

# Technical Overview

- To help this meeting run as smoothly as possible, please consider the following tips:
  - Use headphones with a microphone; make sure you are muted when not speaking.
  - Send all questions and comments through the chat feature.
  - You may choose to disconnect from any VPN or third-party connection sources during the meeting to maintain connectivity and bandwidth.
- This meeting will be recorded and shared with committee members who were unable to attend



# CONNECT Beyond

A Regional Mobility Initiative

January 13, 2021

## Joint Advisory Committee Meeting



# Welcome

Geraldine Gardner, Executive Director, Centralina  
Regional Council

# Agenda

- Project Overview
- Importance of Regional Partnerships
- High Capacity Transit Corridors
- The Next Layers of Mobility
- Group Discussions





**CONNECT  
Beyond**

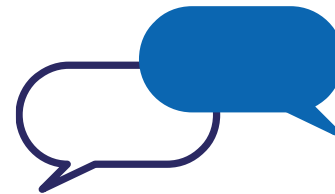
# Meeting Objectives



Update you on the status of the CONNECT Beyond Project



Present the high capacity transit corridors



Gather feedback on how identified corridors match the CONNECT Beyond guiding principles



Introduce upcoming project tasks: Integrated Bus Strategies, Transportation Demand Management & Mobility Hubs



# CONNECT Beyond Overview Video



**CONNECT**  
**Beyond**

# Thank You to our Committees

- Policy Advisory Committee
- Technical Advisory Committee
- Community Advisory Committee

# Policy Advisory Committee

- **Sr. Vice President Joe Bost** Charlotte Regional Business Alliance
- **Councilmember Brian Carnes** Lancaster County Council
- **Mayor Will Cauthen** Town of Cramerton
- **Senator Wes Climer** Senior SC Legislature
- **Commissioner Bobby Compton** Town of Mooresville
- **Mayor Bill Dusch** City of Concord
- **Mayor Jack Edwards** Town of Pineville
- **Councilmember Rusty Efirm** City of Locust
- **Councilmember Julie Eiselt** City of Charlotte
- **Mayor Bill Feather** Town of Granite Quarry
- **Sr. Vice President Reg Henderson** Lowes
- **Mayor Mike “Frizbee” Herron** Village of Misenheimer
- **Mayor John Higdon** Town of Matthews
- **Mayor Darrell Hinnant** City of Kannapolis
- **Commissioner Bob Hovis** Gaston County
- **Commissioner Johnny Hutchins** Cleveland County
- **Councilmember Michael Johnson** York County





# Policy Advisory Committee

- **Mayor Bobby Kilgore**  
City of Monroe
- **President & CEO Janet LaBar**  
Charlotte Regional Business Alliance
- **Commissioner Autumn Rierson-Michael**  
Town of Davidson
- **Commissioner Michael Miltich**  
Town of Cornelius
- **Mayor Pro Tem William Morgan**  
City of Statesville
- **Regional Director of Govt Affairs Tracy Montross**  
American Airlines
- **Mayor Dr. Scott Neisler**  
City of Kings Mountain
- **Mayor Pro Tem Kathy Pender**  
City of Rock Hill
- **Councilmember David Post**  
City of Salisbury
- **Councilmember David Scholl**  
Town of Stallings
- **Commissioner Lynn Shue**  
Cabarrus County
- **Commissioner Milton Sigmon**  
Lincoln County
- **Councilmember Jennifer Stepp**  
City of Gastonia
- **Mayor Bill Thacker**  
Town of Wadesboro
- **Councilmember Richard Turner**  
City of Belmont
- **Senior Director Kathy Wholley**  
Domtar
- **Commissioner Jarvis Woodburn**  
Anson County



# Technical Advisory Committee

- **Stephen Allen**  
Catawba Regional  
COG
- **Jay Almond**  
Badin
- **Liz Babson**  
CDOT
- **Loretta Barren**  
FHWA
- **Dominique Boyd**  
NCDOT
- **Wendy Brindle**  
Salisbury
- **Susan Britt**  
Tega Cay
- **Andrew Bryant**  
Lincoln County
- **Richard Buchanan**  
Mecklenburg  
Transportation  
System
- **Bob Bushey**  
Cabarrus County  
Transportation  
Services
- **Blair Chambers**  
NCDOT – Integrated  
Mobility
- **Phil Conrad**  
CRMPO
- **Bob Cook**  
CRTPO
- **Brandi Deese**  
Indian Trail
- **Shelley DeHart**  
Town of Belmont
- **Scott Efird**  
Locust
- **Larry Faison**  
Monroe



# Technical Advisory Committee

- **Meg Fencil**  
Sustain Charlotte
- **Kristal Ford**  
Transportation  
Lincoln County
- **Doug Frate**  
SCDOT
- **Lyn Garris**  
York County Access
- **Randi Gates**  
GCLMPO
- **Kelly Goforth**  
CATS
- **Zac Gordon**  
Kannapolis
- **Krystal Green**  
CATS
- **Megan Green**  
Mecklenburg  
County Air Quality
- **Lynne Hair**  
Stallings
- **Bjorn Hansen**  
Union County
- **Rodney Harrison**  
Salisbury Transit
- **Erick Hawkins**  
Rock Hill Transit
- **Bridgette Helms**  
Stanfield
- **Heather Hildebrandt**  
NCDOT - Integrated Mobility
- **Monica Holmes**  
Charlotte
- **David Hooper**  
RFATS
- **Hannah Jacobson**  
Salisbury
- **Brad Johnson**  
ICATS



# Technical Advisory Committee

- **Jerrel Leonard**  
Charlotte
- **Twanna Littlejohn**  
Gaston County  
ACCESS
- **Erika Martin**  
 Mooresville
- **Wilmer Melton**  
 Kannapolis
- **Adrian Miller**  
 Town of Belmont
- **Lloyd Payne**  
 Concord
- **Michael Peoples**  
 Gastonia
- **Brian Richards**  
 Huntersville
- **Scott Rowell**  
 Anson County  
 Transportation  
 Services
- **Walt Scharer**  
 Shelby
- **Courtney Schultz**  
 CATS
- **Randy Shank**  
 SCUSA
- **Sally Sherrin**  
 Lancaster Area Ride Service
- **Lee Snuggs**  
 RRRPO
- **Valarie Steele**  
 Rowan County Transit
- **Lisa Stiwinter**  
 Monroe
- **Dana Stoogenke**  
 Matthews
- **Jason Thompson**  
 Gastonia



# Technical Advisory Committee

- **Bill Thunberg**  
Lake Norman  
Regional  
Transportation  
Commission
- **Theresa Torres**  
Union County  
Transportation
- **David Vahaun**  
Rock Hill
- **LJ Weslowski**  
Rider Transit
- **Pamela White**  
CATS
- **Vincent Wong**  
Gastonia Transit



# Community Advisory Committee

- **Jessica Castrodale**  
Atrium Northeast
- **Stuart Hair**  
Charlotte Douglas  
International Airport
- **Jonathan Peebles**  
Latin American  
Coalition
- **Katie Kutcher**  
Centralina Area  
Agency on Aging
- **Dana Draa**  
Metrolina  
Association for the  
Blind
- **Jonathan Wells**  
Town of Troutman
- **Shelby Emrich**  
Anson County  
Chamber
- **Dr. John Hauser**  
Gaston College
- **James Estes**  
Officer of US  
Senator Thom Tillis
- **Dr. John Enamit**  
Stanly Community  
College
- **Kelly Stegall**  
South Piedmont  
Community  
College
- **Kay Tembo**  
Office of US  
Congresswoman  
Alma Adams
- **Ron Tober**  
Sustain Charlotte
- **Krissy Oechslin**  
CATS Transit  
Services Advisory  
Committee



# Community Advisory Committee

- **Barbi Jones**  
Cabarrus Chamber  
of Commerce
- **Viddia Torbett**  
NCGA  
Representative
- **Tara Bengle**  
Community  
Planning Advocate
- **Astrid Chirinos**  
Simmons YMCA
- **Terry Lansdell**  
Bike Walk NC
- **Tony Lathrop**  
NCDOT
- **John Muth**  
VHB
- **Roger Diedrich**  
Sierra Club
- **Ann Benfield**  
Cabarrus  
Partnership for  
Children
- **Anthony Hodges**  
Cabarrus County  
DHHS
- **Jamie Tippet Poe**  
Rider
- **Kathryn Saine**  
Lincoln County  
Senior Services
- **Pearl Burris-Floyd**
- **Patrick Mumford**  
Greater Gaston  
Development  
Corporation
- **Madeline Keeter**  
REBIC
- **Candice Lowder**  
Stanly EDC





# Importance of Regional Partnerships

Mayor Walker Reid, III (Gastonia)

Mayor Bill Dusch (Concord)



The background is a solid teal color with several large, overlapping, semi-transparent geometric shapes in various shades of teal. These shapes include circles, polygons, and curved lines, creating a layered, abstract effect.

# Where We Are Where We're Going

Jason Wager, CONNECT Beyond Project Manager,  
Centralina Regional Council

# Planning Process

1

## Evaluate existing transit systems

SUMMER - FALL 2020

- > What are we doing well?
- > Where are the gaps and barriers to mobility?

2

## Identify high capacity transit corridors

FALL - WINTER 2020

- > Which corridors would be good candidates for regional transit connections to best connect people to jobs, housing, medical services, education and other key destinations?

3

## Envision a total mobility network

WINTER - SUMMER 2021

- > How can we best expand local services to increase transportation options and increase access to high capacity transit corridors?













4

## Develop implementation strategies

SUMMER - FALL 2021

- > How can local transit providers and planning agencies use the results of the initiative?

# 2020-2021 Advisory Committee Meeting Calendar

Evaluate Existing System	Identify High Capacity Transit Corridors	Envision a Total Mobility Network			Develop Implementation Strategies	Final Plan	
Purpose, Goals & Vision	Candidate High Capacity Transit Corridors	Recommended High Capacity Transit Corridors	Integrated Bus Service Strategies	Transportation Demand Management & Mobility Hubs	Rural-Urban Connections & Transit Supportive Strategies	Draft Recommendations	Final Recommendations
MAY 2020	SEPTEMBER 2020	JAN 13, 2021	MAR 24, 2021	APR 28, 2021	MAY 26, 2021	JUL 22, 2021	SEP 29, 2021
<p>Based on your understanding of your community's unique character and needs, help us shape the necessary components of the purpose, goals and vision for CONNECT Beyond.</p>	<p>After careful review of data from across the region we've developed candidate high capacity transit corridors.</p>	<p>Based on all the feedback we received and an initial evaluation of the candidate corridors we have identified the recommended high capacity transit corridors</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Identifying potential service connections, new service in support of high capacity transit, and strategies to benefit the user experience.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Discussion of emerging mobility trends and connecting beyond a fixed route system.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Identifying gaps and bridges for the rural to urban mobility divide and strategies to support transit throughout the region.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Review preliminary and consolidated results and present draft plan.</p>	<p>The final draft plan will outline the vision for the region. It will include action-oriented strategies.</p>
<p> Feedback on purpose, goals &amp; vision</p>	<p> Feedback on candidate corridors</p>	<p> Acceptance of high capacity transit corridors</p>	<p> Feedback on strategic direction</p>	<p> Feedback on strategic direction</p>	<p> Feedback on strategic direction</p>	<p> Feedback draft recommendations</p>	<p> Endorsement of final recommendations</p>

# Advisory Committees

## Policy

Elected officials and policy experts from across the region (NC and SC).

## Technical

Staff level technical resources.

Land use, transportation, health, economic development, education, etc.

## Community

Key regional influencers.

Government, health & human services, economic development, employers, social services, and education.

# Upcoming Working Groups and Technical Meetings

## Funding & Partnerships

Characterize the current realities of paying for regionally significant investments across 2 states and multiple jurisdictions.

Considerations?  
Implications? Timing?  
Governance? Critical next steps?

## Transportation Demand Management (TDM)

Outline and prioritize the key regional technical and policy steps to implement TDM strategies that support access to reliable, efficient, and well-connected transportation options

## Technical Meetings

### Rural / Urban Connections

Coordinate with transit providers to develop a local and integrated bus service strategy that connects the region and the HCT corridors

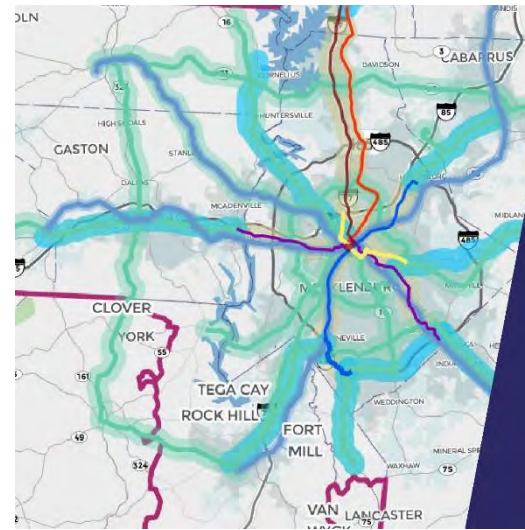
# Touchpoints to Date

- 45+ Individual meetings since the project began - **HCT Input Sessions**

- 9/3 CRTPO | High Capacity Transit Input
- 9/3 RFATS | High Capacity Transit Input
- 9/16 CRMPO | High Capacity Transit Input
- 9/16 GCLMPO | High Capacity Transit Input
- 9/18 RRRPO | High Capacity Transit Input
- 9/30 PAC | High Capacity Transit Input
- 11/05 CATS | Long Range Plans
- 11/23 Centralina | Commuter Rail



# Initial Public Engagement



CONNECT Beyond  
El futuro del transporte  
de alta capacidad



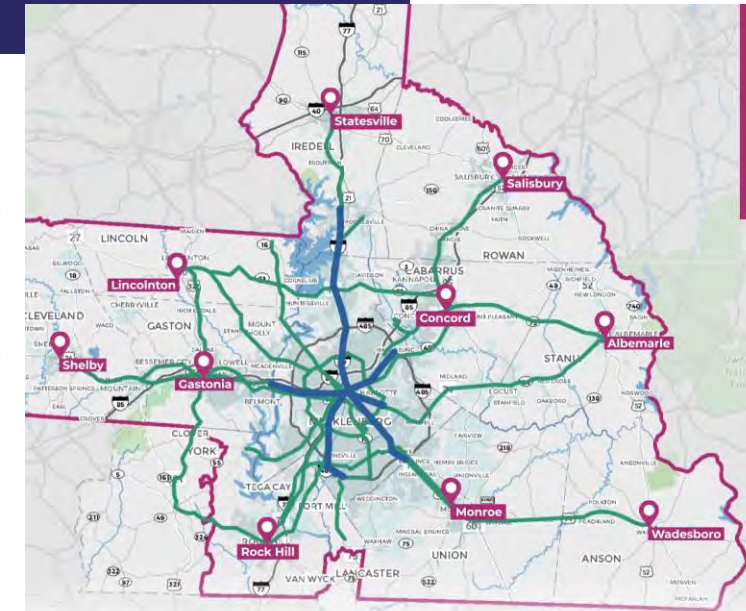
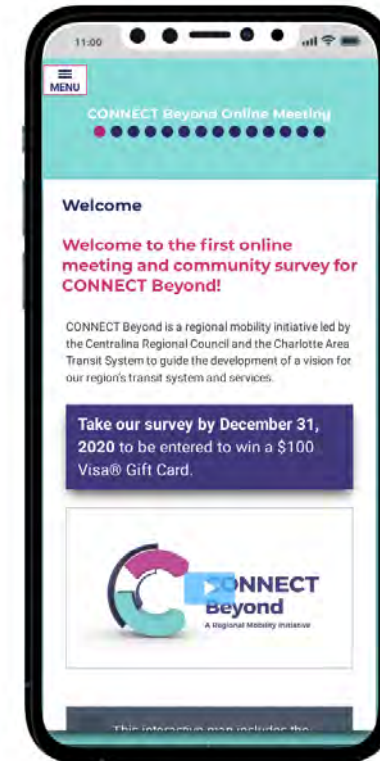
10 de diciembre de 2020  
Español 1:30 p.m. English 2:30 p.m.

## Importance of Outcomes

1. Create a safe and connected multi-modal network
2. Options that support public health
3. Retain and attract employers

## Support for establishing HCT in corridor

70 – 95%



Would you take these corridors?

- Definitely!
- Probably Not
- Probably
- Definitely Not
- Possibly
- These corridors don't go anywhere I want to go!

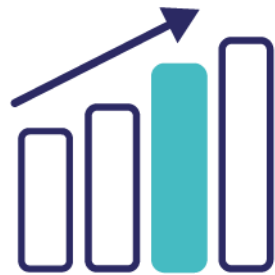


**CONNECT  
Beyond**

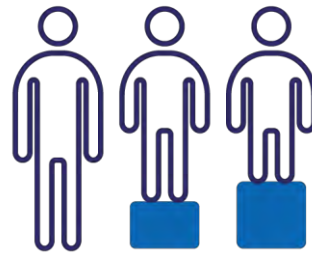
# Guiding Principles for High Capacity Transit Evaluation



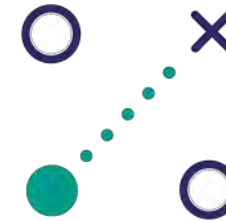
**Creating  
Mobility Choice**



**Preparing for  
Future Growth**



**Advancing  
Equity**



**Aligning Plans  
and Local Visions**



**Planning for  
Implementation**





# High Capacity Transit Guiding Principles

Jason Lawrence, Charlotte Area Transit System



# What is High Capacity Transit?

High capacity transit refers to transit modes that have more capacity than traditional bus, such as light rail, bus rapid transit, express bus, and commuter rail.



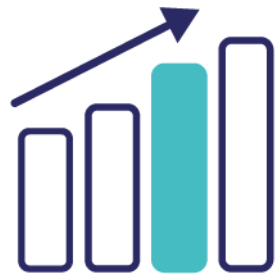


**CONNECT  
Beyond**

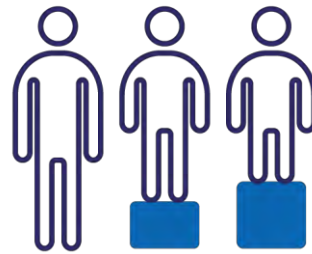
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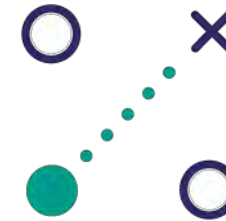
**Creating  
Mobility Choice**



**Preparing for  
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**Advancing  
Equity**

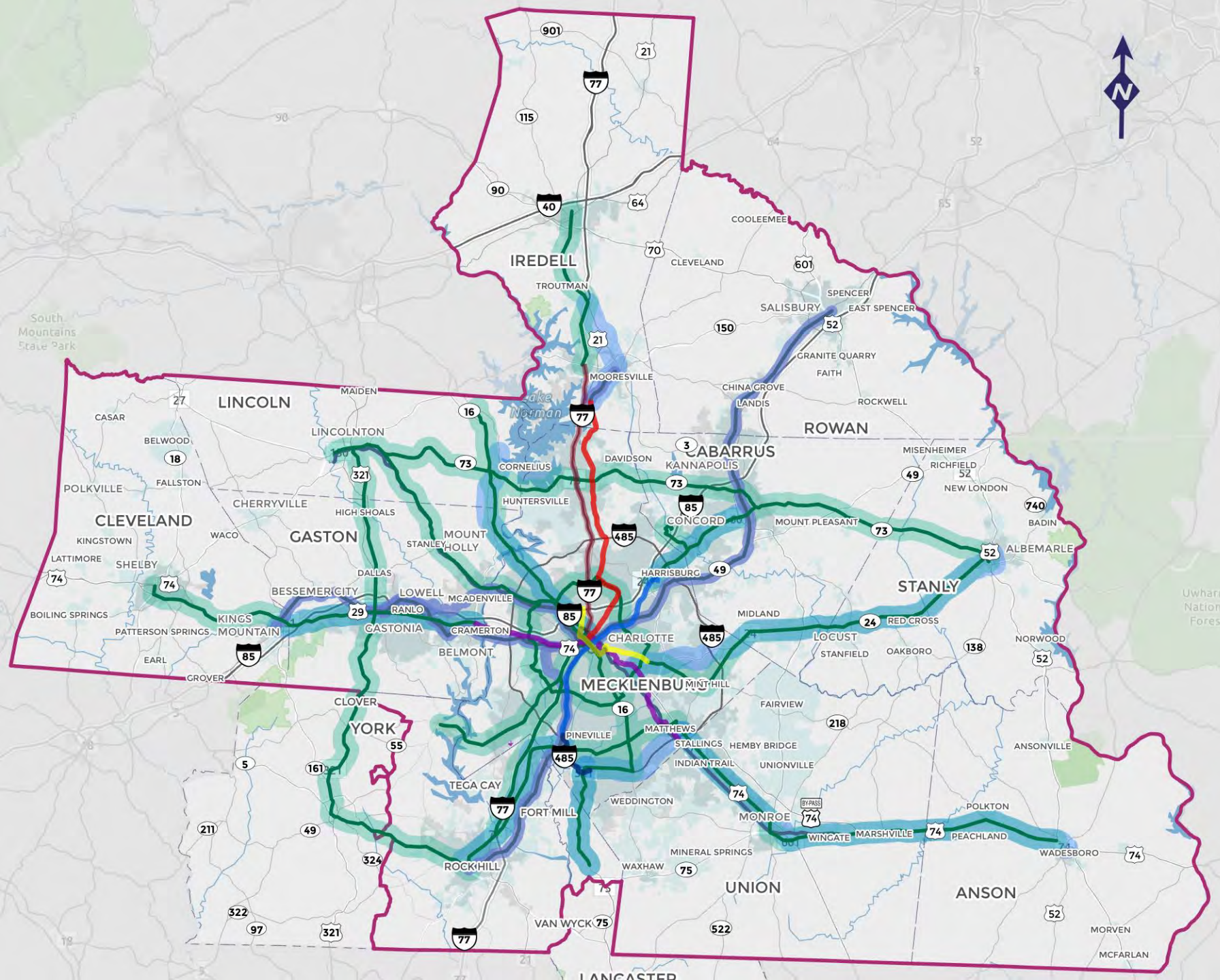


**Aligning Plans  
and Local Visions**



**Planning for  
Implementation**

# Draft Set of Candidate Corridors



- High Capacity Transit (HCT)
- Commuter Rail
- Half Mile Buffer - Commuter Rail
- 1 Mile Buffer - High Capacity Transit
- CONNECT Our Future Preferred Growth Scenario (2015)

## CATS 2030 System Plan

- North Corridor BRT
- LYNX Silver Line
- LYNX Red Line
- LYNX Blue Line
- LYNX Blue Line (Pineville/Ballantyne Ext.)
- City LYNX Gold Line
- City LYNX Gold Line Future



# Guiding Principle: Creating Mobility Choice

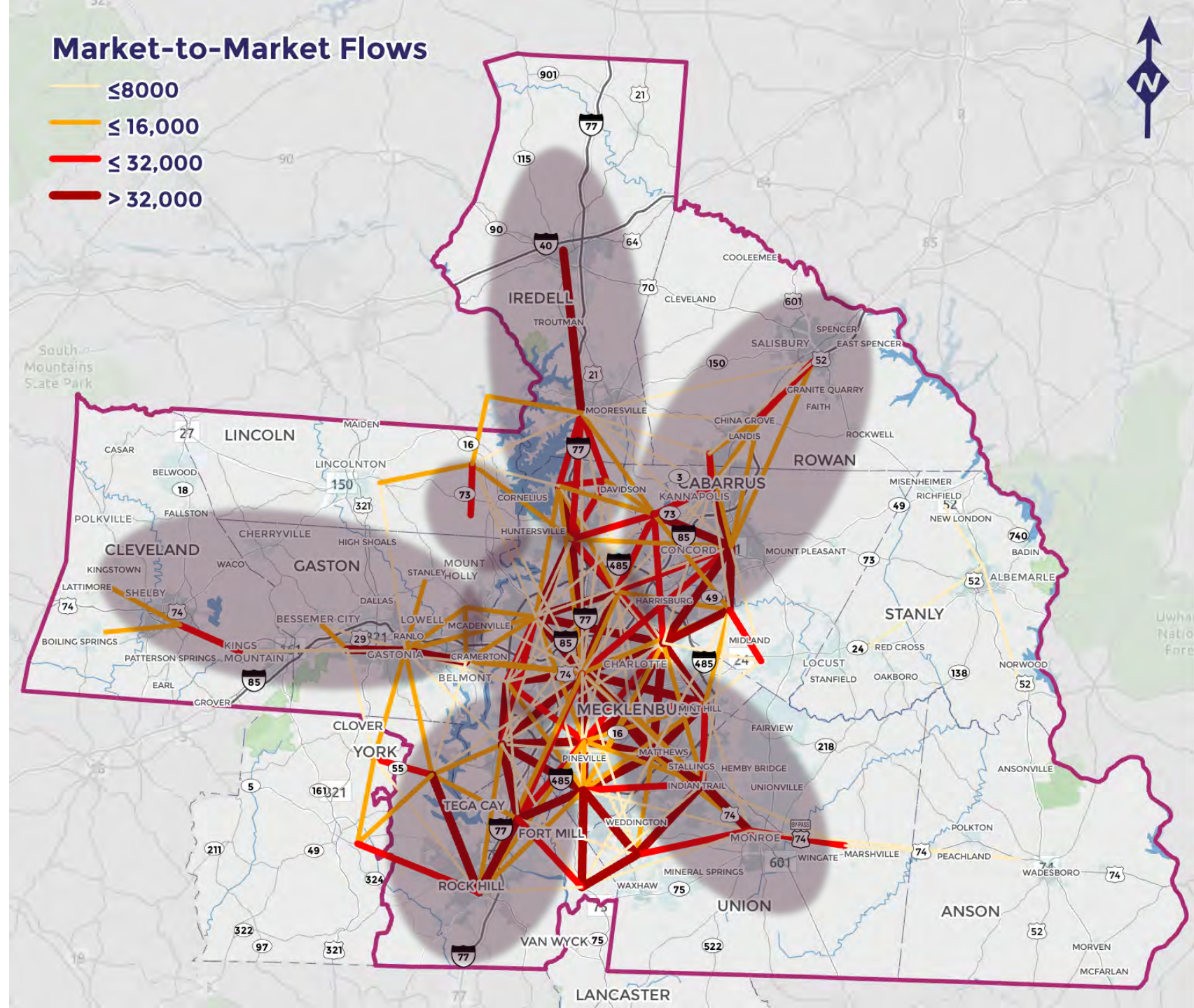


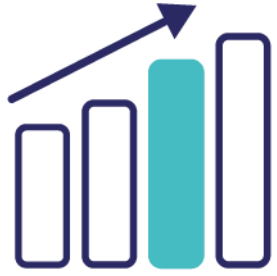
- Travel Forecasts
- Feedback from local Economic Developers, Planners, Employers



# Future Trip Patterns

- Trip patterns in the metropolitan region will be focused on Mecklenburg, Cabarrus, Iredell, Gaston, and York counties
- Future travel patterns suggest Center City will continue to receive the highest volume of daily trips in our region
- Cross regional trips will continue to grow in the CONNECT Beyond region
- Strong internal trip capture in respective transit market area





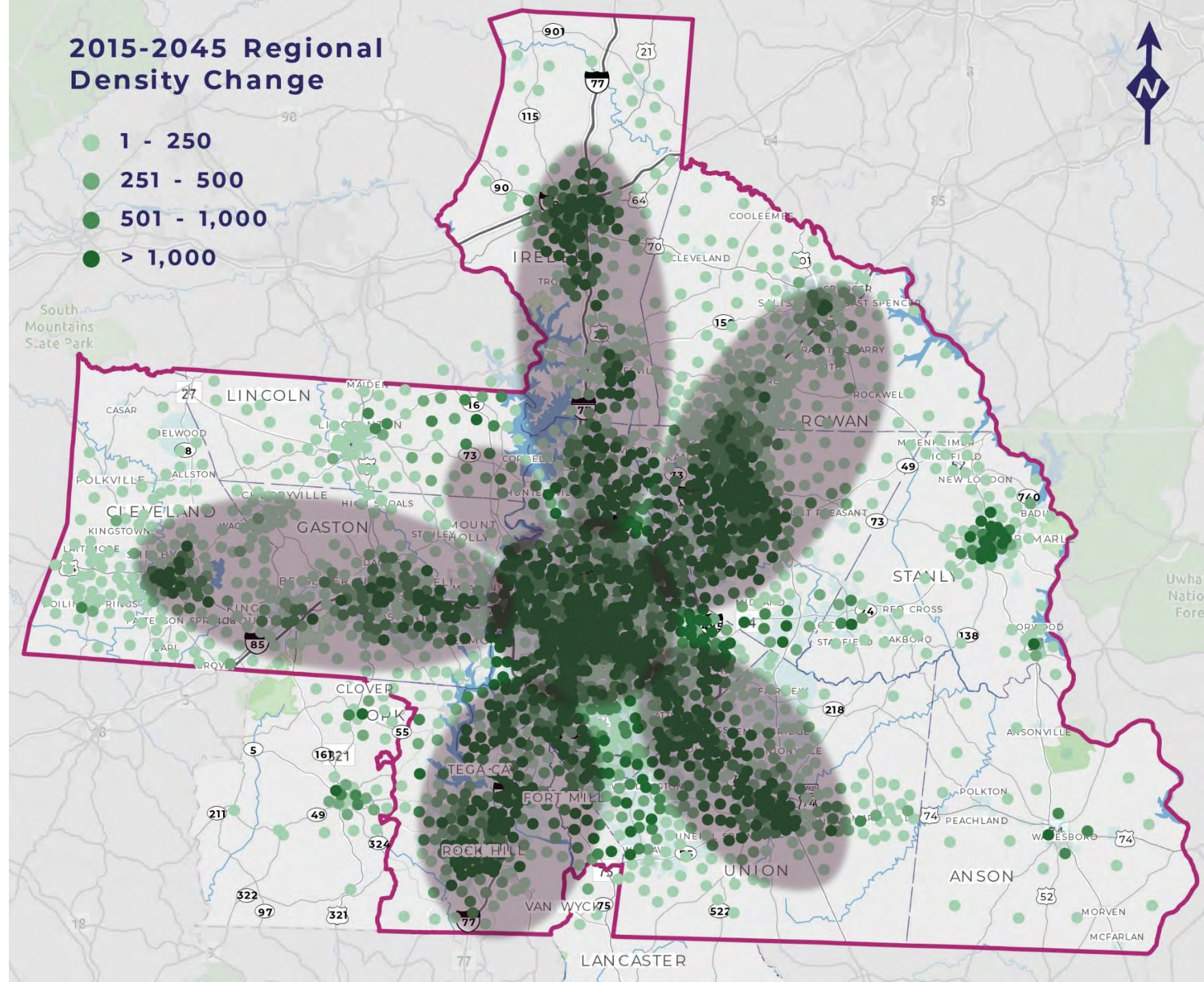
# Guiding Principle: Preparing for Future Growth

- Population & Employment
- CONNECT Our Future
- Future Land Use



# Population & Employment

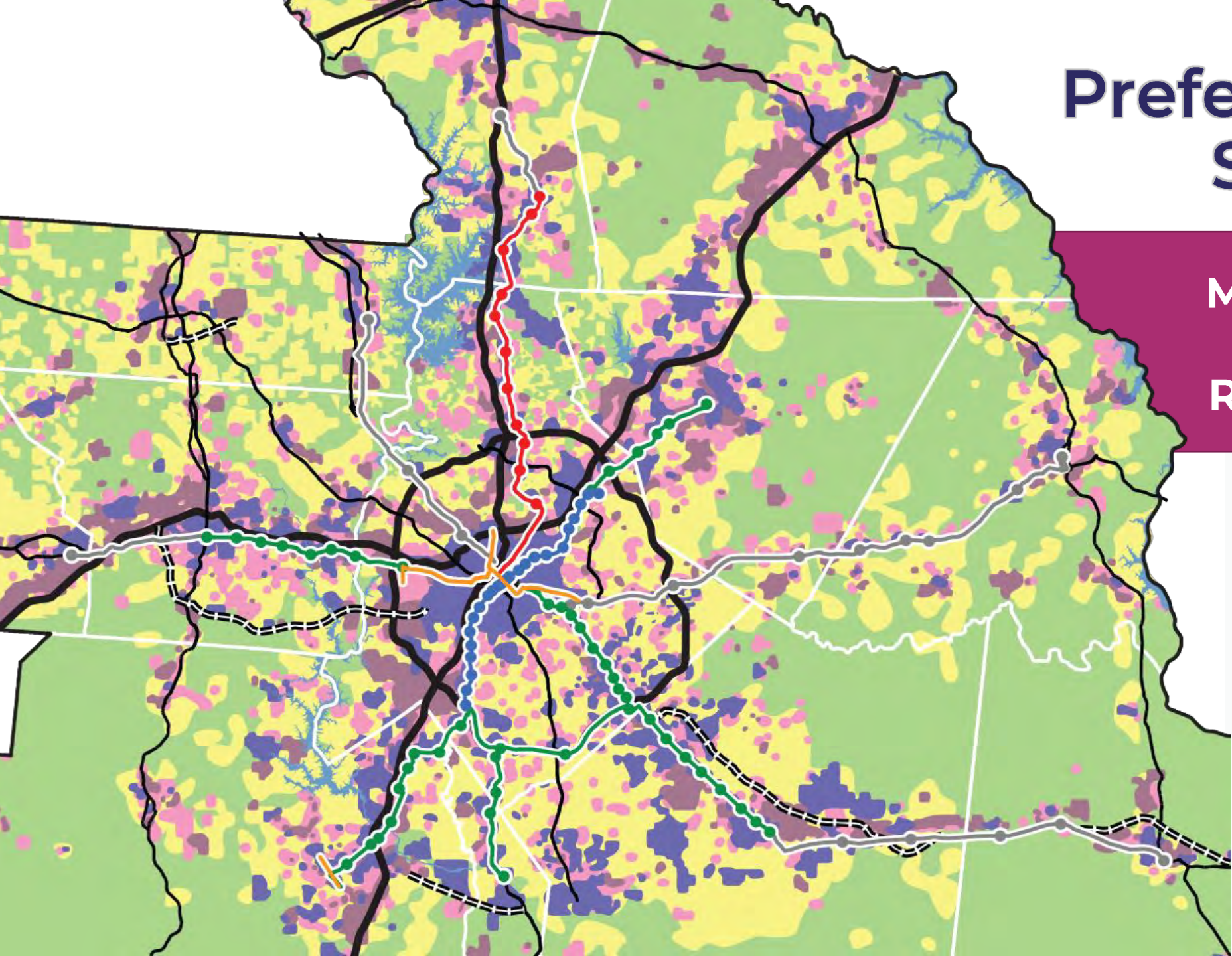
- Density – key determinant of potential HCT investment
- Mecklenburg County will continue to be the focal point of regional growth
- Cabarrus, Gaston, Iredell, Union, and York counties are anticipated to experience significant future growth
- Future growth and development has the potential to create transit-supportive environments capable of sustaining high-capacity transit



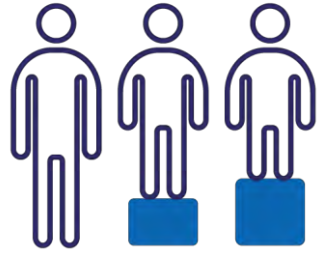


# Preferred Growth Scenario

Multiple Centers  
Connected by  
Regional Transit



- Transit**
- Commuter Rail
  - Light Rail
  - Bus Rapid Transit
  - Streetcar
  - Post-2050
- 
- Rural Living / Open Space
  - Suburban Neighborhoods
  - Industrial Center
  - Suburban Office & Commercial
  - Mixed-Use, Walkable Centers & Neighborhoods



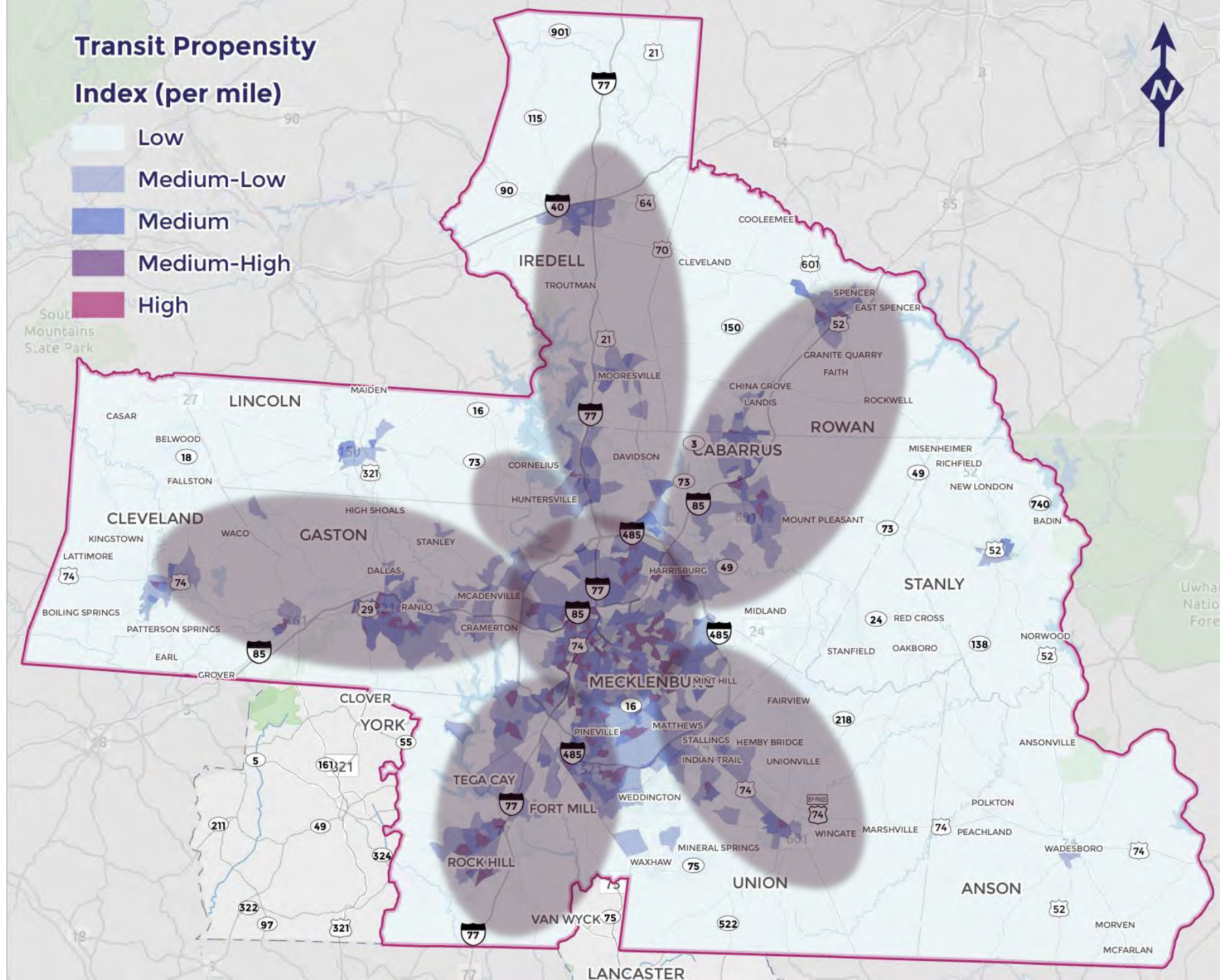
## Guiding Principle: Advancing Equity

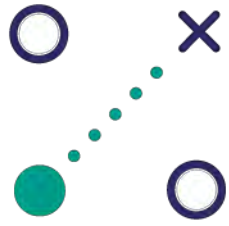
- Minority
- Low-income
- Age
- Disability
- 1 or fewer Vehicle Households
- Housing + Transportation Cost Index



# Transit Propensity

- Helps identify areas with greatest potential of transit utilization
- Considers age, income, disability status, zero and one car households, and minority characteristic
- Greatest in dense urban locations
- Clusters of propensity in ex-urban / rural areas of the study area – to be served with other mobility strategies





# Guiding Principle: Aligning Plans and Local Visions

- CONNECT Our Future
- MPO/RPO Plans
- Local Transit System Plans

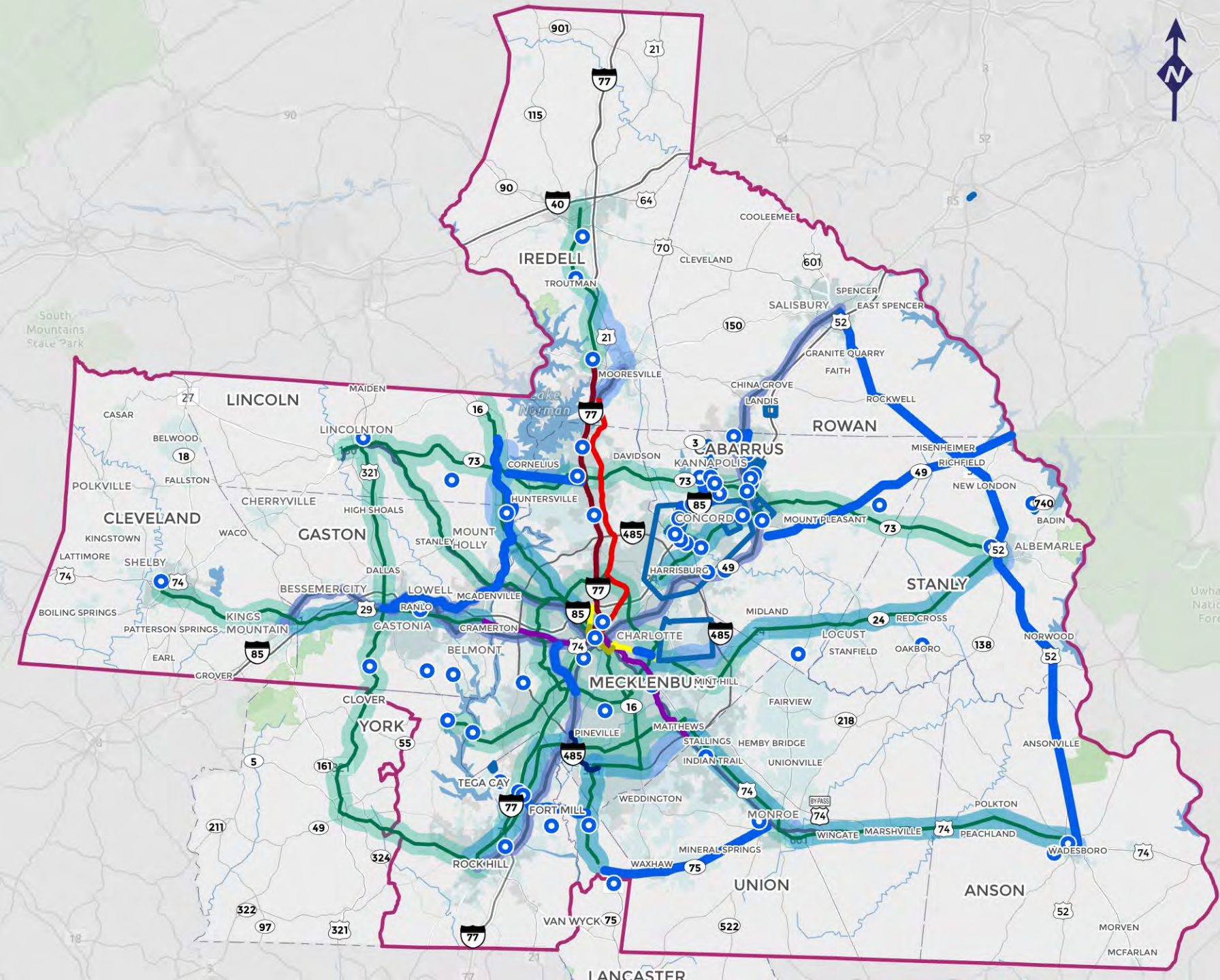


Commercial Real Estate

## Remake of downtown Kannapolis continues as \$61M mixed-use project breaks ground

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### Map Comments

-  Point Comment
-  Line Comment
-  Area Comment

### CATS 2030 System Plan

-  North Corridor BRT
-  LYNX Silver Line
-  LYNX Red Line
-  LYNX Blue Line
-  LYNX Blue Line (Pineville/ Ballantyne Ext.)
-  City LYNX Gold Line
-  City LYNX Gold Line Future

### Preliminary Corridors

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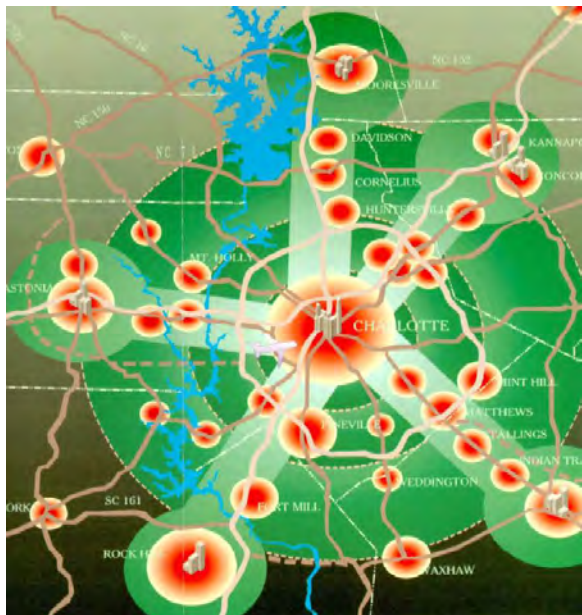
# Guiding Principle: Planning for Implementation

- Federal and State Funding Guidelines
- Cross-jurisdictional Partnerships
- Existing and Planned Infrastructure & Investments

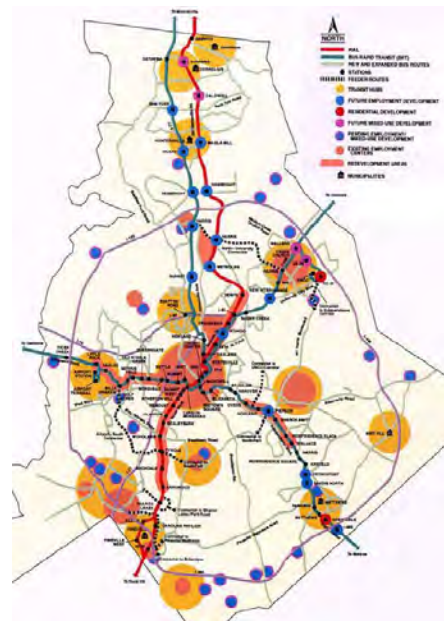


# It Starts with a Vision

Developed the Vision



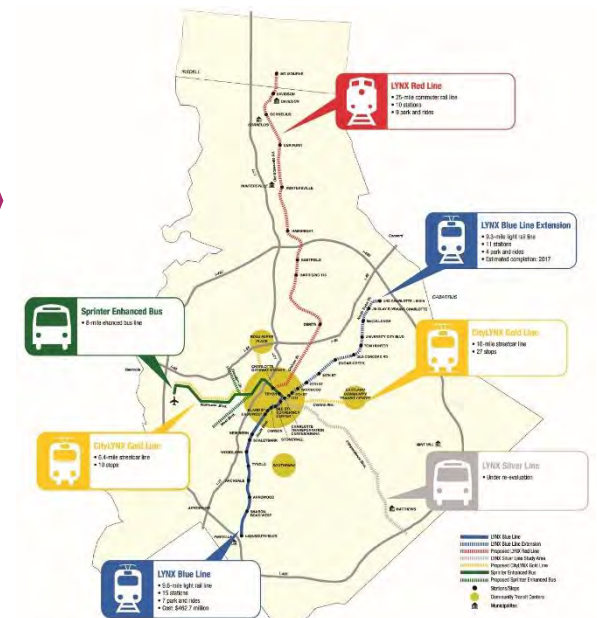
Refined the Vision



Voters Approve Sales Tax

The cover of the 2025 Transit Land-Use Plan report. The cover features a photograph of a person sitting on a train. The text on the cover includes "1998 Road Bond Package" and "2025 Transit Land-Use Plan". The report discusses the challenges of Charlotte's growth and the vision for a transit-oriented development.

Corridor System Plan



Adopted



**Austin**  
Project Connect



**Atlanta**  
More MARTA & The ATL



**Denver**  
FastTracks



**Nashville**  
nMotion

# Visions Are Important



# Preliminary Recommendations

Jorge Luna, HDR

Alec More, WSP

**High Capacity  
Transit Corridors**

**Mobility  
Corridors**

# Mobility Layers and Actions

## Identification

## Mobility Options

## Preparedness Strategic & Actions

**Candidate Corridors**

**HCT Corridors**

**Mobility Corridors & CONNECT Beyond Region**

High-Capacity Transit Solutions  
(Light rail, bus rapid transit, commuter rail)

Enhanced Bus Solutions

Mobility Solutions

Implement HCT Services

Complete Planning & Environmental Studies

Freeway-Based Express Bus Service

Expand Service to New Areas

Span or Frequency Enhancements

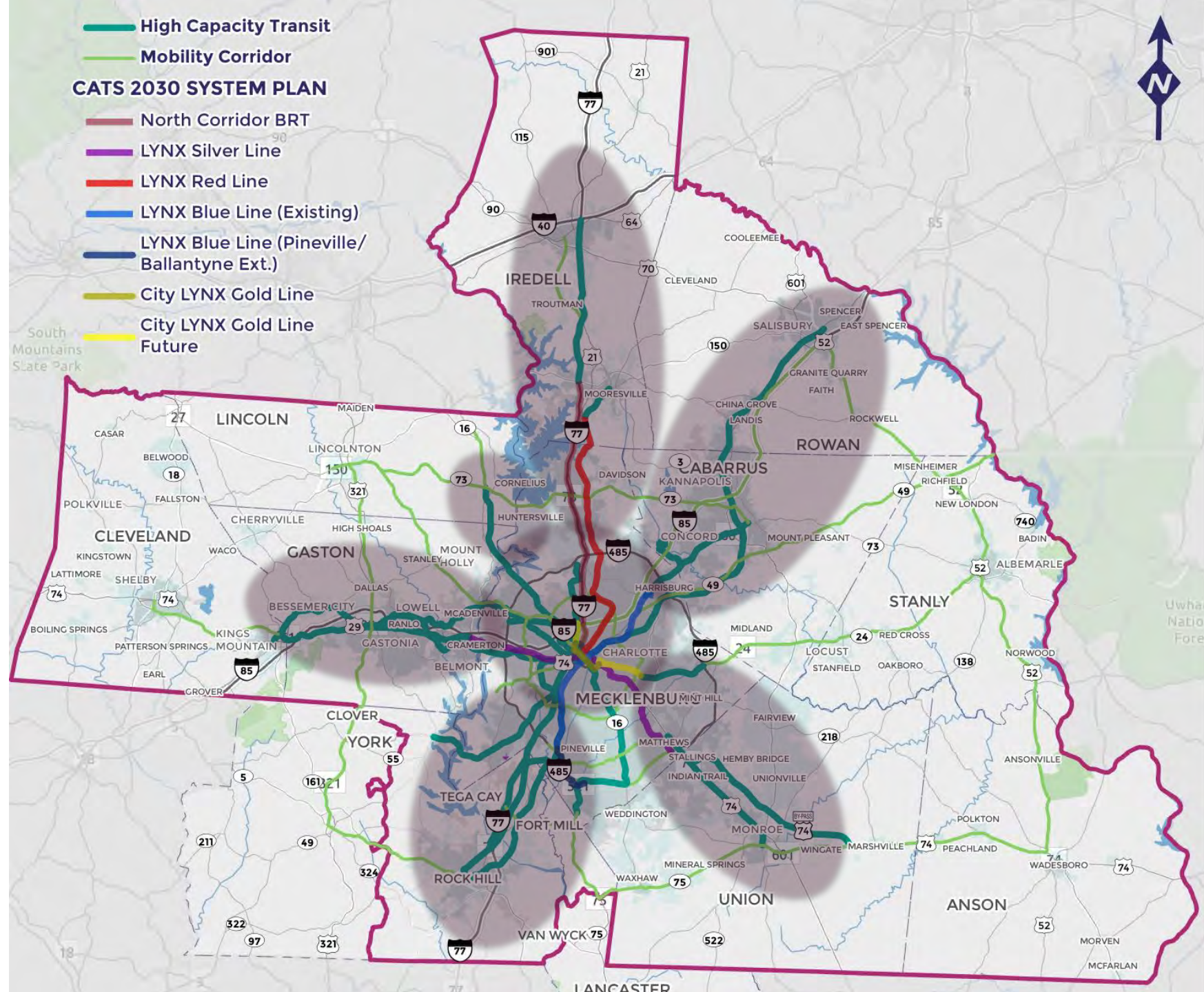
Transit Enhancement Strategies & Technologies

Micro-Transit, Job Access Shuttles, Vanpools

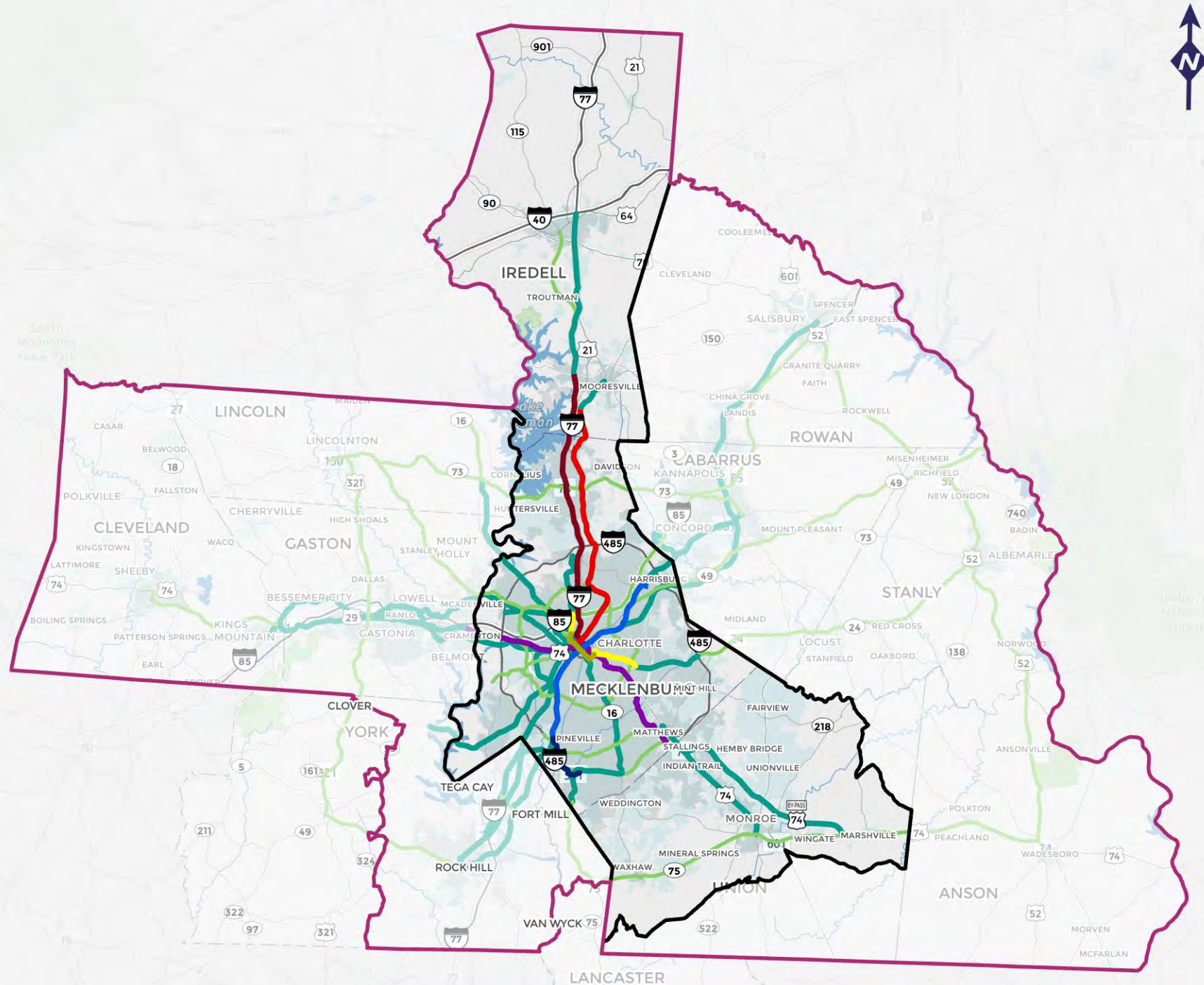
Land Use Strategies to Promote Transit

# HCT and Mobility Corridors

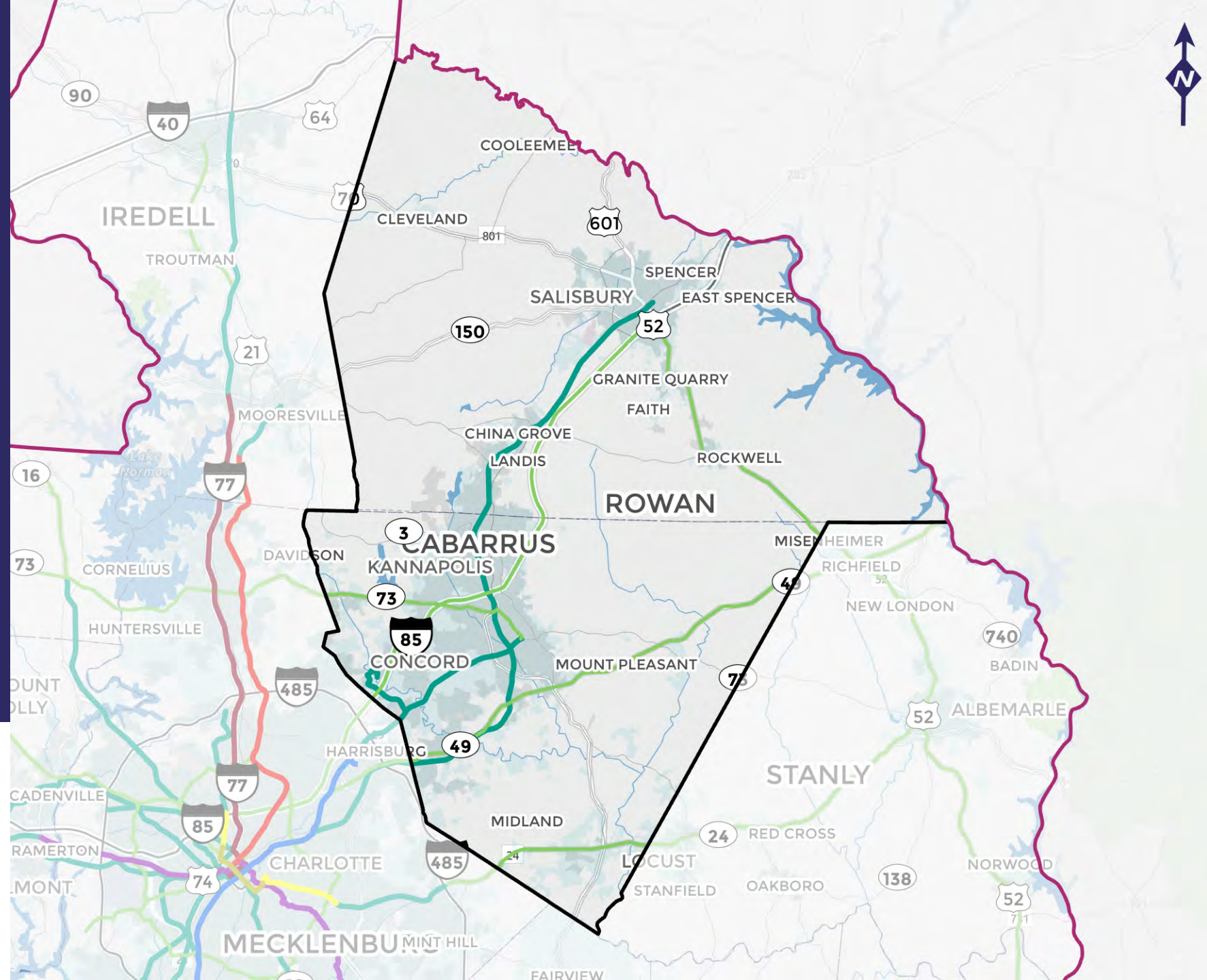
- HCT network
- Mobility corridors
  - Other types of transit improvements or mobility solutions:
    - Enhanced bus
    - Freeway-based express
    - Local bus connection
    - TDM strategies
    - Urban-rural connection
    - Freeway-based express
    - Transit supportive development strategies
    - Other
  - Corridors that may be good HCT corridors in the long-term



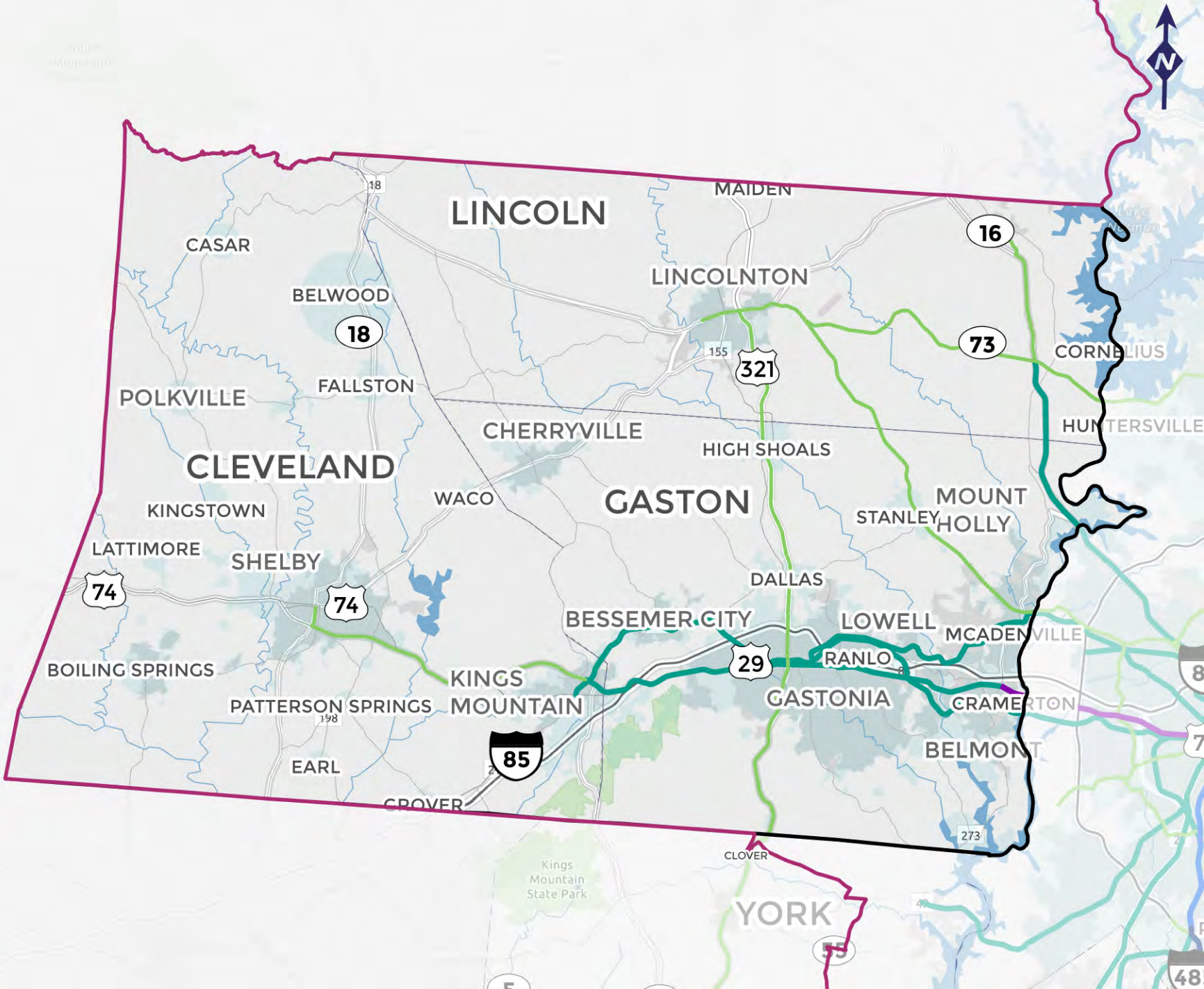
# Iredell, Mecklenburg & Union



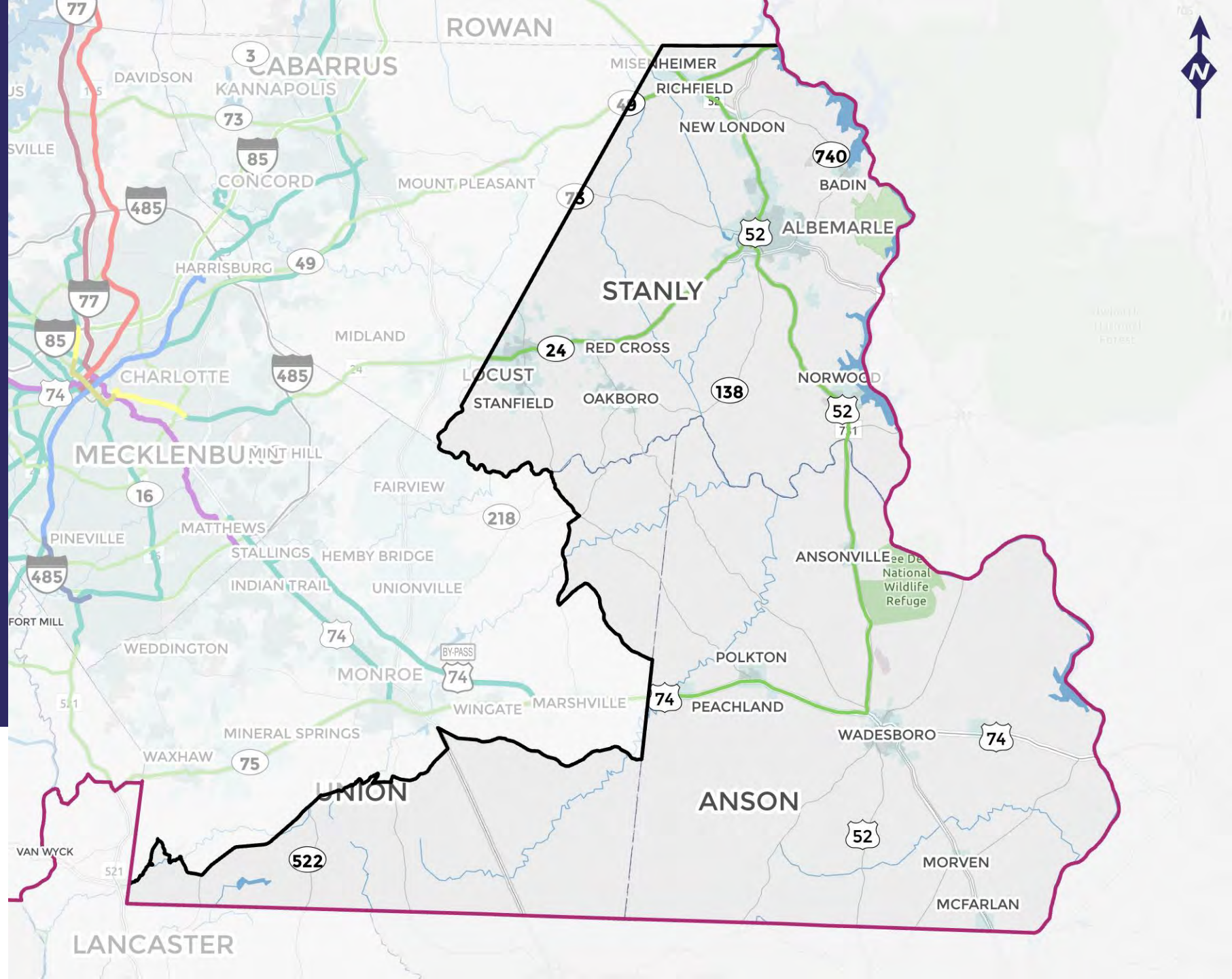
# Cabarrus & Rowan



# Gaston, Cleveland & Lincoln

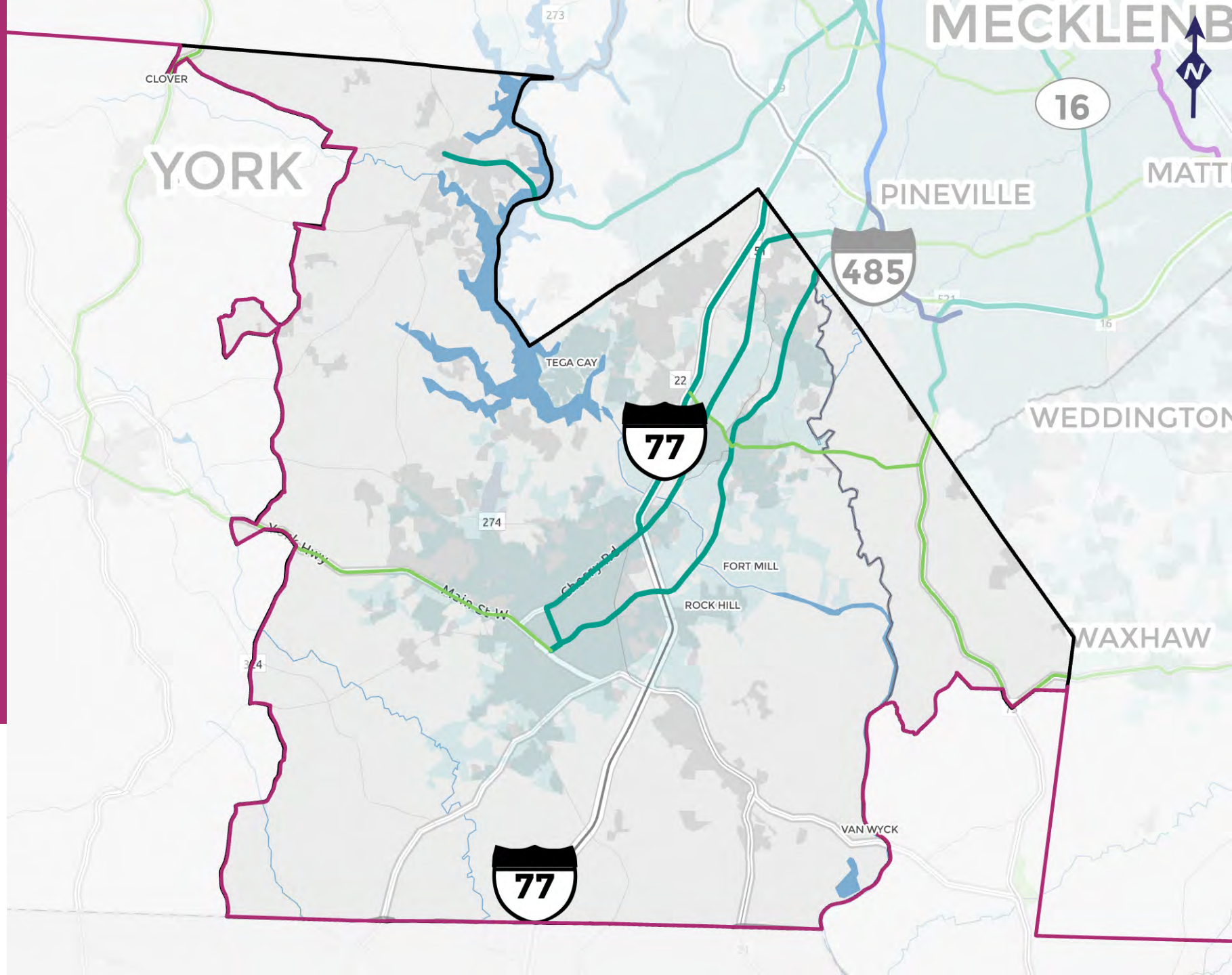


# Anson, Stanly, & E. Union





# E. York & N. Lancaster



# Breakout Session Group Discussion

## High Capacity Transit

Do the high capacity transit corridors we have identified meet the project's guiding principles?

## Mobility Corridors

Given the importance of mobility corridors in making connections, how will these meet your community's greatest needs?

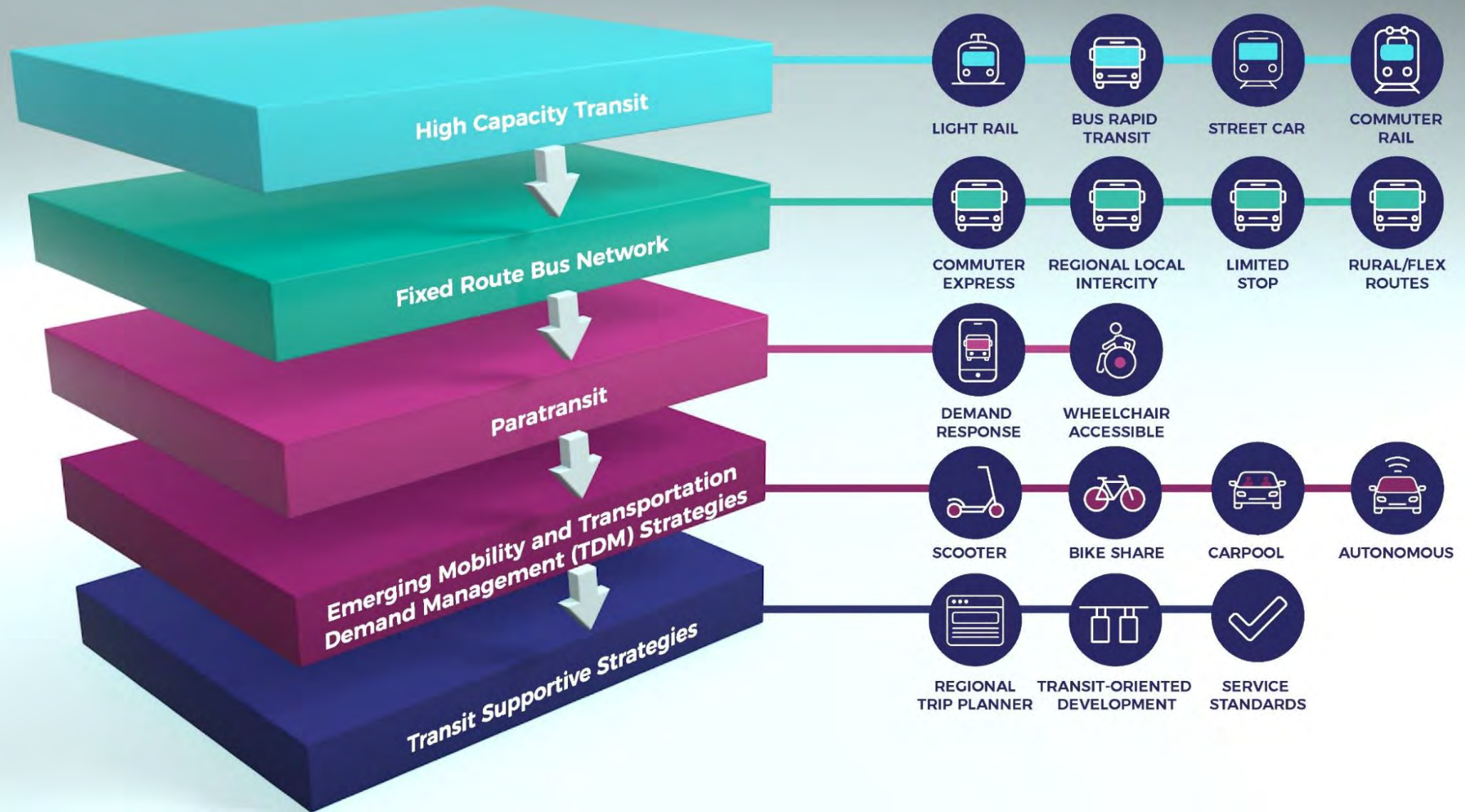


# Questions?

## Up Next

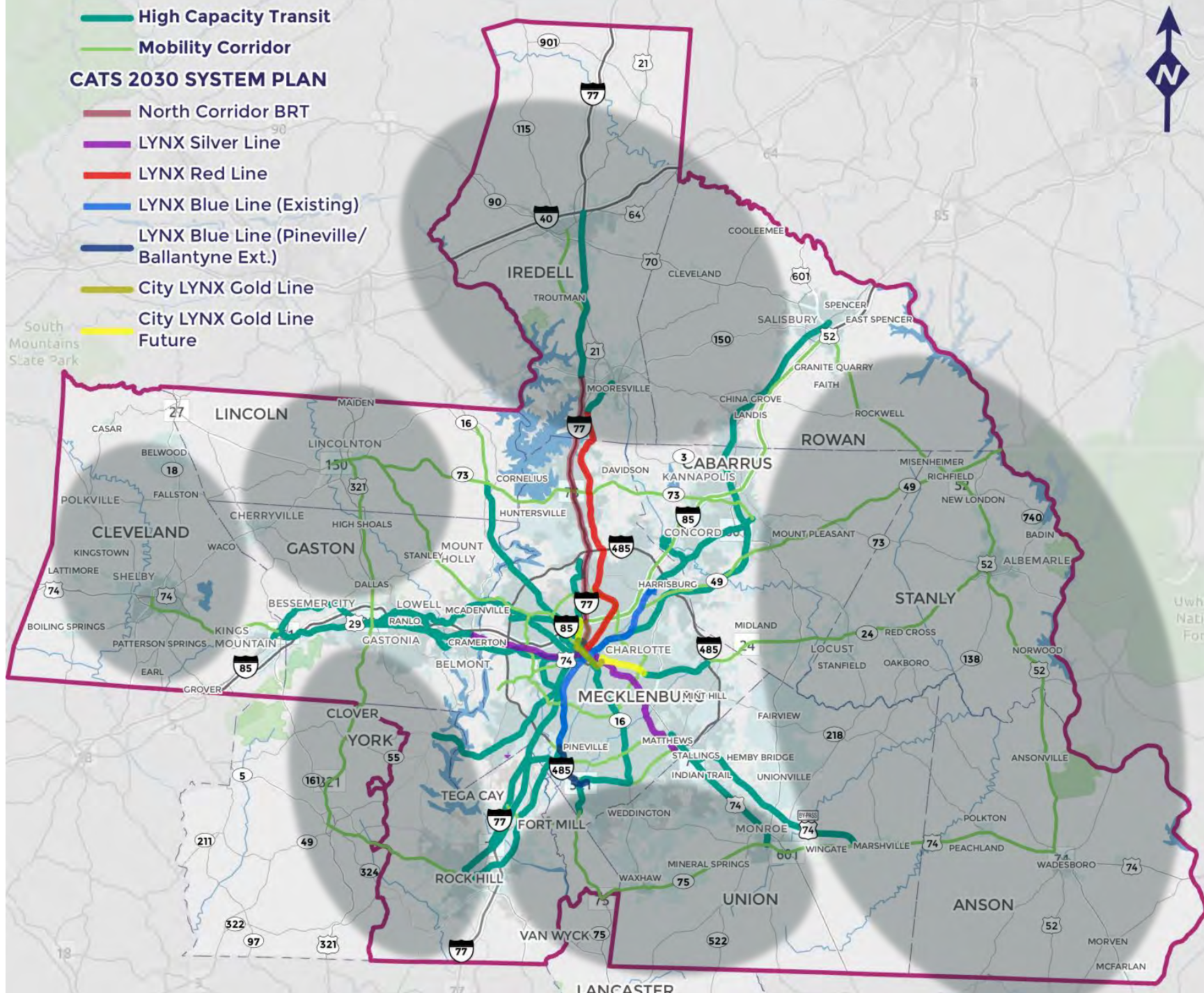
- Integrated Bus Service Strategies
- Transportation Demand Management & Emerging Mobility Trends
- Mobility Hubs

# Mobility Layers



# Additional Layers of Mobility

- CONNECT Beyond study area
- Transit improvements or mobility solutions:
  - Enhanced bus
  - Freeway-based express
  - Local bus connection
  - TDM strategies
  - Urban-rural connection
  - Freeway-based express
  - Transit supportive development strategies
  - Other

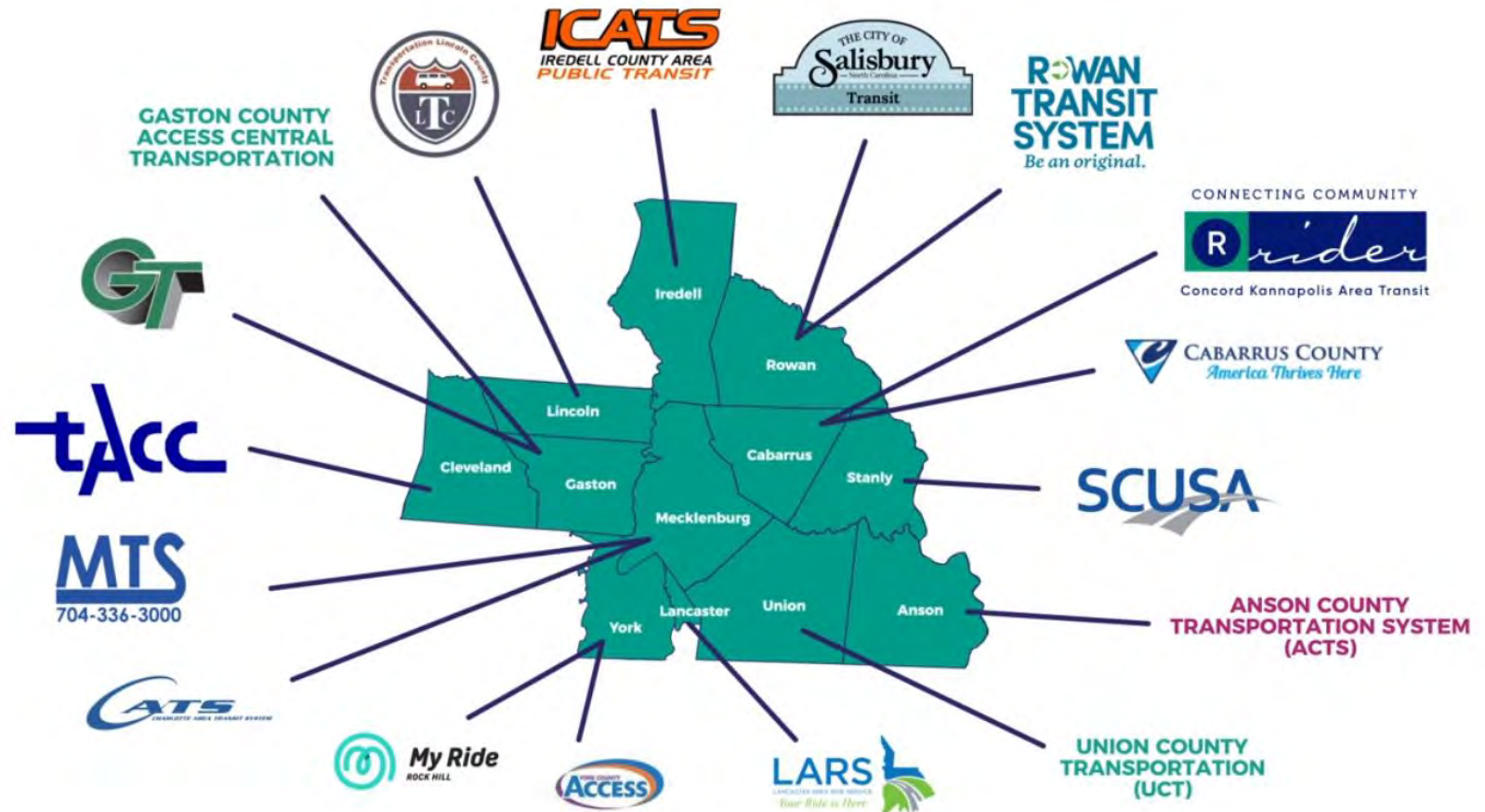


# Integrated Bus Service Strategies

Kevin Walsh, HDR

# Transit Services in Our Region

- 12 Counties
- 17 Agencies
- 24.4M+ Total Transit Trips  
– All Agencies (2018)\*
- \$200M+ in Total  
Operating Costs – All  
Agencies (2018)\*



\*Note: Does not include Rock Hill My Ride. In FY2020 My Ride had about 200k riders and \$1.75M operating budget

# Services Providers

## Urban Services Providers



## Community Transportation Providers





# Next Steps – Urban Services Providers

- Interviews with Fixed Route Providers
- Field Observations / Windshield Surveys
- S.W.O.T. Analysis
- Workshop for Future Service



# Next Steps – Community Transportation Providers

- Ad-Hoc Committee Development and Engagement
  - Improving the Rural-Urban Connectivity
  - Major Transfers between the System
  - Opportunities and Barriers
  - Service Gaps



# Transportation Demand Management & Emerging Mobility Trends

John Cock, Alta Planning

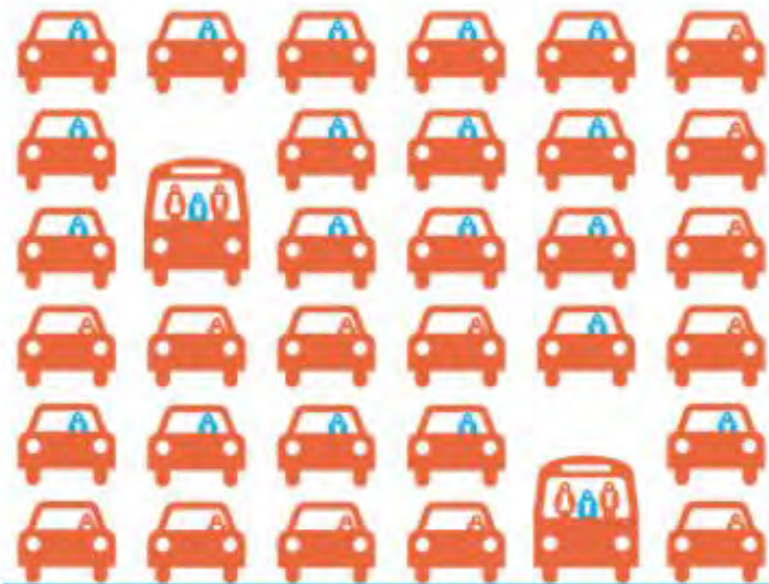
# What is TDM?

**Transportation Demand Management** is helping people use existing infrastructure in more efficient ways (*Mobility Lab*)

- Improving Public Transport
- Educating Re: Transportation Options
- Collaborating with Employers & Institutions
- Shifting Priority from Driving Alone



# Transportation Demand Management

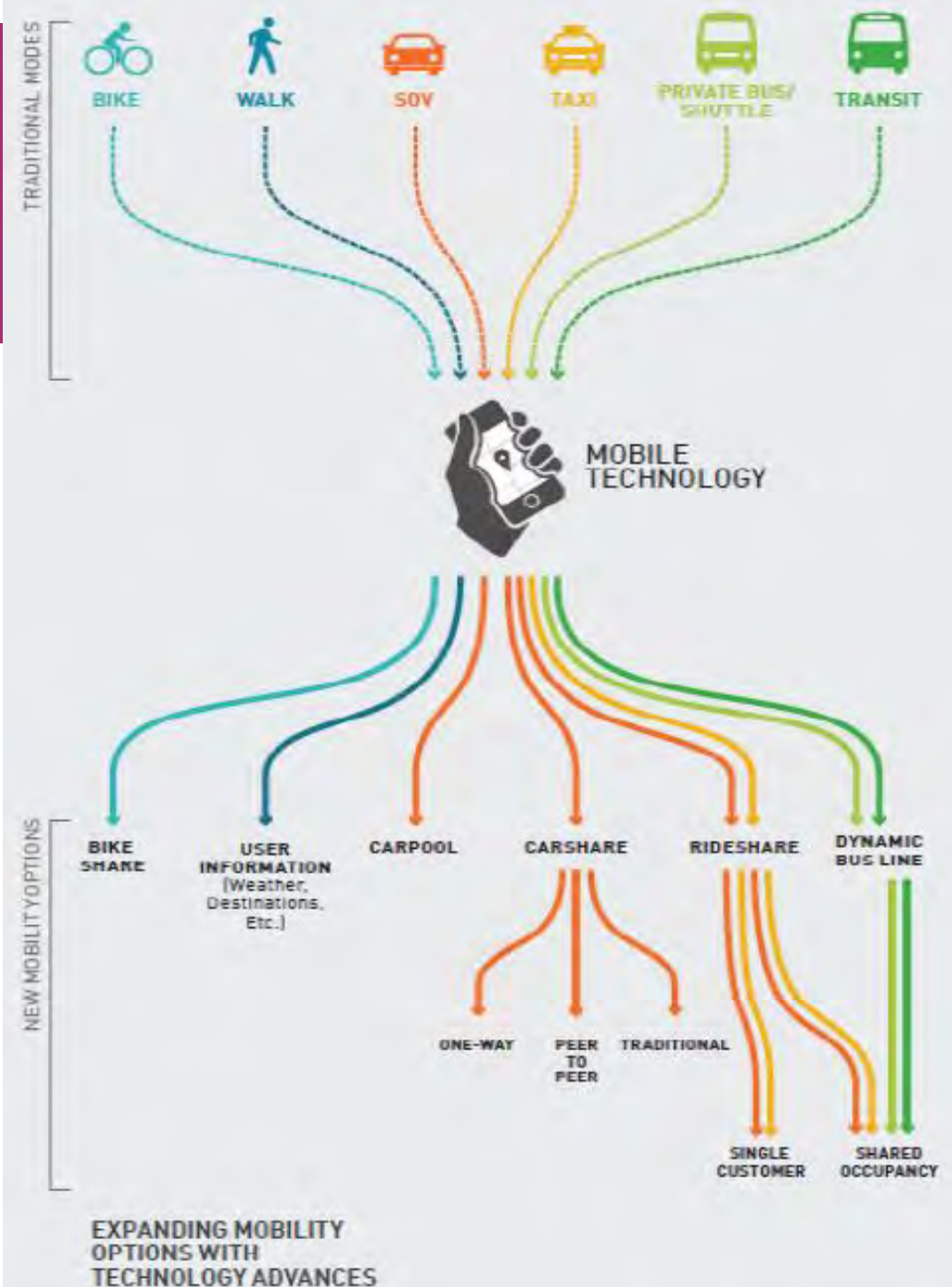


Commuter Options



# New Mobility

- Smart phone enabled
- Mode comparison
- Real-time
- Route planning
- Point-to-point
- On-demand
- Shared
- Multimodal trip linking



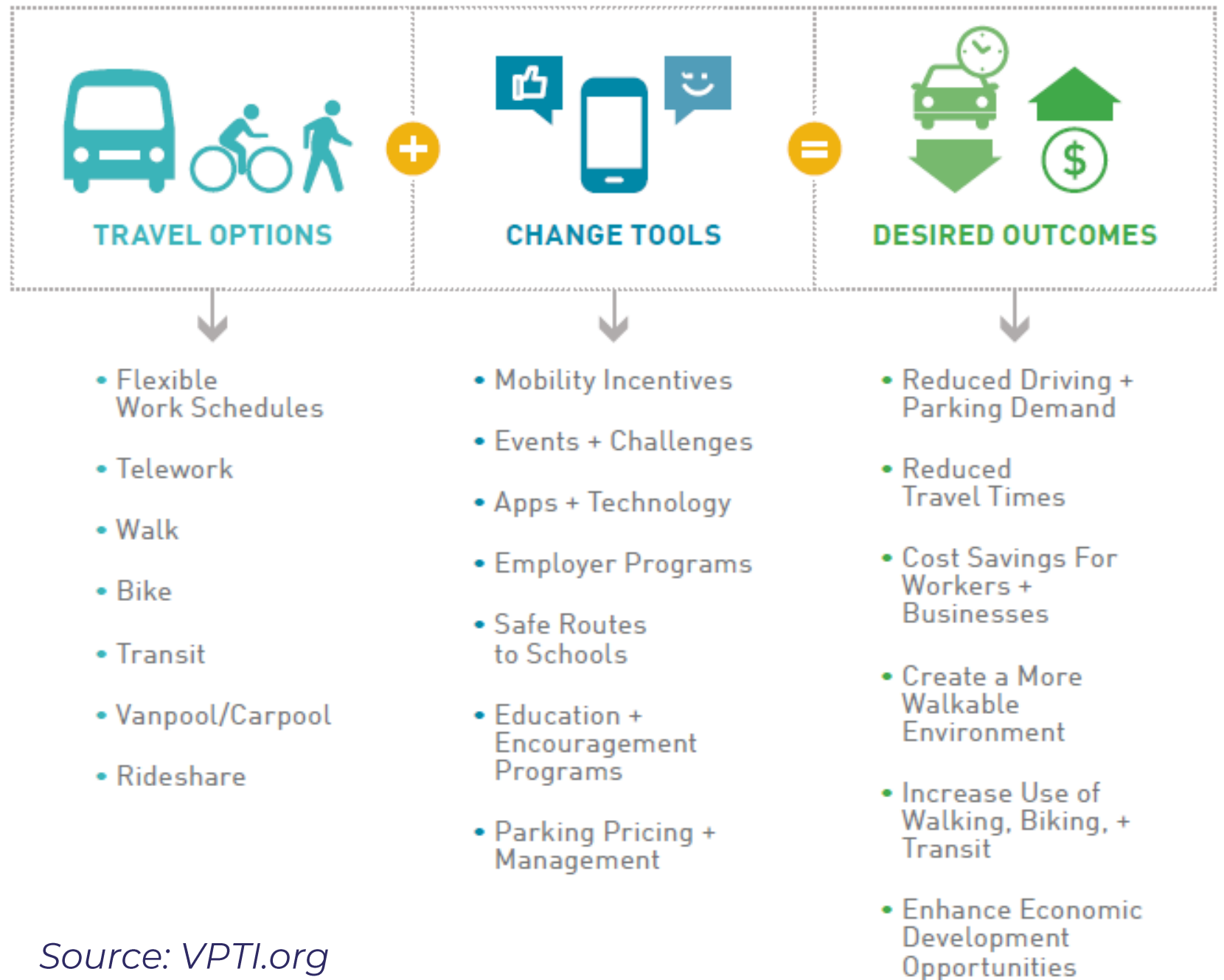
# The New Telecommute Paradigm

Comment



Jason Lawrence-...

# TDM





# TDM Tasks

- **Existing TDM programs** in the region?
- **Regional TDM gaps/needs** for best transit and mobility outcomes?
- Potential **organizational frameworks/governance elements for regional TDM?**





# Emerging Trends and Mobility Hubs

Jean Crowther, Alta Planning

# Emerging Trends in Transportation

## 1 MORE CHOICES



In addition to biking, walking, driving, and taking transit, many people have **access to on-demand services such as private-for-hire rides** (like taxis, Uber, and Lyft), scooter share, bike share, carsharing, and micro-transit shuttles.

## 2 NEW PLAYERS



New business models have increased the role of the **private sector in transportation and changed the nature of services operating in the public right-of-way.**

## 3 BEHAVIOR CHANGE



**Trip-planning services** are changing the way people make decisions about routes, mode, and cost to travel.

## 4 ELECTRIFICATION



Global trends toward electrification of vehicles, combined with locally-adopted goals for reduced greenhouse gas emissions, has **increased demand for electric charging options** as part of public infrastructure.

## 5 E-COMMERCE



**E-commerce is reducing personal trips** to retail stores and restaurants and exponentially **increasing the volume of urban delivery and courier trips** occurring.

## 6 CURB SPACE DEMAND

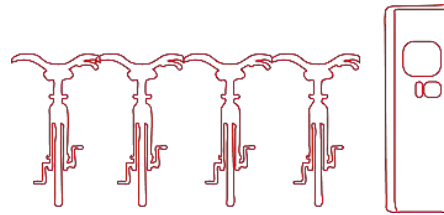


There is **increasing demand for curb space** for elements like transit services, rideshare, pick-up and drop off, walkways, bikeways, and freight delivery.

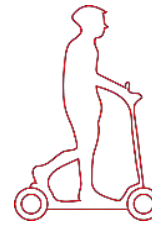
# Expanded Options



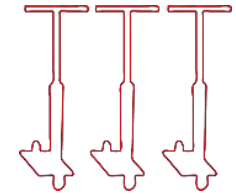
**e-bikes**



**bikesharing**



**e-scooters/NEV**



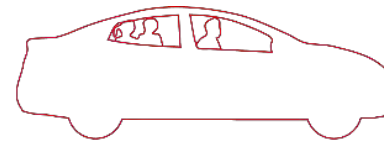
**scooter sharing**



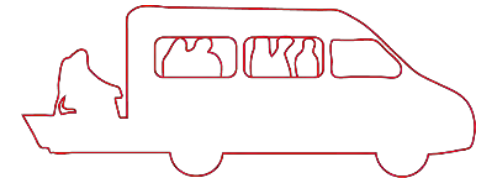
**carsharing**



**ridesharing**



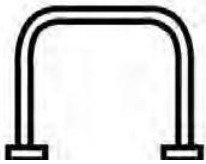
**ridesourcing/  
hailing**



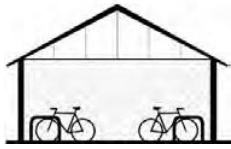
**microtransit**

# Mobility Hubs

A collection of elements that make it easier to access the shared and active mobility network. The key elements can be mixed and matched to create a mobility hub that is customized for each location.



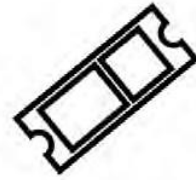
Short term bike parking



Long term bike parking



Bikeshare & scootershare parking



Transit ticket and integrated payment kiosks



Real time transit information & other shared mode information



Electric vehicle charging (including bicycles & scooters)



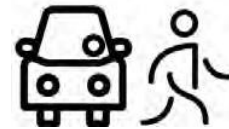
Bus/shuttle stop



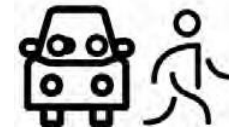
Freight loading/unloading area



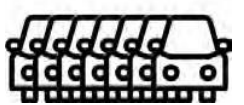
Wifi hub



Ridesourcing loading/unloading area



Microtransit pick up & drop off area

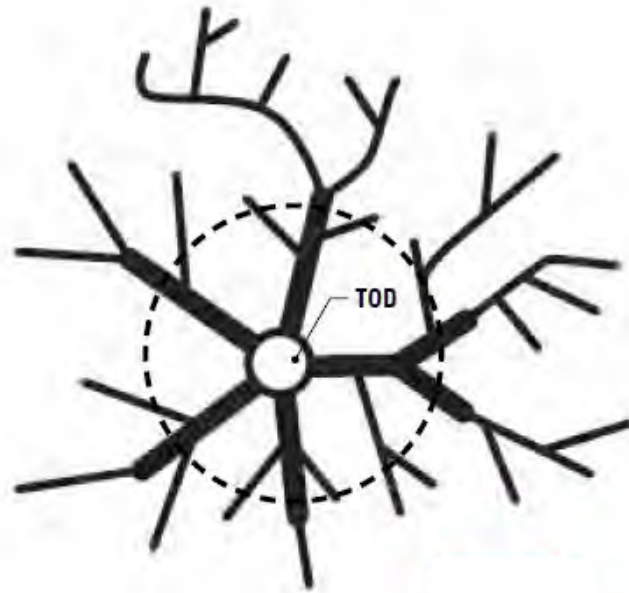


Carshare parking and access points

# Traditional vs. Future Networks

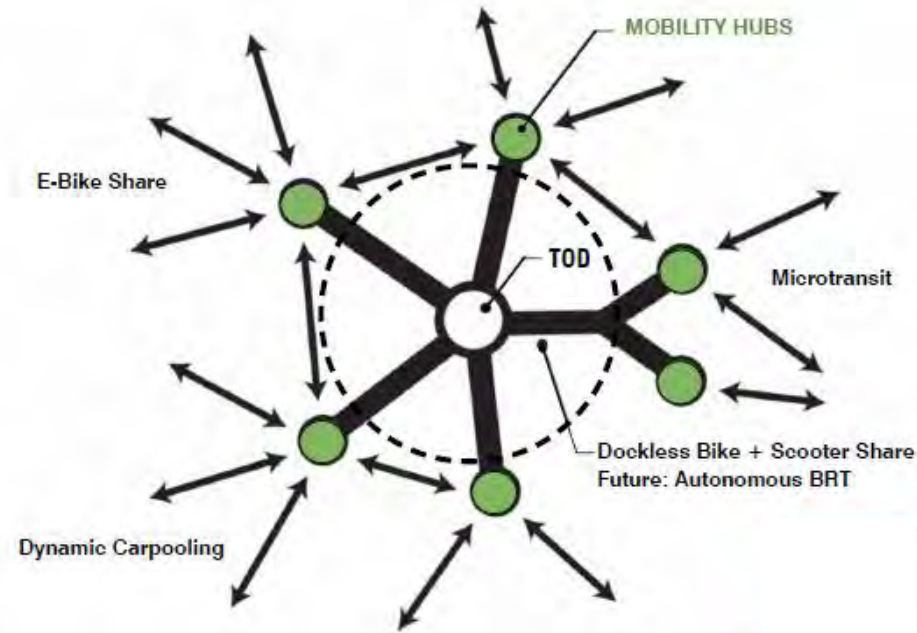
## TRADITIONAL TRANSIT NETWORKS

HUB AND SPOKE NETWORK



## FUTURE TRANSIT NETWORKS

MOBILITY HUB NETWORK





Credit: Guidon (Julia M Carson Transit Center)





# Conventional Bus Stop Hub



8' x 6' min. rear accessible boarding area

Bus shelter with seating, map, real-time transit info, trash receptacle, and leaning rail

8' x 5' min. front accessible boarding area

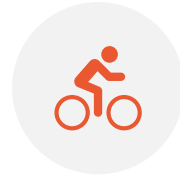
Parking for personal and shared bicycles

Sidewalk width too narrow for designated scooter parking

## POTENTIAL DESIGN FEATURES

- » Short term bike parking
- » Scootershare parking
- » Walking and biking support infrastructure:
  - » Water fountain
  - » Trash receptacle
  - » Structure for shade and rain protection
  - » Wayfinding
- » Clear pedestrian through zone (5-ft min)

# Project Goal: Implementation Approach that Support...



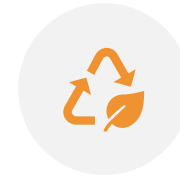
Improved mobility and access.



Effective, regionally **coordinated transit investments.**



**Coordinated and resilient transit operations** to meet the needs of a growing and changing region.



**Environmentally sustainable investments and policies.**



**Advancement of equitable and community-driven improvements.**

# Tasks

## Emerging Mobility

- Which technologies are relevant to the CONNECT Beyond region?
- How are they typically implemented?
- Which ones will support local and regional goals?

## Mobility Hubs

- What types of hubs will best support transit and mobility outcomes in Centralina?
- How have other regions approached hub planning?
- How should the region develop a hub network?



# Group Discussion



# Breakout Session Group Discussion

## High Capacity Transit

Do the high capacity transit corridors we have identified meet the project's guiding principles?

## Mobility Corridors

Given the importance of mobility corridors in making connections, how will these meet your community's greatest needs?



# Please Enter Your Breakout Room

Iredell,  
Mecklenburg  
& Union

Cabarrus &  
Rowan

Gaston,  
Cleveland &  
Lincoln

Anson &  
Stanly

York &  
Lancaster

Regional

# Highlights



# What's Next?

## Project Management Team

- Form Working Groups and Technical Meetings
- Launching Transit Academy

## Committees

### Homework:

- Review the High Capacity Transit & Mobility Corridors and provide feedback by January 29, 2021
- **Save the date:**
- March 24, 2021, next committee meeting

## Contact Us

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[contact@connect-beyond.com](mailto:contact@connect-beyond.com)





# 2020-2021 Advisory Committee Meeting Calendar

Evaluate Existing System	Identify High Capacity Transit Corridors	Envision a Total Mobility Network			Develop Implementation Strategies	Final Plan	
Purpose, Goals & Vision	Candidate High Capacity Transit Corridors	Recommended High Capacity Transit Corridors	Integrated Bus Service Strategies	Transportation Demand Management & Mobility Hubs	Rural-Urban Connections & Transit Supportive Strategies	Draft Recommendations	Final Recommendations
MAY 2020	SEPTEMBER 2020	JAN 13, 2021	MAR 24, 2021	APR 28, 2021	MAY 26, 2021	JUL 22, 2021	SEP 29, 2021
<p>Based on your understanding of your community's unique character and needs, help us shape the necessary components of the purpose, goals and vision for CONNECT Beyond.</p>	<p>After careful review of data from across the region we've developed candidate high capacity transit corridors.</p>	<p>Based on all the feedback we received and an initial evaluation of the candidate corridors we have identified the recommended high capacity transit corridors</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Identifying potential service connections, new service in support of high capacity transit, and strategies to benefit the user experience.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Discussion of emerging mobility trends and connecting beyond a fixed route system.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Identifying gaps and bridges for the rural to urban mobility divide and strategies to support transit throughout the region.</p>	<p> <b>TRANSIT ACADEMY</b></p> <p>Review preliminary and consolidated results and present draft plan.</p>	<p>The final draft plan will outline the vision for the region. It will include action-oriented strategies.</p>
<p> Feedback on purpose, goals &amp; vision</p>	<p> Feedback on candidate corridors</p>	<p> Acceptance of high capacity transit corridors</p>	<p> Feedback on strategic direction</p>	<p> Feedback on strategic direction</p>	<p> Feedback on strategic direction</p>	<p> Feedback draft recommendations</p>	<p> Endorsement of final recommendations</p>

# Upcoming Working Groups and Technical Meetings

## Funding & Partnerships

Characterize the current realities of paying for regionally significant investments across 2 states and multiple jurisdictions.

Considerations?  
Implications? Timing?  
Governance? Critical next steps?

## Transportation Demand Management (TDM)

Outline and prioritize the key regional technical and policy steps to implement TDM strategies that support access to reliable, efficient, and well-connected transportation options

## Technical Meetings

### Rural / Urban Connections

Coordinate with transit providers to develop a local and integrated bus service strategy that connects the region and the HCT corridors



**Thank You**

# Breakout Room Facilitator Slide Deck

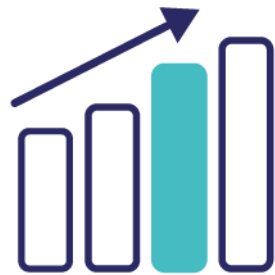


**CONNECT  
Beyond**

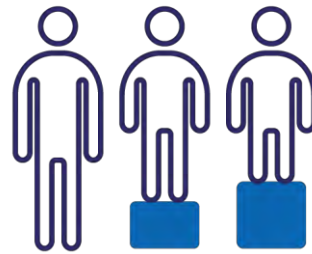
# Guiding Principles for High Capacity Transit Evaluation



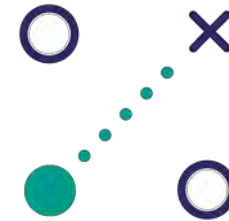
**Creating  
Mobility Choice**



**Preparing for  
Future Growth**



**Advancing  
Equity**



**Aligning Plans  
and Local Visions**



**Planning for  
Implementation**

# Breakout Session Group Discussion

## High Capacity Transit

Do the high capacity transit corridors we have identified meet the project's guiding principles?

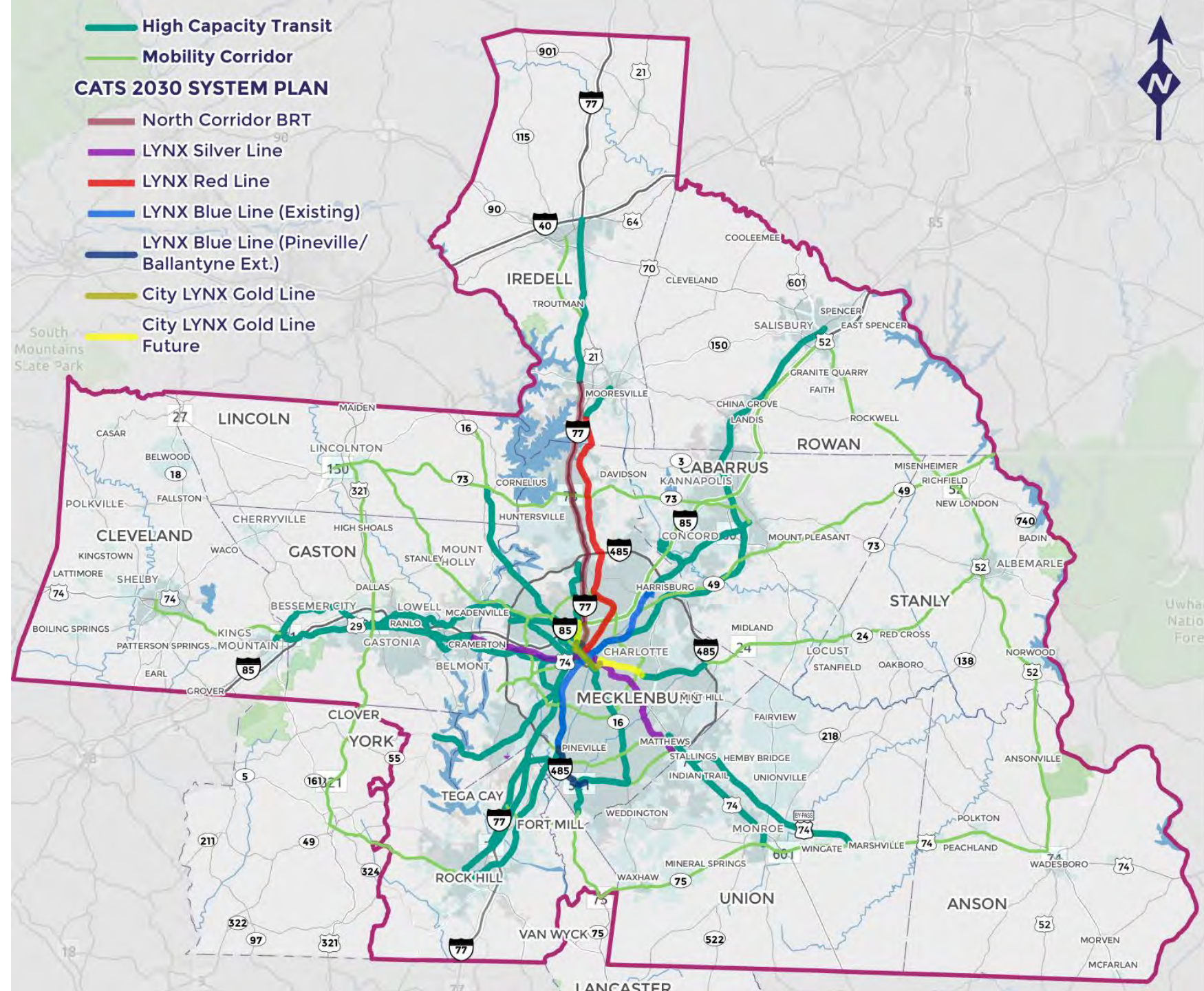
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Given the importance of mobility corridors in making connections, how will these meet your community's greatest needs?

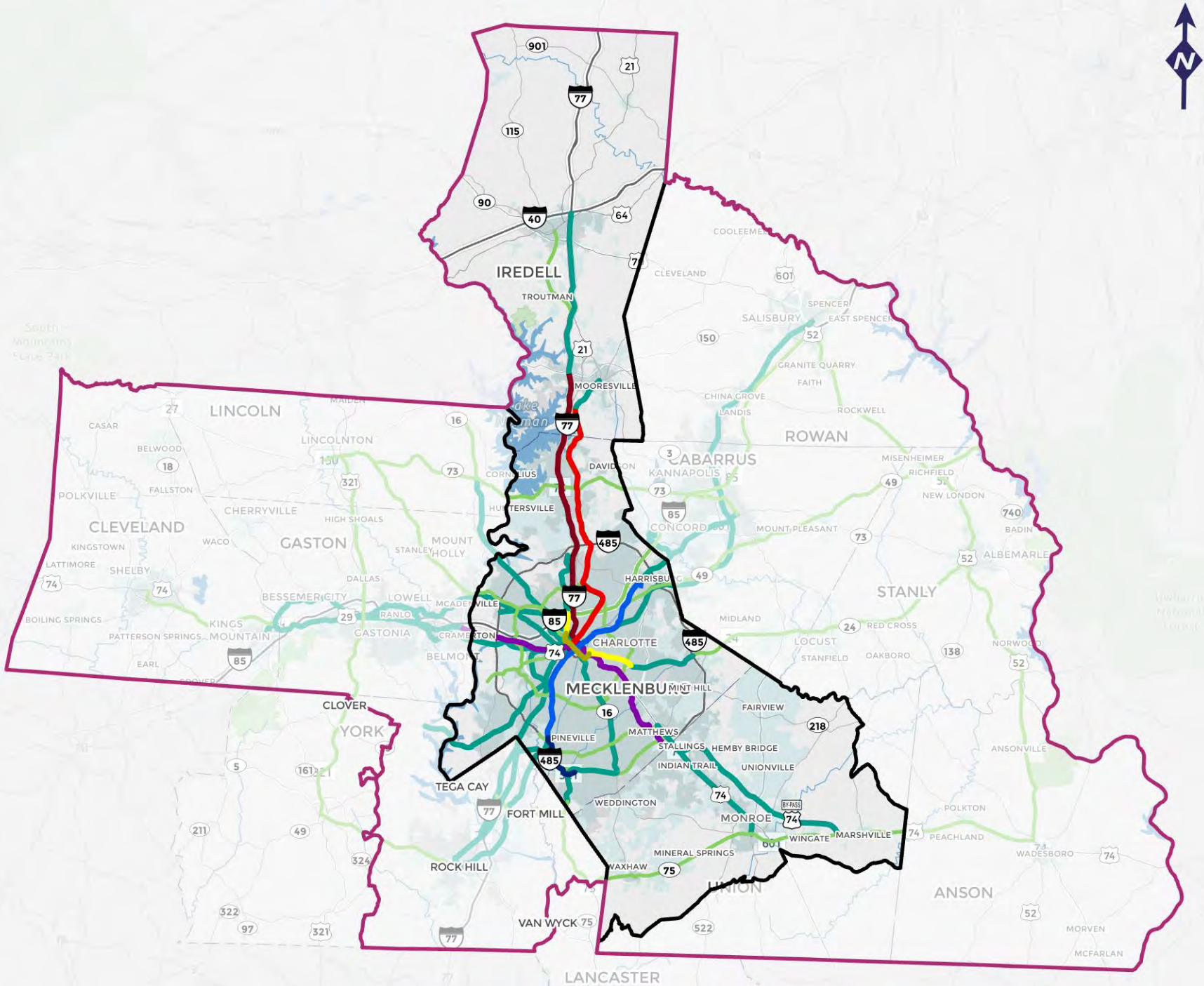


# HCT and Mobility Corridors

- HCT network
- Mobility corridors
  - Other types of transit improvements or mobility solutions:
    - Enhanced bus
    - Freeway-based express
    - Local bus connection
    - TDM strategies
    - Urban-rural connection
    - Freeway-based express
    - Transit supportive development strategies
    - Other
  - Corridors that may be good HCT corridors in the long-term

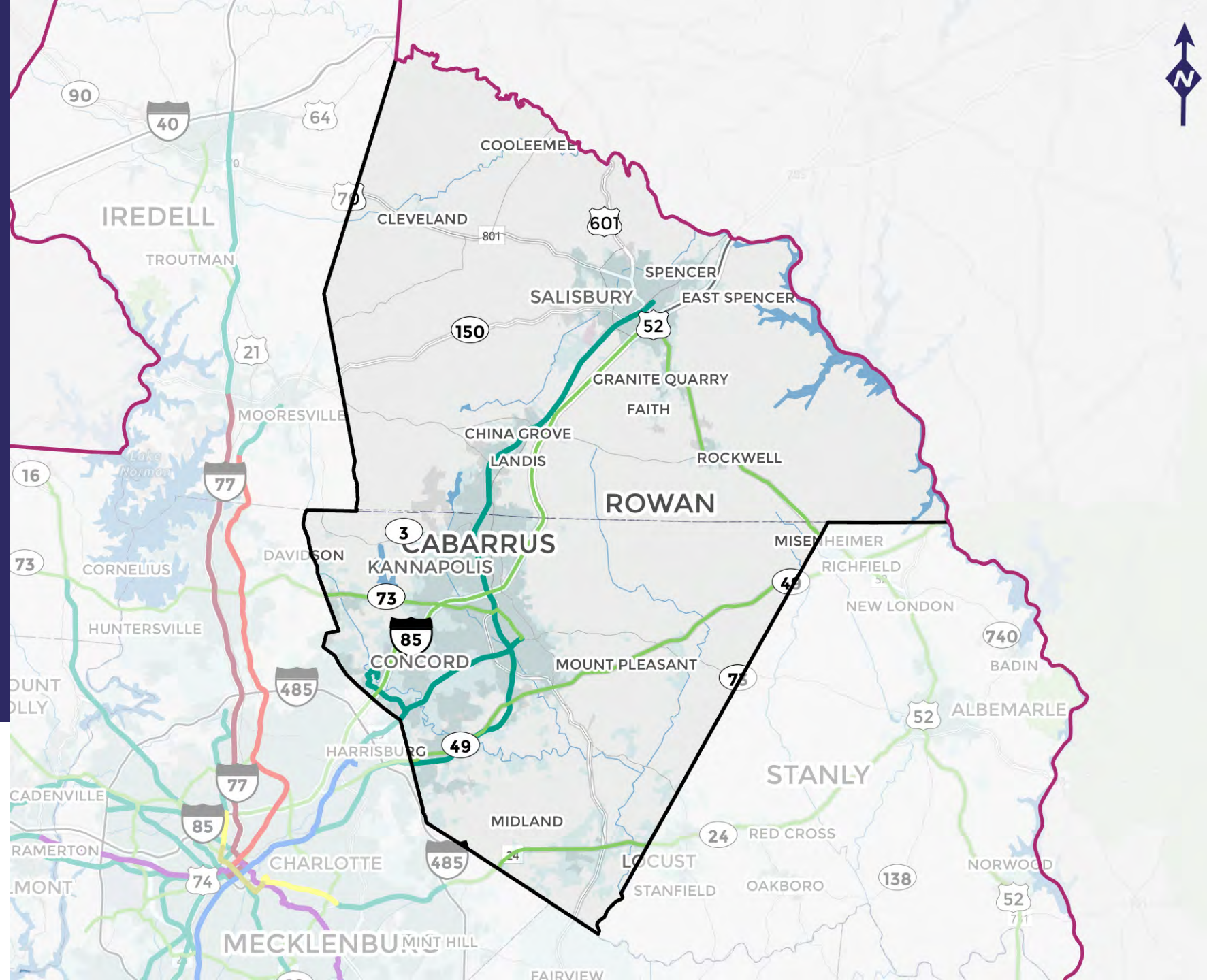


# Iredell, Mecklenburg & Union

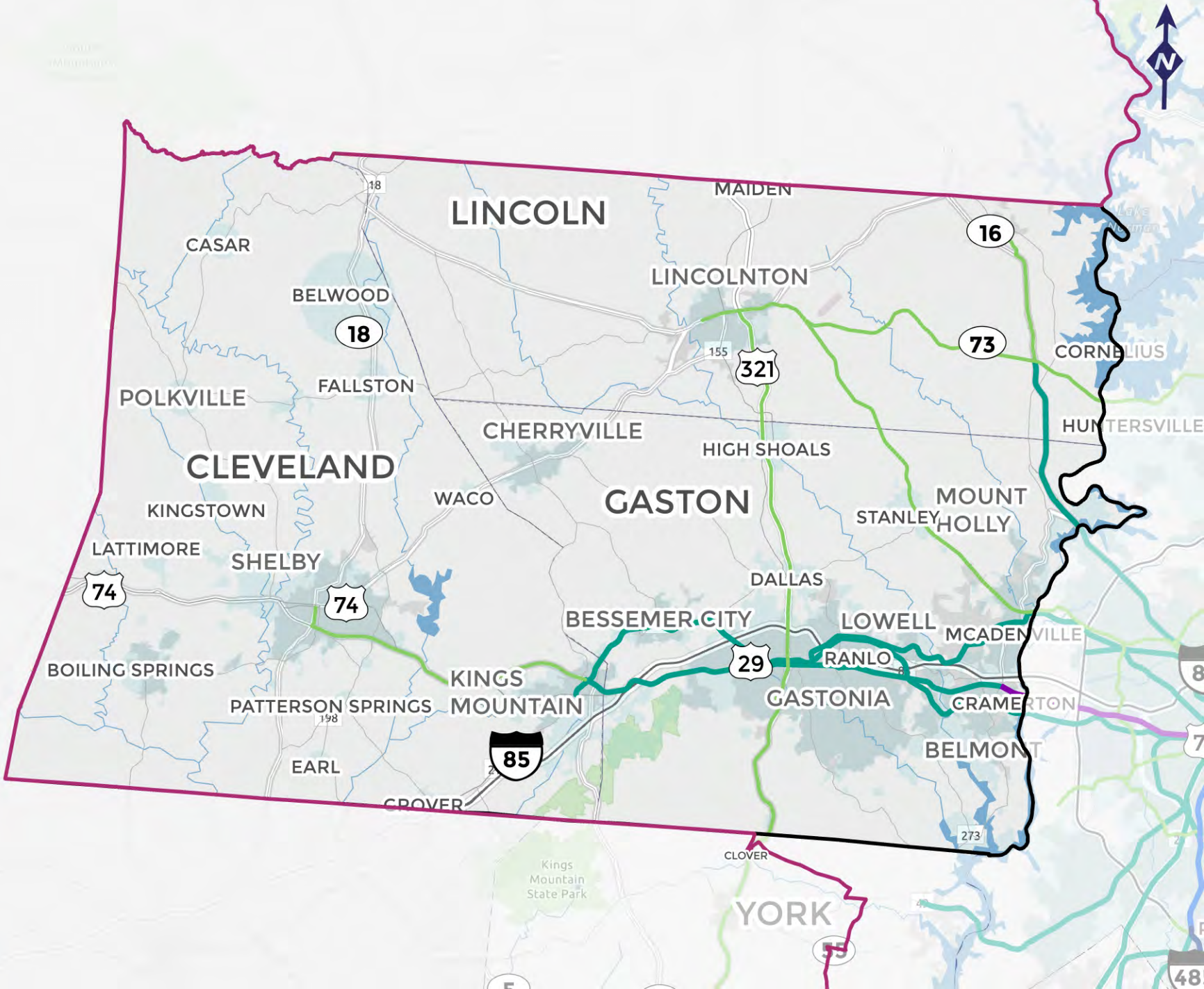




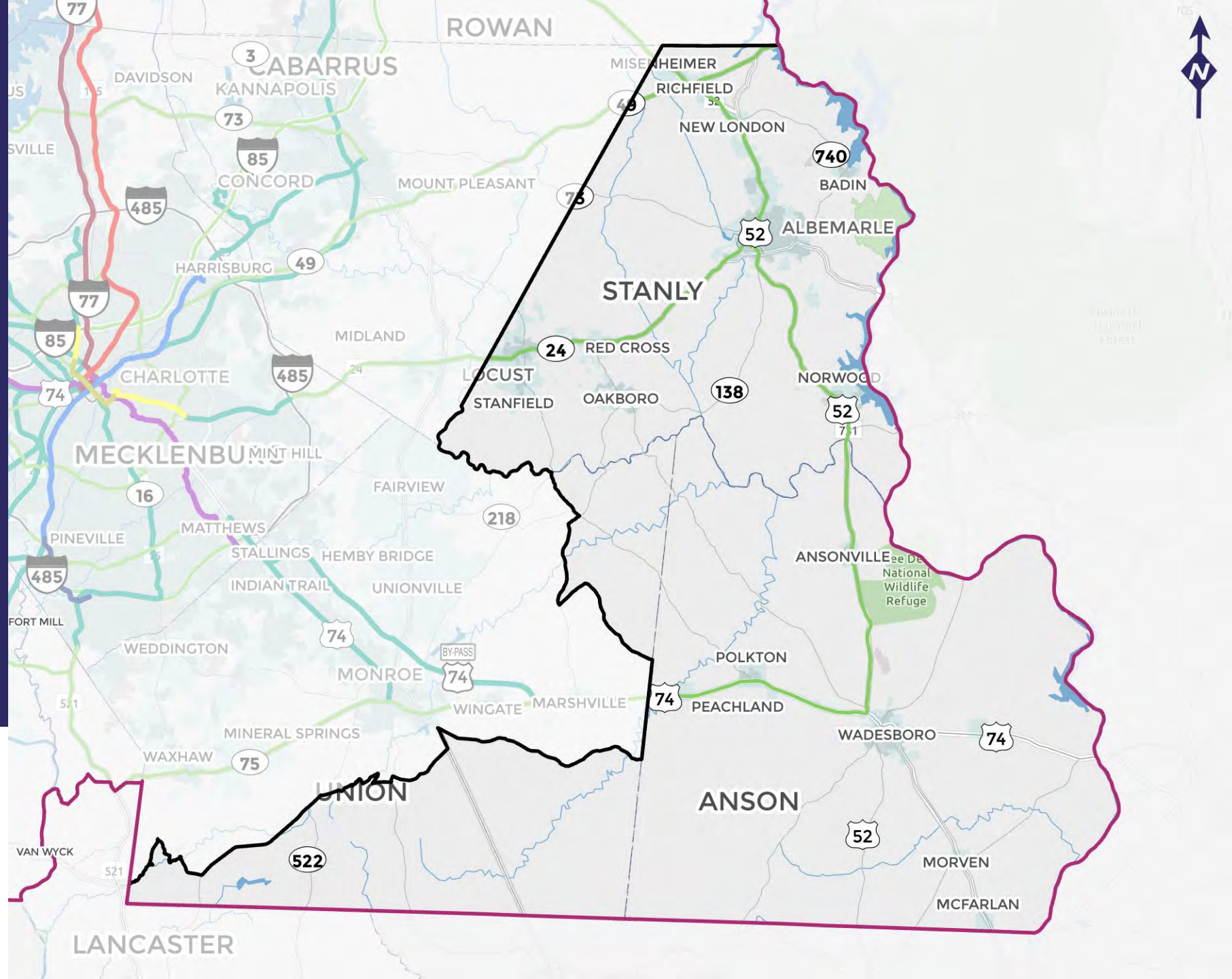
# Cabarrus & Rowan



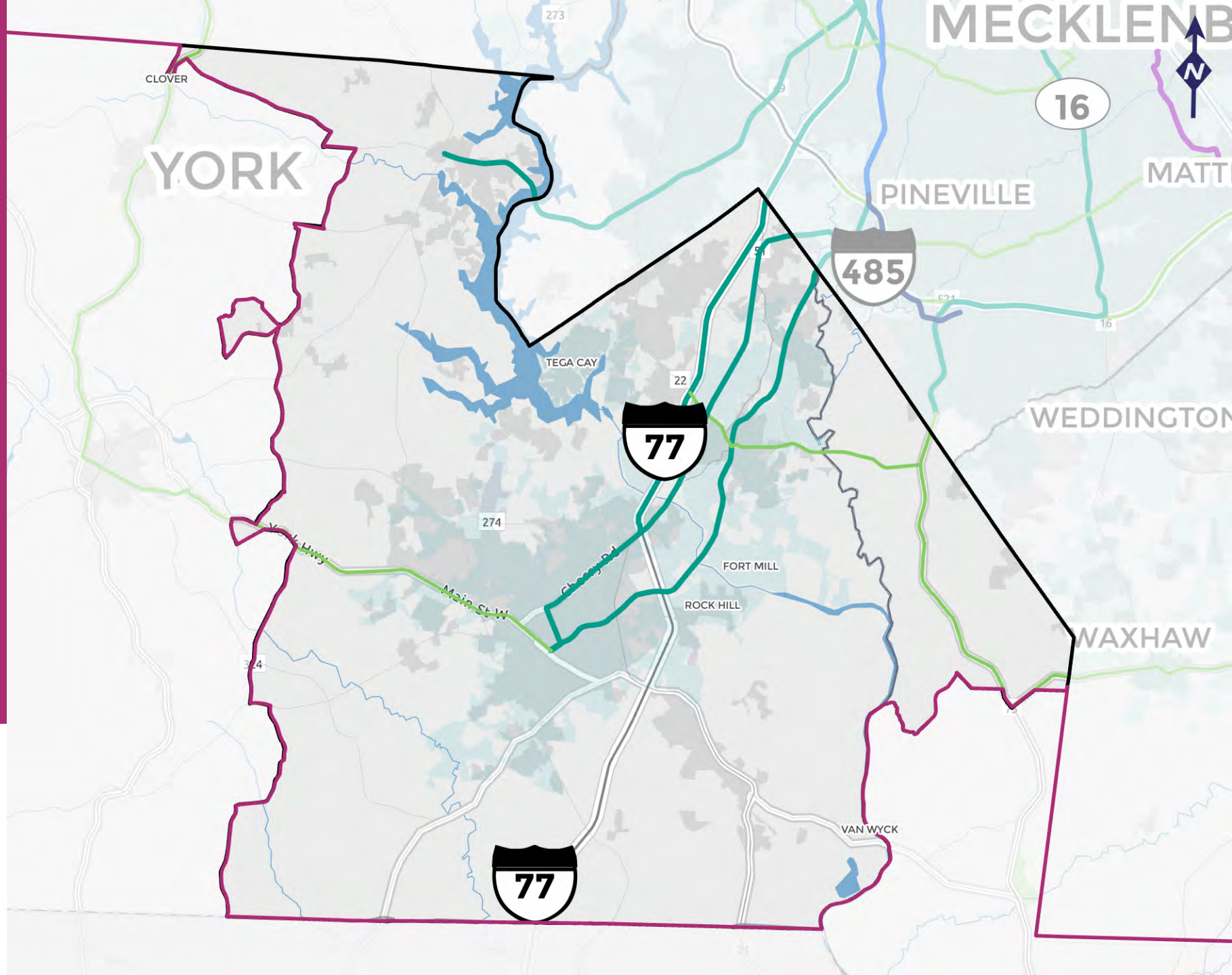
# Gaston, Cleveland & Lincoln



# Anson, Stanly, & E. Union



# E. York & N. Lancaster



# Mobility Layers and Actions

## Identification

## Mobility Options

## Preparedness Strategic & Actions

**Candidate Corridors**

**HCT Corridors**

**Mobility Corridors & CONNECT Beyond Region**

High-Capacity Transit Solutions  
(Light rail, bus rapid transit, commuter rail)

Enhanced Bus Solutions

Mobility Solutions

Implement HCT Services

Complete Planning & Environmental Studies

Freeway-Based Express Bus Service

Expand Service to New Areas

Span or Frequency Enhancements

Transit Enhancement Strategies & Technologies

Micro-Transit, Job Access Shuttles, Vanpools

Land Use Strategies to Promote Transit