



TRIANGLE WEST
Transportation Planning Organization

Presentation to the Joint Meeting Durham's Elected Bodies

STRATEGIC RAIL INFRASTRUCTURE STUDY

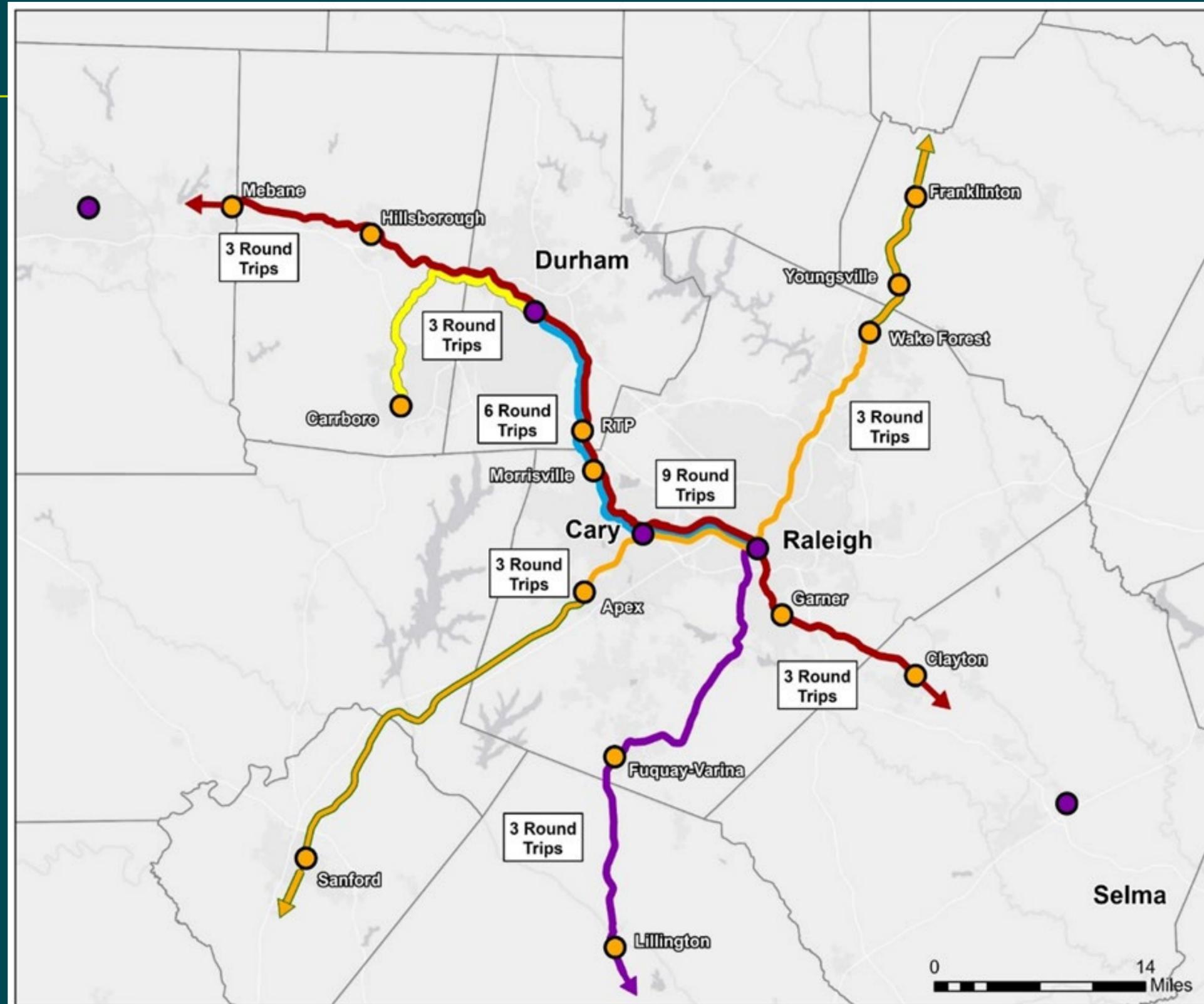
August 12, 2025

PURPOSE

To Develop an Incremental Rail Expansion Strategy

- Explore Potential Service Concepts
- Identify Capital Project Needs Within Service Concepts
- Create a Crosswalk Matrix Evaluating Federal and State Investment Attractiveness
- Produce a Decision Tree for Strategic Investments
- Establish a Stakeholder Collaboration Structure

Step 1: Evaluate Intercity Passenger Rail Service Concepts

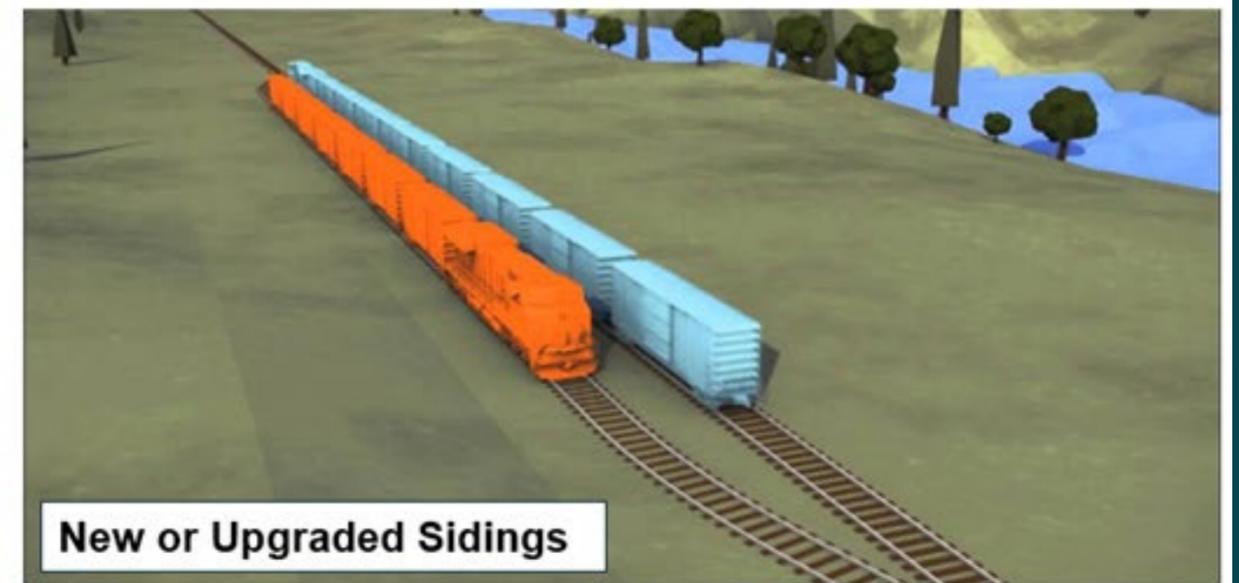
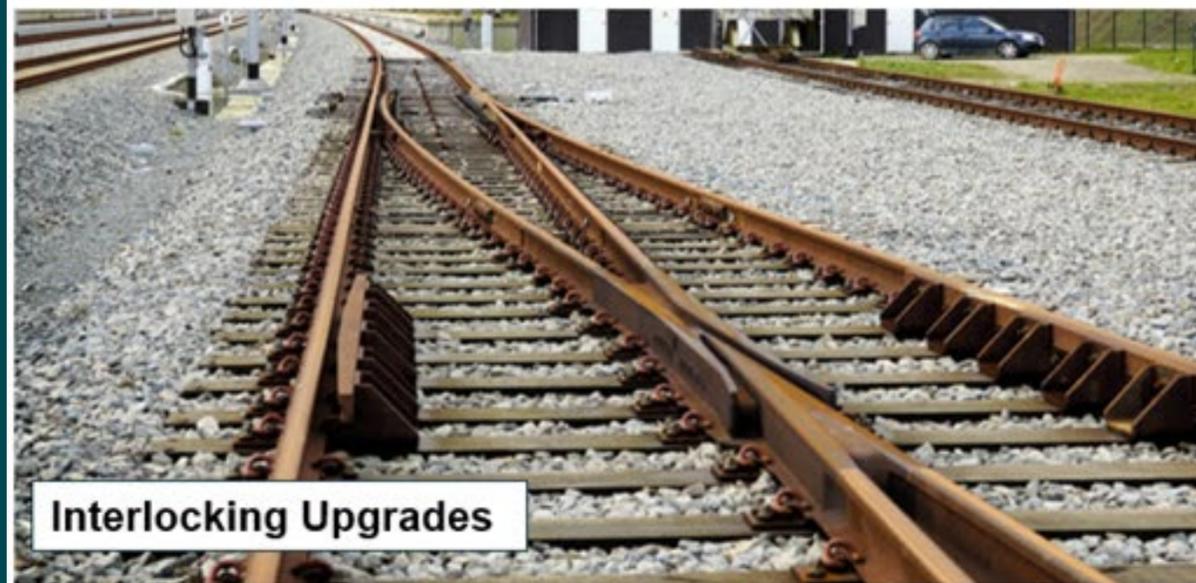
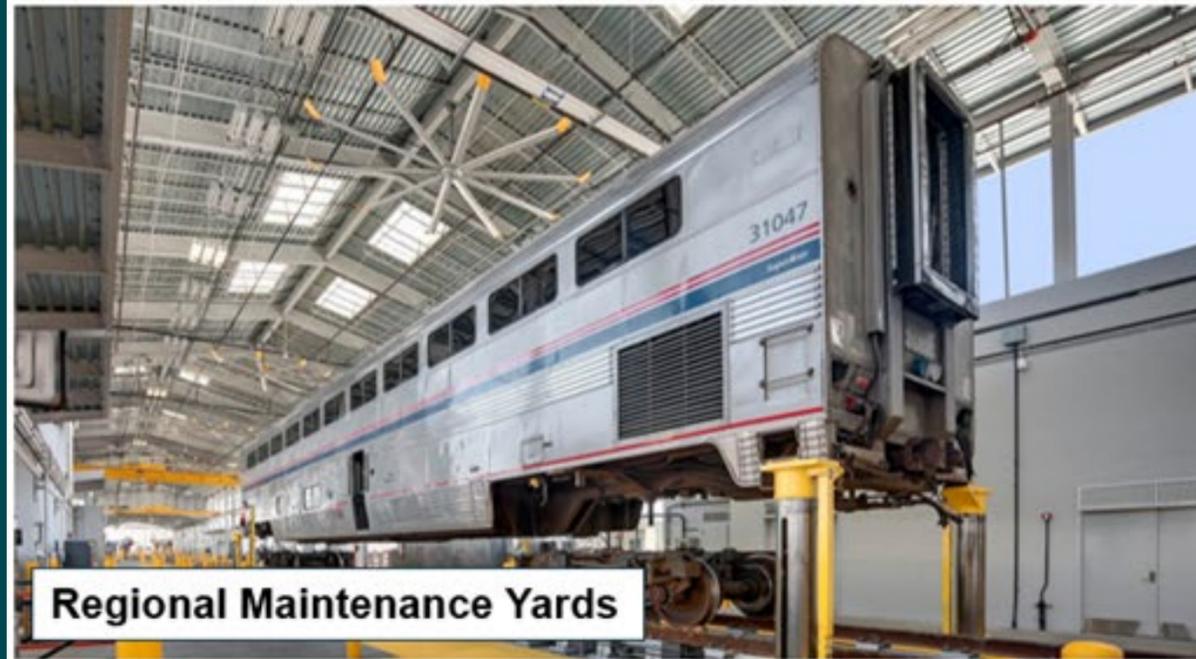


Service Concepts

- Existing Stations
- Proposed Stations
- Mebane to Clayton
- Sanford to Franklinton
- Lillington to Raleigh
- Apex to Wake Forest
- Durham to Raleigh
- Carrboro to Durham



**Step 2:
Identify
Capital
Projects
Within
Service
Concepts**



Step 3:
Strategic
Investment
Decision
Tree
(In Order)

1. Grade Crossing Eliminations
2. Advancing Station Work, including NEPA and Engineering studies
3. Protective Land Purchases for a Regional Maintenance Facility and layover yards
4. Interlockings and Sidings
5. Ridership studies to prioritize which parts of long corridors to invest in first
6. Investments in the NC-Line from Burlington to Selma

Decision Tree Teir 2 - Advancing Station Work

1. NCDOT's SPOT process and criteria offer little funding support for passenger rail investments.
2. Using local dollars to fund station buildings and platforms, and new station tracks are strategies that may advance portions of the system that most galvanize public support for continued expansion. Example investments could include early engineering and NEPA studies or final design and construction.
3. NC strategic precedent for station investments independent of service introduction are the station improvements from Salisbury to Asheville and the current Charlotte Gateway Station platform.
4. The RTP InterCity Rail Station is included in the soon to be adopted 2055 Joint Metropolitan Transportation Plan.





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THANK YOU



NORTH CAROLINA
Department of Transportation

Passenger Rail in the Triangle

Jason Orthner, P.E., CPM
Rail Division Director

August 12, 2025

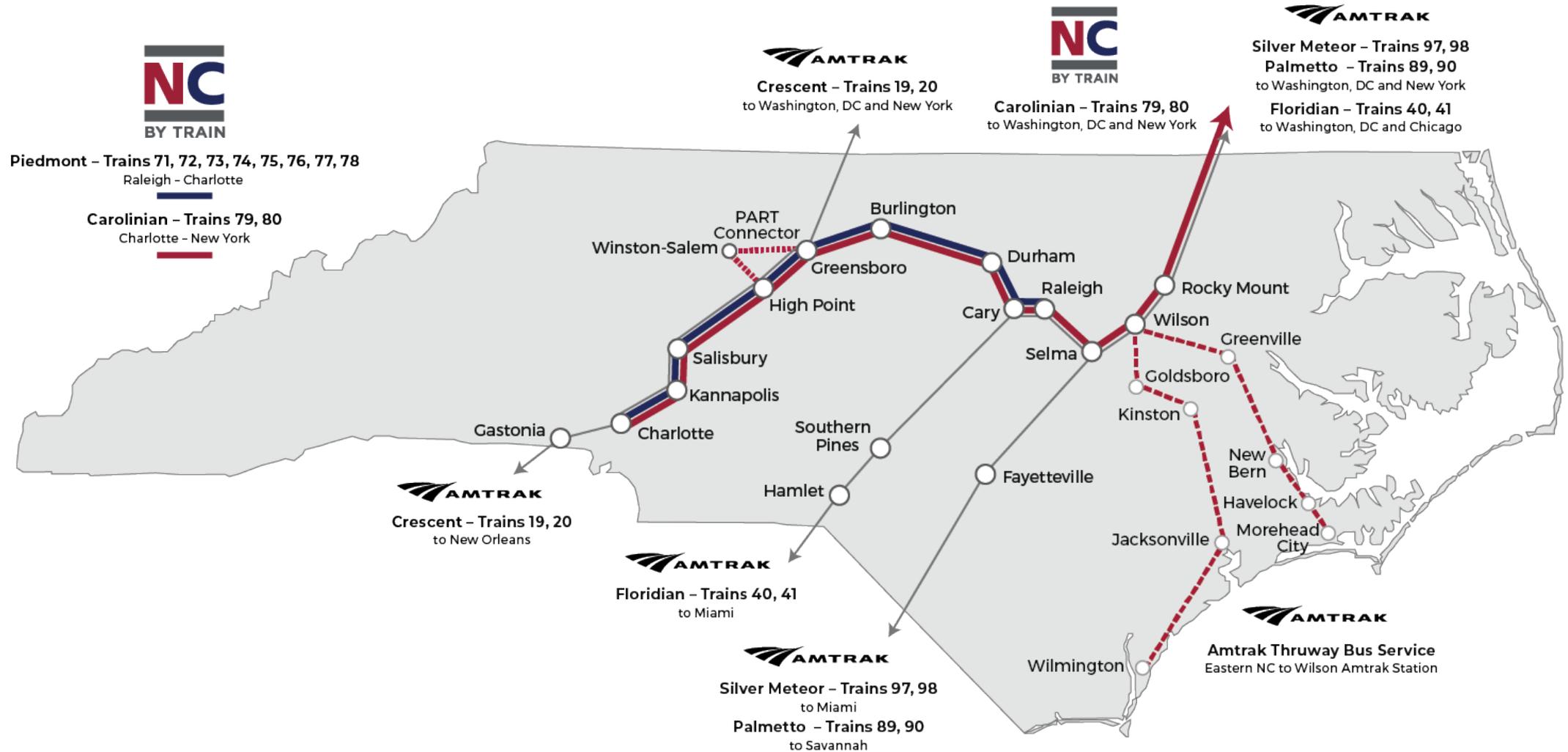
Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

Types of Passenger Rail Service

- **Intercity Passenger Rail (Typically FRA supported)**
 - *NCDOT NC By Train Service operated by Amtrak in North Carolina*
 - Connecting the centers of cities and towns
 - Longer distances between stations
 - Longer trip durations
 - Baggage and food service typical
- **Commuter Rail (Typically FTA supported)**
 - Connecting outlying areas and urban centers
 - Peak hour service is historically typical
 - Closer station spacing
 - Shorter trip durations
- **Light Rail (Typically FTA supported)**
 - Urban area
 - Separate rail system (not part of national rail network)



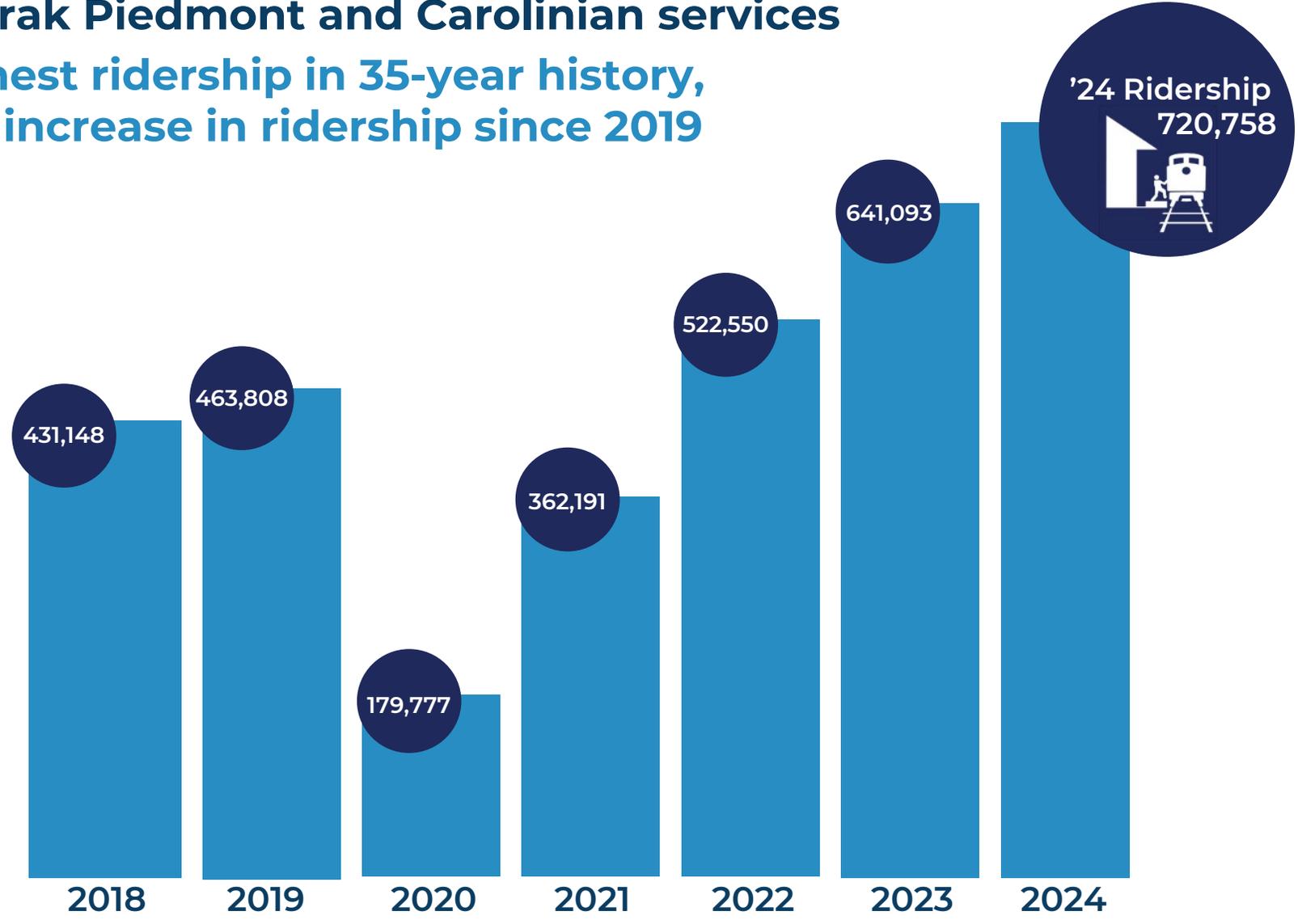
NC Intercity Passenger Rail Service





NC Intercity Passenger Rail Service – Amtrak Piedmont and Carolinian services

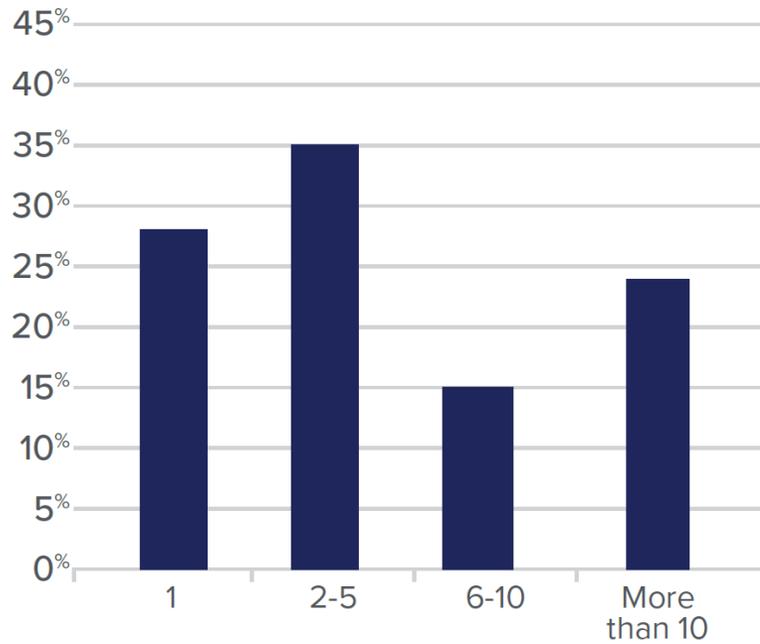
Highest ridership in 35-year history,
55% increase in ridership since 2019



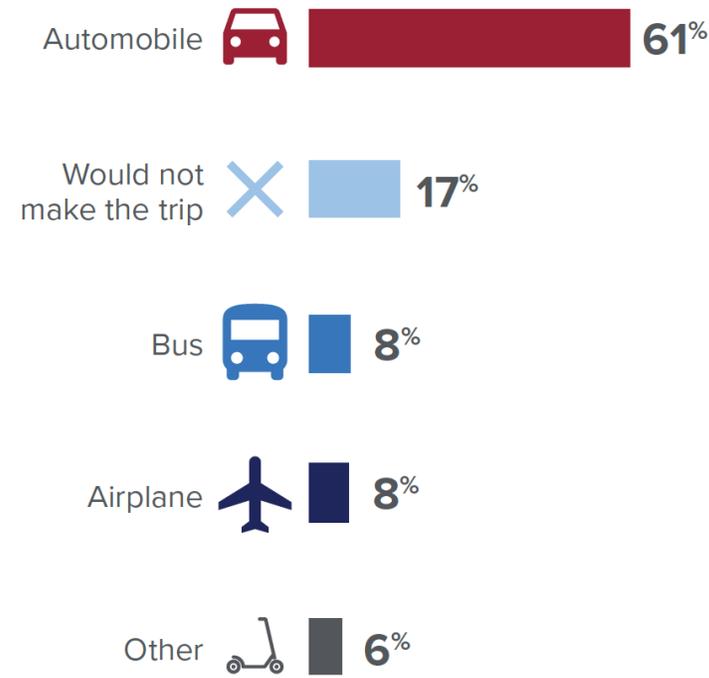
Some insights from our 2024 rider survey

Impact on people's lives

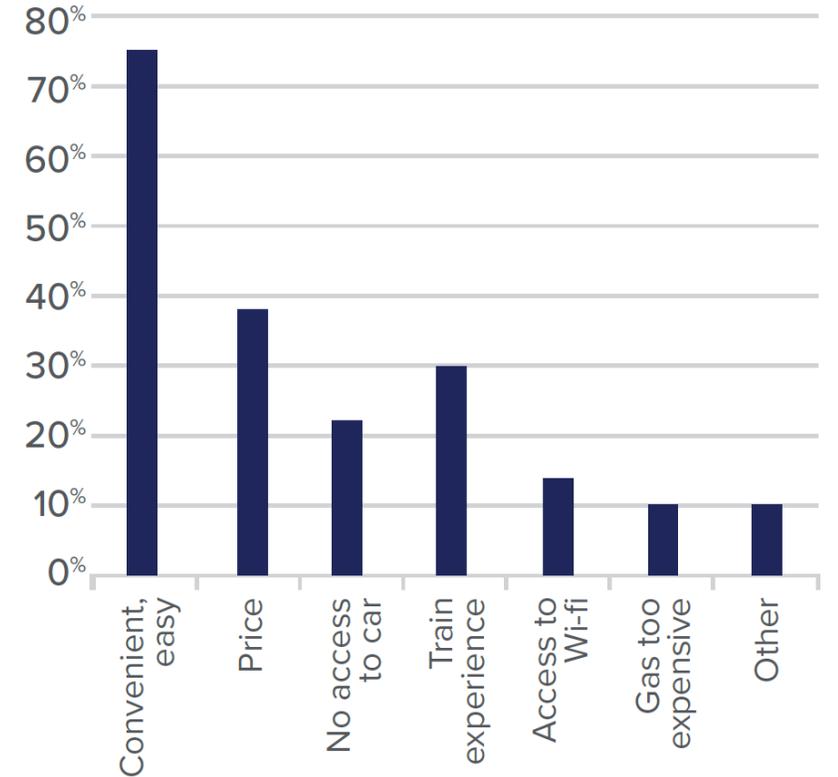
Train Trips within Past Year



Mode if Train Service Were Not Available



Most Important Factors for Choosing the Train



North Carolina Intercity Rail Expansion Opportunities

Seven Corridors in FRA CID Program

- ✓ Charlotte to Washington, DC
- ✓ Salisbury to Asheville
- ✓ Raleigh to Wilmington
- ✓ Charlotte to Kings Mountain
- ✓ Raleigh to Fayetteville
- ✓ Raleigh to Winston-Salem
- ✓ Charlotte to Atlanta

Future CID Applications:

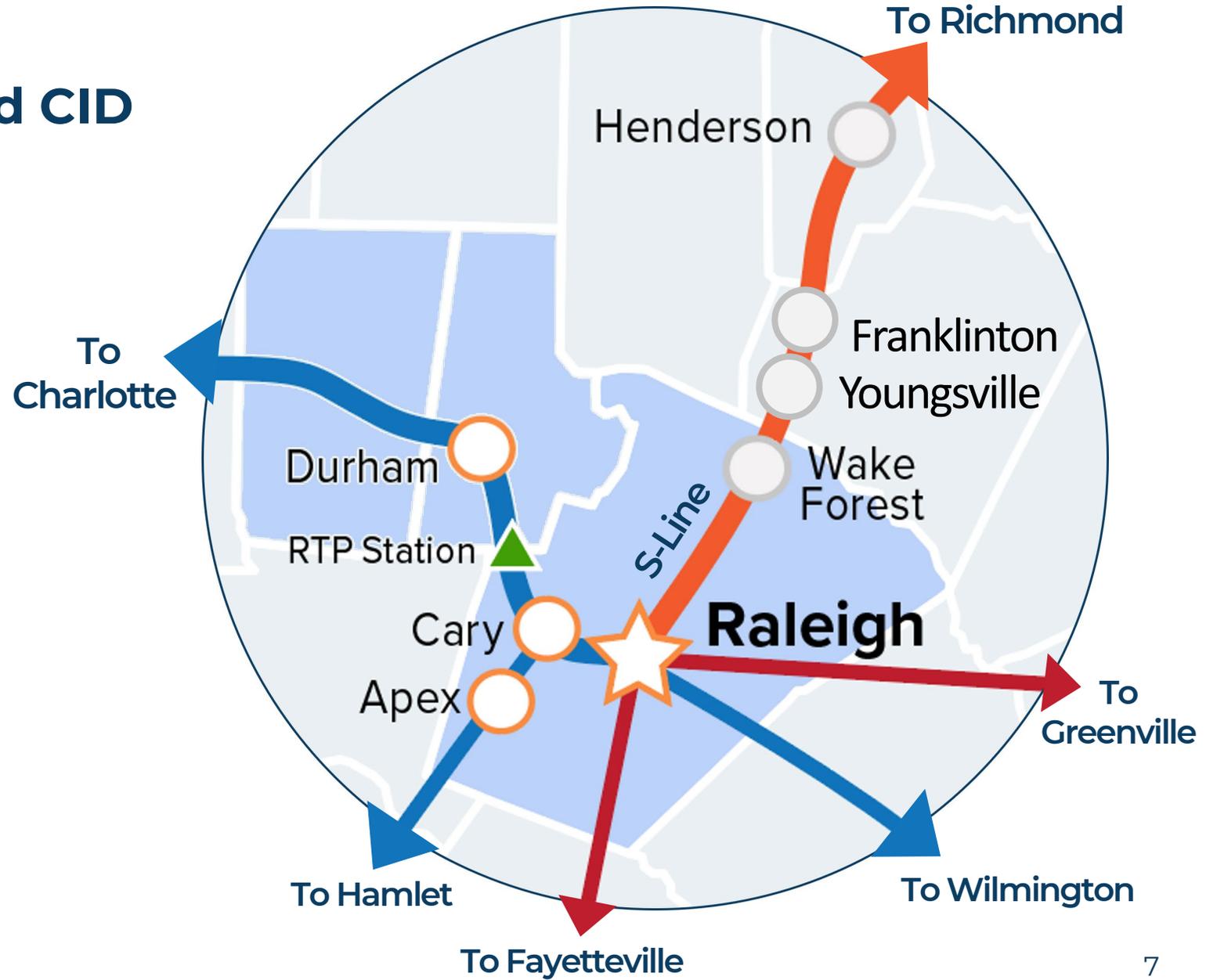
- Raleigh to Greenville
- Raleigh to Hamlet
- Raleigh to Morehead City
- Winston-Salem to Charlotte
- Raleigh to Weldon



Towns shown are for geographical reference only and do not represent station locations.

Wake County, S-Line, and CID

- S-line and CID programs support regional and southeastern connectivity
- Opportunity for enhanced intercity rail service to achieve regional goals.



Adding Rail Service to the Triangle Mobility Hub



Station Roles and Responsibilities

Planning and Implementation

- Station Feasibility and Concept:
 - ~\$200K
 - 9–12-month process
- Station Preliminary Engineering and Environmental Documentation (NEPA):
 - ~\$300K
 - 9–12-month process
- Final Design and Construction:
 - \$10-30M
- NCDOT helps with project management and railroad coordination.



Operations

- Most NC By Train stations locally owned and managed.
- NCDOT provides station staffing.
- NCDOT manages service relationship with operator (Amtrak).
- Railroad liability can be a challenge

Contact Us

Jason Orthner

jorthner@NCDOT.gov

919-707-4714

 ncbytrain.org

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 @NCDOT

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 NCDOTcommunications

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 NCDOT

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 View All Channels

Thank you!



Research Triangle Park today

PARK OVERVIEW

7,000 acres

385+ established and startup companies

55K+ employees

TOP PARK INDUSTRIES



Biotech/Life Science



Data Science



Agtech



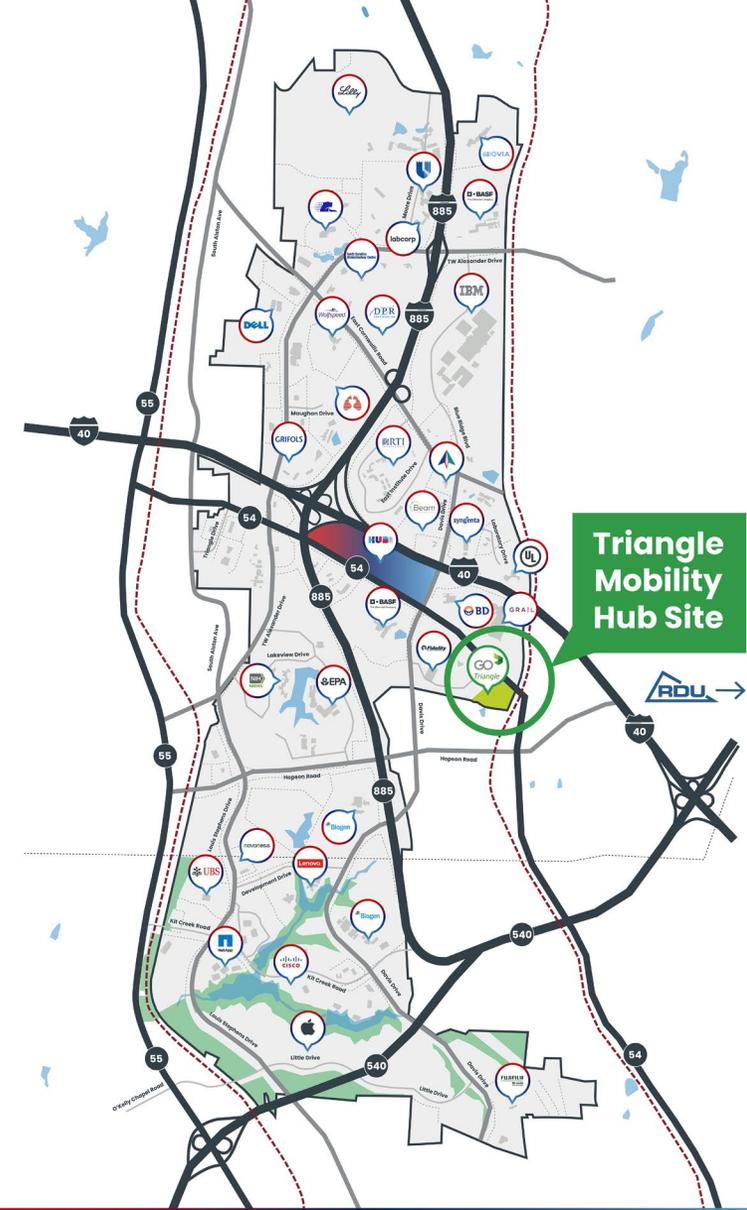
Cybersecurity



Cleantech



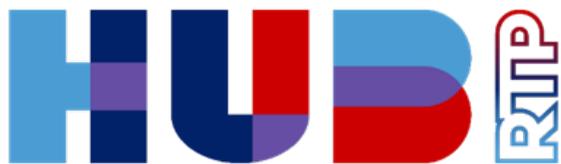
Fintech



Map Legend

Road ——— Railroad - - - - - Freeway ——— Highway ———
Preserved Area ——— Lake or Pond ——— RDU ——— Raleigh/Durham International Airport





1M+ SF office & life science space

50K SF retail

1,200 residential units

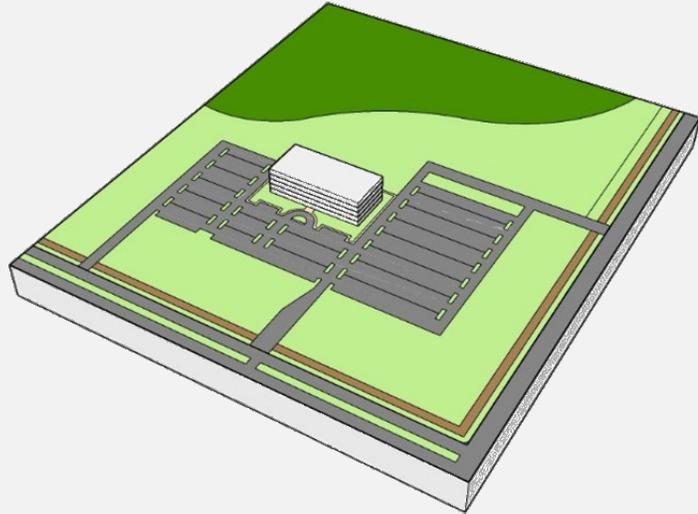
279 hotel rooms

16 acres greenspace

< 3/4 of a mile to
Triangle Mobility
Hub

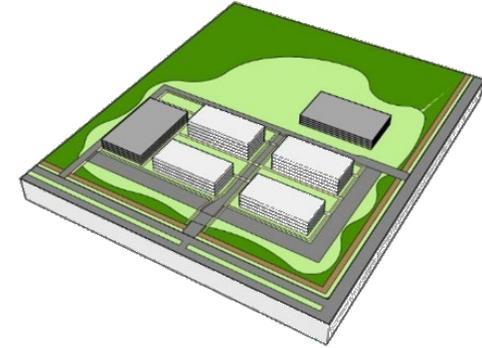


RTP 3.0 framework concept



Existing Place Type

ENHANCED
CORPORATE
CAMPUS



RESIDENTIAL
NEIGHBORHOOD
DEVELOPMENT



MIXED-USE
DENSITY NODES

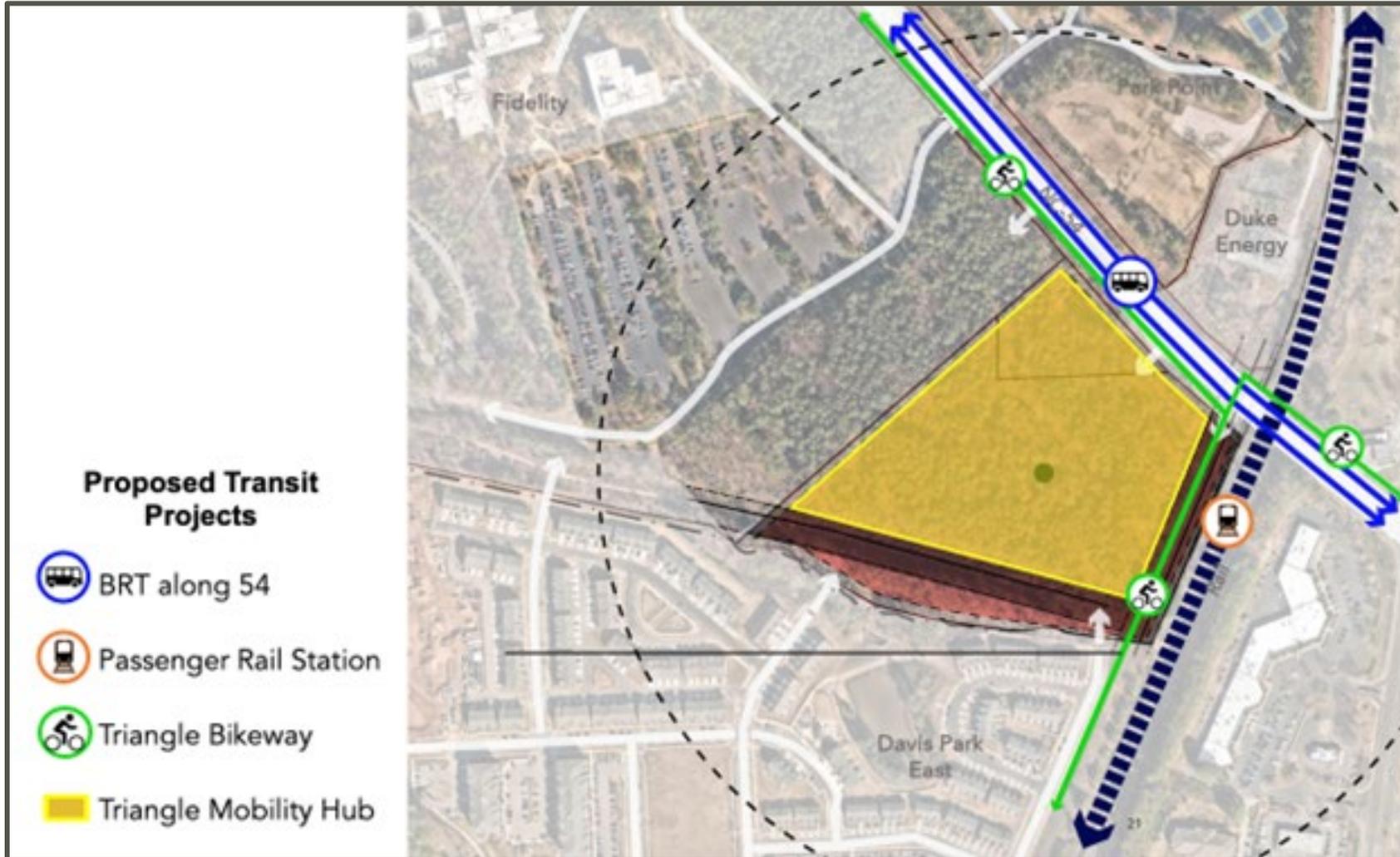


Triangle Mobility Hub

Future transportation hub that will facilitate new **multimodal connections** and support regional transit **service expansion**



Triangle Mobility Hub: Project Location



- Strategic location at intersection of NC 54 and NC Railroad in RTP
- Future connections to planned transit investments
- Anchor for future transit-oriented development in partnership with RTF

