

# NORTH CAROLINA

Department of Transportation



## Multimodal Innovations Webinar Series

January 25, 2021

# Multimodal Innovations Webinar Series



## 2020

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### **Oct. 21**

Wilson and Via launch RIDE – a new microtransit service (*recording is available*)

### **Nov. 12**

The Bicycle and Pedestrian Explosion in COVID: What is the data showing and how can we maintain it?

### **Dec. 15**

Non-Motorized Policies and Programs – How are we doing and how do we compare with other states?

## 2021

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### **Jan. 26**

S-Line: Leveraging new rail access and transit-oriented development to spur economic growth

### **Feb. 23**

Iconic Multimodal Stations at any scale and how they can spur economic development around them

# Today's Speakers



- **Marston Raue** works with NCDOT's rail division and agency leadership to advance long-range passenger and freight rail initiatives for the Southeast Corridor. She is the lead project manager on the Department's ambitious S line project which aims to bring a multimodal approach to transit-oriented development while connecting rural and urban communities. She is specifically responsible for program coordination, policy development and implementation, and local and state stakeholder outreach.
- **Charles Terry Shook, FAIA**, is a founding partner and principal of Shook Kelley. Terry is focused upon the creation of new communities in both the suburbs and within urban cores that reflect timeless patterns of building, while responding to modern aspirations for a better life. As one of the nation's top experts in placemaking, he has been recognized as a vanguard in the movement to return meaning to the urban environment by the Clinton Library & School of Public Service. Terry is an annual lecturer in the Professional Development Program at Harvard University, and has shared his views with audiences connected to the International Council of Shopping Centers, the International Downtown Association, the National Trust for Historic Preservation, the American Planning Association and the Urban Land Institute, among others.
- **Nick Ruiz** is a Rail Planning Project Manager with the Virginia Department of Rail and Public Transportation (DRPT). He has a background in rail transportation planning and has experience leading station and service feasibility planning studies. Nick assisted DRPT's Manager of Rail Planning on the completion of the DC2RVA Tier II EIS in 2019 and is currently completing a 30% Planning and Design study as a follow-up to the DC2RVA effort for Richmond's Staples Mill Road Amtrak Station. His presentation today includes the results of that study's TOD planning efforts.



## NORTH CAROLINA

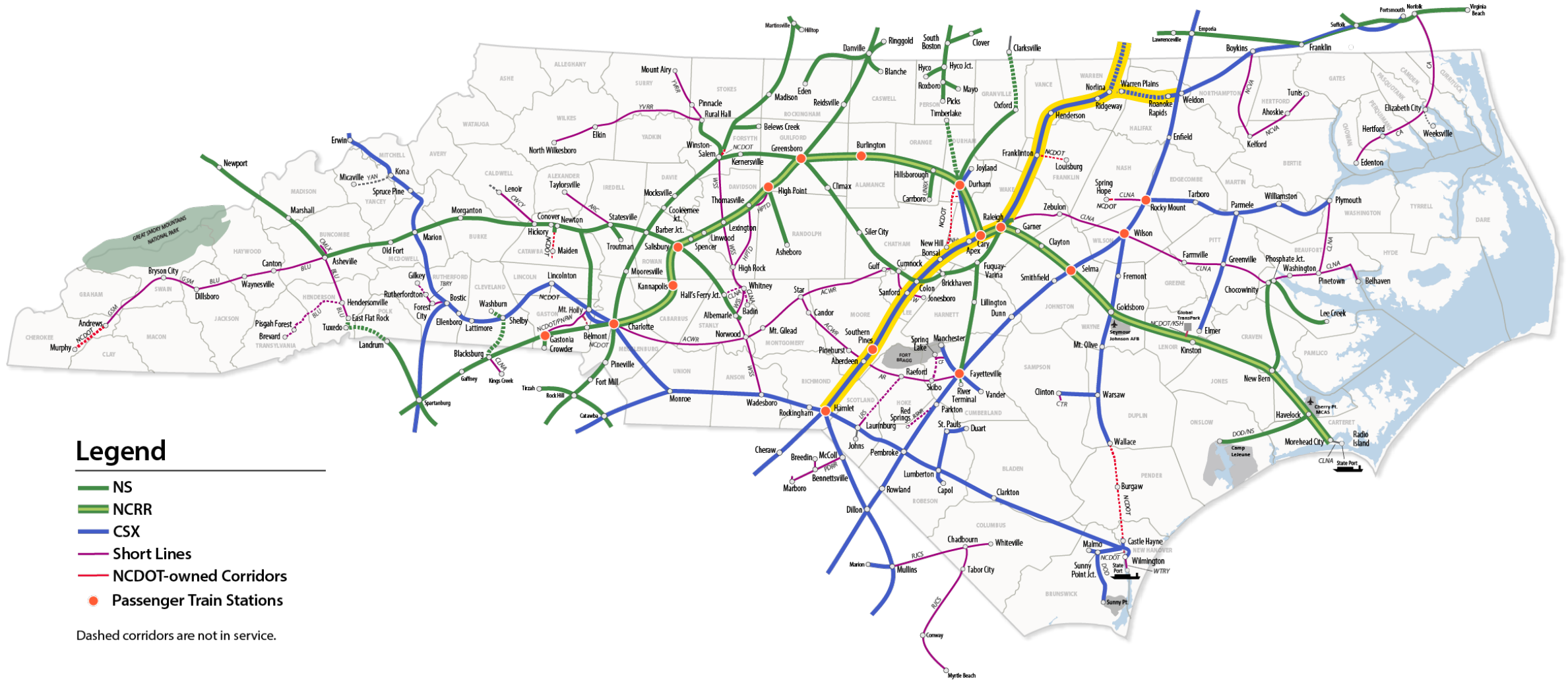
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# Expanding Rail in North Carolina—The S-Line Opportunity

Marston Raue, *S-Line Project Manager*

# Railroad System in North Carolina



## Legend

- NS
- NCR
- CSX
- Short Lines
- NCDOT-owned Corridors
- Passenger Train Stations

Dashed corridors are not in service.

## Existing Conditions on the S-Line

- **Petersburg to Ridgeway**
  - Out of service, tracks removed
  - *Recently purchased by State of Virginia*
- **Ridgeway to Raleigh**
  - 25 mph, local freight traffic only
- **Raleigh to Hamlet**
  - 60 mph, local freight and passenger service



# History of the S-Line

*The S-Line was once a primary rail route*



*Passenger train in Sanford, NC*



*Freight train north of Franklinton, NC*

# The S-Line – Gateway to the Southeast Corridor

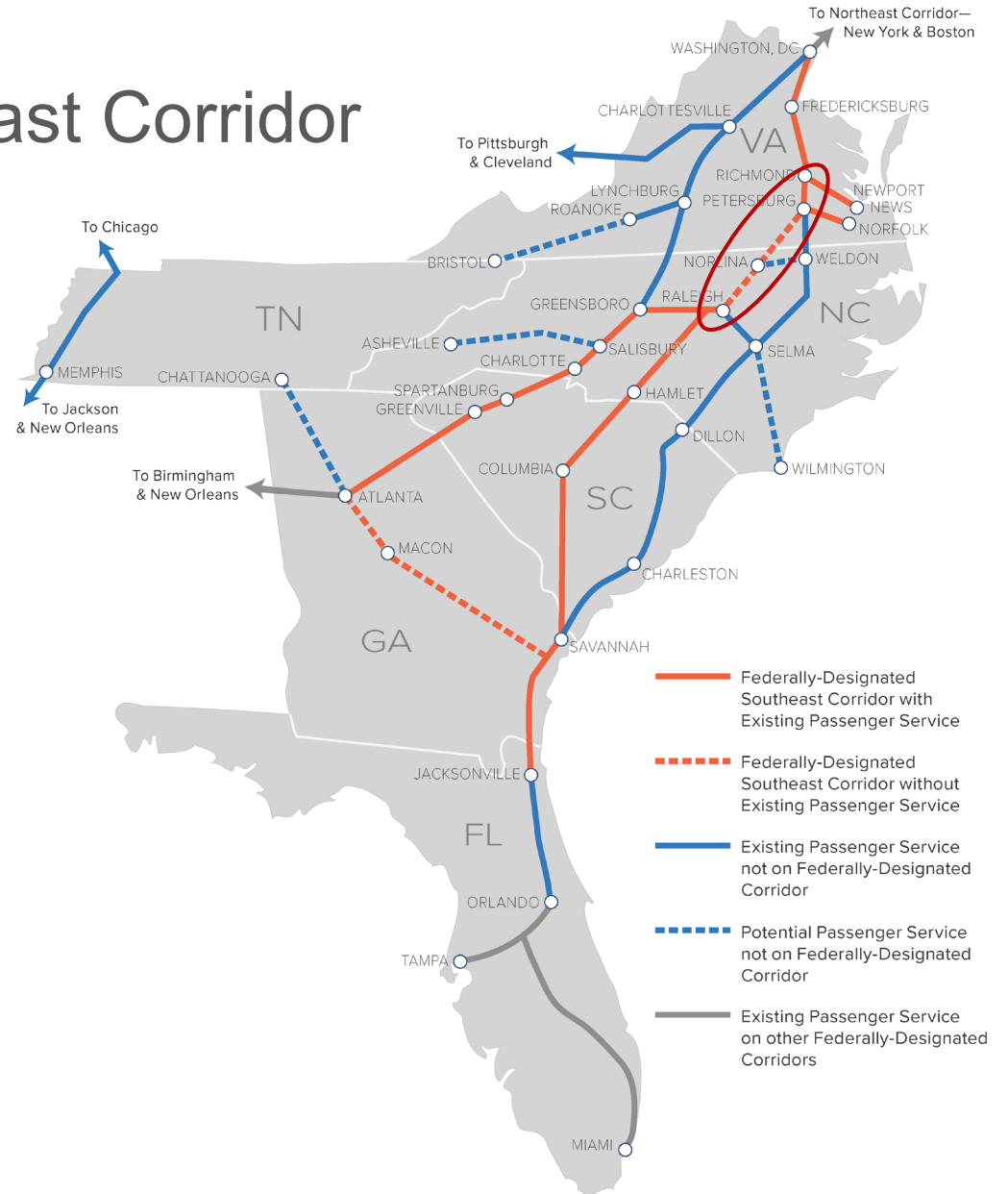
**1992** FRA designated the Southeast Corridor



**2002** Charlotte to DC Tier I Record of Decision



**2017** Raleigh to Richmond Tier II Record of Decision

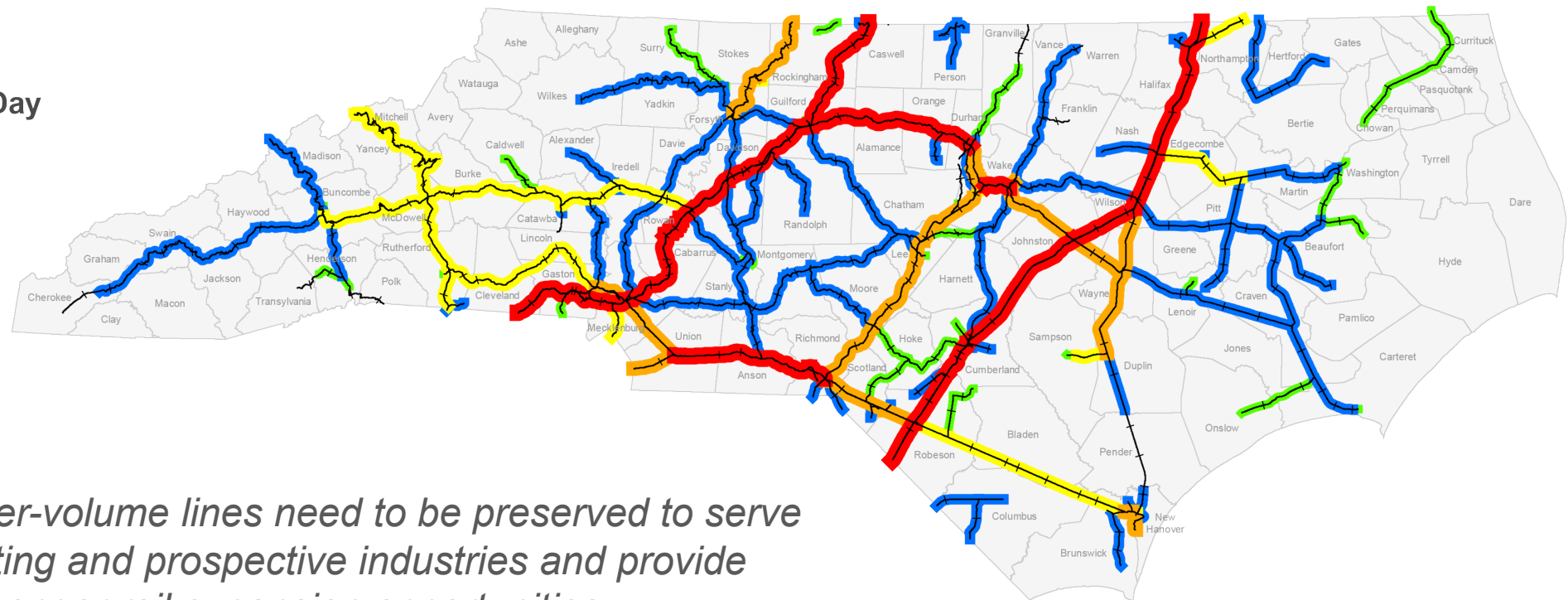




# Class I Railroads “Rationalizing” Their Networks

- Focusing on core routes that carry large volumes of freight trains
- Selling lower-volume, stub ended, and redundant rail corridors

## Average Trains/Day

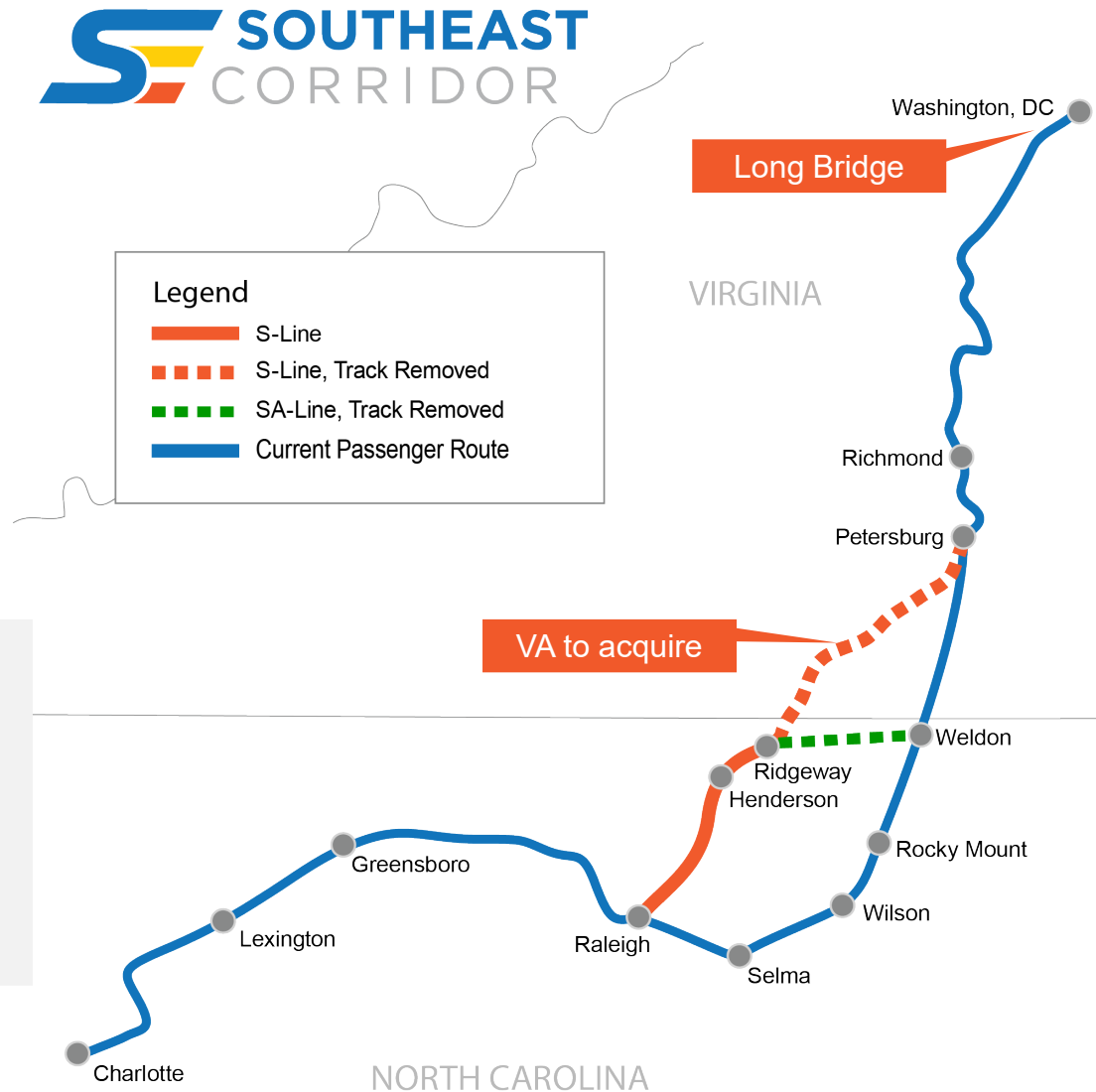


*Lower-volume lines need to be preserved to serve existing and prospective industries and provide passenger rail expansion opportunities*

## Virginia & CSX Landmark Rail Agreement – Dec. 2019

- VA purchasing 350 miles of railroad right of way and 225 miles of track
- Completes the missing link of the Southeast Corridor through acquisition of the S-Line

***“We have a once-in-a-generation opportunity to make our rail system work better for everyone, both in Virginia and along the entire East Coast”***  
**said Virginia Governor Northam**



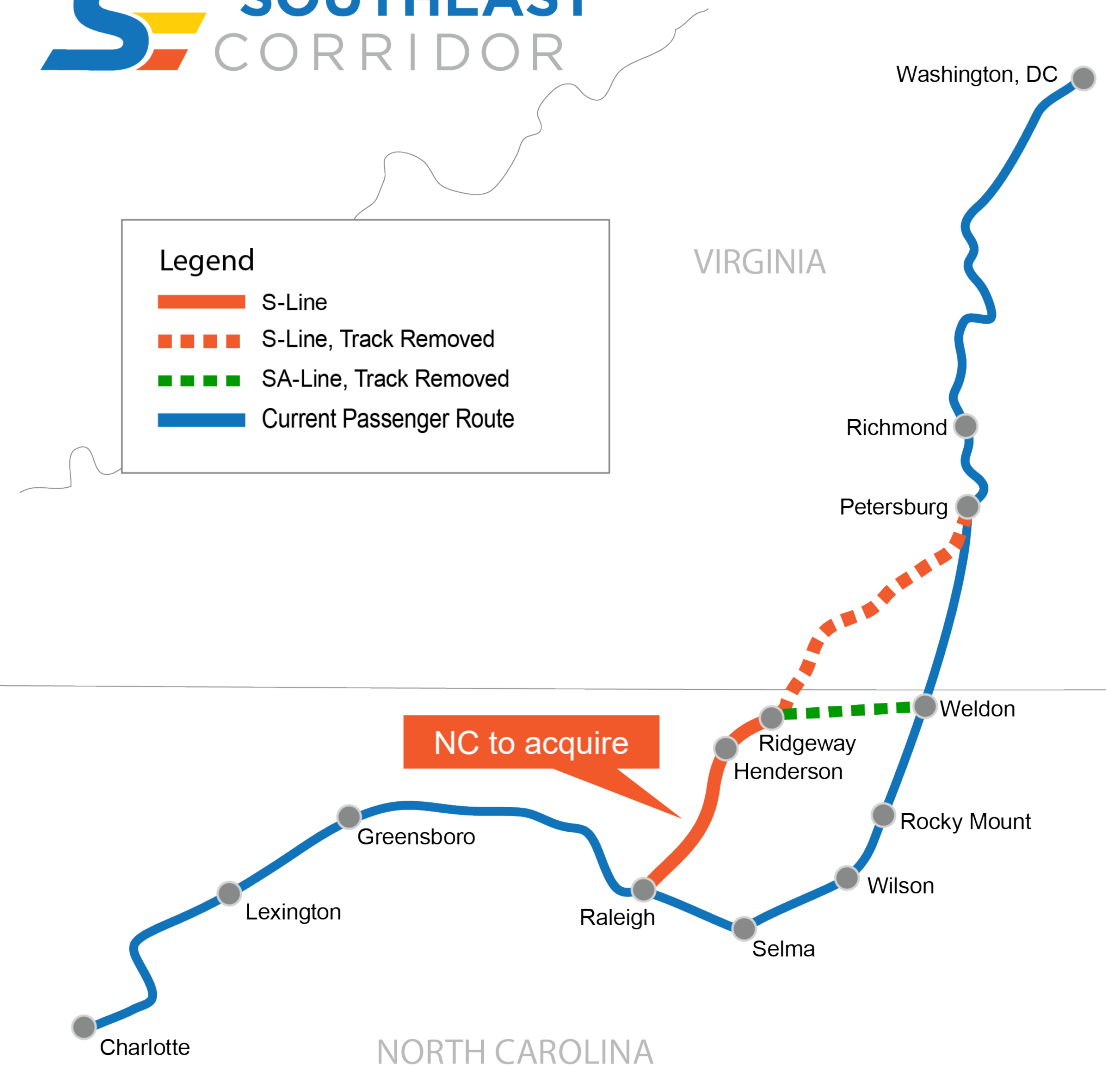
NCDOT received  
grant to purchase  
S-Line – Sept. 2020

\$47.5M

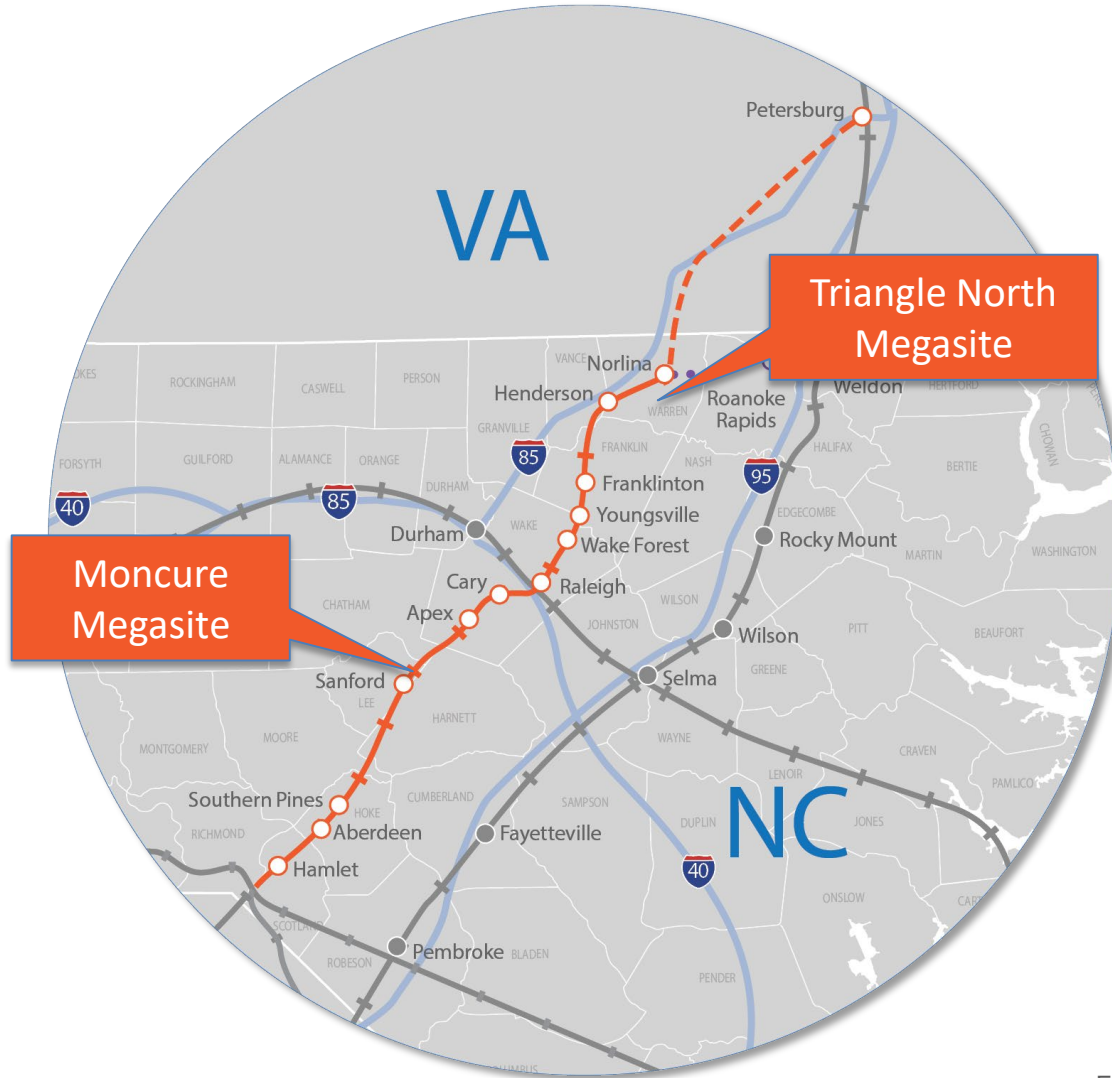
### Critical for Southeast Corridor buildout

- Will reduce passenger trip times and improve on-time performance
- Will increase north-south freight capacity and rail network resiliency
- Will connect manufacturing and job centers to population centers

**SOUTHEAST**  
CORRIDOR



# North Carolina's S-Line Connectivity Opportunities



- Connect rural and urban communities
- Expand access for freight and megasites
- Provides economic development opportunities for the state – and for the region



## Estimated Travel Times

Henderson-Raleigh	40 minutes
Wake Forest-Raleigh	20 minutes
Raleigh-Roanoke Rapids	90 minutes
Sanford-Raleigh	40 minutes
Southern Pines-Cary	58 minutes

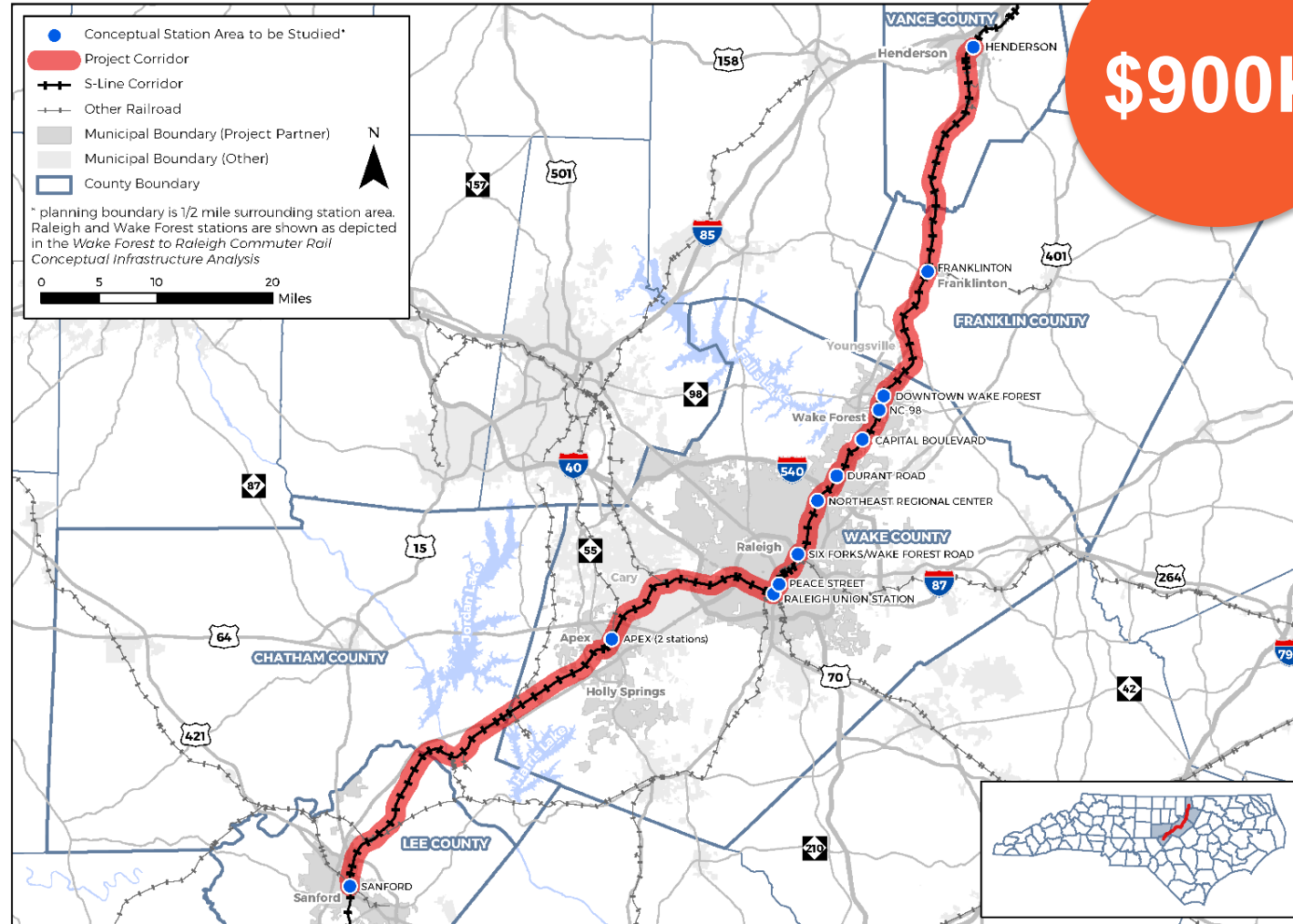
Estimated time subject to further analysis.

# FTA TOD Planning Grant for the S-Line

## Connecting Rural and Urban Triangle Communities Through Equitable Transit Oriented Development

Greater Research Triangle Region, North Carolina

Raleigh and Wake Forest study areas are shown as depicted in the *Wake Forest to Raleigh Commuter Rail Conceptual Infrastructure Analysis*



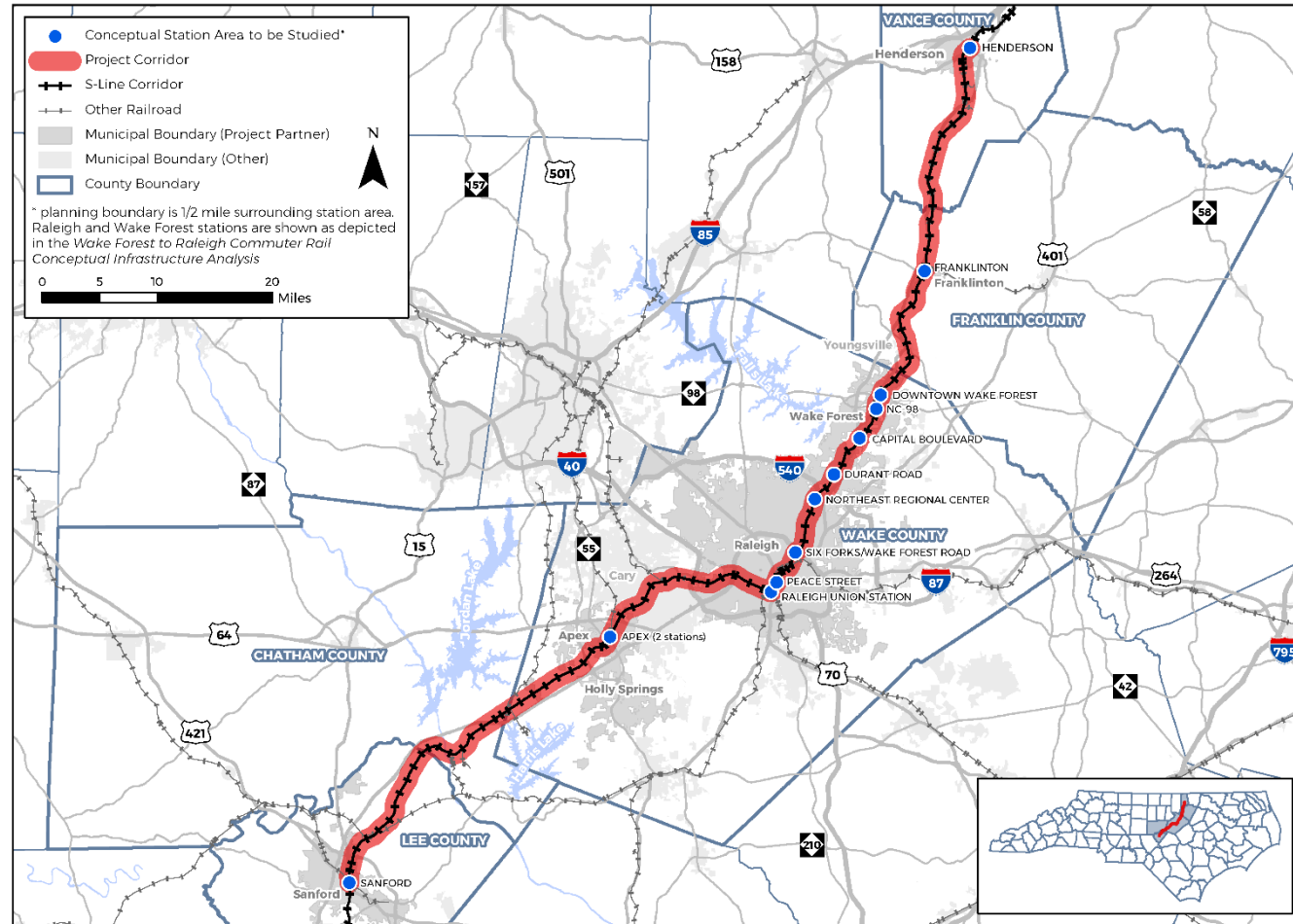
- Opportunity for value capture in rural and urban areas
- 13 potential station locations for TOD planning
- Community partners provided **100% of the non-federal match: \$370K**
  - Henderson: \$30K
  - Franklinton: \$30K
  - Wake Forest: \$90K
  - Raleigh: \$150K
  - Apex: \$40K
  - Sanford: \$30K

# TOD Planning Grant Tasks

## Connecting Rural and Urban Triangle Communities Through Equitable Transit Oriented Development

Greater Research Triangle Region, North Carolina

Raleigh and Wake Forest study areas are shown as depicted in the *Wake Forest to Raleigh Commuter Rail Conceptual Infrastructure Analysis*



- Community engagement
- Corridor-wide market study
- Vision summary
- Implementation framework

# Next Steps

*Ready to Build*



1

Continue partnership with MPOs, RPOs, communities, and private developers to progress corridor development and planning

2

Secure additional funding for rail infrastructure improvement projects

- STI
- Federal discretionary grants
- Potential economic stimulus packages



# NORTH CAROLINA

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## Questions

Julie White  
NCDOT Deputy Secretary of  
Multi-Modal Transportation  
[juliwhite@ncdot.gov](mailto:juliwhite@ncdot.gov)

Jason Orthner  
NCDOT Rail Division Director  
[jorthner@ncdot.gov](mailto:jorthner@ncdot.gov)

Marston Raue  
[mmraue@ncdot.gov](mailto:mmraue@ncdot.gov)





## TOD Visioning at Richmond's Staples Mill Road Station

IMD Webinar Series, January 26, 2021

Nick Ruiz, Rail Planning Project Manager  
VA Department of Rail and Public Transportation



# Background

- Part of Staples Mill Advanced Planning and Design Study
- Builds off of DC2RVA Tier II EIS, taking designs from 10% → 30%
- *Transforming Rail in VA* calls for 6 new round-trips to station by 2030

## Baseline Needs:

1. Larger station building
2. Better multimodal access
3. ADA-compliant platforms

## Desired Condition:

1. Station as development anchor
2. People-scaled district
3. Improved district connectivity



Main entrance to Staples Mill



Denver Union Station at Wynkoop Street

# “Hiding in Plain Sight”

The study team observed the following from stakeholder discussions:

Limited connectivity due to wide fast roads and the railroad

*District is affordable for lower-capital businesses*

**Not a compelling impression for arriving passengers**

County park and ride across from station is underutilized

Parcel across from station is a wetland, not easily developable

*Limited amount of pedestrian activity around station, hostile environment for non-motorized modes, lack of frequent transit access*

**Retail is struggling in this area, not a high-rent commercial district**

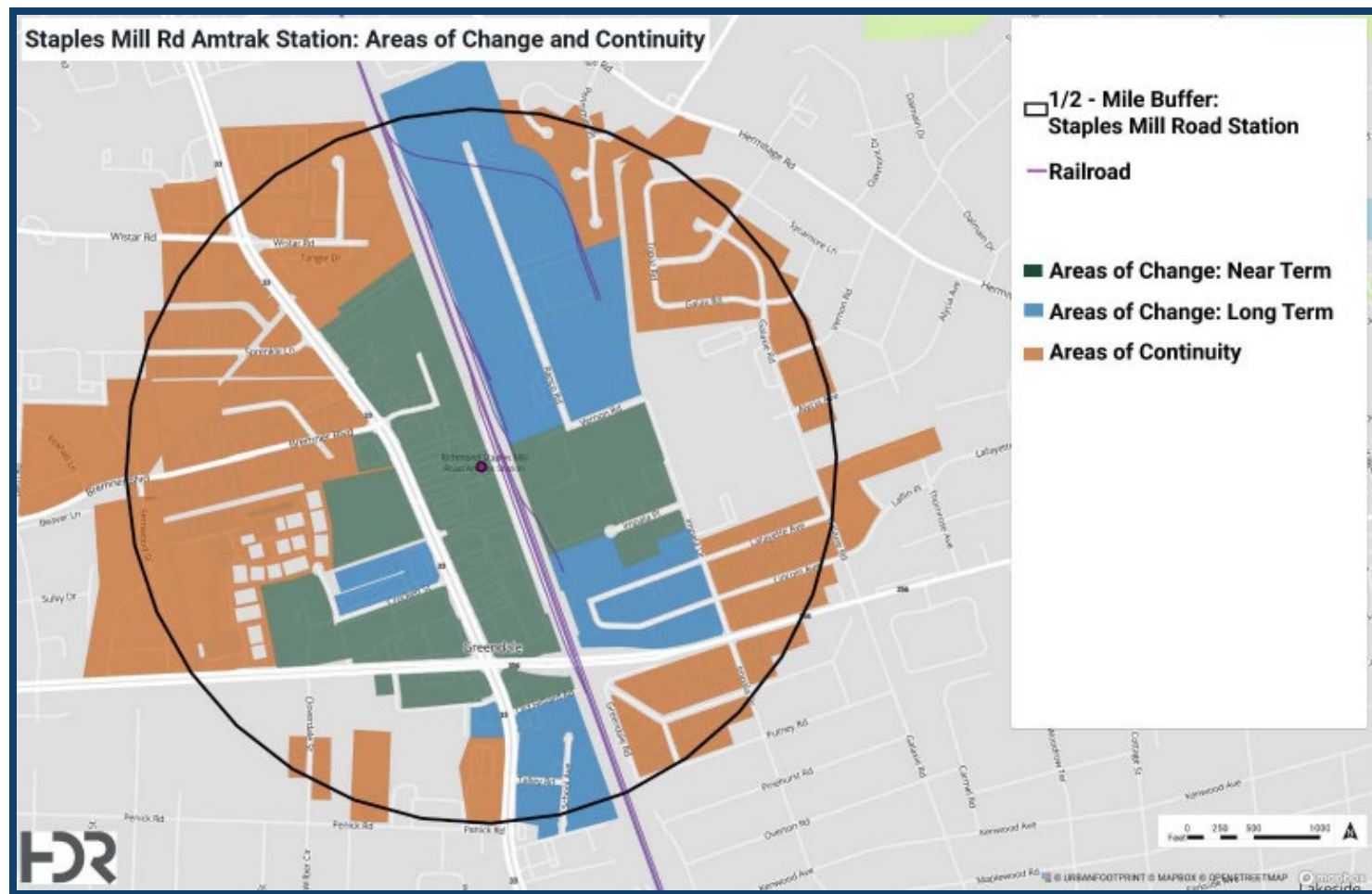
# Current Land Use

- East of the tracks: mostly functioning heavy/medium industry
- West of the tracks: low-density auto-oriented retail, low output, high vacancy
- Surrounding the district: low density mid-century residential



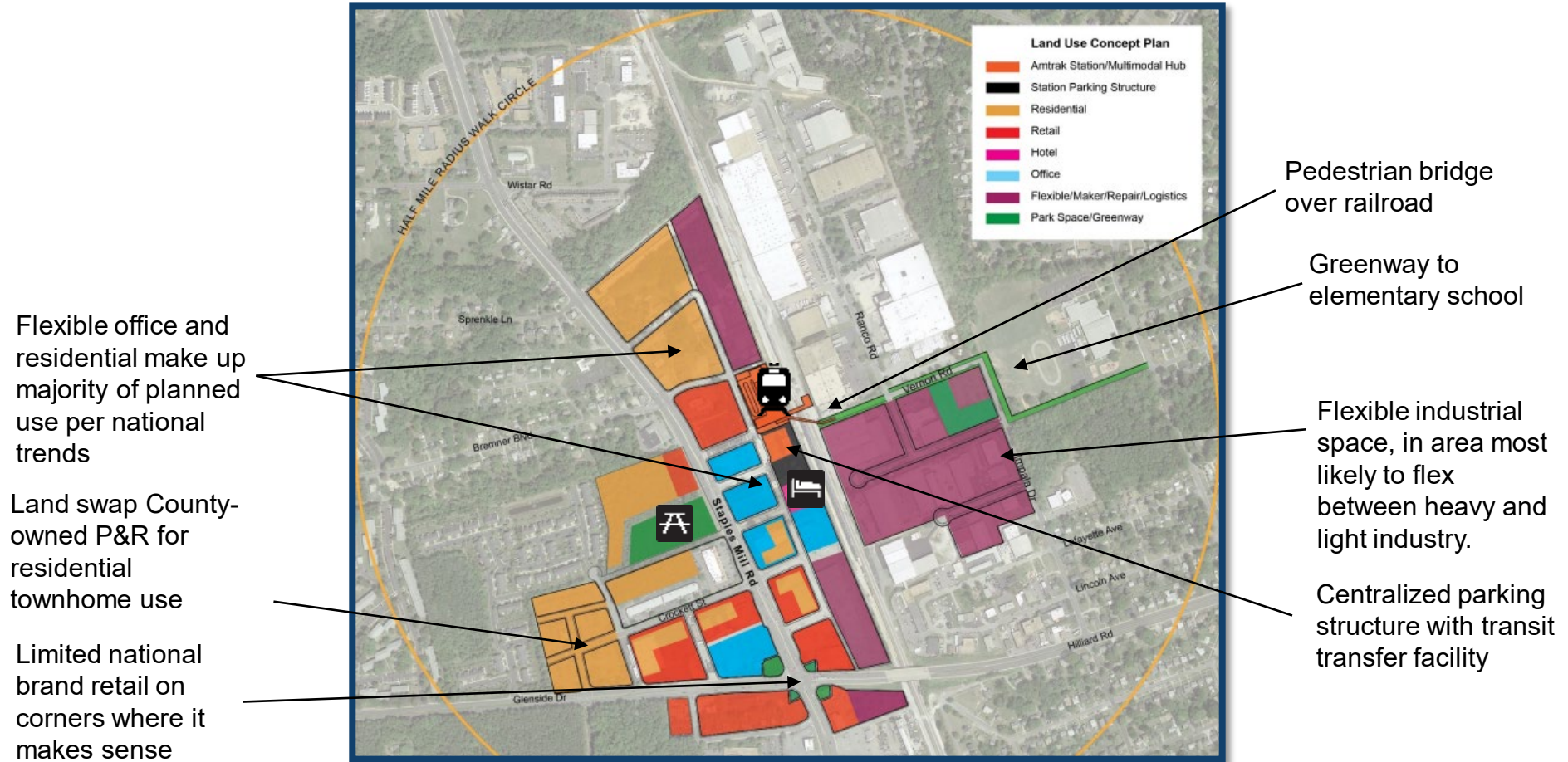
# Areas of Change and Continuity

Developed to realistically frame conceptual development alternatives and guide intensity of private, station-induced investment in 1/2 mile buffer



# Land Use Opportunities

Developed from the guiding “Areas of Continuity and Change” map

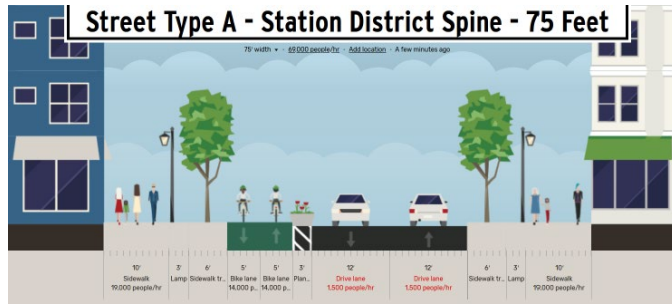


*These are DRPT Rail Planning draft recommendations. District land use, design, and parking recommendations have not been formally adopted by Henrico County at this time.*

# Design Principles

The “spine street” concept supports all district design principles

Multimodal transportation with mode preference away from SOV



Generous public gathering spaces for placemaking/public health

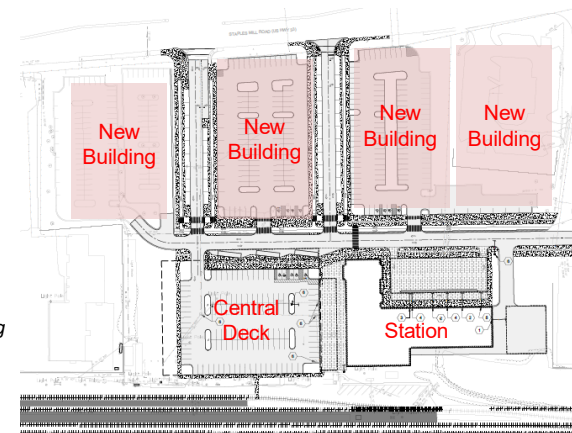


Mosaic District, Fairfax, VA, a model for Staples Mill TOD

Envisions a different cross section for US-33 (Staples Mill Road) and takes local movement off thru highway



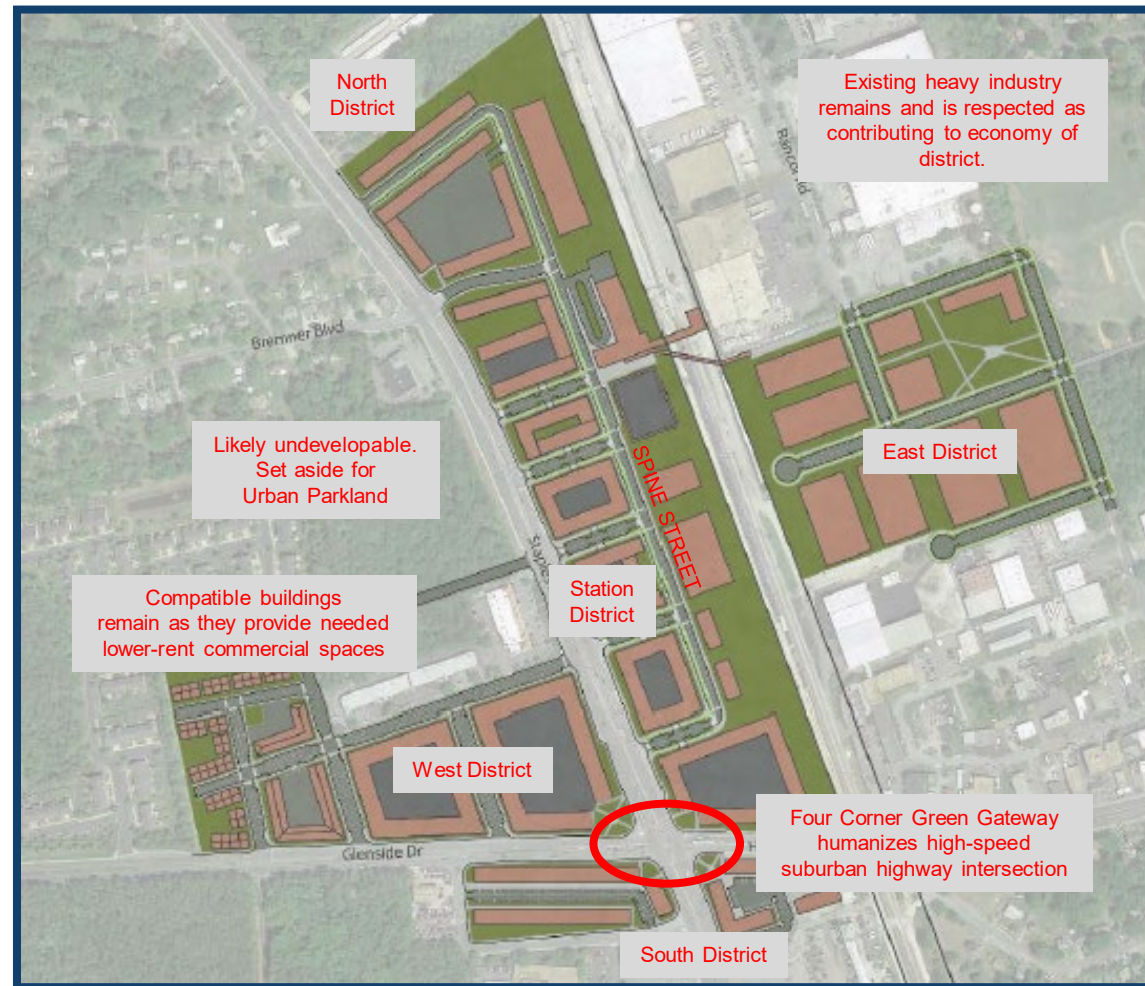
Creates orderly and logical developable blocks in an urban format familiar to TOD developers



*These are DRPT Rail Planning draft recommendations. District land use, design, and parking recommendations have not been formally adopted by Henrico County at this time.*

# Design Principles

The study area was broken up into several districts with unique design attributes and expected land use/scale.





# “District Parking”

- “Parking that works well” was a top goal of stakeholders
- Staples Mill is and will continue to be the “easy” station to drive to from the greater region for train trips—facilitating that mode transfer is key
- How it could be done:
  - Center-block parking for residential/office use
  - On-street is performance priced and short-term
  - Overnight station business/transit P&R parking occurs in central deck
  - De-couple parking facilities from development costs
  - Generate revenue to bond against (i.e. Parking Authority)
  - Agglomerate uses/services to cut down on short car trips, transit is key

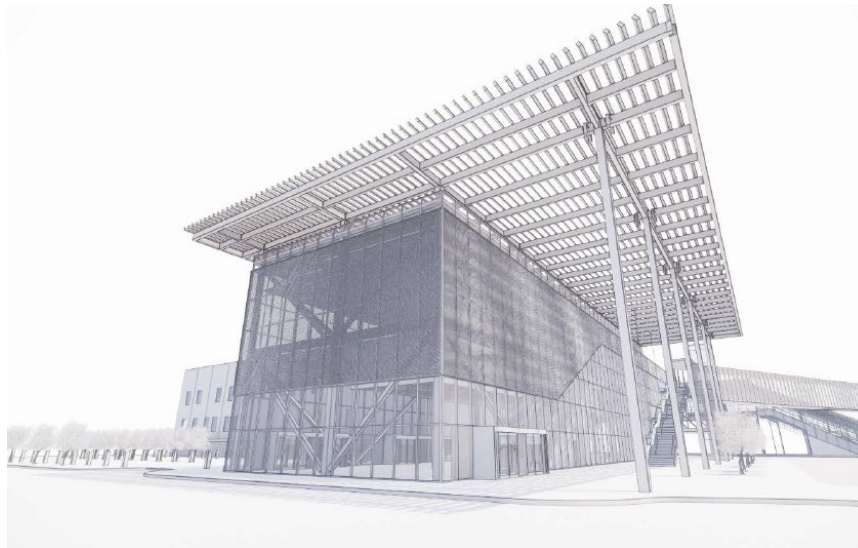


**Above all, pushing local trips to non-auto modes preserves capacity for extra-district auto trips**

# What's Next?

## Complete 30% P.E. and stakeholder concurrence

- Then...
  - Create Staples Mill Corridor Working Group (w/ bi-annual meetings)
  - Participate in STARS Study (VDOT's roadway safety study program)
  - Explore east-of-tracks pedestrian connection with existing landowners
  - Seek developer feedback (RFI) on the concept plan
  - RFI for private development of Glenside Park and Ride lot (County owned)
  - Plan for District Parking, establish parking policies and strategies
  - Coordinate with GRTC and MPO for regional high-frequency bus service





- ✓ This session has been approved for 1 AICP CM Hour.
- ✓ The Reference Number is 9211154. Hold off on trying to record this until the NCAPA completes its annual renewal process. It should show up after that.
- ✓ Attendance is automatically recorded.

# Multimodal Innovations Webinar Series

**2021**

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**Feb. 23**

Charlotte Gateway Station: Learn how to develop an iconic multimodal station at any scale

Learn how to develop an iconic multimodal transportation station at any scale and how they have successfully spurred economic development around them.

NCDOT Chief Deputy Secretary David Howard will discuss the Gateway Station in Charlotte including the P3 aspects, partners, funding, affordable housing, and how it will spur private development around it.

Please visit: <https://connect.ncdot.gov/business/Transit/Pages/IMD-Webinars.aspx>