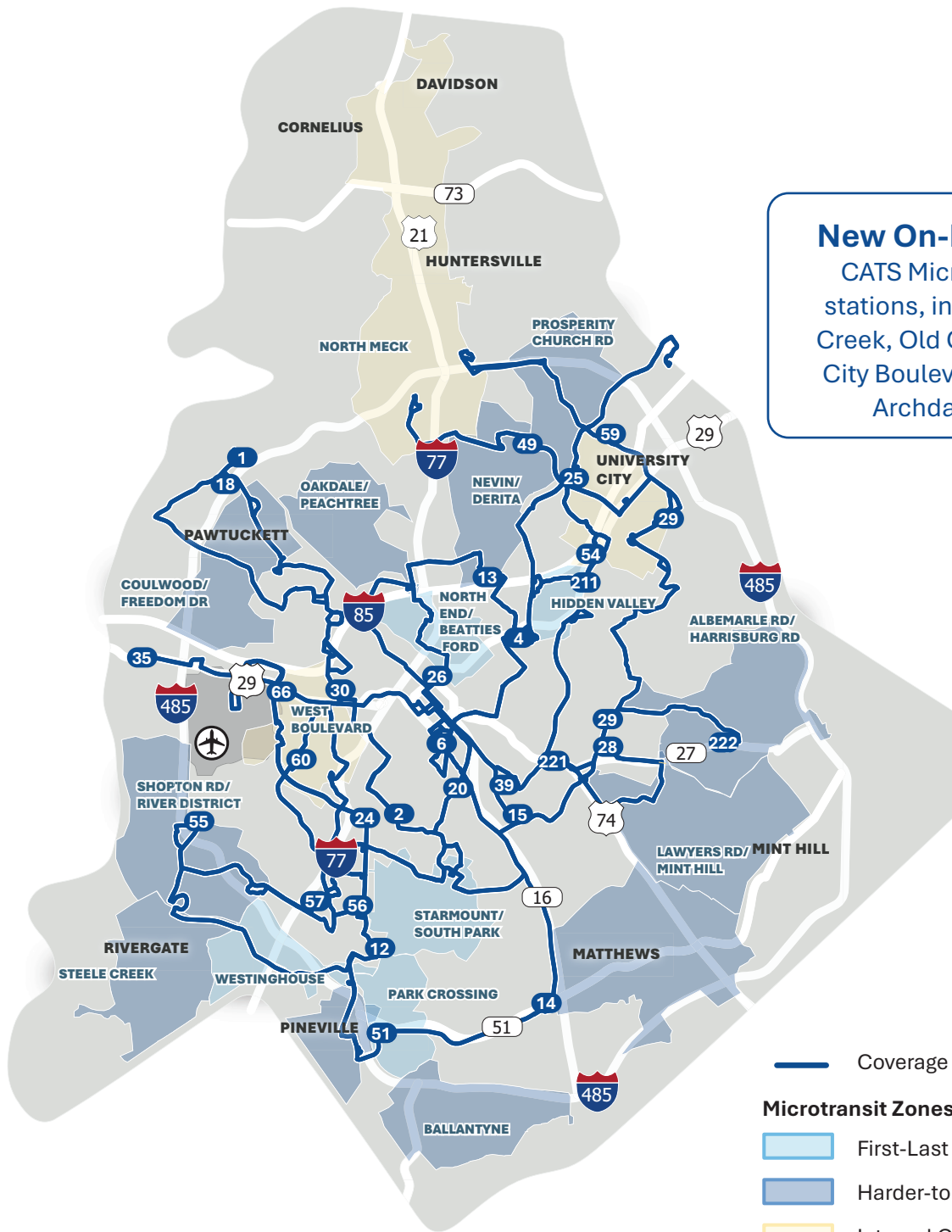
Internal circulation zones connect people living in the zone to nearby activity generators, like employers or health services.



Harder-to-reach populations zones bring mobility to transit-oriented populations that are less served by fixed-route services.

**19 microtransit zones** will enhance movement throughout the region and provide new connections to key resources such as grocery stores, retail, job opportunities, and rail.





**New On-Demand Connections to Rail**  
 CATS Micro will connect with eleven LYNX rail stations, including Parkwood, 25th Street, Sugar Creek, Old Concord Road, Tom Hunter, University City Boulevard, McCullough, JW Clay, Arrowood, Archdale, 1-485, Woodlawn, and Tyvola.

**Enhanced Crosstown Network**  
 Network of new crosstown routes that make connections like:

- Eastland - Southpark - Tyvola
- Woodlawn - Airport
- Tyvola - Valerie Woodard
- Rosa Parks - Valerie Woodard - Woodlawn
- Northlake - UNC Charlotte

# BETTER CONNECTIONS

**System-wide facility improvements to bus stops and mobility hubs will shape a more comfortable customer experience for CATS riders.**

All bus stops will see upgrades, with priority corridors receiving additional infrastructure that will transform stops to high-quality premium stops and mobility hubs.

**34 mobility hubs** will enhance connections between various modes.



**2,000 improved bus stops** will include new shelters, benches, and waiting pads.

## Quality Stop

General bus stops served by transit. These stops include essential amenities that provide a comfortable and safe passenger experience before and after boarding a vehicle.

Types of amenities are dependent on several factors: ridership, land use, wait time, and rider profile at each individual bus stop.



- 1 Bus Stop Sign
- 2 Trash Receptor
- 3 Lighting Improvements
- 4 Boarding & Alighting Area
- 5 Single Bench
- 6 Shelter
- 7 Bicycle Rack
- 8 Crosswalk Improvements



## Premium Stop

Bus stops located along high-frequency routes with high ridership. These stops feature enhanced amenities that facilitate connection into the system and improve the customer experience.

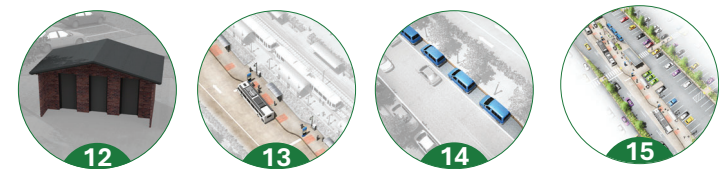


- 9 Larger bus shelter
- 10 Information Kiosk
- 11 Off-board fare payment

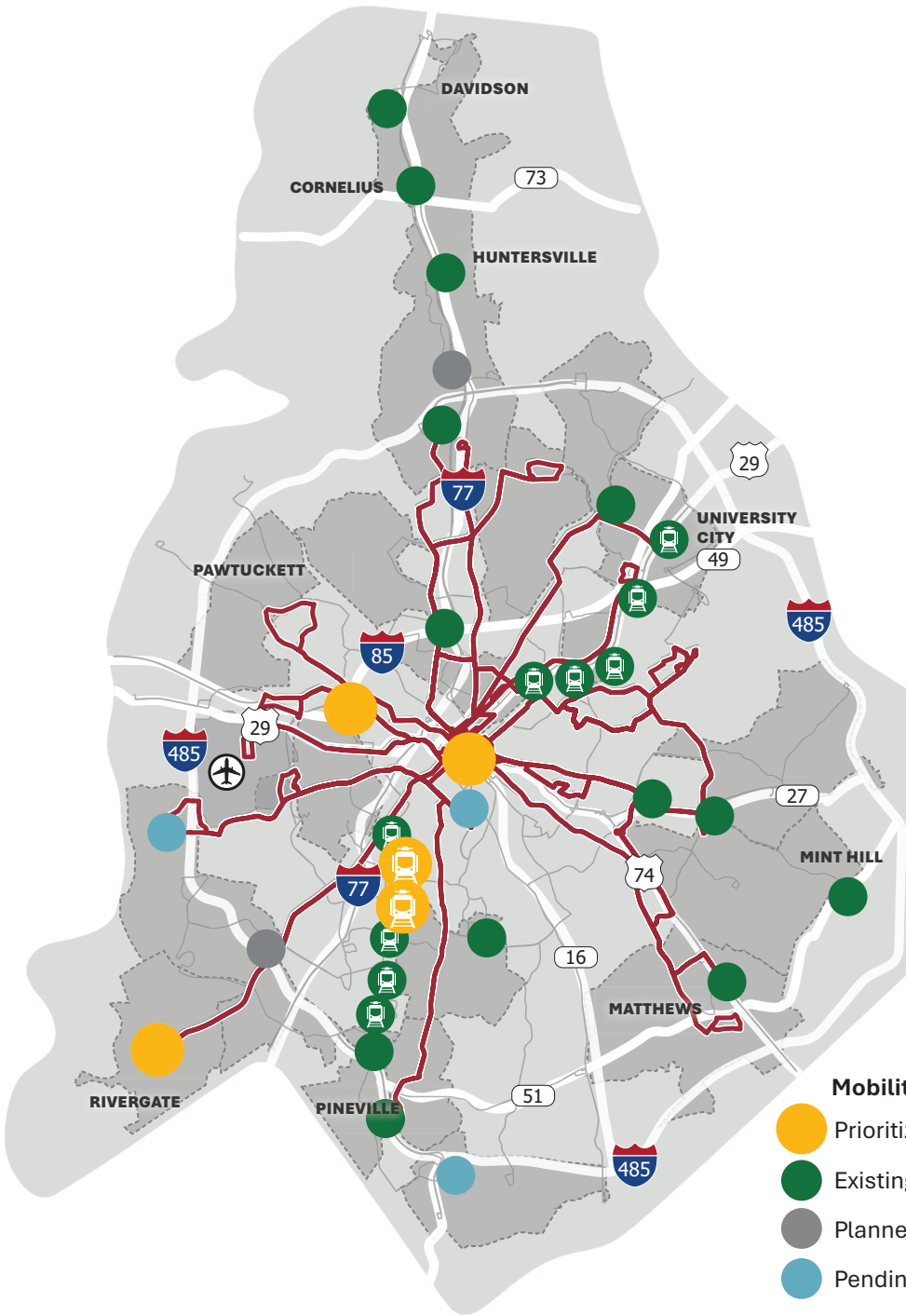


## Mobility Hub

Flagship connection points that facilitate transfers between two or more types of service (local bus, high-frequency bus, express bus, rail or microtransit) or three or more local routes. These hubs are focused on creating a safe, comfortable space for passengers to transfer between services with ease.



- 12 Operator restroom
- 13 Bus bays
- 14 Microtransit pickup/dropoff area
- 15 Park-and-Ride



**Mobility Hubs prioritized for capital investment include:**

- Charlotte Transportation Center (CTC)
- Valerie Woodard
- Woodlawn LYNX Station
- Tyvola LYNX Station
- Rivergate

**Three new mobility hubs are pending additional coordination with local developers:**

- Ballantyne
- Carolina Medical Center
- River District

**Mobility Hubs**

- Prioritized for Capital Investment
- Existing
- Planned
- Pending Approval with Partner

- High Frequency Routes (15 minutes or better)
- Other Better Bus Routes
- - - Microtransit Zones
- 🚆 LYNX Rail Station

## Connections to Local Land Uses

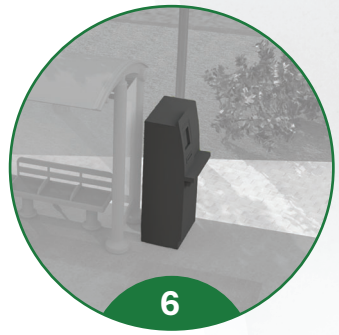
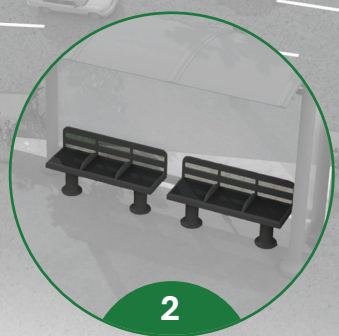
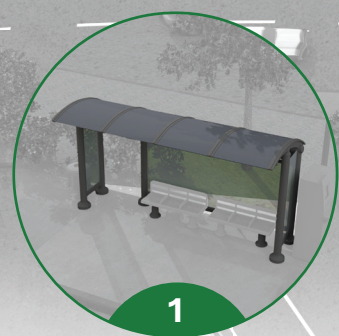
In this scenario, plazas and sidewalks were added to the hub to improve connections.



Bus Bays

Bus Bays

Bus Bays



See legend at right the amenity types.

## MOBILITY HUBS IN ACTION

The new bus network will increase the number of bus routes and microtransit zones. To effectively serve the new routes/zones, a new hub could benefit from bus bays, additional passenger amenities, and improved pedestrian connections as conceptualized here.

This example demonstrates how mobility hubs form the backbone of the new bus network by improving the transfer experience across the network so transfers are less reliant on a downtown hub.

Bus Bays

- 1 5' X 15' Shelters
- 2 Benches
- 3 Trash Receptors
- 4 Bicycle Racks
- 5 Pylons
- 6 Offboard Fare Payment
- 7 Boarding & Alighting Areas
- 8 Operator Restroom
- 9 Bus Bays
- 10 Bus Pads
- 11 Microtransit Pickup/Dropoff Area
- 12 Reserved Staff/Carshare Parking
- 13 Lighting Improvements
- 14 Crosswalks with Integrated Public Art



# BETTER COMMUTES

CATS is improving its express bus service regionally to ensure a more efficient and reliable commute.

These express bus enhancements are focused around expanded hours of service, better frequency, and access to more and enhanced Park and Ride facilities to improve the customer experience, increase accessibility, and better connect communities with key job opportunities. With these improvements, CATS is committed to fostering a more sustainable and connected community.



## Park and Rides

The current 43 CATS park and ride facilities play a unique role in expanding access to transit, particularly for suburban and regional riders who may not live within walking distance of a stop or station. Improving amenities provides an opportunity to unlock the potential of currently under-utilized park and ride facilities.


### Potential Park and Ride Improvements

 **Accessibility & Connectivity** ADA Accessibility, pedestrian facilities, platform access

 **Safety & Security** Blue light emergency call box, CCTV, gates, or security

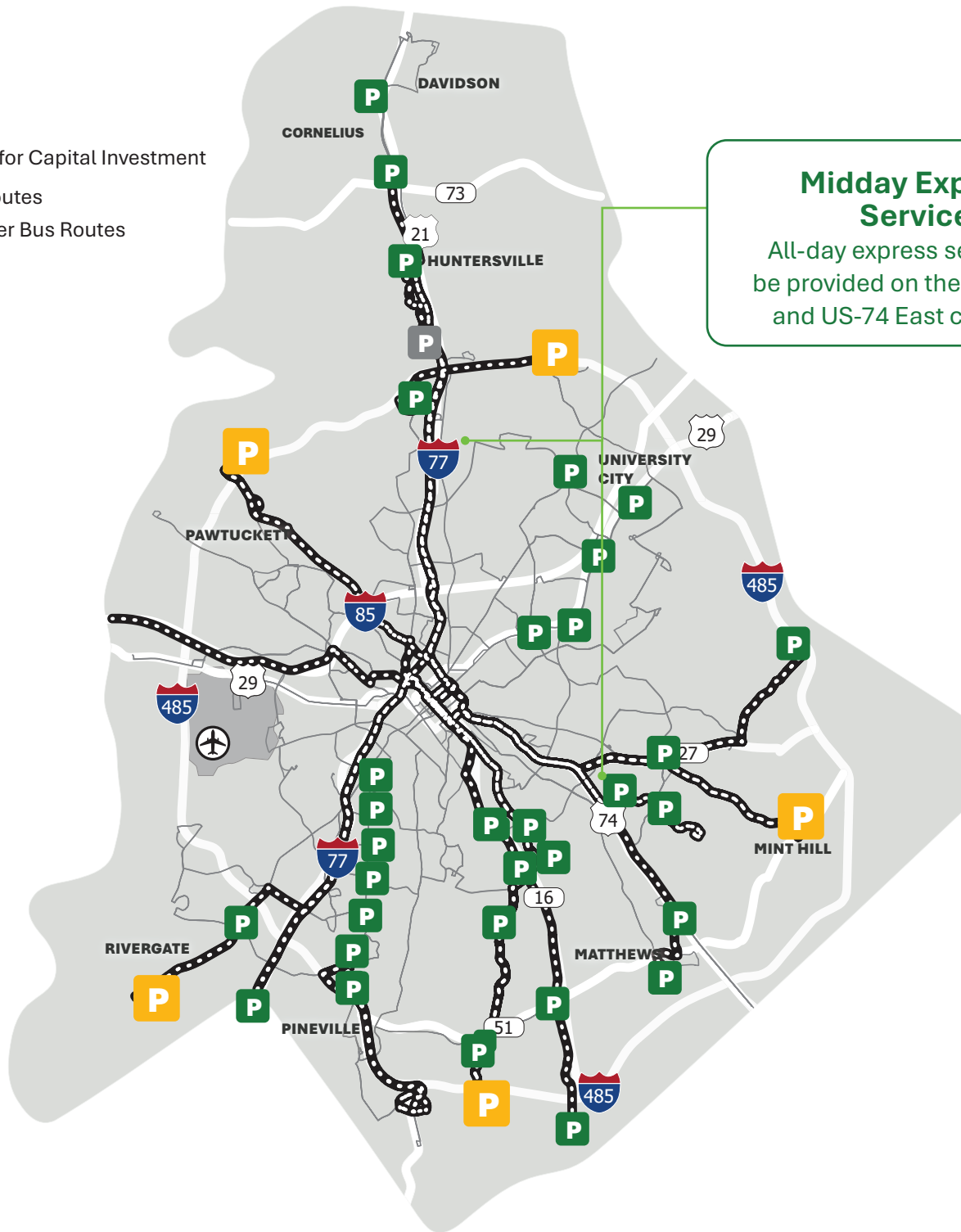
 **Sustainability & Support Facilities** Trash cans, bike facilities, parking quality

 **Passenger Comfort & Amenities** Covered seating area, heating, lighting improvements, restrooms, water fountains

 **Information & Technology** Audio announcements, variable message signs, wayfinding, public art

**Park and Rides**

- P Existing
- P Planned
- P Prioritized for Capital Investment
- Express Routes
- Other Better Bus Routes



**Midday Express Service**  
 All-day express service will be provided on the I-77 North and US-74 East corridors.

**Park and Rides prioritized for capital investment are:**

- Riverbend
- Steele Creek/ Rivergate
- Rea Rd
- Prosperity
- Mint Hill



# Implementation Plan

# REALIZING THE VISION



## Near-Term

Implementation of frequency improvements across the entire system

Expansion of microtransit network

Implementation of run time improvements

Upgrade existing bus stop amenities

Adopt and implement performance monitoring plan

## Building

Heightened operator hiring and retention efforts

Acquiring new vehicles for the fleet

Completing Bus Stop Improvement Plan

Strengthening agency organizational capacity

Incorporate new rebranding

## Long-Term

Construction of additional mobility hubs and park and rides

Upgrade bus stop infrastructure system-wide

Infrastructure and design improvements for priority corridors

Full implementation of Better Bus Plan

**The Better Bus Plan prioritizes accessibility, equity, and efficiency through a comprehensive network redesign that delivers high frequency service along 15 key corridors and expands microtransit to 19 new zones.**

These improvements will place nearly 90% of the county’s residents and over 95% of its jobs within reach of reliable transit, with significant gains for low-income and historically under-served communities.

The Near- and Long-Term improvements in the Better Bus Plan take a phased, strategic approach, enabling CATS to implement the Better Bus Plan vision within existing funding, infrastructure, and fleet constraints.



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