

Presentation to the Joint Meeting Durham's Elected Bodies

# STRATEGIC RAIL INFRASTRUCTURE STUDY

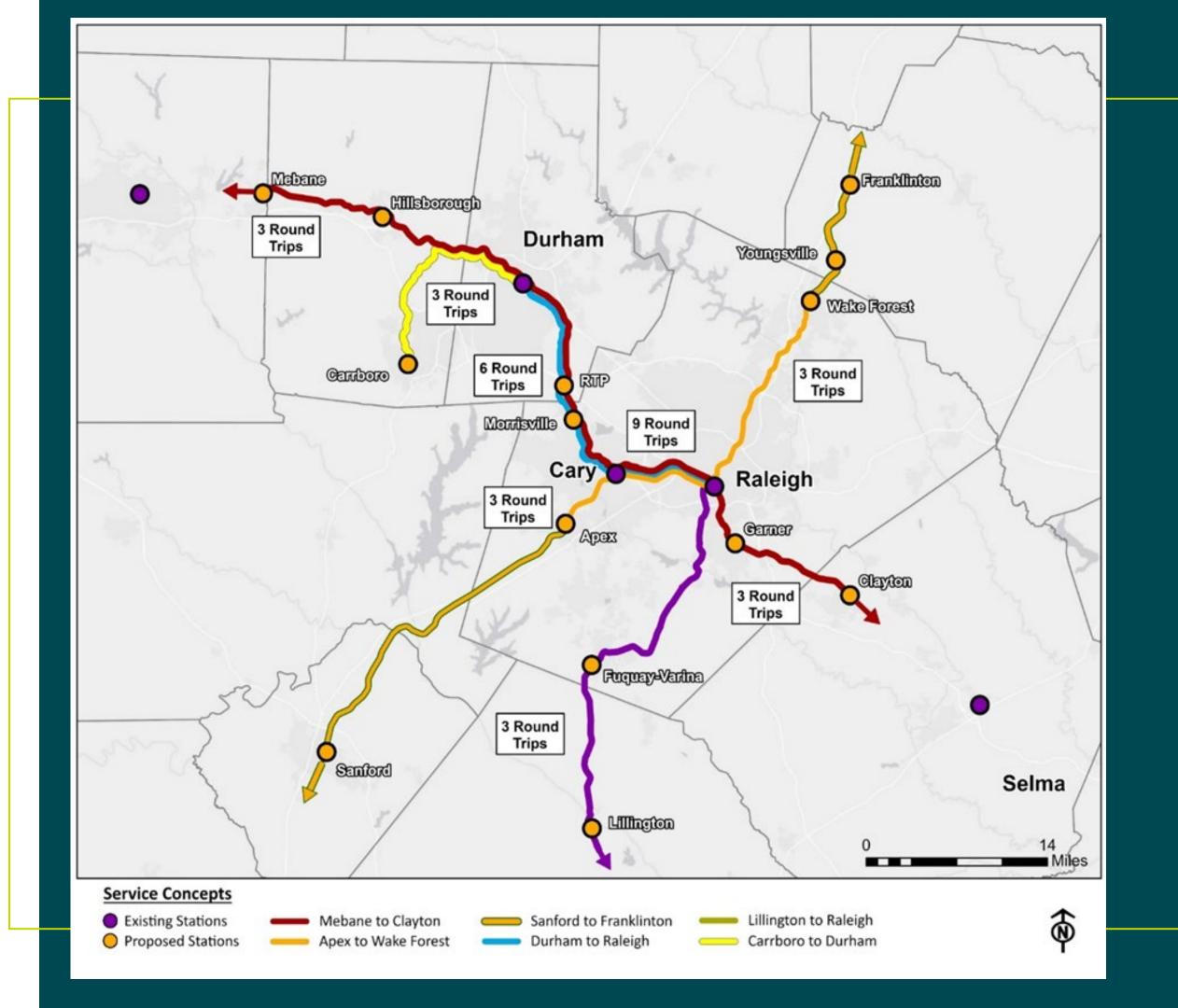


## **PURPOSE**

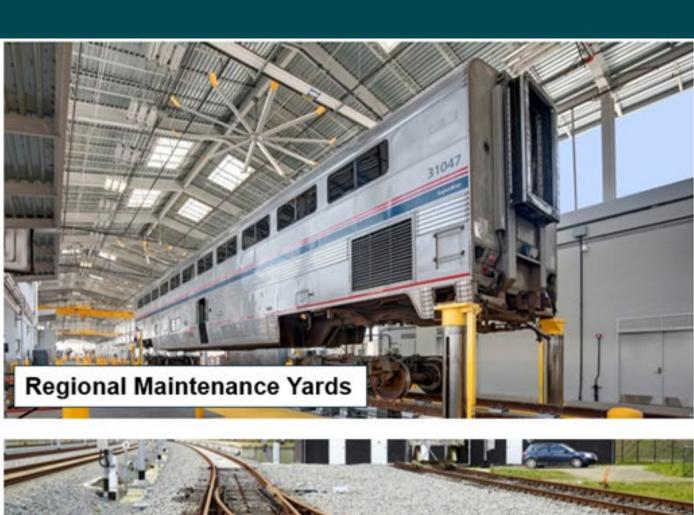
## To Develop an Incremental Rail Expansion Strategy

- 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

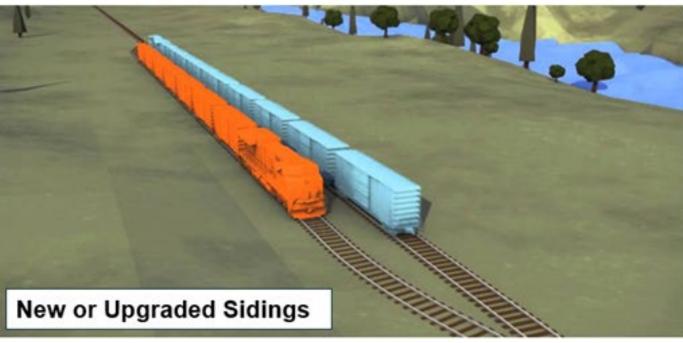


Step 2: Identify Capital **Projects** Within Service Concepts









## 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.





## THANK YOU



## 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**

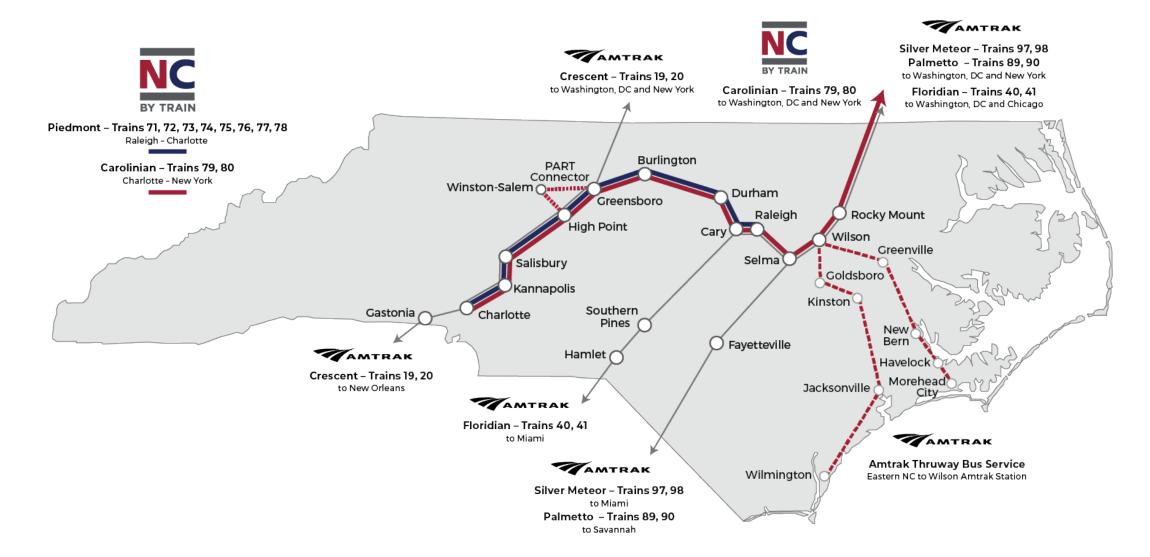
- Intercity Passenger Rail (Typically FRA supported)
  - NCDOT NC By Train Service operated by Amtrak in North Carolina
  - Connecting the centers of cities and towns
  - Longer distances between stations
  - Longer trip durations
  - Baggage and food service typical
- Commuter Rail (Typically FTA supported)
  - 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)







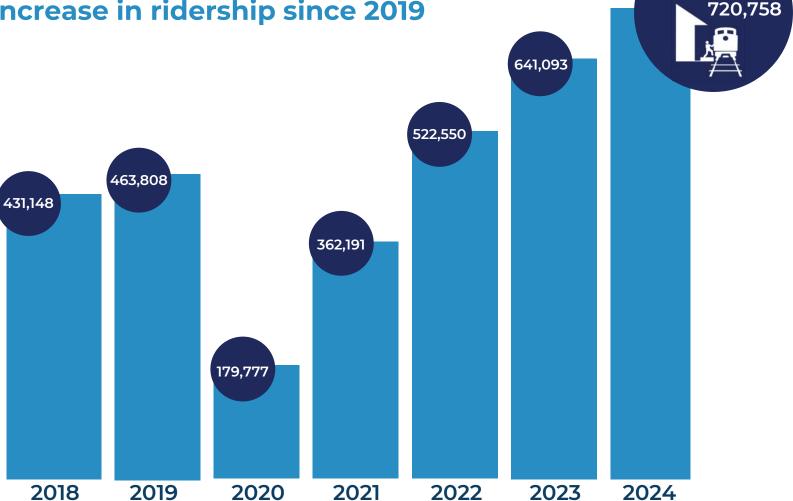
#### **NC Intercity Passenger Rail Service**





NC Intercity Passenger Rail Service – Amtrak Piedmont and Carolinian services

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

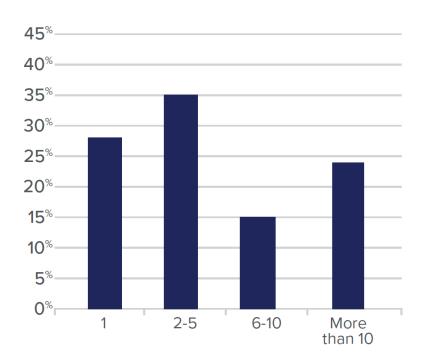


'24 Ridership

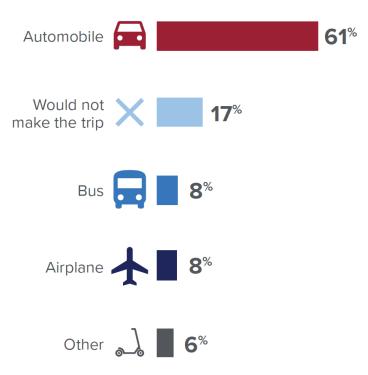
#### Some insights from our 2024 rider survey

#### Impact on people's lives

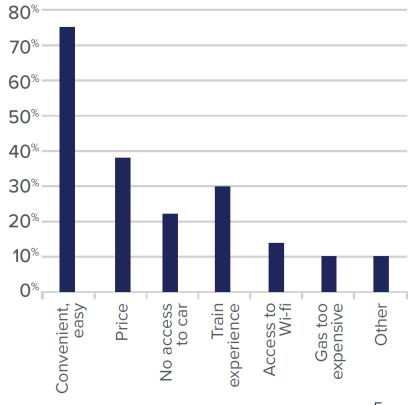
#### Train Trips within Past Year



#### 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

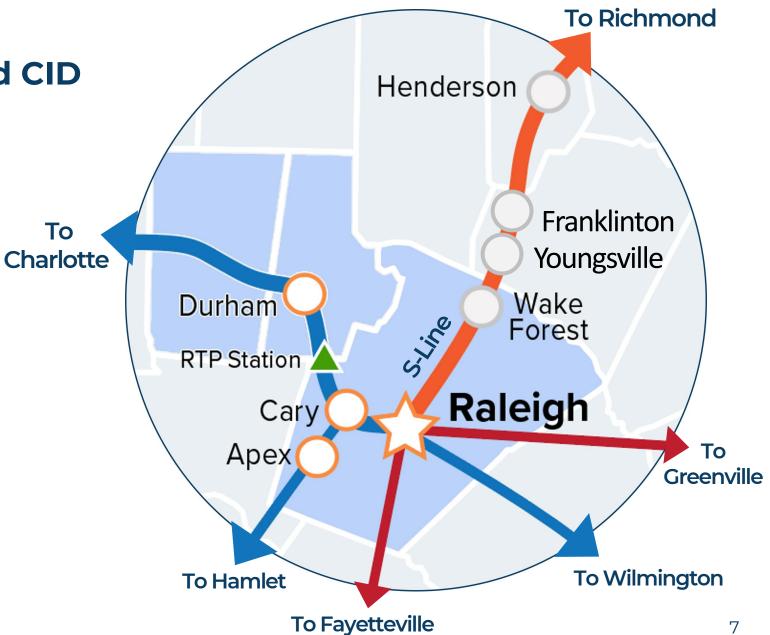


To New York, NY Washington, DC

Future CID Application

#### 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**



To Cary and Raleigh

#### **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
- X @NCDOT O ncdotcom
- ONCDOT
   In NCDOT
   NCDOTcommunications

► NCDOTcommunications

- (a) ncdotcom
- ₩ 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



Cybersecurity



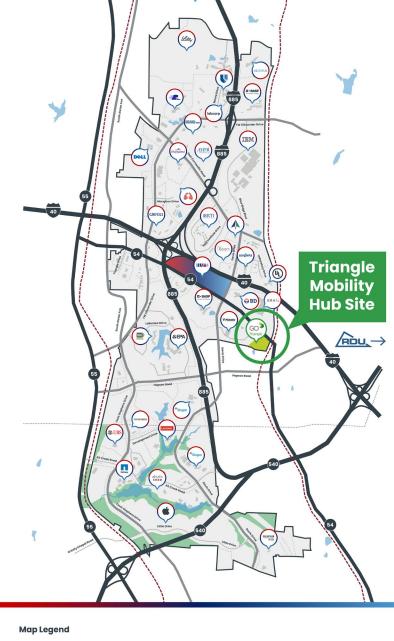
Data Science





Agtech

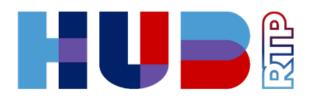
**Fintech** 











1M+ SF office & life science space

50K SF retail

1,200 residential units

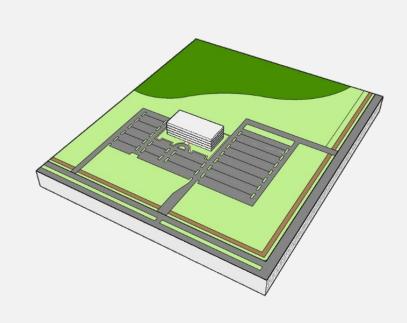
279 hotel rooms

16 acres greenspace

< ¾ of a mile to Triangle Mobility Hub

## RTP 3.0 framework concept





**Existing Place Type** 

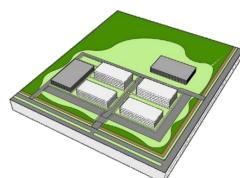
ENHANCED CORPORATE CAMPUS

RESIDENTIAL
NEIGHBORHOOD
DEVELOPMENT













## RTP 3.0 transportation linkages



#### – Multimodal Transportation Vision

RTP 3.0 will ultimately transform the existing traditional suburban office park to a destination with a denser and greater mix of land uses. To achieve this vision, the transportation infrastructure needs to support multimodal travel by including facilities for people walking, biking, taking transit, and using other personal mobility devices. In pursuit of this goal, this plan is consistent with the NCDOT Complete Streets Guide and WalkBike NC.

#### **Complete Streets**

Complete Streets is a nationwide policy approach that requires streets to be planned and designed to prioritize safety, comfort, and access to destinations for all people who use the street, regardless of their mode of transportation. Creating Complete Streets helps to ensure RTP is accessible and welcoming for the most vulnerable populations, including children, older adults, people living with disabilities, and people who do not have access to a car.

A Complete Street is not a single design, but rather a flexible approach to designing a street that best fits the surrounding community. Under the Complete Streets approach, community needs are key in determining the final street design.

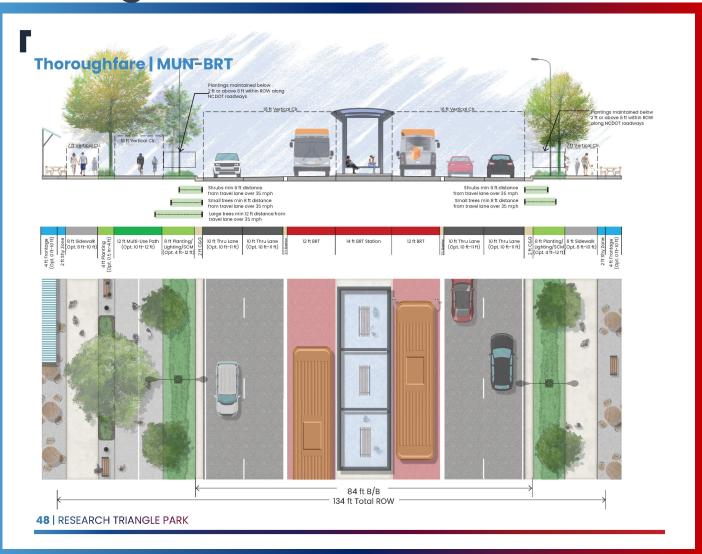
#### **NCDOT Complete Streets Guide**

The NCDOT Complete Streets Implementation Guide is designed to assist department staff engineers, project managers, and designers in implementing the Complete Streets Policy as adopted by the NCDOT Board of Transportation. The document provides comprehensive guidance for incorporating a Complete Streets approach into NCDOT's planning, programming, design, and maintenance processes.

26 | RESEARCH TRIANGLE PARK



RTP's special tax district has collected a 2.5-cent public transportation tax since FY 2024



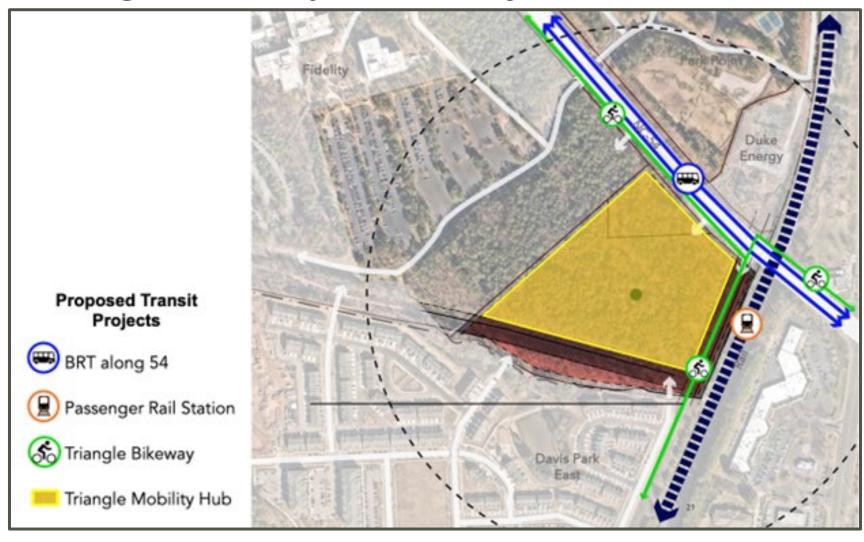
## Triangle Mobility Hub

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



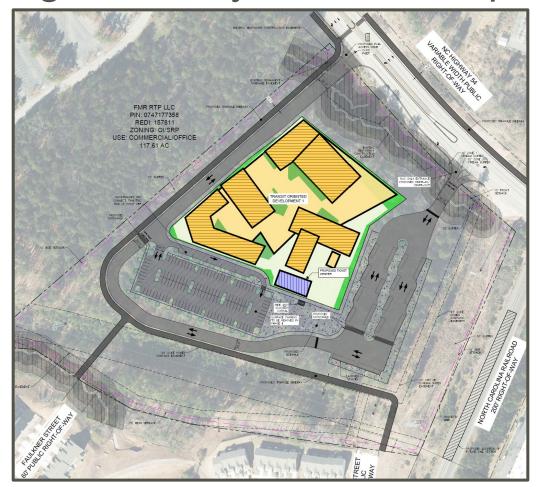


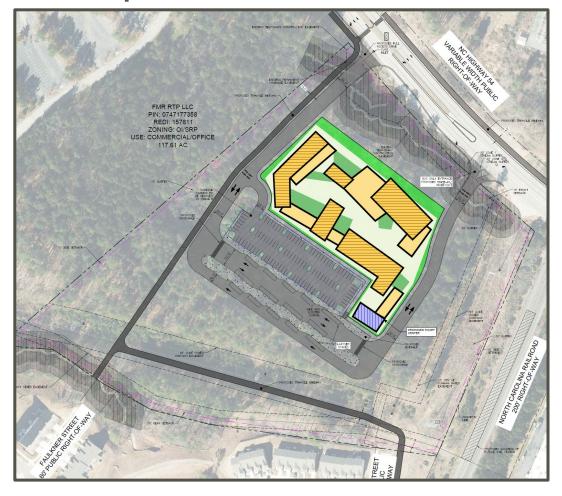
### Triangle Mobility Hub: Project Location



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

## Triangle Mobility Hub: Concept Development





Kimley-Horn Conceptual Site Plans (2024)



## Triangle Mobility Hub: Target Schedule

Activities	2021-2024			2025				2026				2027			2028			2029						
Planning/Preliminary Design																								
Preliminary Engineering																								
Environmental Review																								
Final Design																								
Construction																								
Pre-Revenue Service																								
Operations																								