Eno MAX

Where we've been, Where we're going

July 12, 2021

CHARLOTTE AREA TRANSIT SYSTEM

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Valley Metro - Wikipedia
en.wikipedia.org

Valley Metro remains devoted to its ...
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Valley Metro Bus - Wikipedia

These Valley Metro Express Bus Routes ...

Phoenix Transit System 4428) | Bus city ...

New Valley Metro express buses start ...

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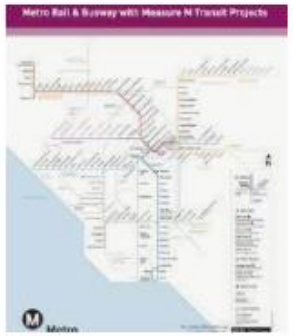
Los Angeles Metro Guide...
timeout.com

L.A. Metro faces funding gaps on major ...
latimes.com


transit system will look li...
thesource.metro.net

How to Ride LA Metro Even If You're a ...
lamag.com

Los Angeles Metro Rail - Wikipedia
en.wikipedia.org

LA Metro Future Pos
spectrumnews1.com

Regional Rail
metro.net

Map: A potential 2040 Los An...
scpr.org

CTC Allocates $27.8MM for LA Metro LRVs ...
railwayage.com

Metro Rail Subway and Light Rail
urbanrail.net

LA Metro Approves Fareless Rides For ...
losangeles.cbslocal.com

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dailynews.com

os Angele...

Los Angeles Metro 2020–2060. The Future ...

Climate Bonds Initiative

L.A. Metro Rail's High Operating Costs ...

Rail News - L.A. Metro's board OKs ...

Metro Projects - In

What Happens When WMATA Shut...
cip.gmu.edu

WMATA fantasy combo map – Gre...
ggwash.org

WMATA proposes cutting service at two ...
alextimes.com

WMATA Planning $1.4 Billion in Safety ...
ohsonline.com

Proposed supplemental Me...
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Wikipedia

Washington Metro Area Transit Authority ...
electricalalliance.org

WMATA expands Orange, Silver line ...
progressiverailroading.com

WMATA officials hope "normal" Metro ...
ggwash.org

Report: WMATA 6000-Series Cars ...
railwayage.com

rred ...

Metro (@wmata) | Twitter

Orange Line (Washington Metro) - Wikipedia

Metro rail closures effect...

8000-series railcar procurement ...

WMATA Recruitment Event - Wo...

Cats review: A deep and inscrutabl...
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The cat's meow | The Humane Society of ...
humanesociety.org

Here's why cats hate belly rubs so much
nationalgeographic.com

Coronavirus: Cat owners fear pets will ...
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Why do we think cats are un
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Cats | The Humane Society of the United ...
humanesociety.org

Food recall as hundreds of cats die ...
independent.co.uk

The Shots Your Cat Needs
pets.webmd.com

Why Do Cats Hate Water? | Britannica
britannica.com

Your pets can catch Covid from you, and
nbcnews.com

Us? You May Be ...

Soon, the internet will make its own ...
theverge.com

How we found coronavirus i...
theconversation.com

Cats' Bound To Lose At Least $71M After...
deadline.com

Cats Can Get Coronavirus, Study ...
scientificamerican.com

Cats Care About People More Than Food ...
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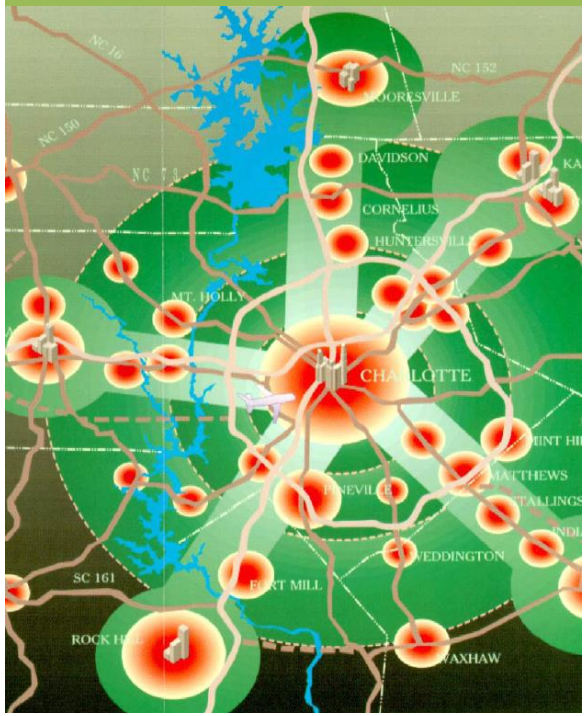
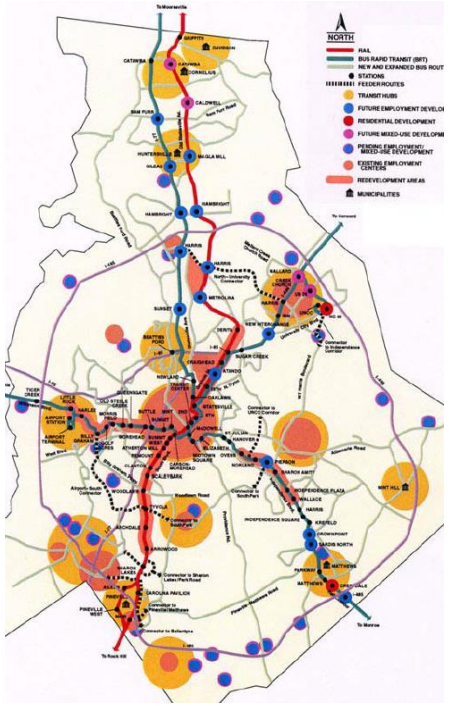
It Started with a Vision

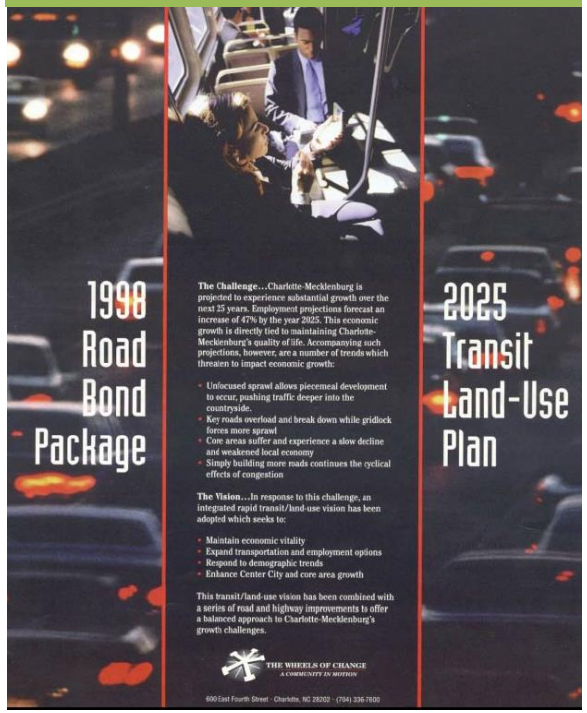
Developed the Vision



Refined the Vision

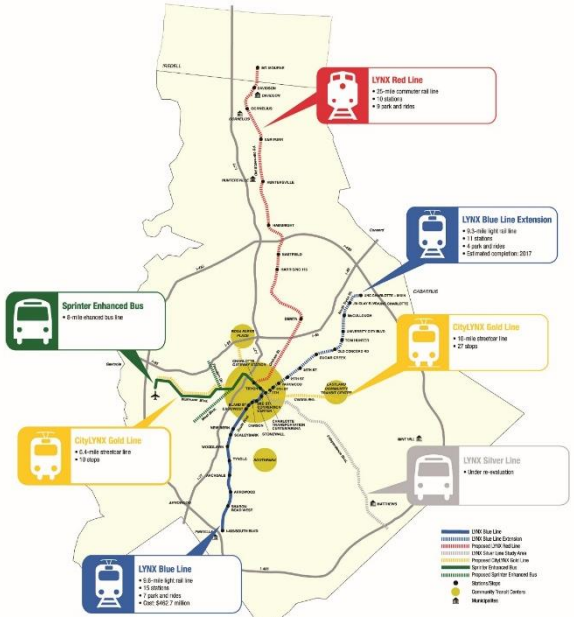


Voters Approve Sales Tax



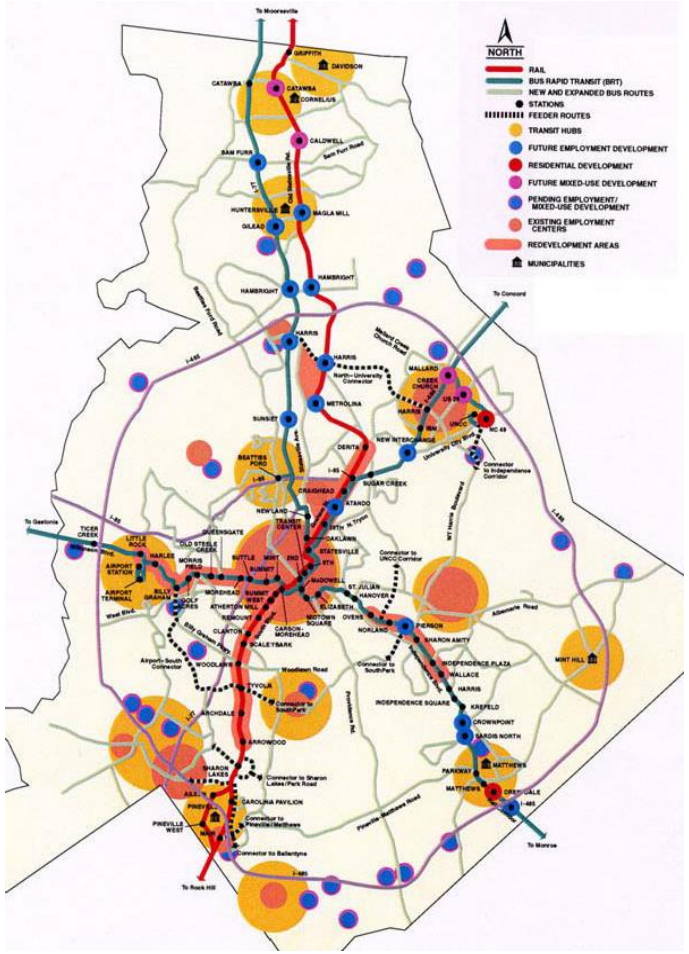
Corridor System Plan

Adopted



The Vision:
Transit and Land Use Integration

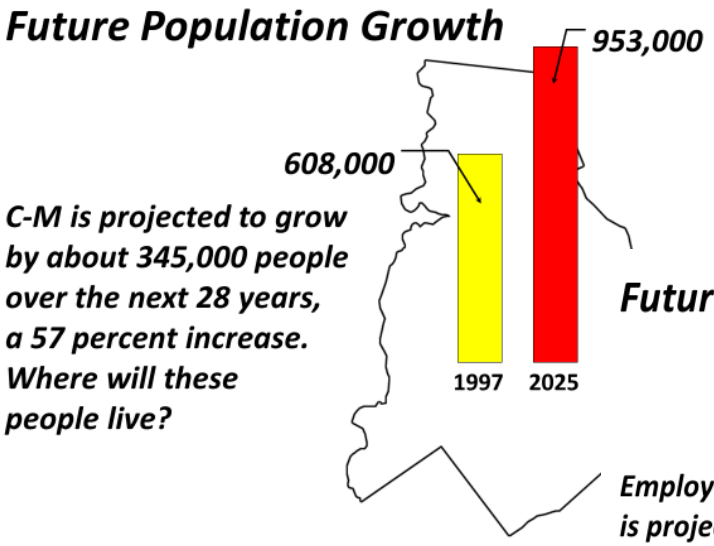
2025 Transit and Land Use Plan



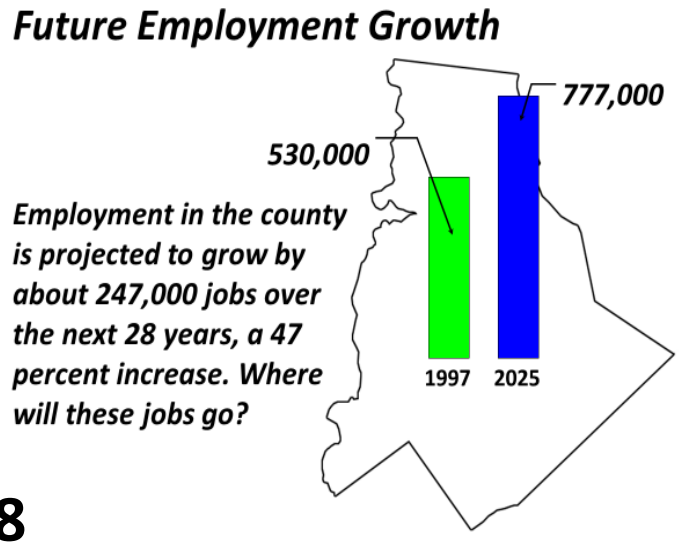
- Vision for a long-term growth management strategy
- Integrates rapid transit and mixed-used development along 5 transportation corridors
- Expands transit system to serve between the rapid transit corridors
- Provide more transportation choices to meet mobility needs
- Support sustainable growth for region
- Approved by Mecklenburg County voters in 1998
- Updated in 2006:
  2030 Transit System Plan

Growth: More Than Expected

What we thought….



C-M is projected to grow by about 345,000 people over the next 28 years, a 57 percent increase. Where will these people live?

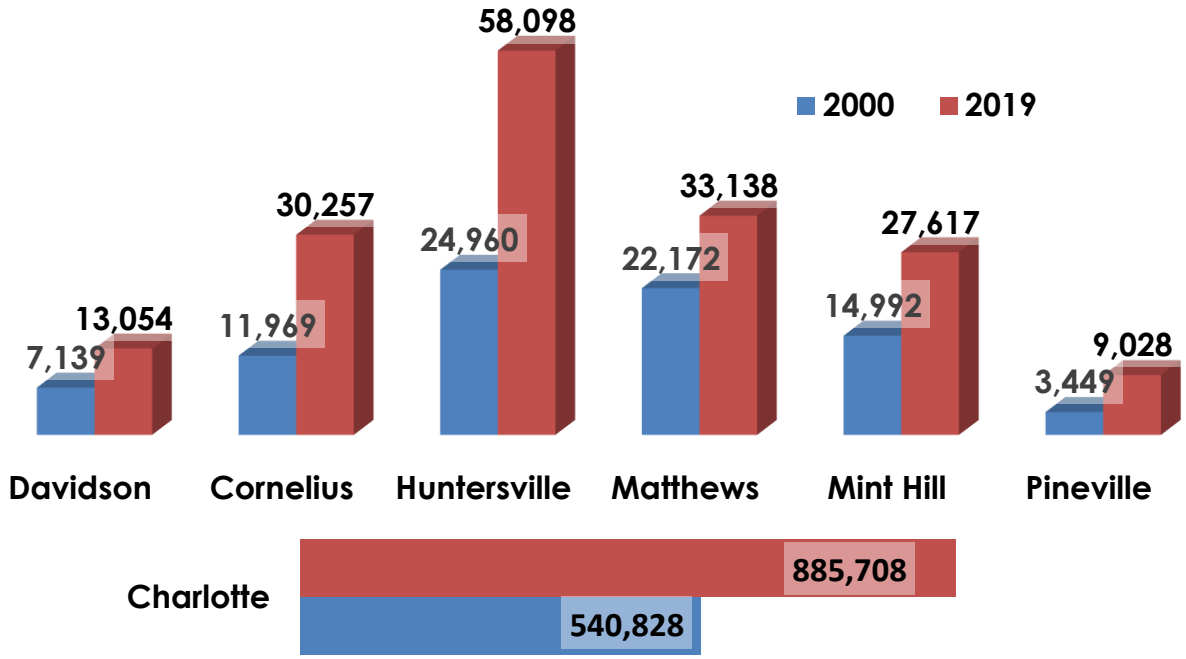


Employment in the county is projected to grow by about 247,000 jobs over the next 28 years, a 47 percent increase. Where will these jobs go?

2025 Forecast in 1998

And what actually happened

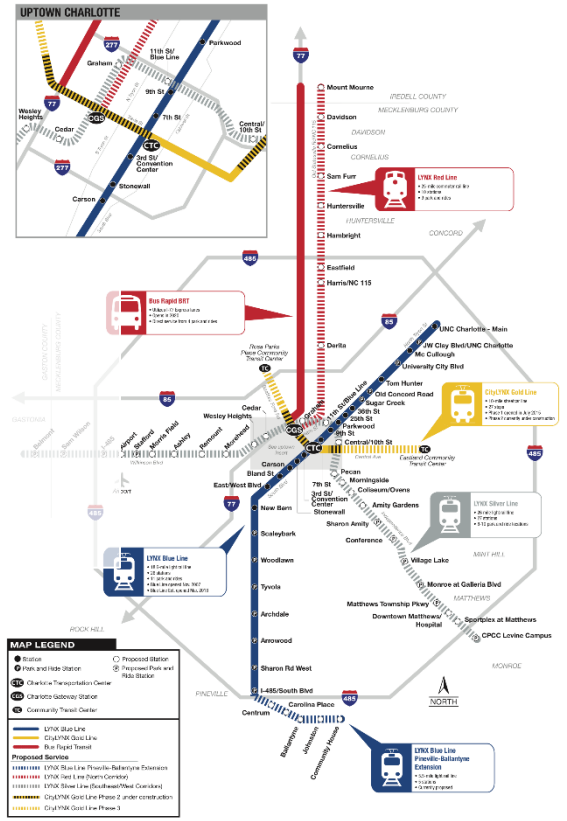
Mecklenburg County
2019 Population: 1,110,356
2017 Employment: 722,577



Because of 1998...

- Expanded bus fleet from 125 - 323
- Created CATS as an agency
- Expanded bus network and paratransit services to serve Mecklenburg County
- Developed regional partnership to expand express service
- 19 miles of light rail
- 4 miles of streetcar
- The Rail Trail!
- Places like SouthEnd & Noda….

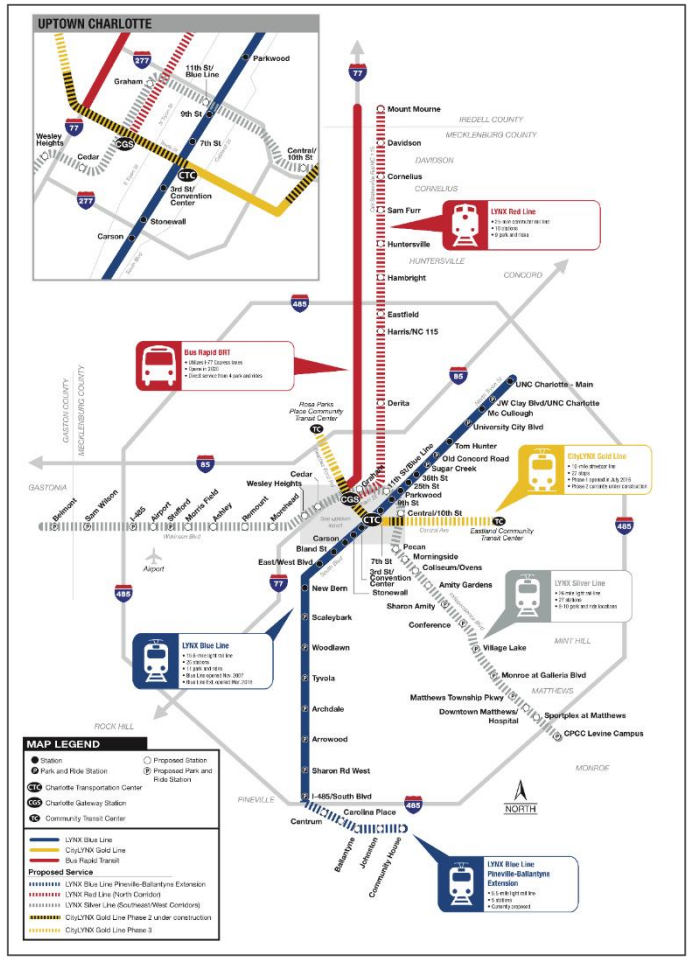
Advancing the Plan

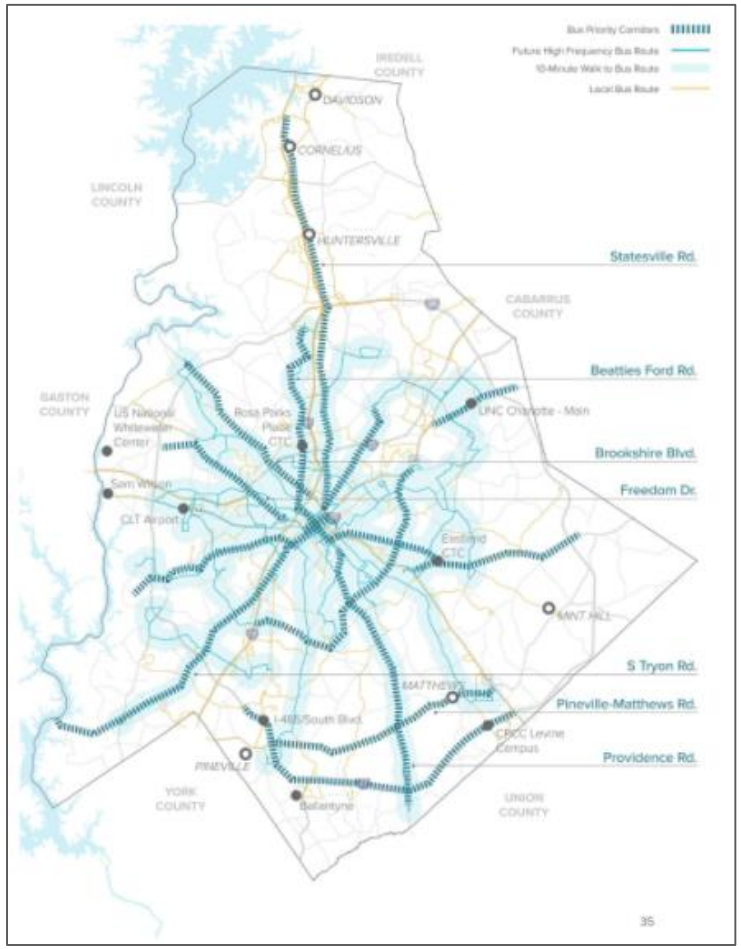


Connecting Efforts

CHARLOTTE MOVES
TASK FORCE

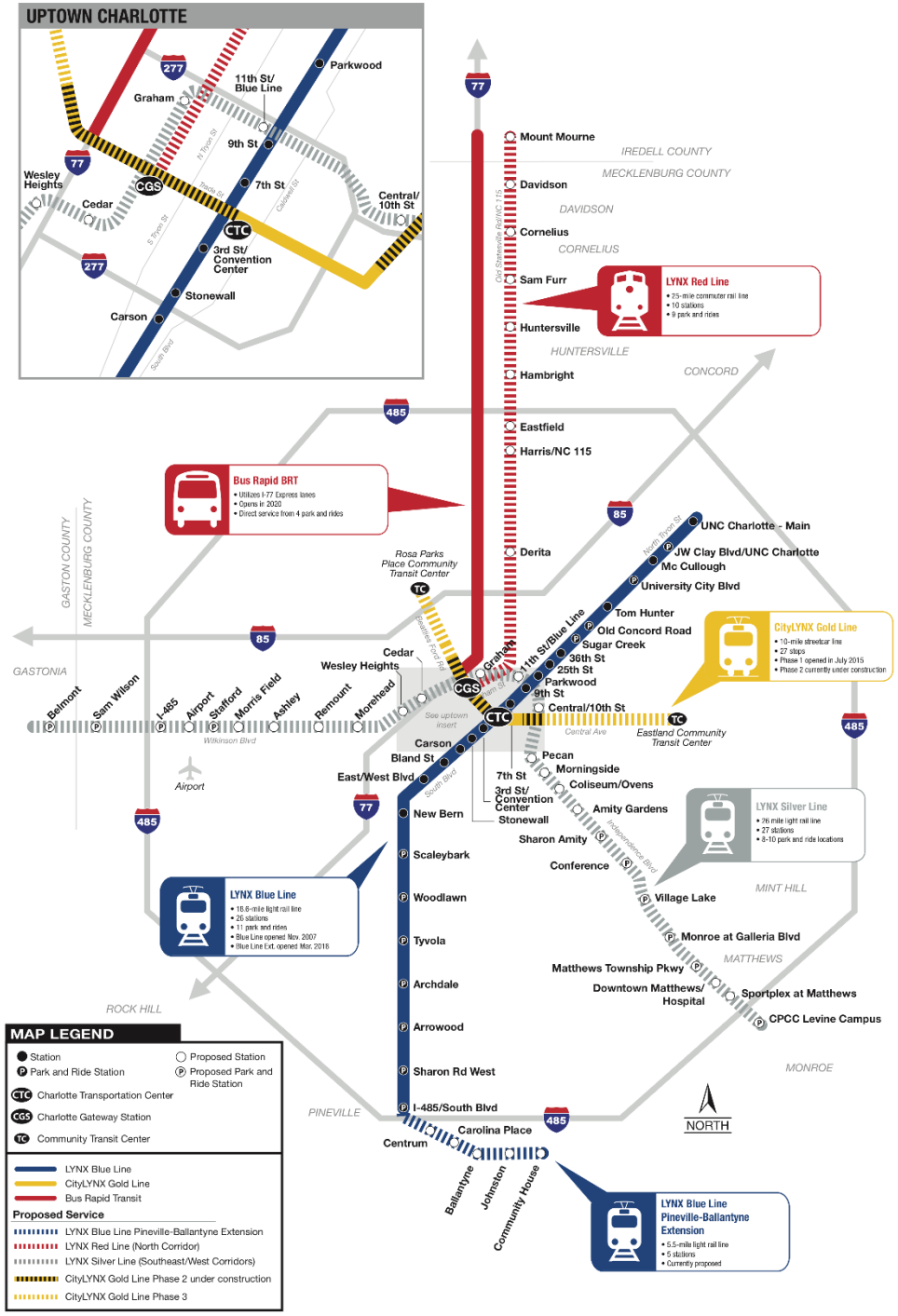
CONNECT Beyond
A Regional Mobility Initiative





Connecting Efforts

- LYNX Blue Line
  - South Corridor 2007
  - Northeast Corridor 2018
  - Pineville/Ballantyne Extension
  - Platform Expansion
- LYNX Silver Line Program
  - Design & Environmental Services
  - Transit Oriented Development Study
  - Rail Trail Study
- North Corridor Strategy
  - MetroRapid I-77 BRT Phased Implementation
  - LYNX Red Line—Continue NS Discussions



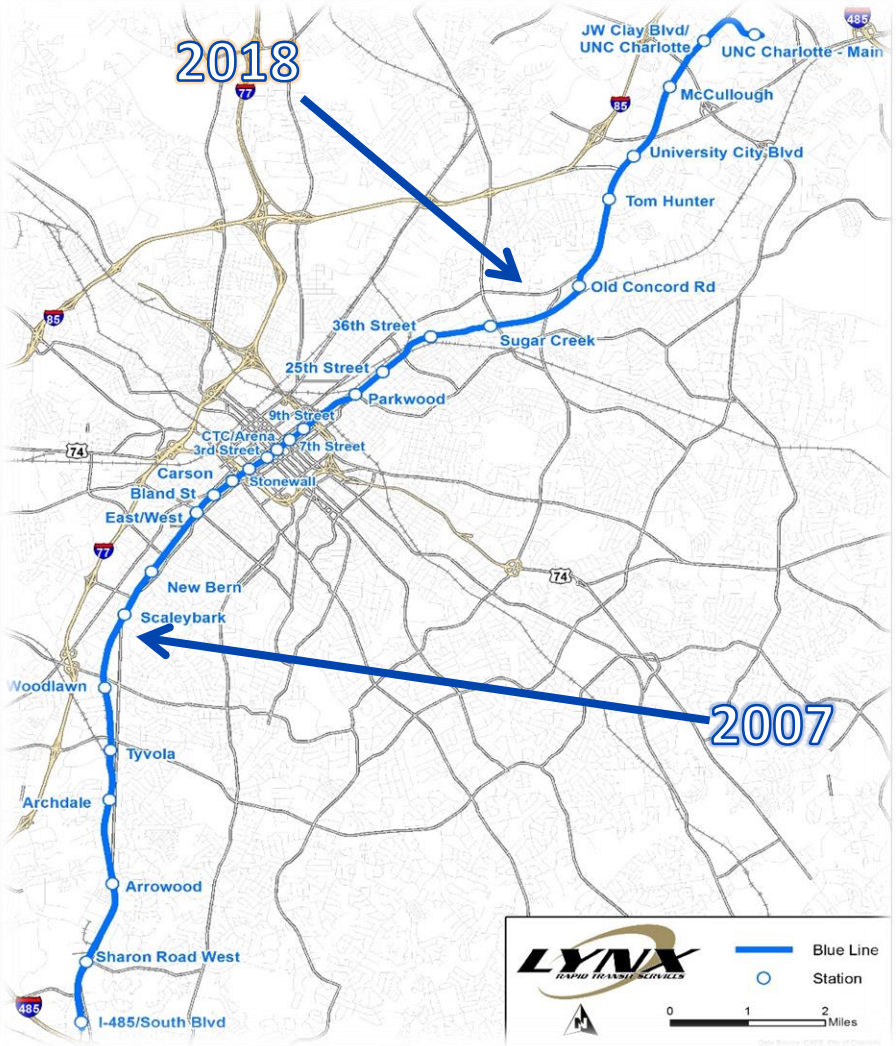
LYNX Blue Line

2007: Original South

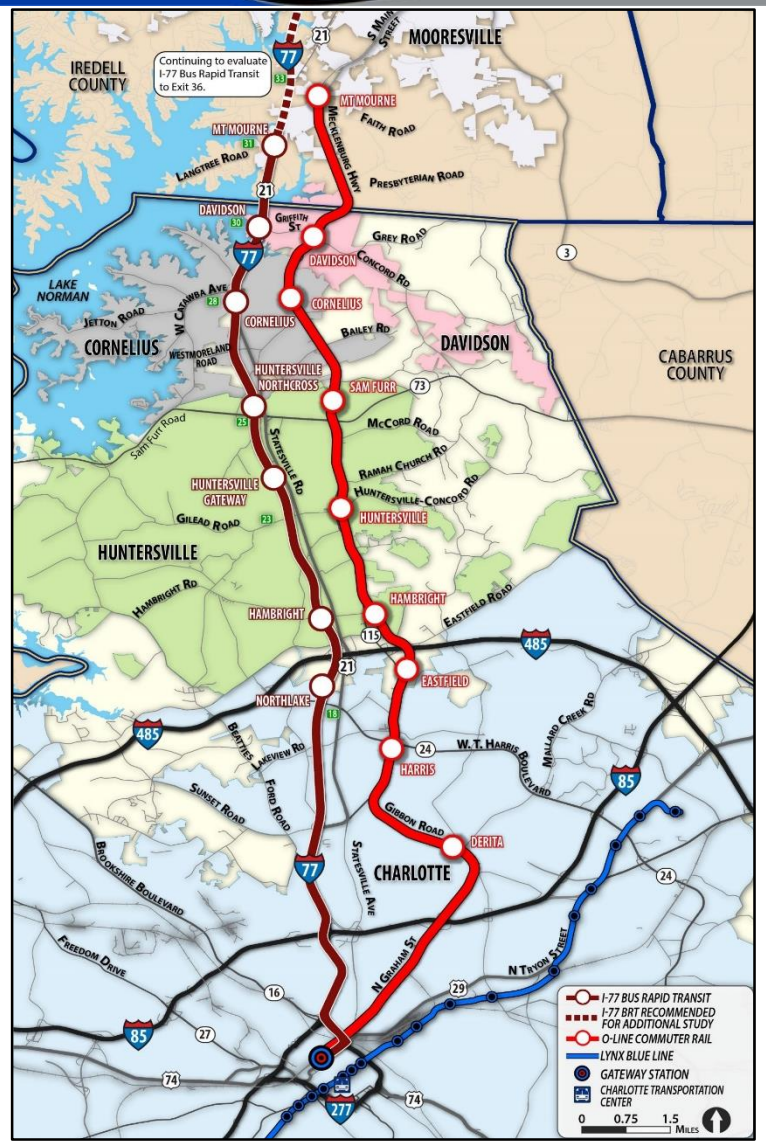
- 9.6 miles, 15 stations
- 7 park and ride facilities
- 3,191 parking spaces
- 4 stations extended to accommodate 3-car trains
- Originally terminus planned in Downtown Pineville

2018: Northeast Extension

- 9.3 miles, 11 stations
- 4 park and ride facilities
- 3,277 parking spaces
- Accommodates 3-car trains
- Improvements to North Tryon St.
- Connects UNCC campuses



North Corridor Rapid Transit Strategy



Short Term

- Village Rider and Express bus stop amenity improvements
- Continued express lane bus service improvements as recommended in the North Corridor Mobility Study and Envision My Ride

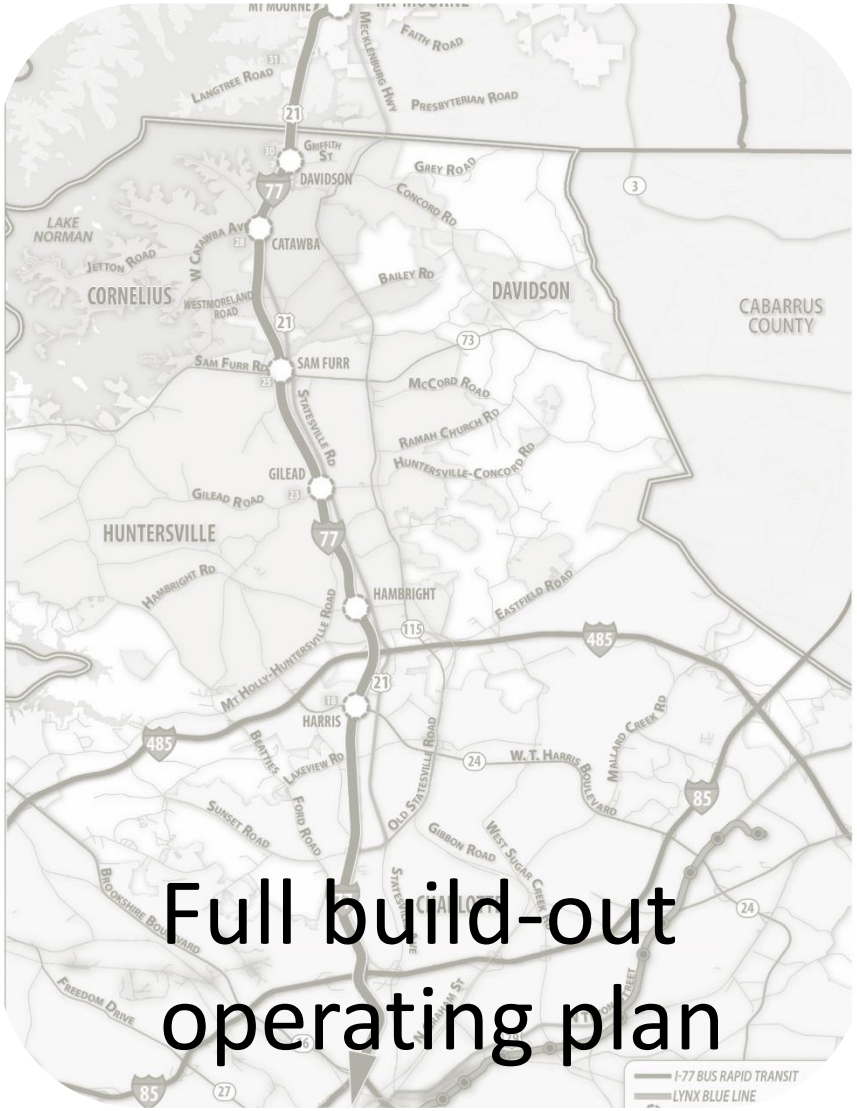
Medium Term

- Implementation of an I-77 Bus Rapid Transit service from Charlotte Gateway Station to Mooresville to include:
  - All day service including nights and weekends
  - Four new park and rides and two new express lane direct connects
  - Integrated BRT stations into mixed use developments that also incorporate emerging mobility technologies for first/last mile.
- Begin project definition of concept in 2020

Long Term

- Continue dialogue with Norfolk Southern on use of the “O” Line corridor for a Rapid Transit project

I-77 Enhanced BRT Program

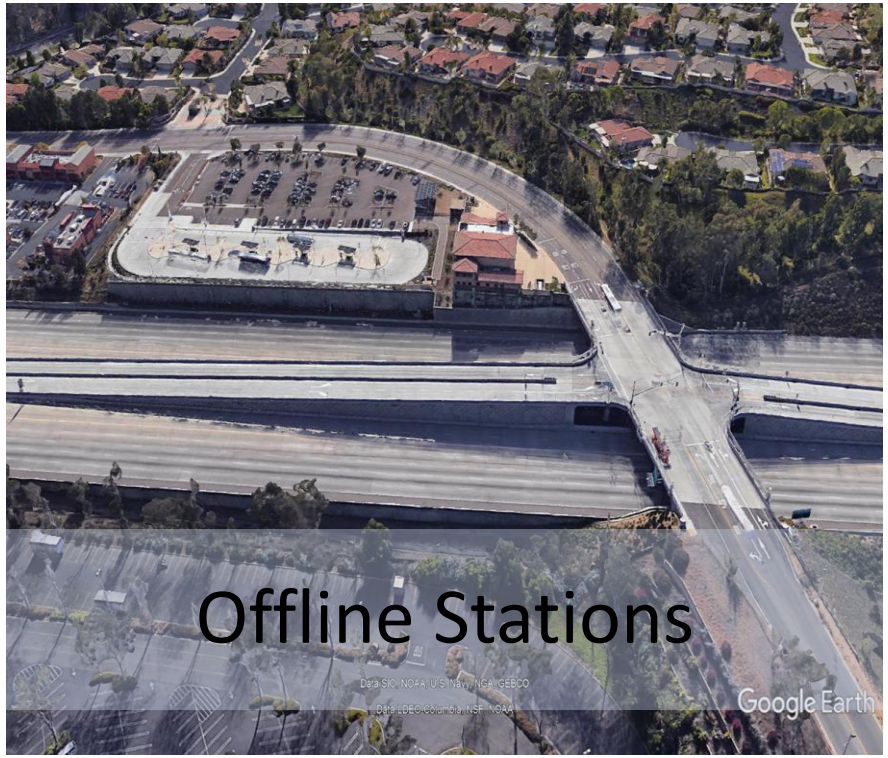


Full build-out operating plan

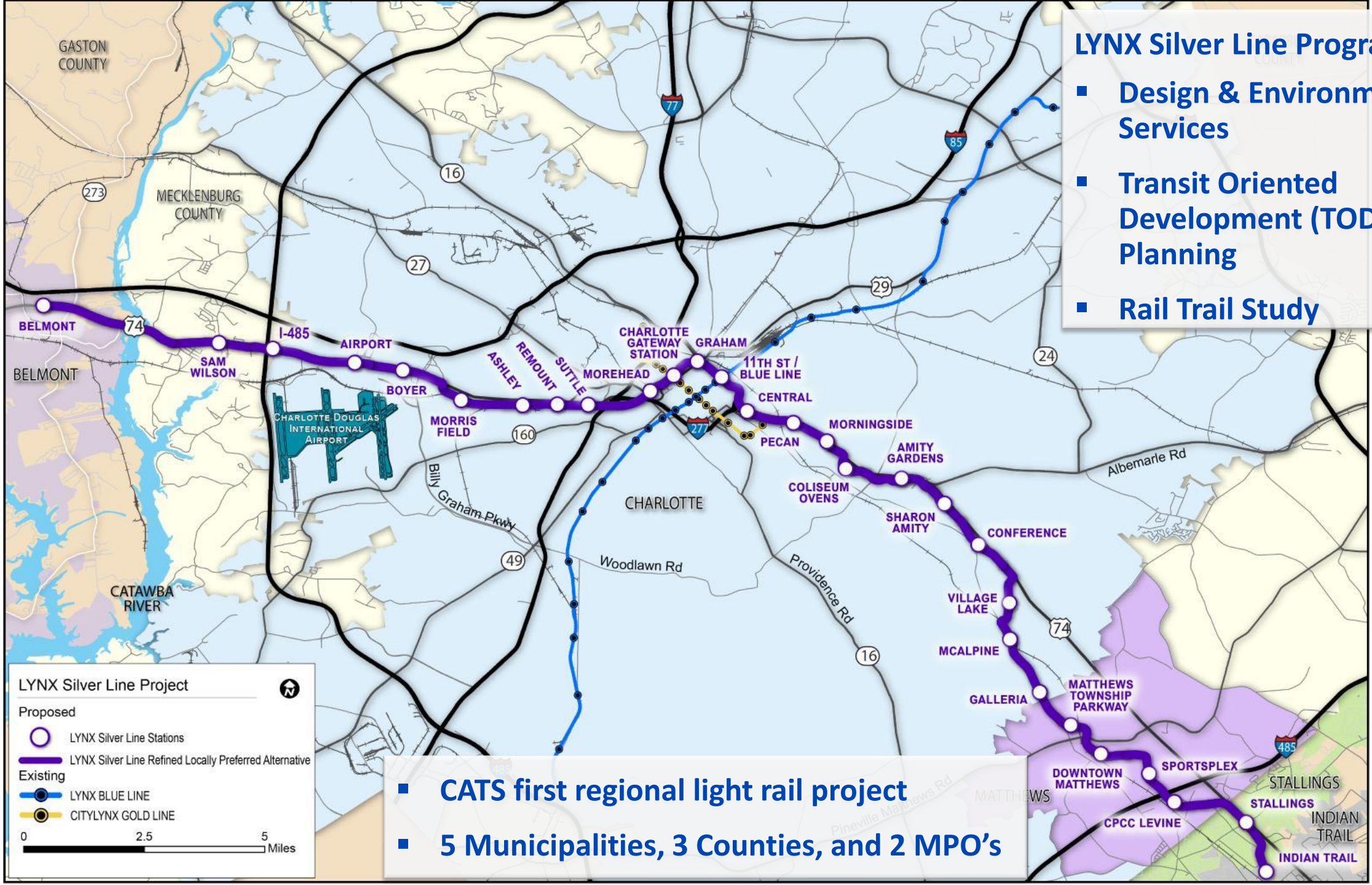
Family of services operating in the corridor

Mobility hub with Flexibility to offer future autonomous service

Inline (Shoulder) Stations



Offline Stations



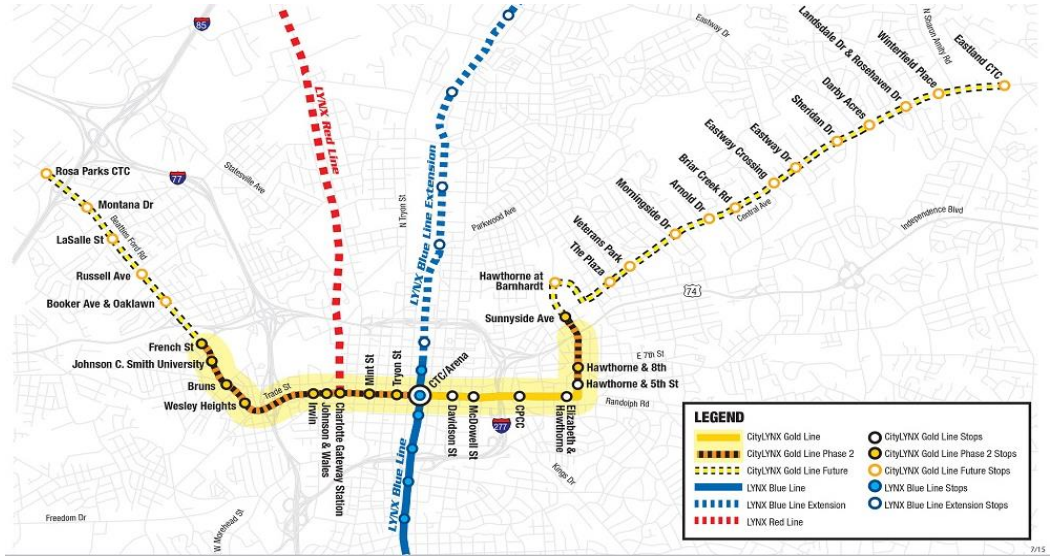
LYNX Silver Line Program

- Design & Environmental Services
- Transit Oriented Development (TOD) Planning
- Rail Trail Study

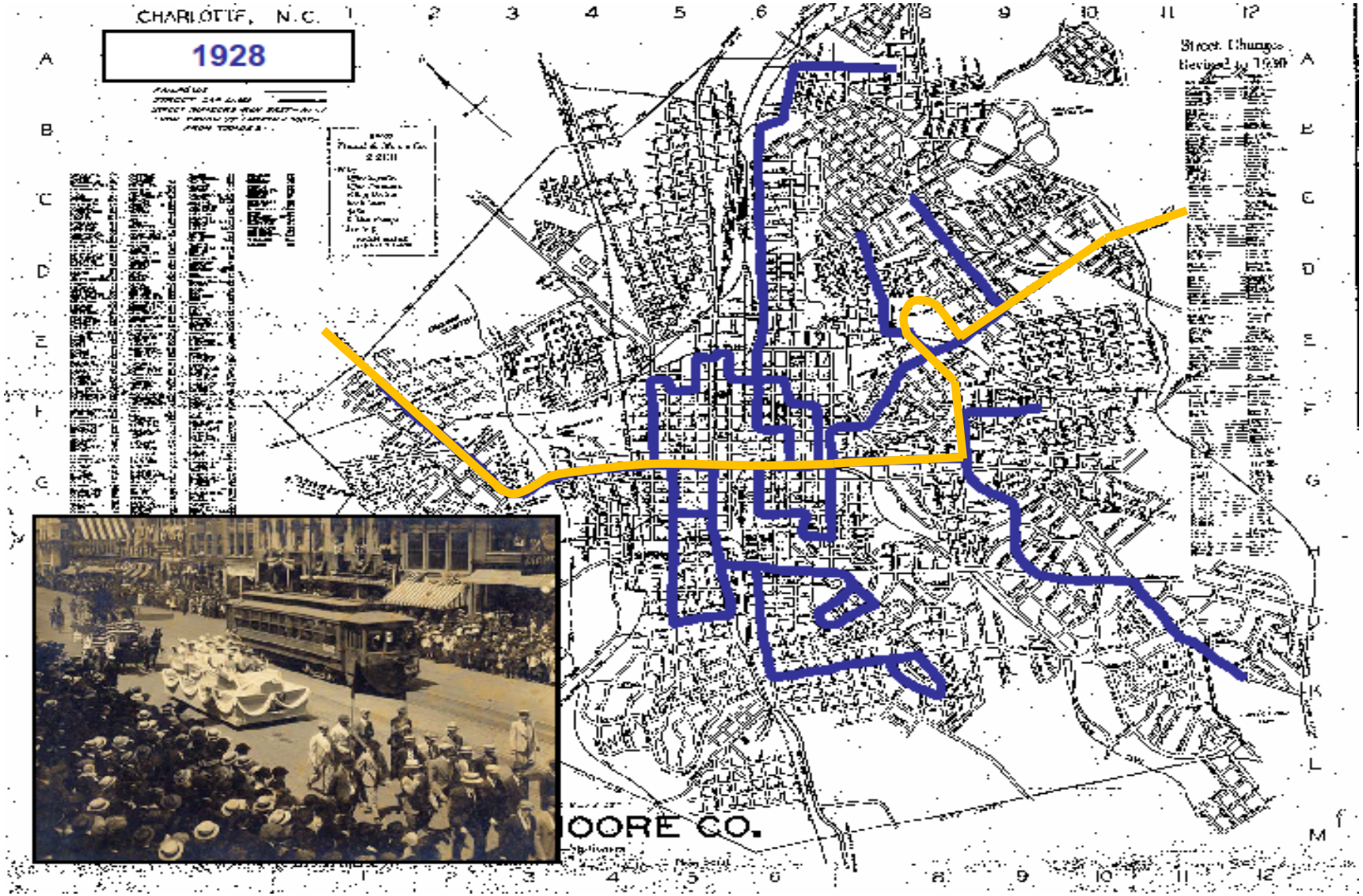
- CATS first regional light rail project
- 5 Municipalities, 3 Counties, and 2 MPO's

CityLYNX Gold Line

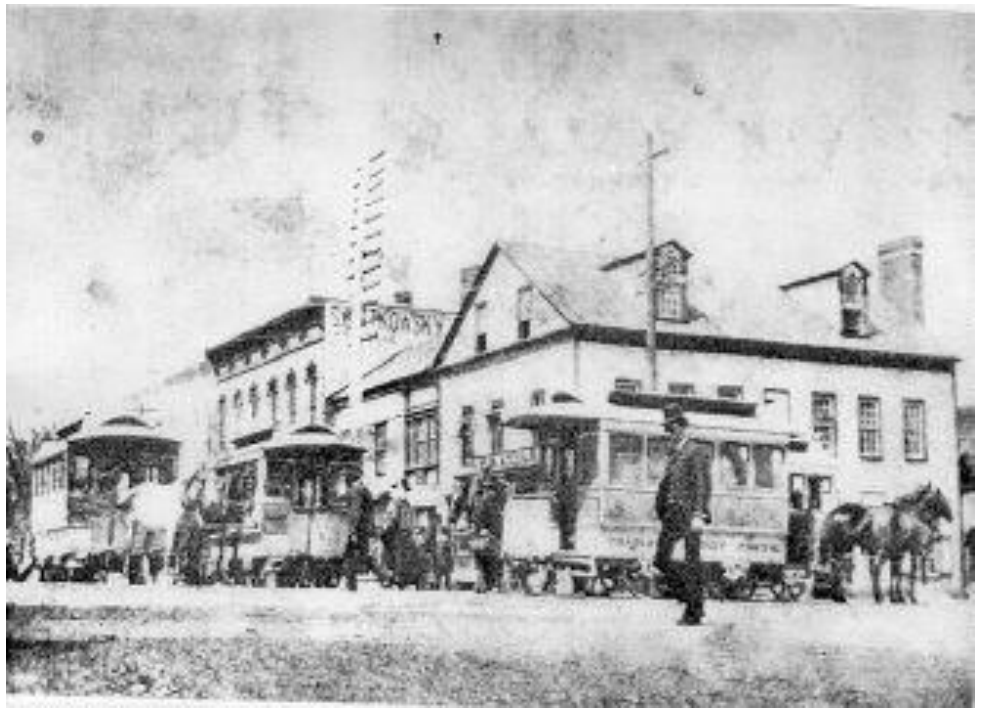
- **Phase 1 (2015)**
  - Charlotte Transit Center to Novant Health Used “Vintage” trolley
  - $37 Million -Urban Circulator
- **Phase 2 Extension (2021 *Under construction*)**
  - Extends to Johnson C. Smith and Sunnyside Ave in Elizabeth
  - Vehicles upgraded to modern Siemens model
  - $150 Million -Small Starts
- **Phase 3 Extension (*Future*)**
  - Extension to Rosa Parks CTC and Eastland CTC
  - Design update to begin soon



Charlotte Streetcar History



Charlotte Streetcar History



- Horse-drawn streetcar started in 1887
- First electrified streetcar started in 1891
- Car 85 last run on March 14, 1938
- Streetcar replaced by buses in late 1930's

Car 85 Back in Action

Next chapter in New Digs

Piece of Charlotte's transportation history moved to Spencer museum – for now

By David Perlmutt

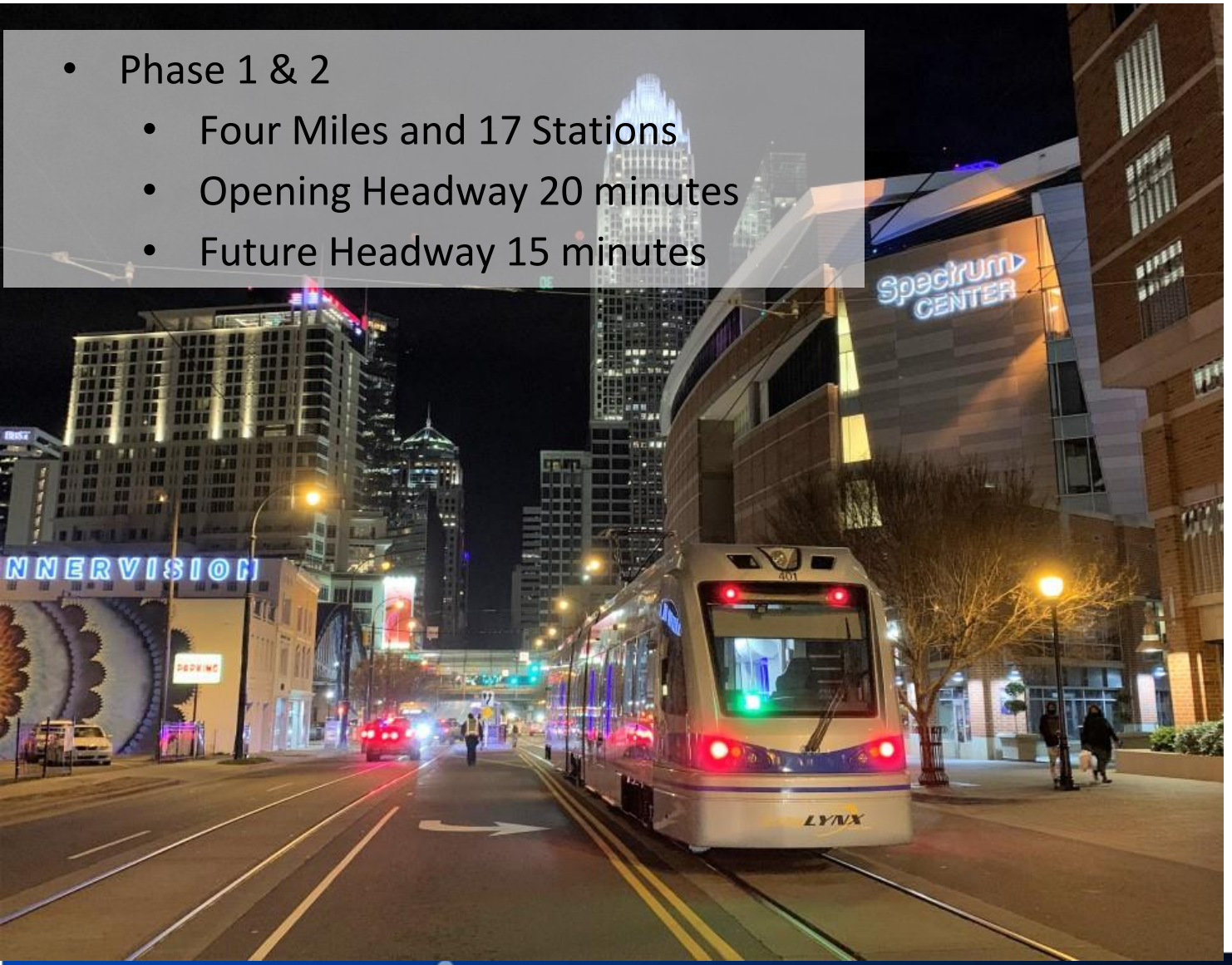
dperlmutt@charlotteobserver.com

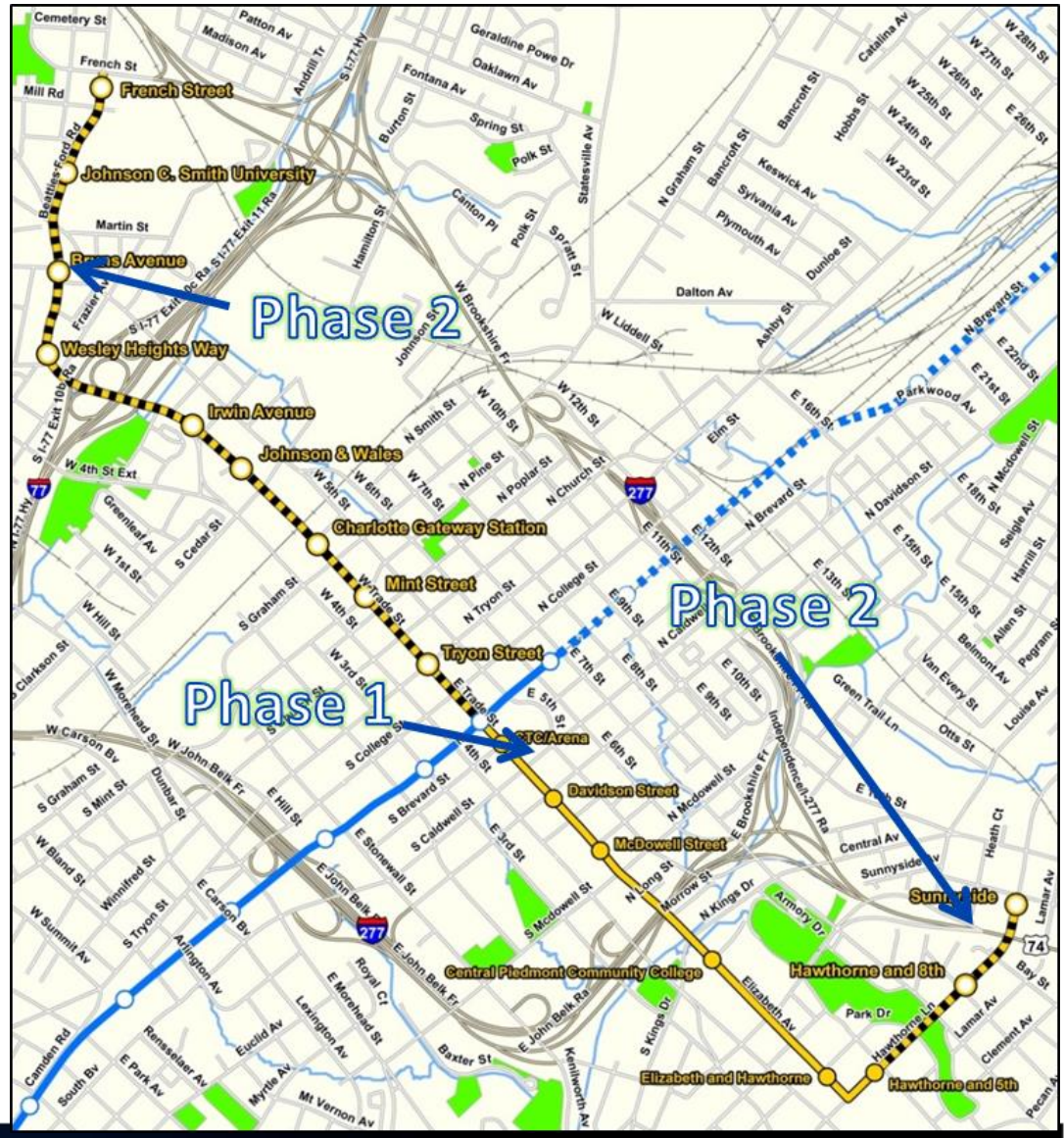
MARCH 12, 2016 04:16 PM, UPDATED MARCH 13, 2016 10:26 AM

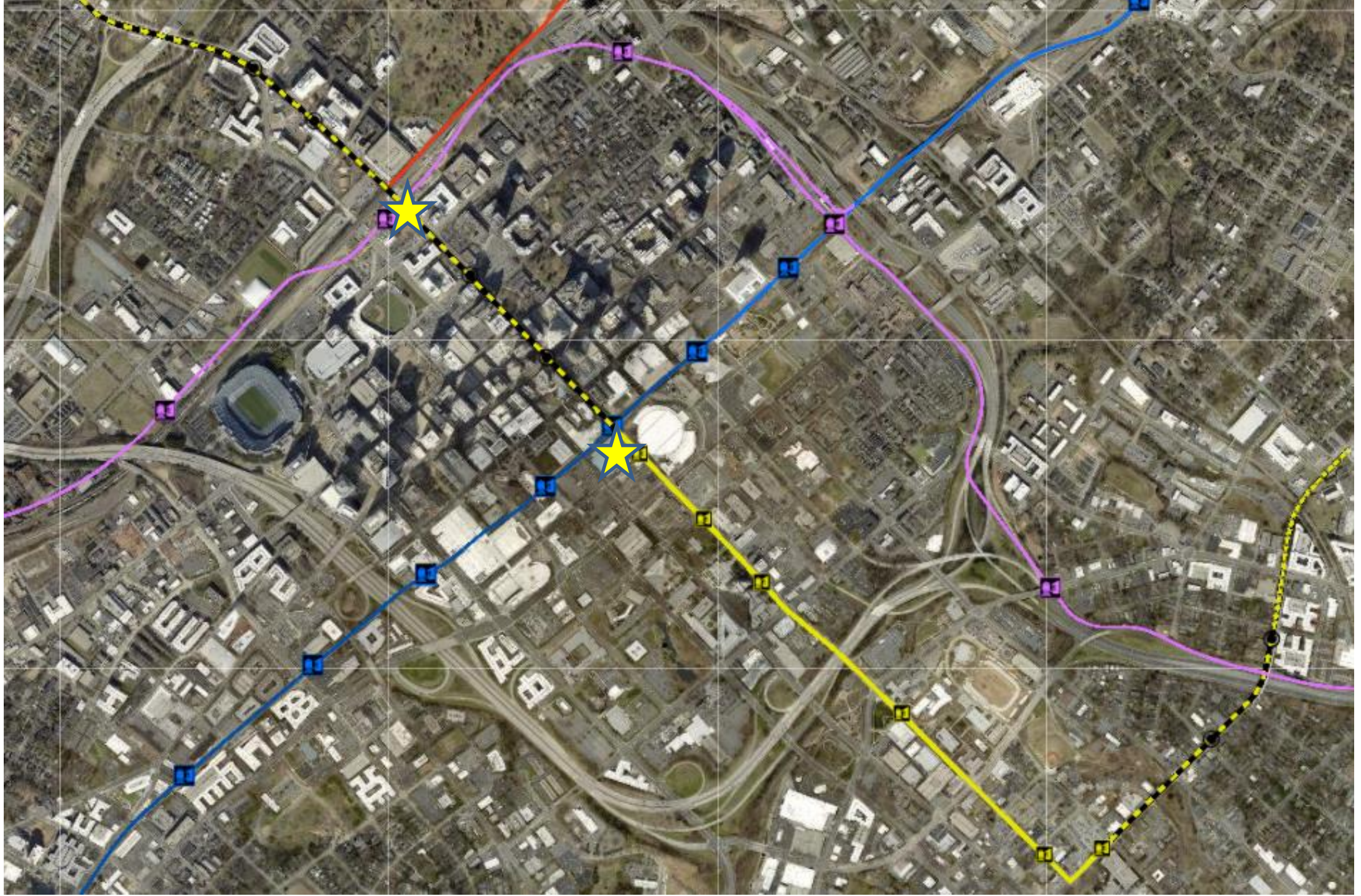
Streetcar No. 85 on flat-bed truck bound for North Carolina Transportation Museum in Spencer.
COURTESY OF STEVE MERSCH

CityLYNX Gold Line

- Phase 1 & 2
  - Four Miles and 17 Stations
  - Opening Headway 20 minutes
  - Future Headway 15 minutes

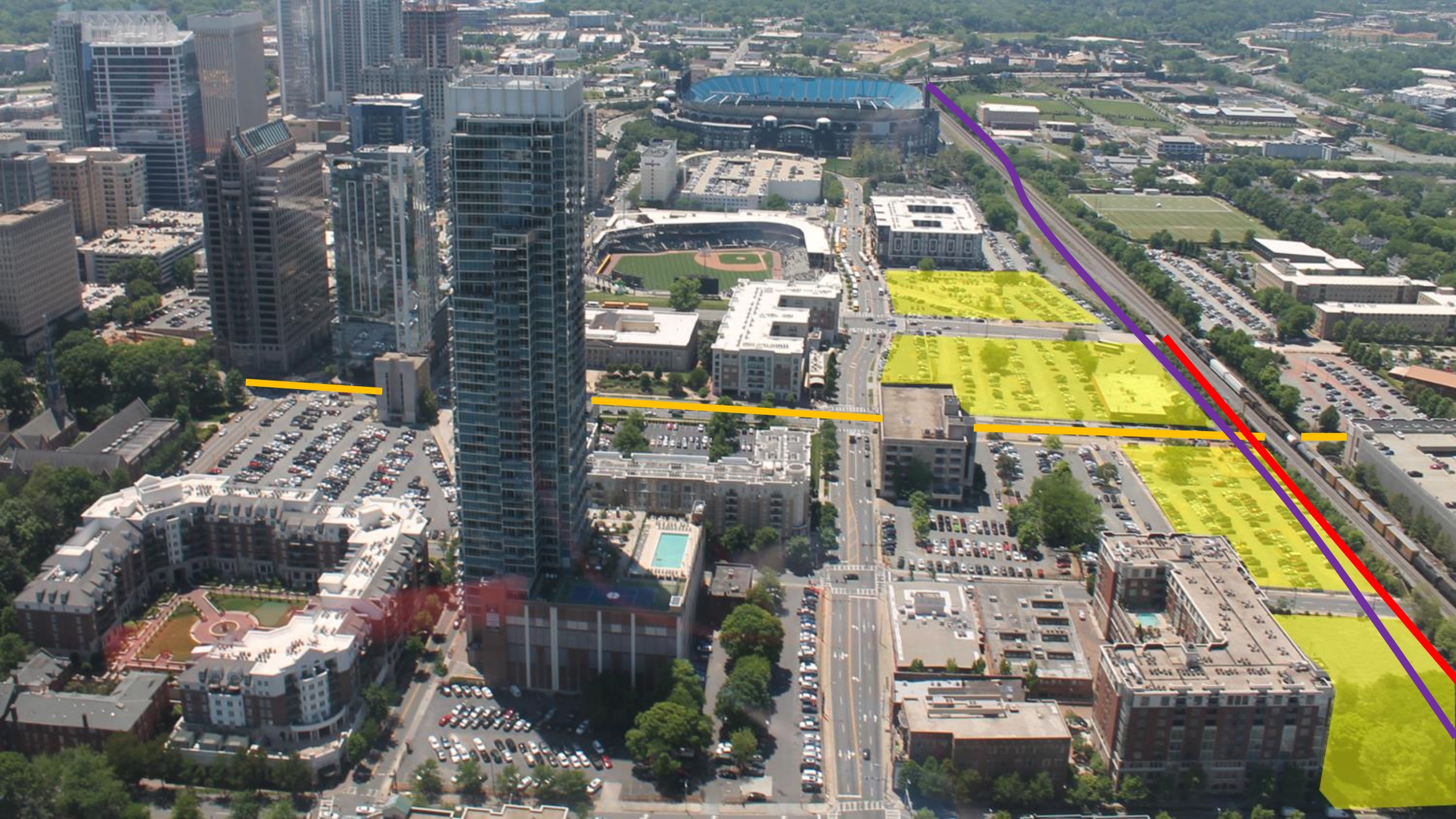




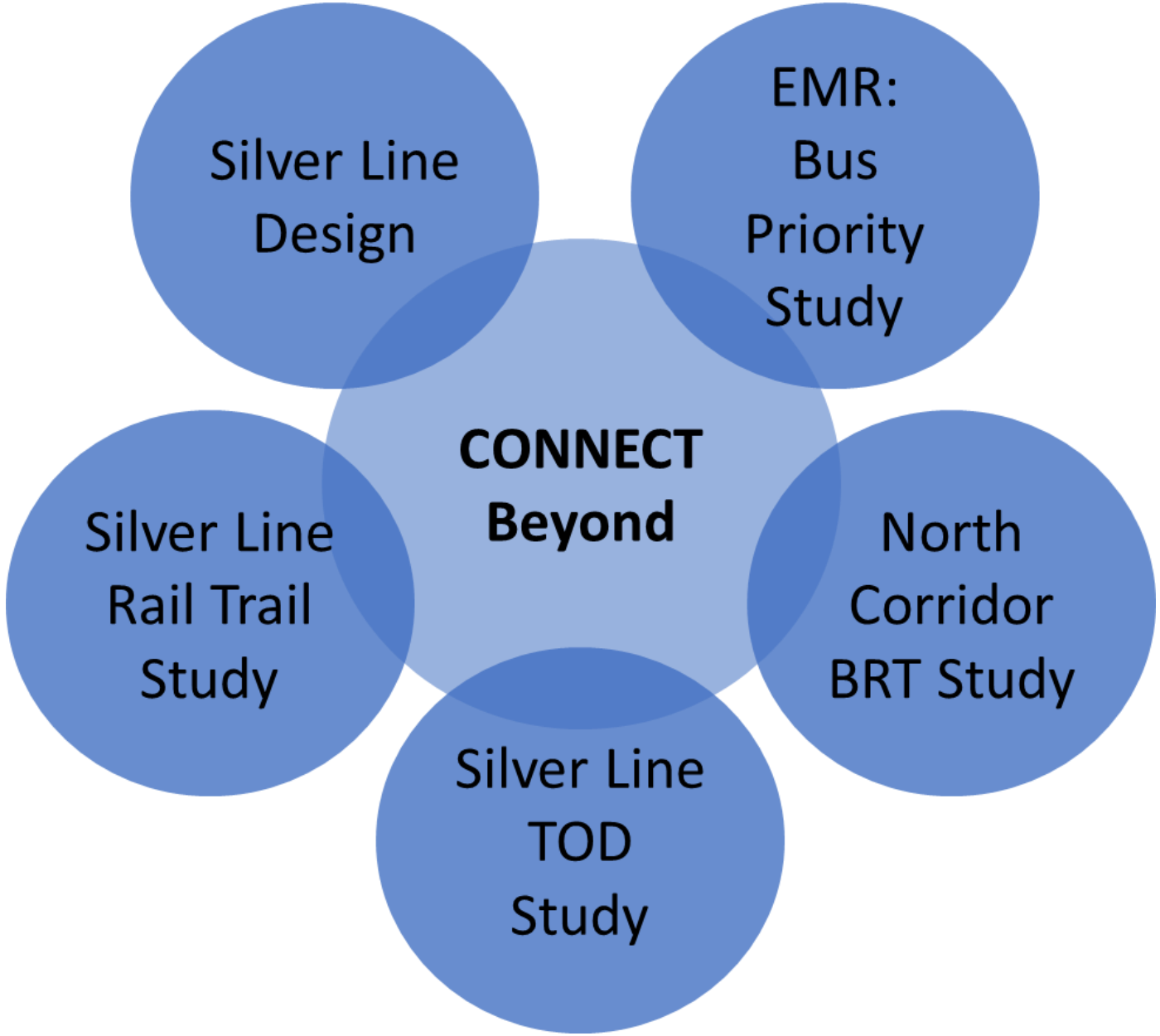


MEN'S & BOYS
LATEST STYLES
PANTS
PANTS
Candy's

Square to Center



Advancing the Vision



A New Day

The Pandemic has created new questions and considerations

- What does Transit look like during and post pandemic?
- Has highlighted the importance of essential service and workers
- There is a need for an essential services network plan.
- Proved how important our work is to a functioning society.
- Provides a unique opportunity to revision and rebuild our network not based solely on ridership but on value to the community
- Prior to covid, big changes would be incremental. Now, mobility can, will, and must change quickly.
- The need for passenger data is even more necessary.
- Social distancing must be considered in all aspects of planning and operating.
- We must incorporate resiliency as a planning metric

To Be Successful

- We need data…lots of it
  - What is the peak, is there one?
  - Are mobility needs the same?
- Stakeholder engagement
  - Who's coming back when…and how many?
  - Work more closely with town staff on service and amenities
- Start at the stop
  - Will be advertising a procurement for new family of amenities
  - Develop an optimization and improvement plan

Frequency Based Approach

Base Frequency: 15 Minutes		
Route	Route Name	Frequency
5	Sprinter Airport	15
7	Beatties Ford	15
9	Central	10
16	S. Tryon	15
27	Monroe	15

Base Frequency: 20 Minutes		
Route	Route Name	Frequency
6	Kings Dr	20
8	Tuckaseegee	20
10	West Blvd	20
11	North Tryon	20
21	Statesville Ave	20
34	Freedom Drive	20
211	Hidden Valley	20

Base Frequency: 30 Minutes		
Route	Route Name	Frequency
1	Mt. Holly Rd	30
2	Ashley Rd	30
3	The Plaza	30
4	Belmont	30
13	Nevin Road	30
14	Providence Rd	30
15	Randolph Rd	30
17	Independence Blvd	30
22	Graham	30
23	Shamrock	30
29	JW Clay/UNCC	30
56	Arrowood	30
58	Pineville	30
60	Tyvola	30
221	Idlewild	30

Base Frequency: 40+ Minutes		
Route	Route Name	Frequency
12	South Blvd	45
18	Paw Creek	45
19	Park Rd	45
20	Sharon Rd	60
24	Nations Ford Rd	45
26	Oaklawn Ave	45
28	Fairview Rd	40
30	Woodlawn/Scaleybark	35
39	Eastway	40
43	Ballantyne	60
51	Pineville-Matthews	45
54	URP/CIC	45
55	Westinghouse	45
57	Archdale	60
59	N. Meck, Connector	60
97	VR - Cornelius	60
98	VR - McCoy Rd	60
99	VR - Town Center	60
222	Pence Rd	60
235	Goodwill	40

Envision My Ride (EMR) launched in 2016 to redesign CATS existing bus system.

Goals:

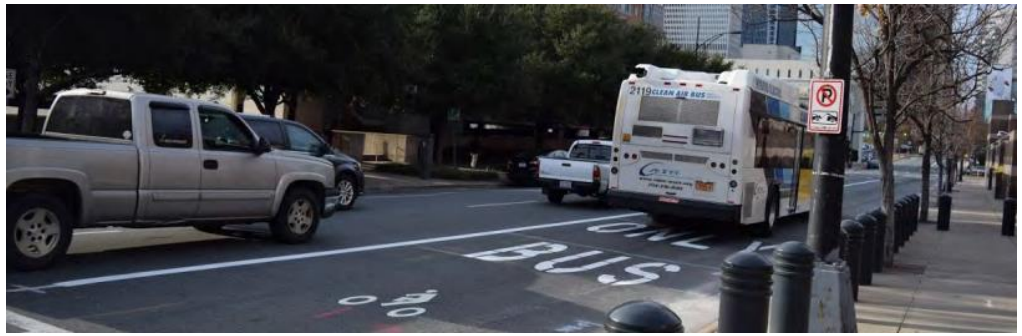
- Transition from a hub-spoke network
- Developing a more frequent & direct bus network

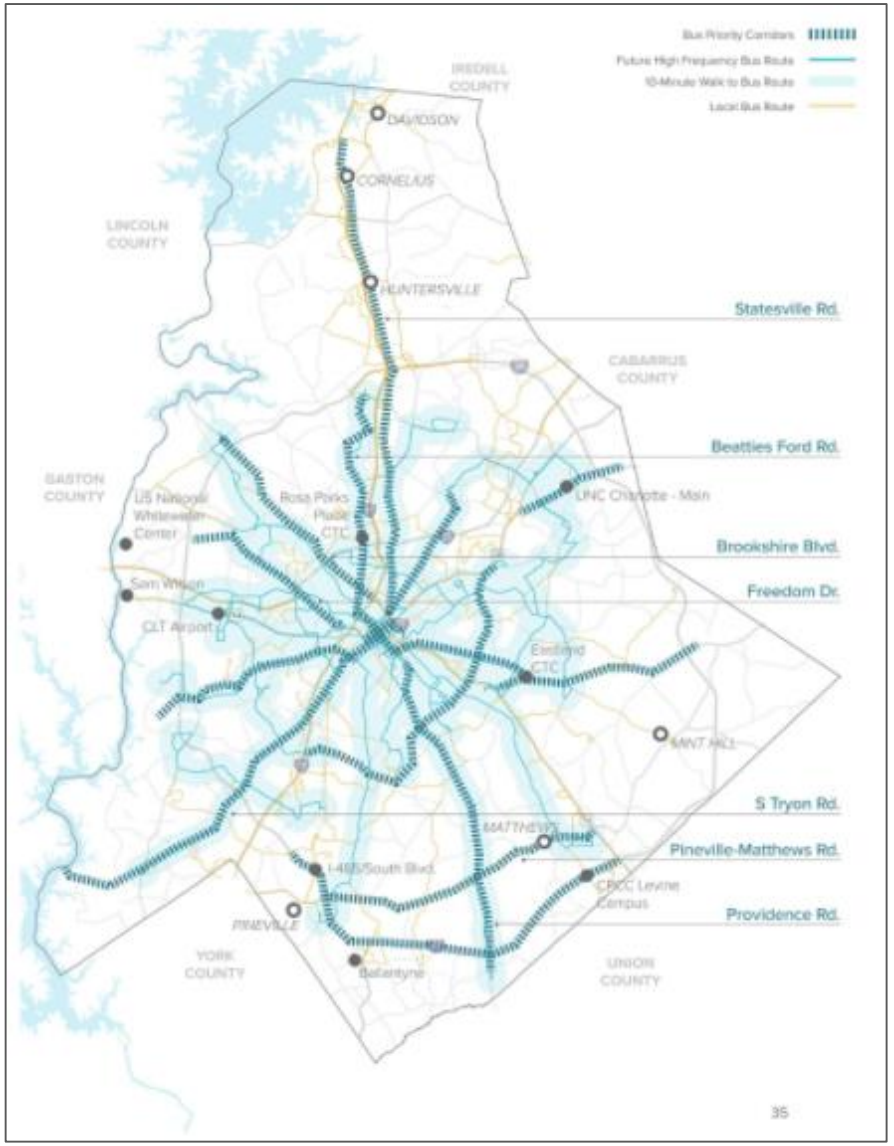
Implementing improvements in **3-key areas**:

1. **Structure** ✓
2. **Frequency** ✓
3. **Reliability**

Goals:

- Identify bus enhancements on major corridors to improve speed and reliability
- Bus treatments recommended may include:
  - Bus only lanes
  - Queue jumper
  - Transit signal priority
  - Adjustments to bus stop amenities and spacing

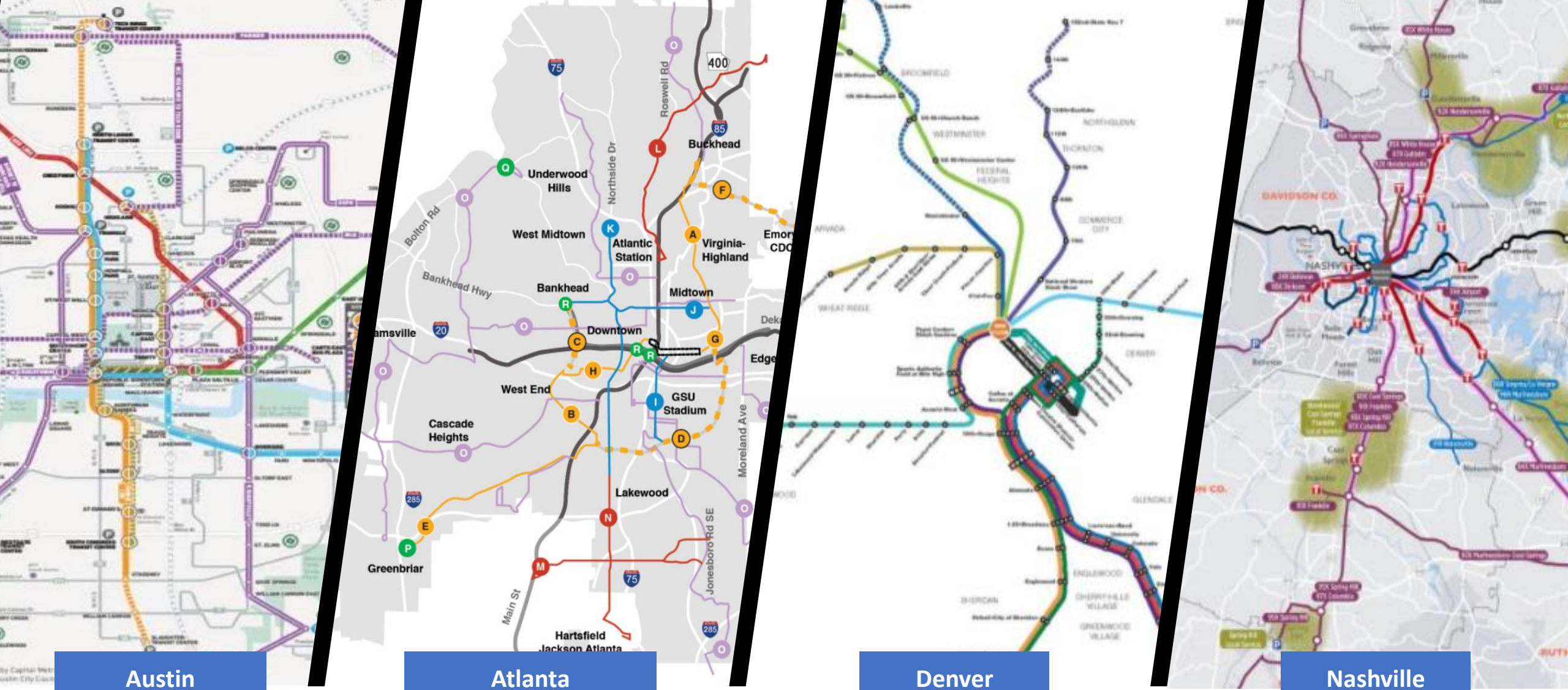




When in doubt, zoom out.

— Reggie Watts —

AZ QUOTES



Austin
Project Connect

Atlanta
More MARTA & The ATL

Denver
FastTracks

Nashville
nMotion

Visions Are Important

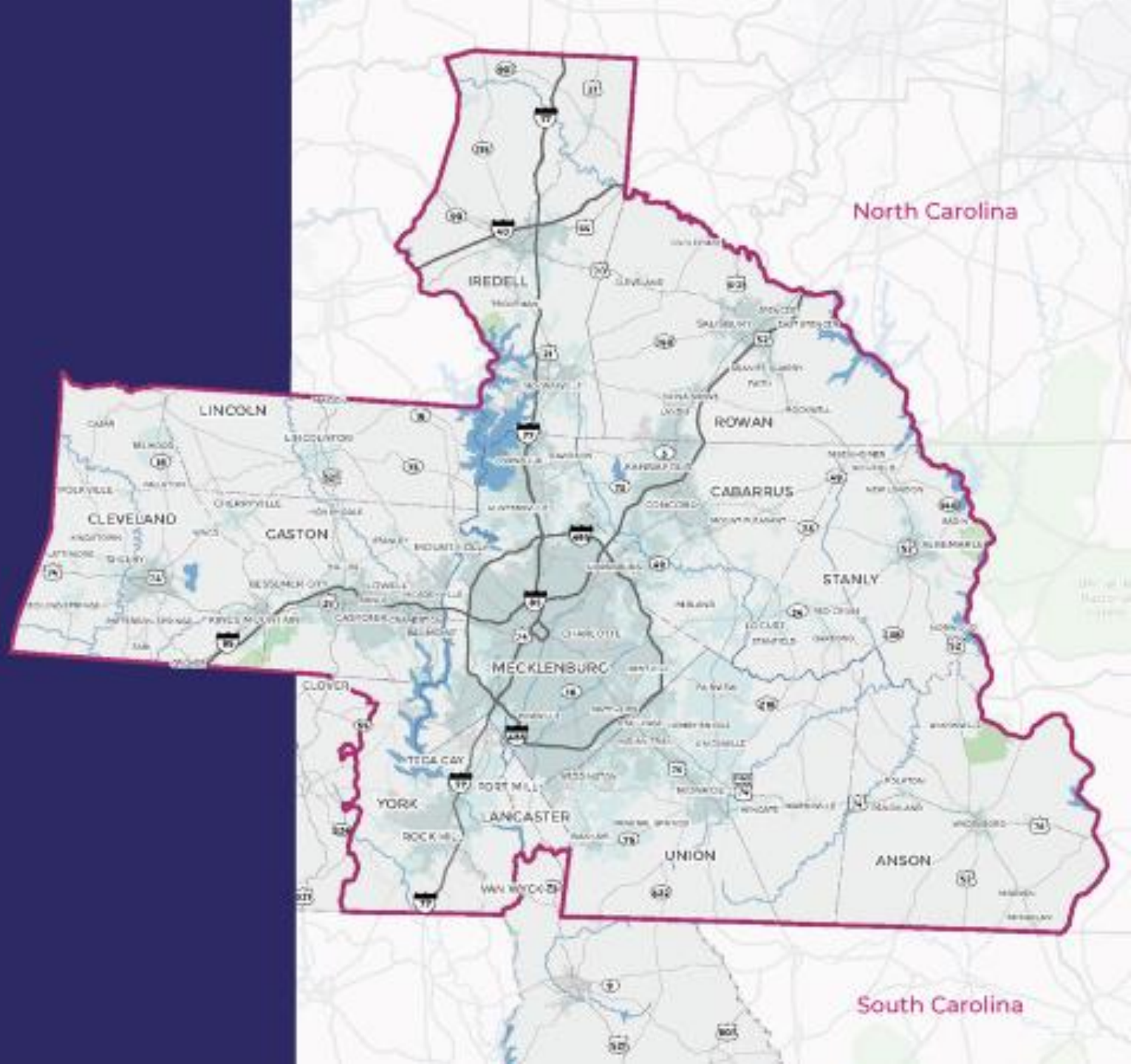
Our Region

2 States

12 Counties

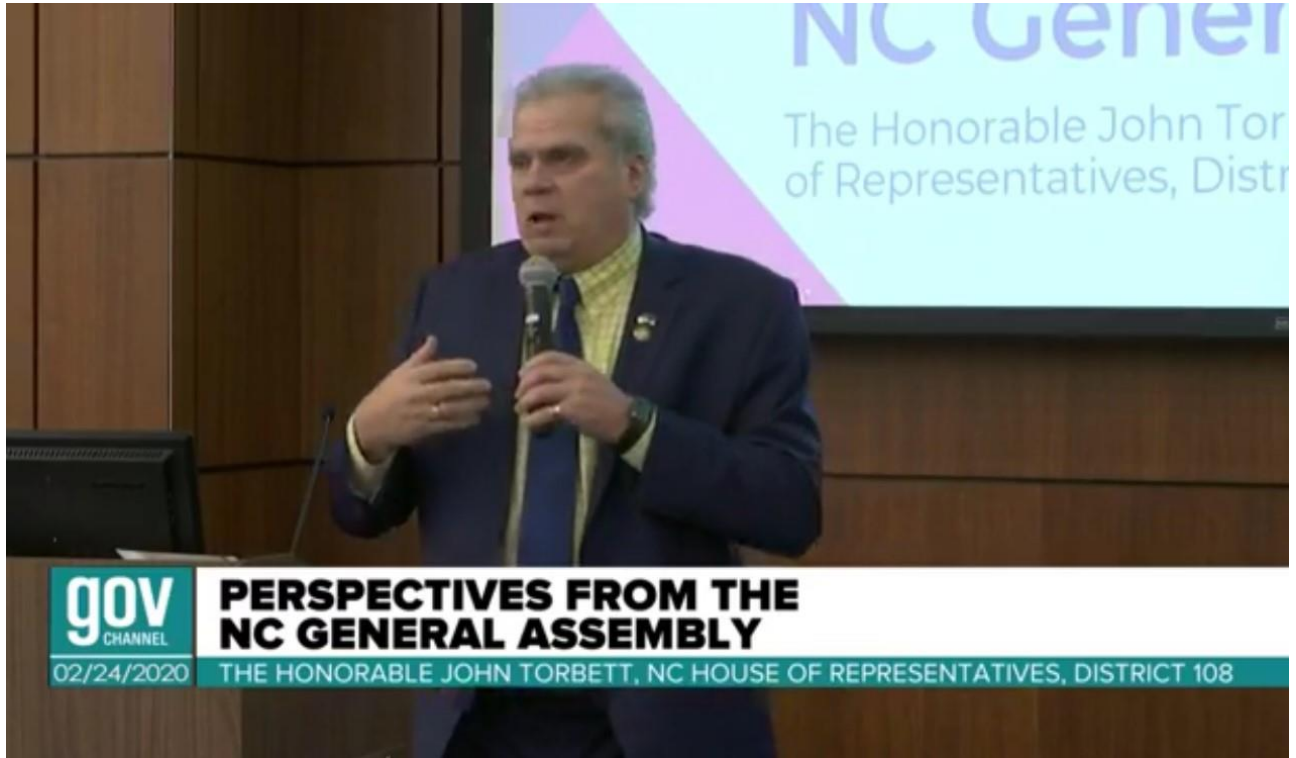
5K Square Miles

2.6 Million People



CONNECT Beyond

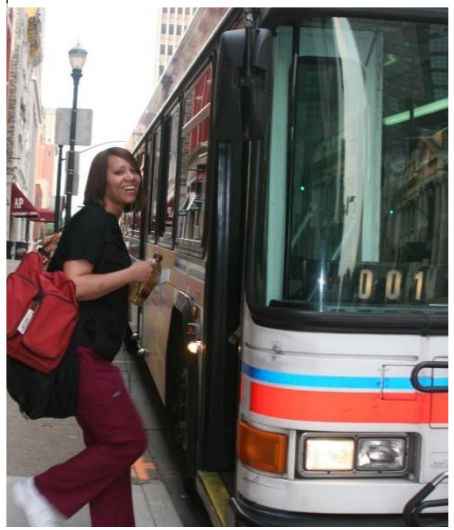
A Regional Mobility Initiative



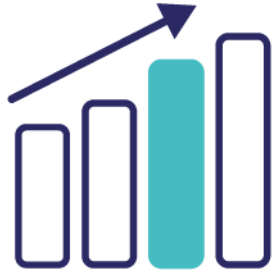
Building a Plan Together

CONNECT Beyond

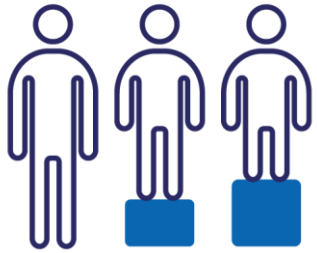
A Regional Mobility Initiative



Creating Mobility Choice



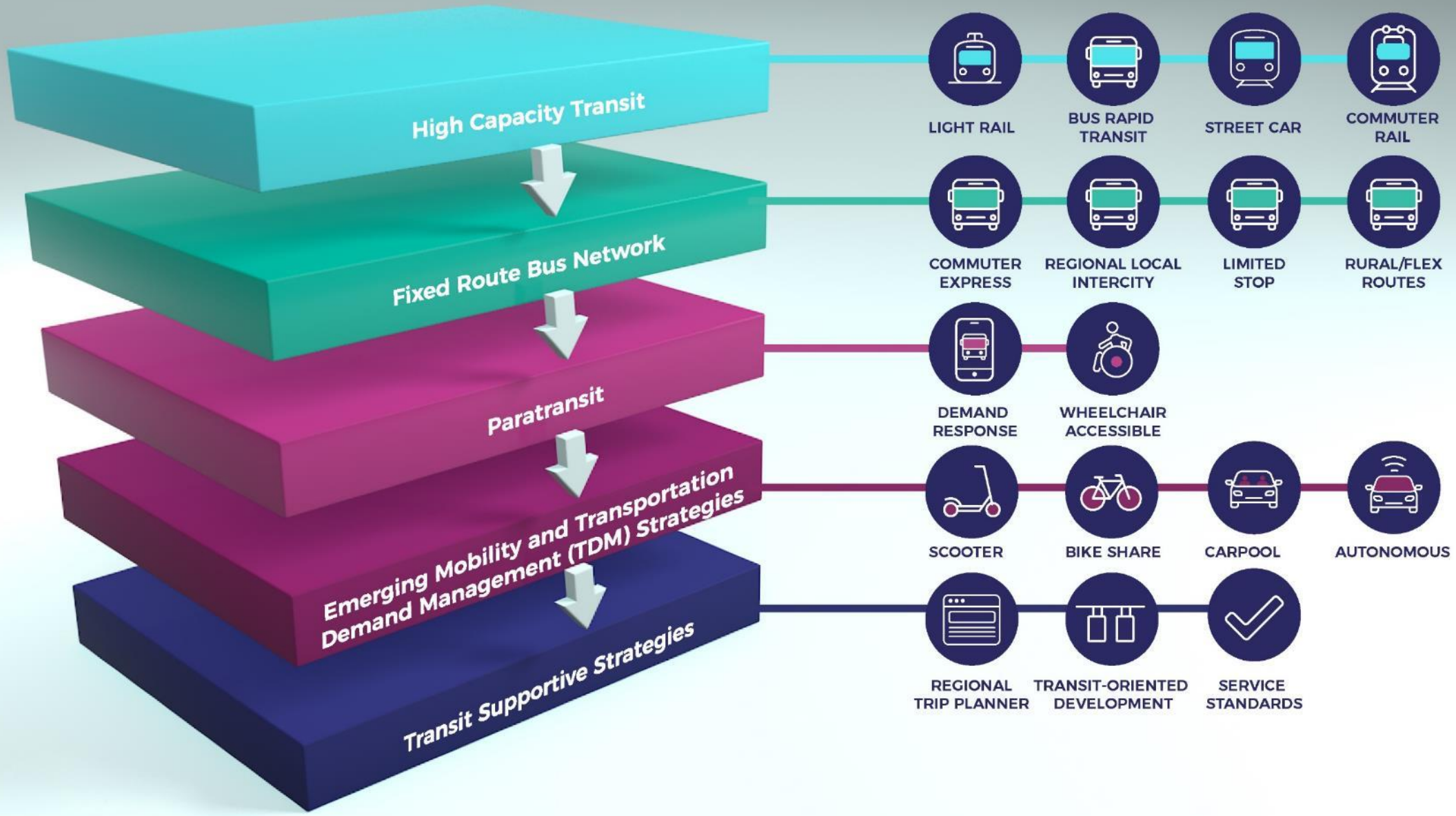
Preparing for Future Growth

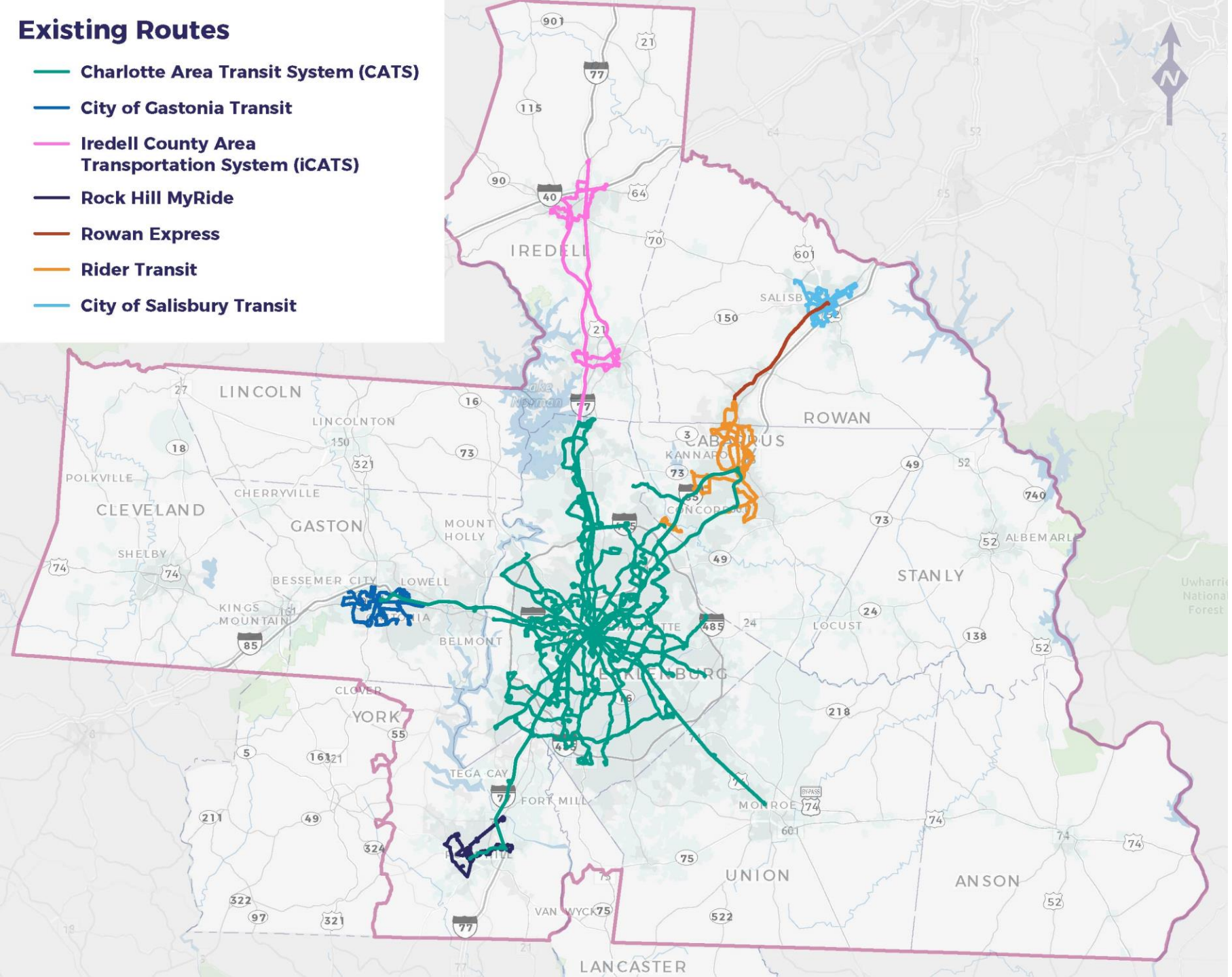


Advancing Equity

Aligning Plans and Local Visions

Planning for Implementation


High Capacity Transit
Fixed Route Bus Network
Paratransit
Emerging Mobility and Transportation Demand Management (TDM) Strategies
Transit Supportive Strategies
LIGHT RAIL
BUS RAPID TRANSIT
STREET CAR
COMMUTER RAIL
COMMUTER EXPRESS
REGIONAL LOCAL INTERCITY
LIMITED STOP
RURAL/FLEX ROUTES
DEMAND RESPONSE
WHEELCHAIR ACCESSIBLE
SCOOTER
BIKE SHARE
CARPOOL
AUTONOMOUS
REGIONAL TRIP PLANNER
TRANSIT-ORIENTED DEVELOPMENT
SERVICE STANDARDS



Bus Routes in Our Region

Time & Money

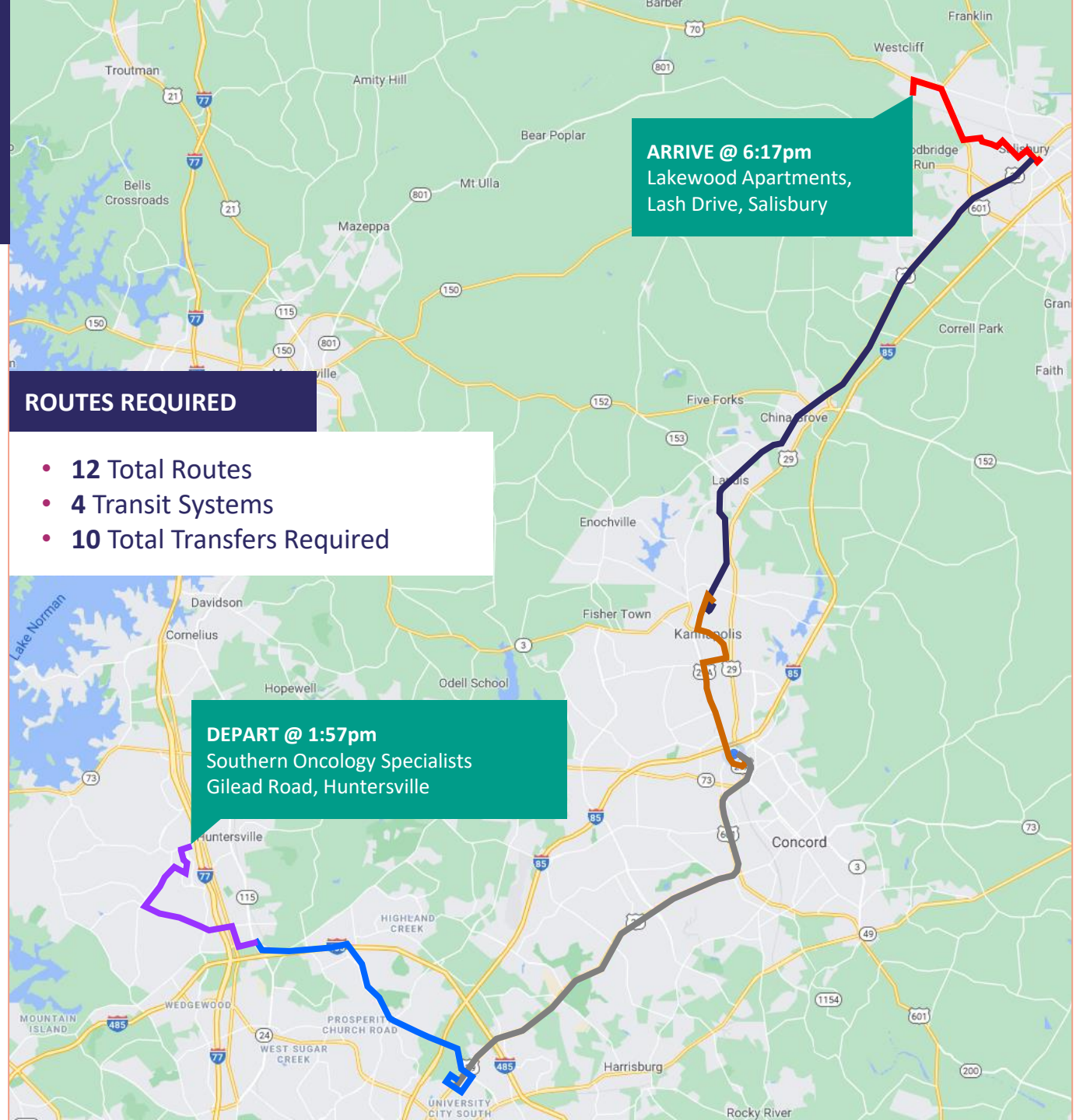
Outbound Trip = 3 Hours, 59 Minutes

Return Trip = 4 Hours, 20 Minutes

Round Trip Time
8H 19M

CAR
40-60 Minutes each way

UBER
Est. $74.14 Roundtrip



CONNECT Beyond

Building a Better Bus Network

Policy

Technology

Operational

Financial

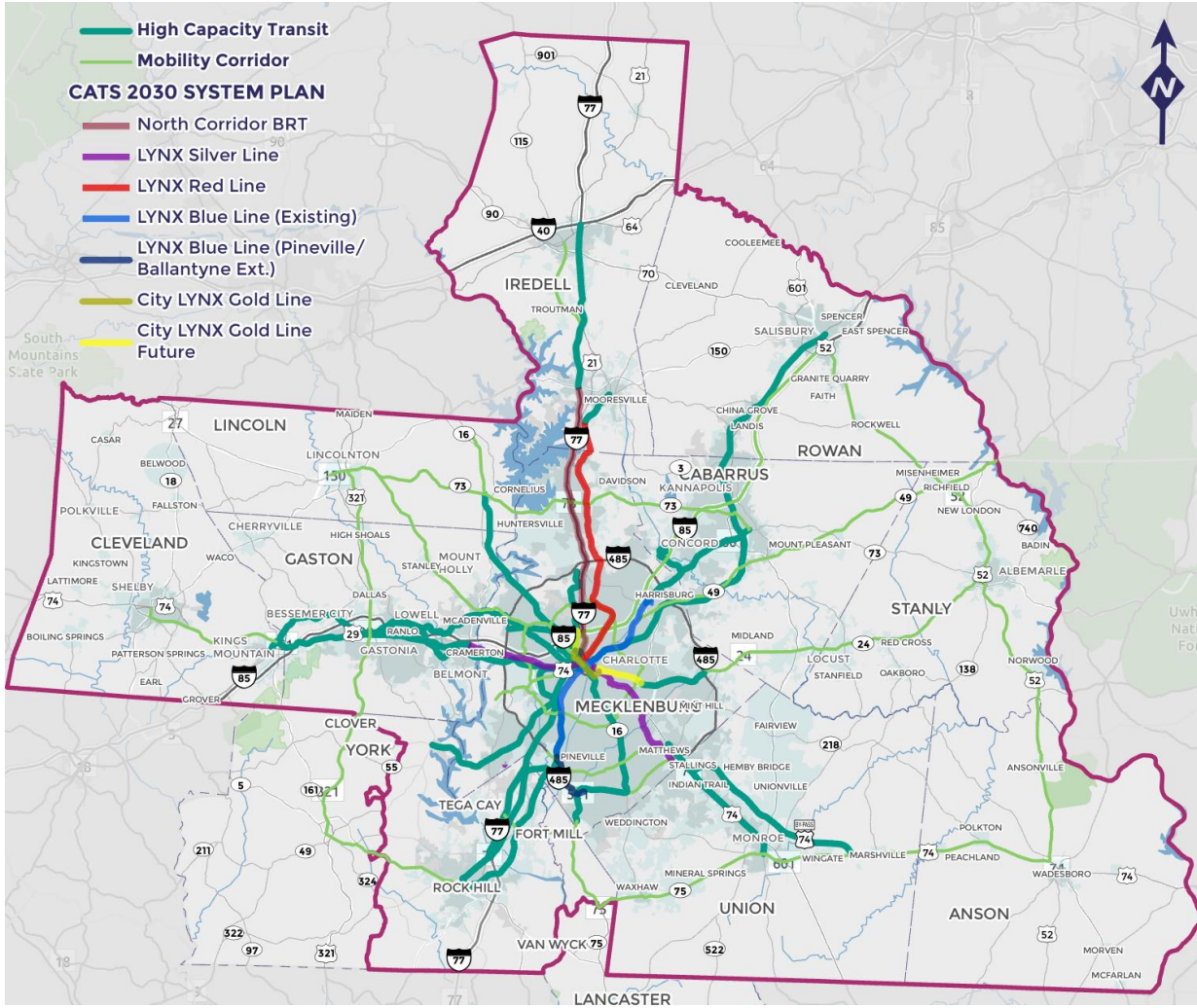
Interagency Coordination

Education & Outreach

High Capacity Transit & Mobility Corridors

I have a line on the map, now what?

- **Urban and Urbanizing Areas**
- **Vision = Opportunity**
  - **Investment**
  - **Predictability**
- **Cross Community Coordination**
  - **Land use policy**
  - **Local mobility connections**
  - **Partnerships**
  - **Funding**
- **Community Education and Technical Assistance**



To Be Successful

- We must plan and build more inclusive and thoughtful infrastructure
- All layers of mobility have to advance.
- Access to opportunity must be integrated into each transit project and service proposal

Thank you!