



THE VOICE OF THE  
REGIONAL BUSINESS COMMUNITY  
ON TRANSPORTATION

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# 20<sup>th</sup> Annual RTA Leadership Retreat

Friday, August 20, 2021

The Umstead Hotel and Spa

# WELCOME

Harold Hicks, Fidelity Investments  
RTA chair-elect

# OVERVIEW

**Joe Milazzo II**  
RTA executive director

# RETREAT AGENDA IN BRIEF

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- Overview and RTA report
- Accelerated Metropolitan Mobility, part 1: Freeways, streets, transit, funding
- *Break*
- Accelerated Metropolitan Mobility, part 2: RDU Airport, funding
- Closing remarks
- Adjourn by 11:30 am



# RTA REVIEW

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## 10 studies since 2020

- Freeway And Street-based Transit (FAST) network
- Dynamic Left Turn intersection (DLTi) pilot analysis and compliance enhancement
- Aviation Parkway interchange signal improvement
- Bus Rapid Transit extension study
- RDU Airport capacity – consequences of deferred terminal investment
- Zero Fare pilot study
- I-40 transit priority shoulder – pre-feasibility study
- I-40 transit priority shoulder – RTP area cost estimate
- Dual Left Turn lanes guidance

# RTA REVIEW

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## Changing paradigms

- Policy change
- Pandemic disruptions
- Hybrid work
- Accelerated growth
- Regional dispersion

# RTA REVIEW

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## Accelerated Metropolitan Mobility

*A flexible, all-of-the-above-and faster, equity framework, strategy, and agenda*

- Metropolitan rapid transit system with BRT and commuter rail
- Sustainable funding for RDU, highways
- New, improved freeways or freeway segments
- Intersections for everyone
- Mobility innovations

# ACCELERATED METROPOLITAN MOBILITY – PART 1:

## Freeways, streets, transit, funding

# NCDOT PRIORITIES, FUNDING, AND PARTNERSHIPS

**Eric Boyette**  
NC Secretary of Transportation

# MULTIMODAL FREEWAY PROJECTS

Nate Knuffman, UNC  
RTA system operations chair

# TURNPIKE 540

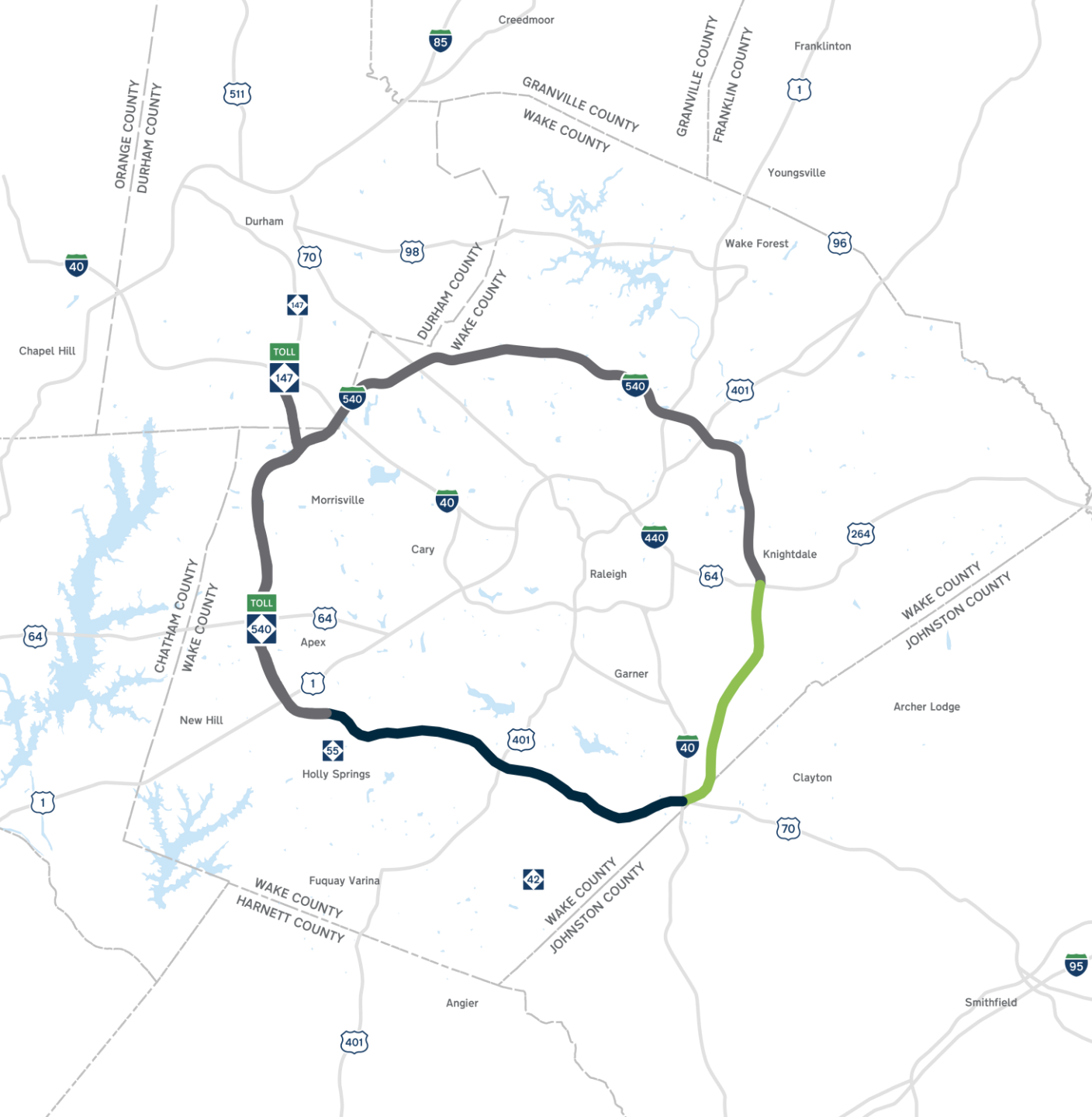
Rodger Rochelle  
NC Turnpike Authority

# Complete 540 Update

Rodger Rochelle, P.E.

August 20, 2021





Open to traffic (42 miles)

I-540 & Triangle Expressway



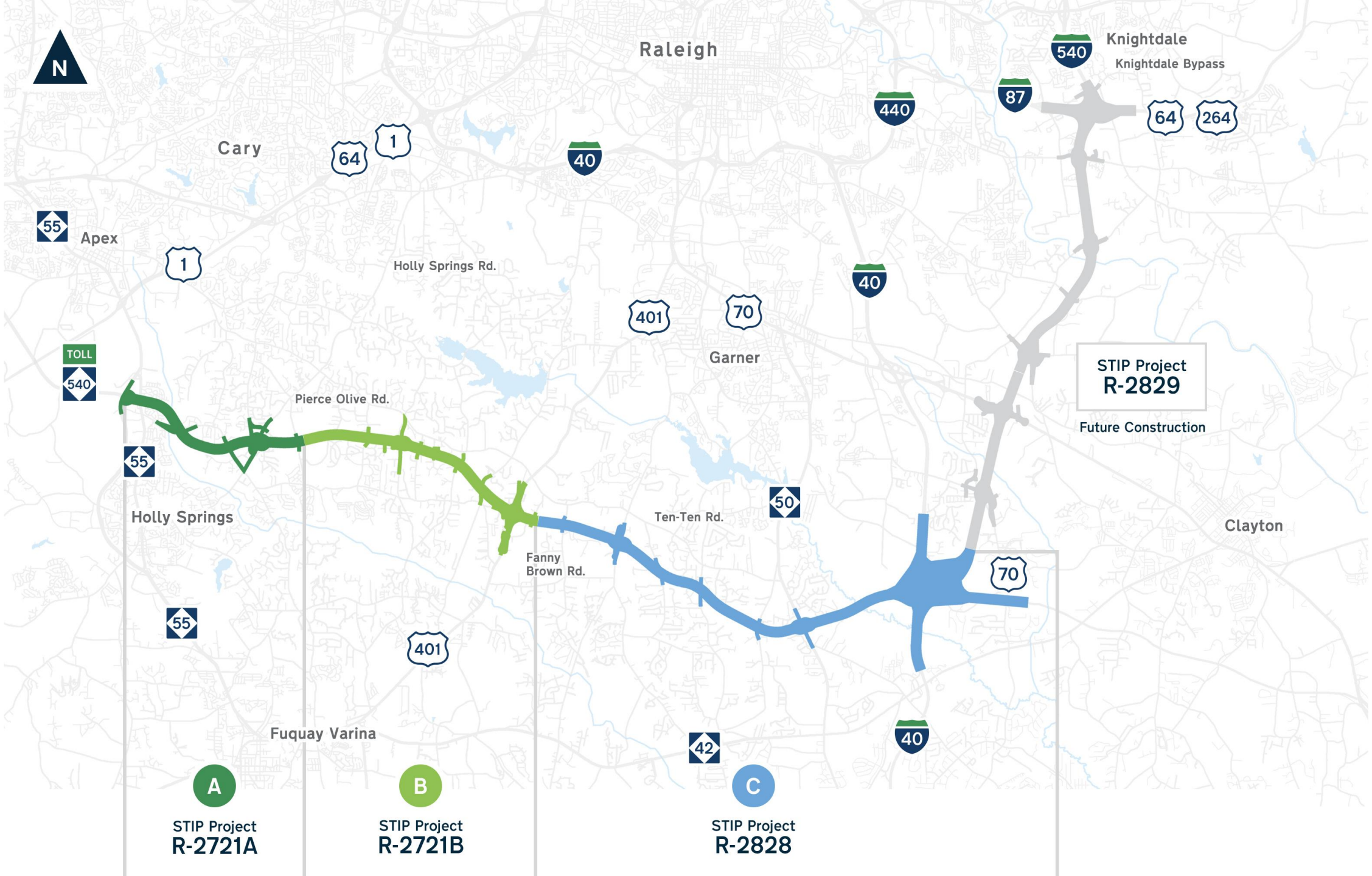
Under construction (18 miles)

Southern Wake Expressway (Phase I)



Missing link (11 miles)

Eastern Wake Expressway (Phase II)

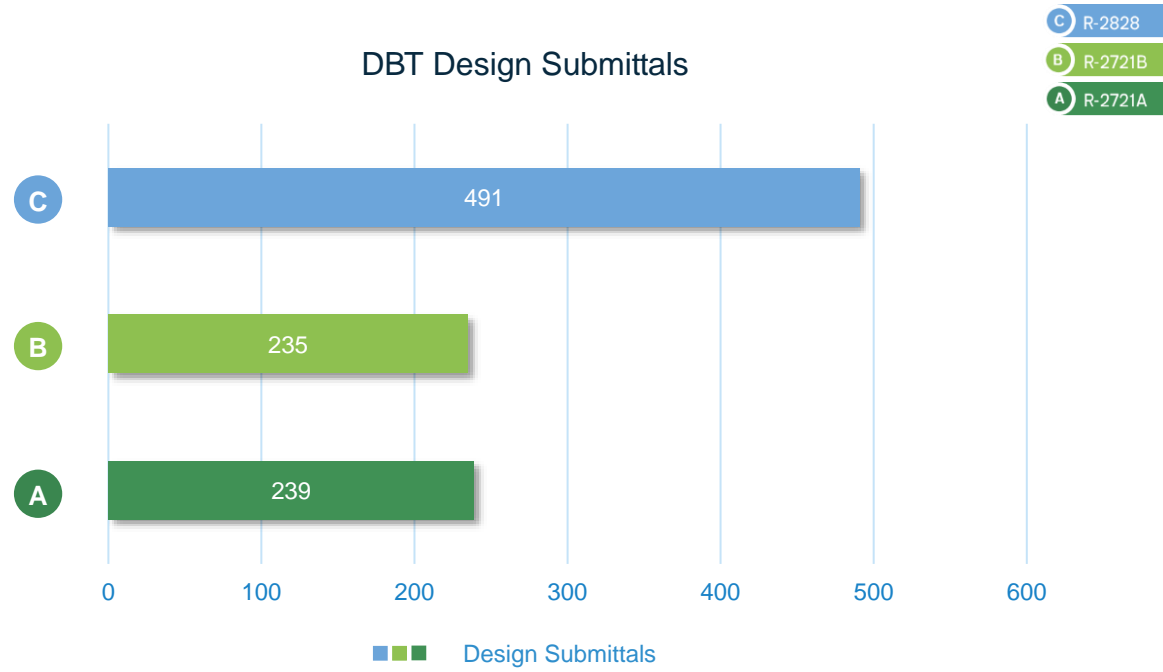


**A**  
STIP Project  
R-2721A

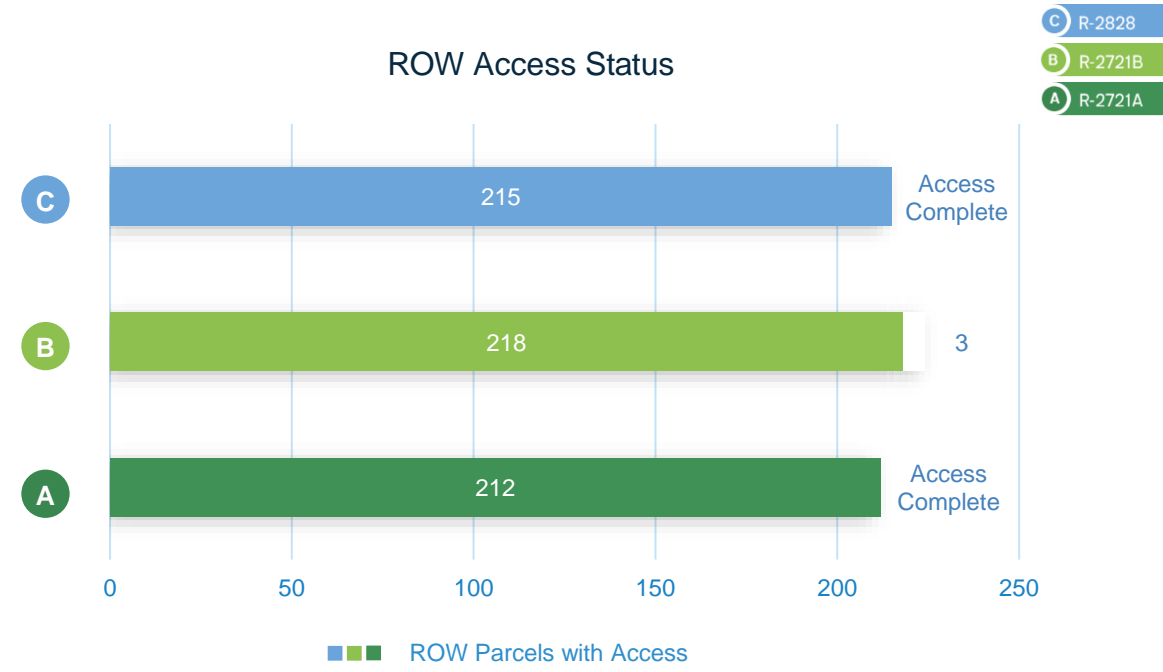
**B**  
STIP Project  
R-2721B

**C**  
STIP Project  
R-2828

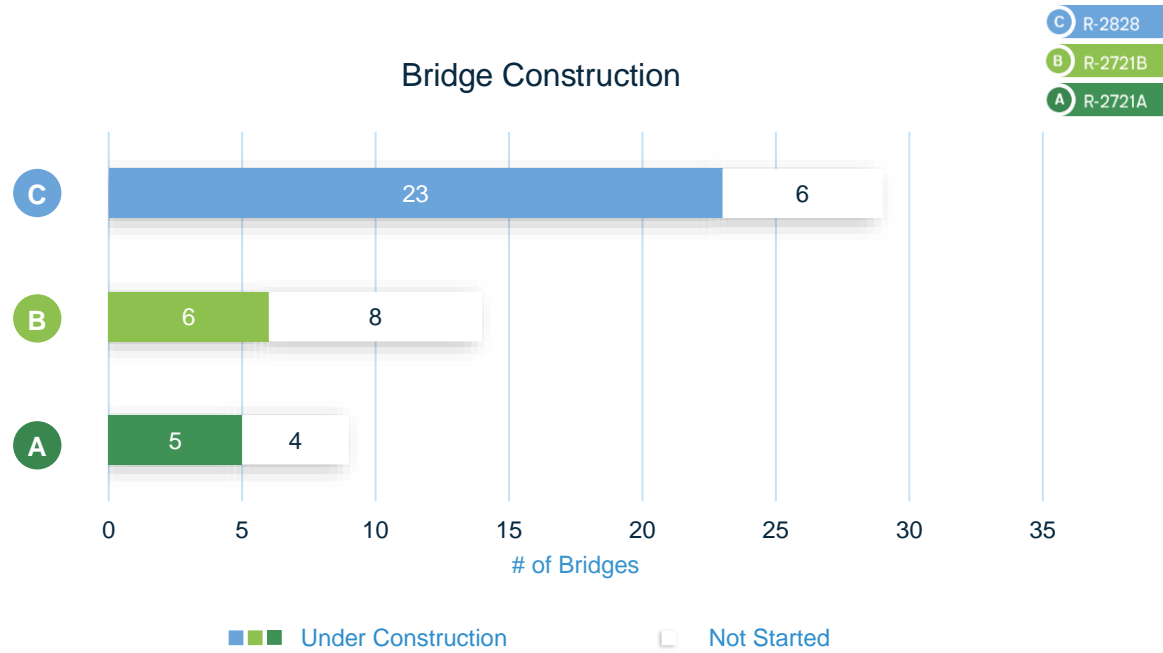
### DBT Design Submittals



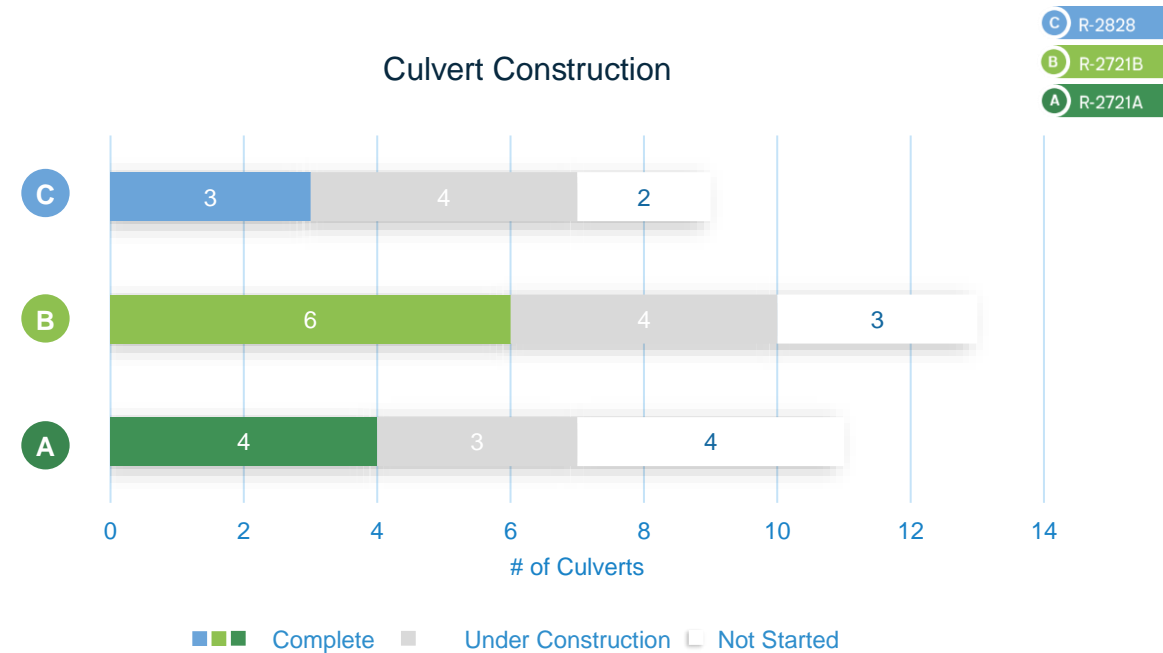
### ROW Access Status



### Bridge Construction



### Culvert Construction











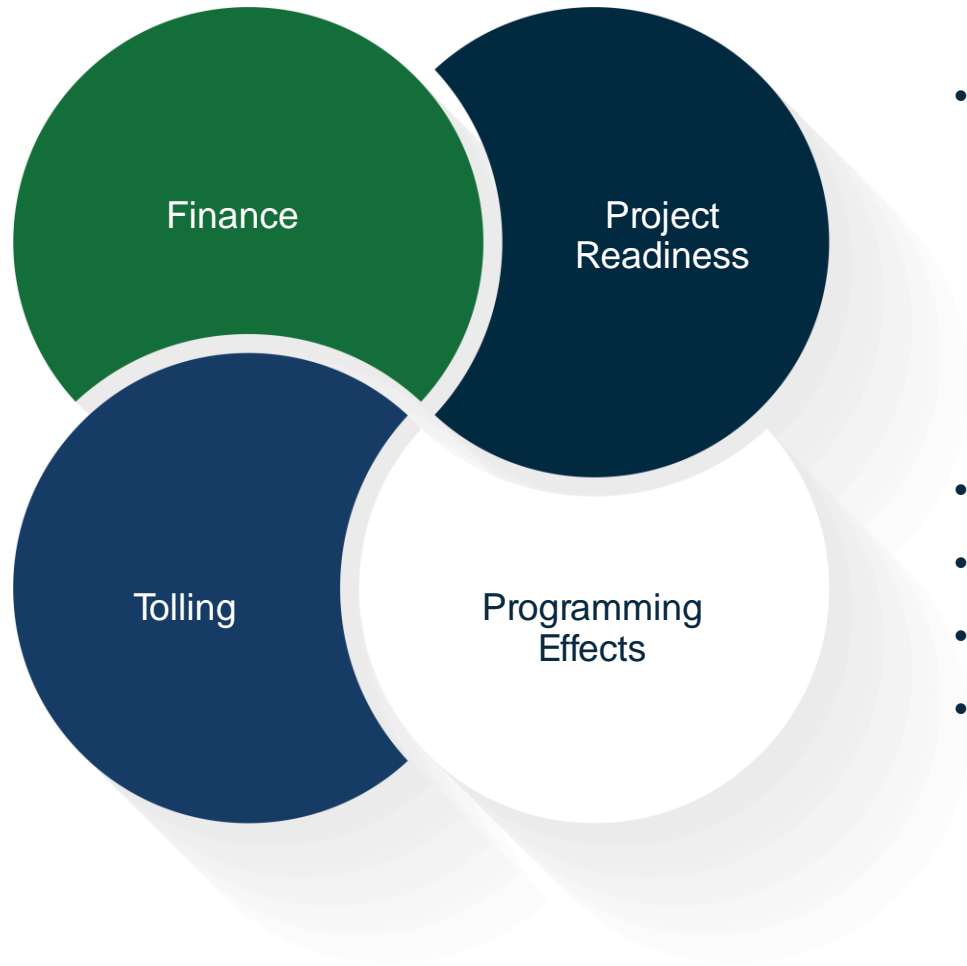




## Complete 540 Phase 1 TIFIA Loan – Rate Reset

- ◆ In December 2019, the Authority completed the initial financing of the Complete 540 Phase 1 project
- ◆ Project funding included a Federal TIFIA Loan between USDOT and NCTA, in an amount of ~ \$500 million, at an interest rate of 2.27%
- ◆ The Authority issued Bond Anticipation Notes in 2020 which renders the TIFIA loan undrawn at this time, resulting in the possibility to “reset” the TIFIA loan interest rate
- ◆ On August 5, 2021, the TIFIA Loan rate was reset to 1.83% resulting in ~ \$59 million in debt service savings over the life of the loan (over \$40 million in PV savings).

## Phase II – R-2829 Eastern Wake Expressway



- The Project is ready
  - Environmental Document
  - Corridor Permit
  - Final Surveys
  - Preliminary Design
  - Geotechnical Investigations
  - Covenant not to sue
- Completes the missing link
- Accelerates the systemwide benefits
- Exploits historically low interest rates
- Provides direct and indirect benefits to the local economy



# NCDOT DIVISION PROJECT UPDATES

Brandon Jones  
NCDOT Division 5



# **NORTH CAROLINA**

## Department of Transportation



# Project Updates

# RTA Annual Retreat

August 20, 2021

Brandon Jones, Division Five Engineer













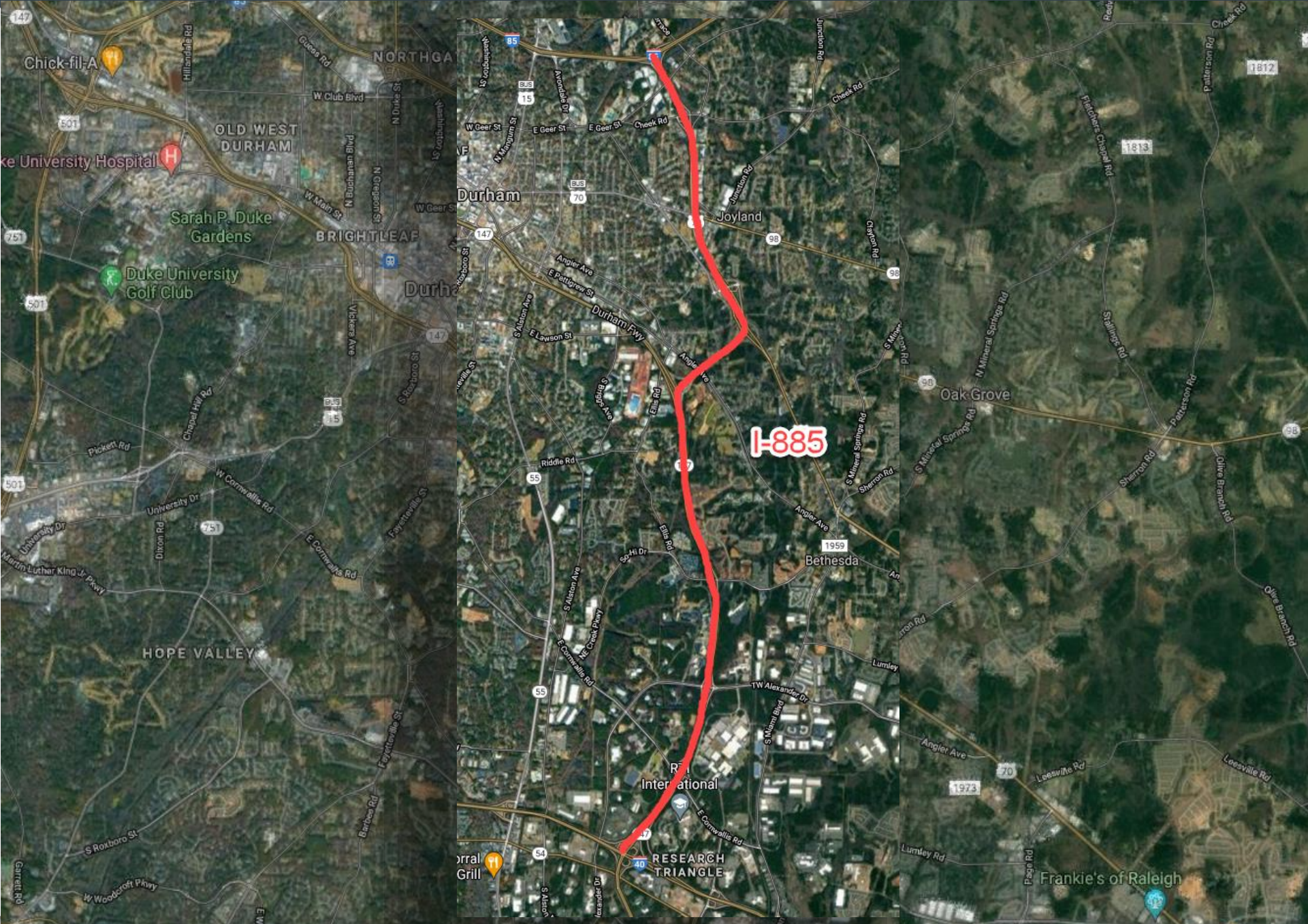




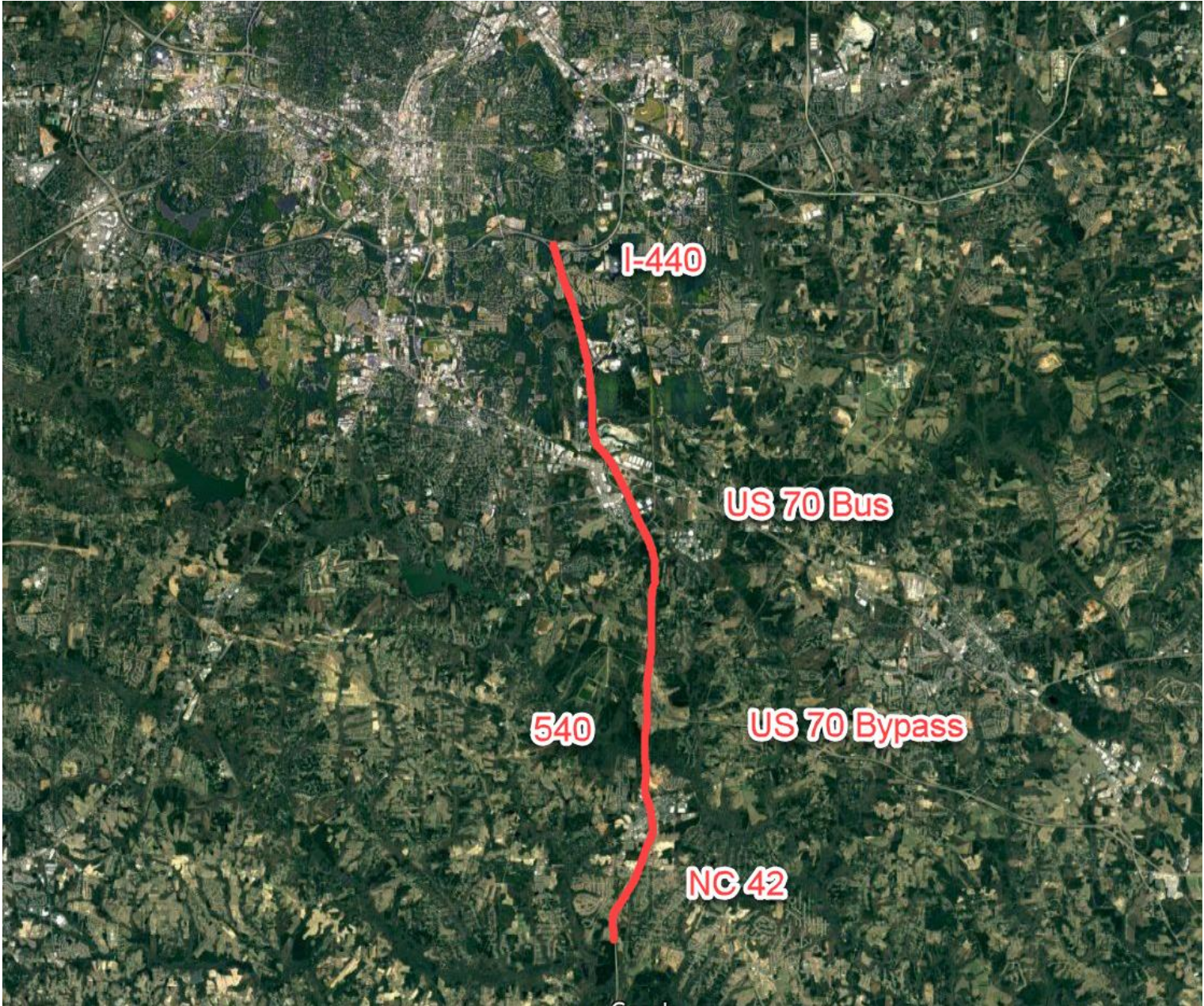




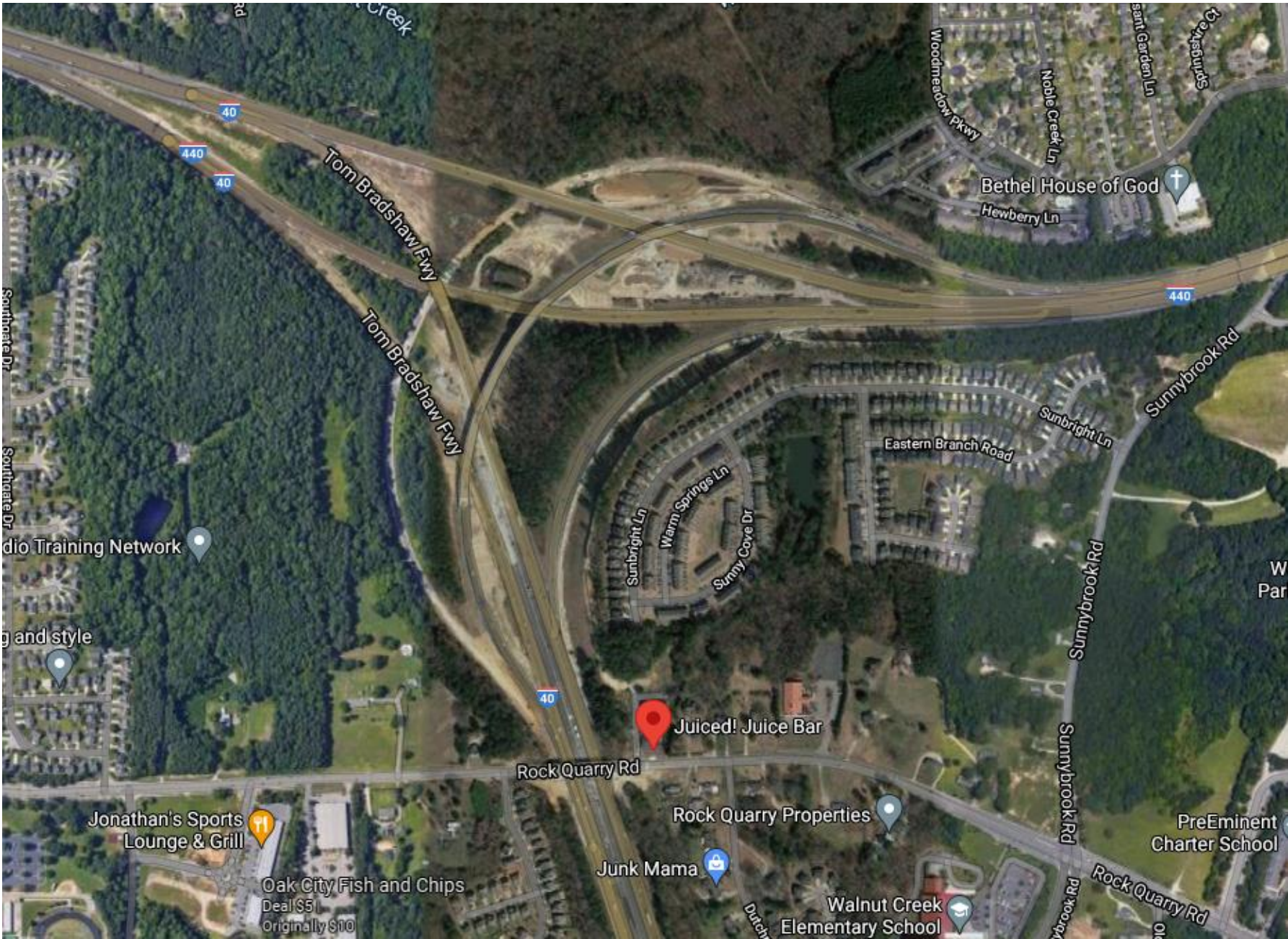




























 S.T. Wooten Corporation

[www.americanaerialphotos.com](http://www.americanaerialphotos.com)

WAKE & JOHNSTON COUNTY  
I-40 DESIGN BUILD PROJECT  
C204134/D18001  
11-10-20

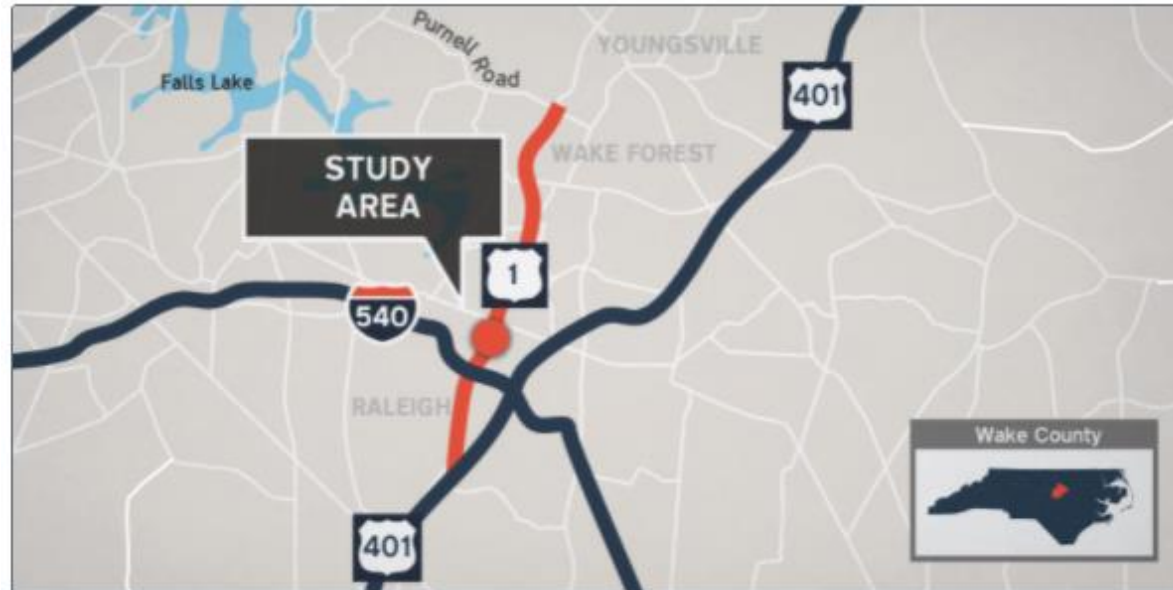






# Capital Boulevard North Upgrade (Raleigh to Wake Forest)

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The map above shows only the project's general location. ([View detailed maps.](#))

County: Wake  
Status: In Development  
STIP Number: U-5307

Estimated Cost: \$475 million  
Start Date: October 2024  
Completion Date: TBD

## Project Timeline

Milestone	Date*
Public Meeting	September 2021
Environmental document completed	Spring 2022
Right-of-way acquisition and construction begins on I-540 to north of Durant Road/Perry Creek Road	October 2024
Right-of-way acquisition begins on North of Durant Road/Perry Creek Road to north of Burlington Mills Road and North of Burlington Mills Road to south of N.C. 98 Business (Durham Road)	October 2024
Construction begins on North of Durant Road/Perry Creek Road to north of Burlington Mills Road and North of Burlington Mills Road to south of N.C. 98 Business (Durham Road)	October 2026
Right-of-way acquisition begins on South of N.C. 98 Business (Durham Road) to Purnell Road/Harris Road	October 2028
Construction begins South of N.C. 98 Business (Durham Road) to Purnell Road/Harris Road	Unfunded

# U.S. 70 Improvements at Brier Creek Parkway & T.W. Alexander Drive

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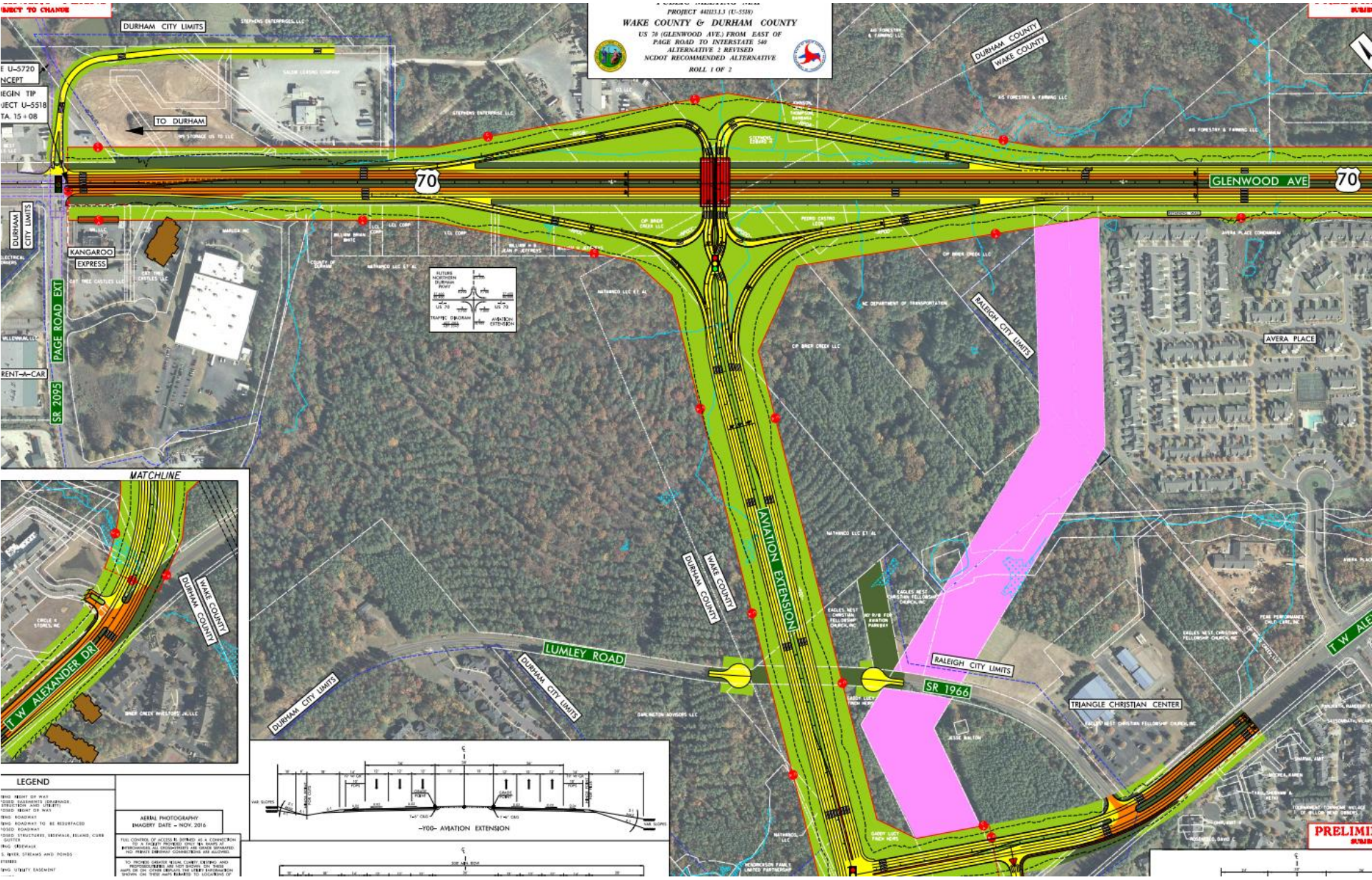
The map above shows only the project's general location. ([View detailed maps](#))

County:	Multiple	Estimated Cost:	\$325 million
Status:	In Development	Start Date:	Fall 2024
STIP Number:	U-5518	Completion Date:	TBD











# U.S. 70 Improvements in Durham

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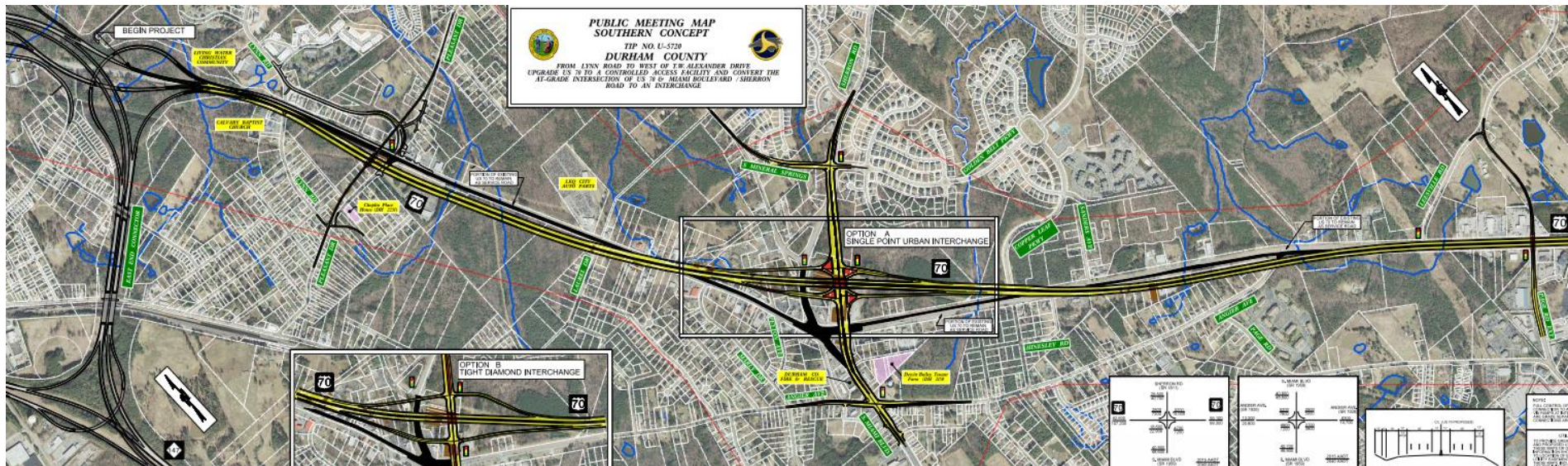
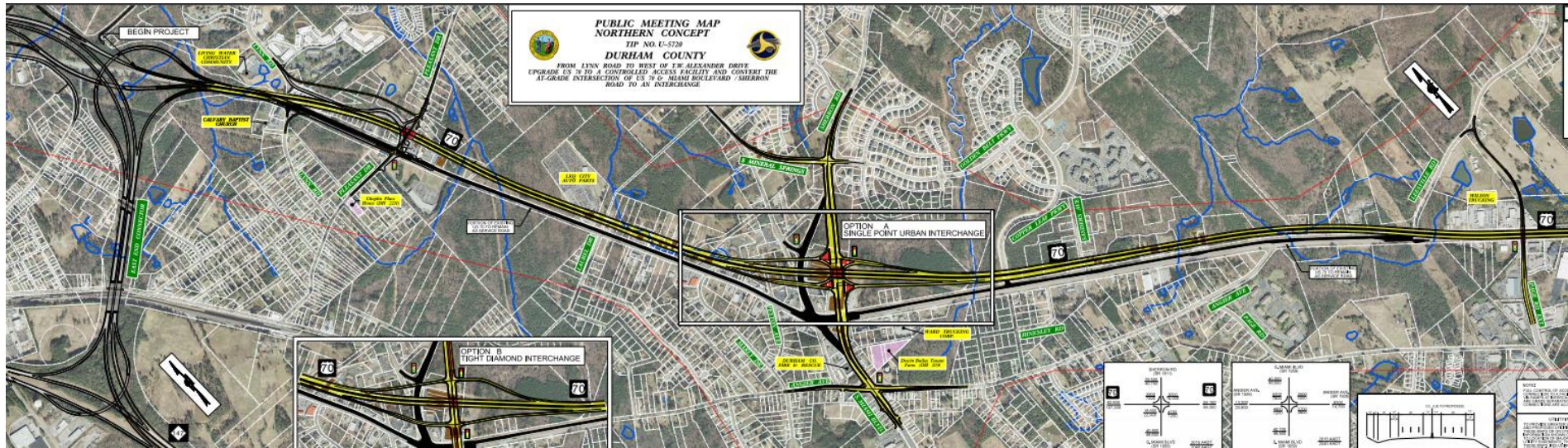


The map above shows only the project's general location. ([View detailed maps](#))

**County:** Durham  
**Status:** In Development  
**STIP Number:** U-5720

**Estimated Cost:** \$158 million  
**Start Date:** TBD  
**Completion Date:** TBD









N.C. Department of Transportation

# LITTER SWEEP

SEPTEMBER 11-25, 2021  
*Volunteer Locally*

*Sign up now at*  
[ncdot.gov/littersweep](https://ncdot.gov/littersweep)

Share your clean-up images at:  
**#LitterSweepNC**

*Forms, posters and telephone listings are available online.*

The poster features a yellow background with a white honeycomb pattern. A broom is positioned vertically on the left side. At the bottom left is a cartoon purple ant wearing an orange safety vest and holding a pair of tongs. At the bottom right are illustrations of grey trash bins, orange and blue litter bags, and a blue bag with the N.C. Department of Transportation logo.



# METROPOLITAN RAPID TRANSIT SYSTEM

Scott Ralls, Wake Tech  
RTA equity and workforce chair

# REGIONAL COMMUTER RAIL

Katharine Eggleston  
GoTriangle

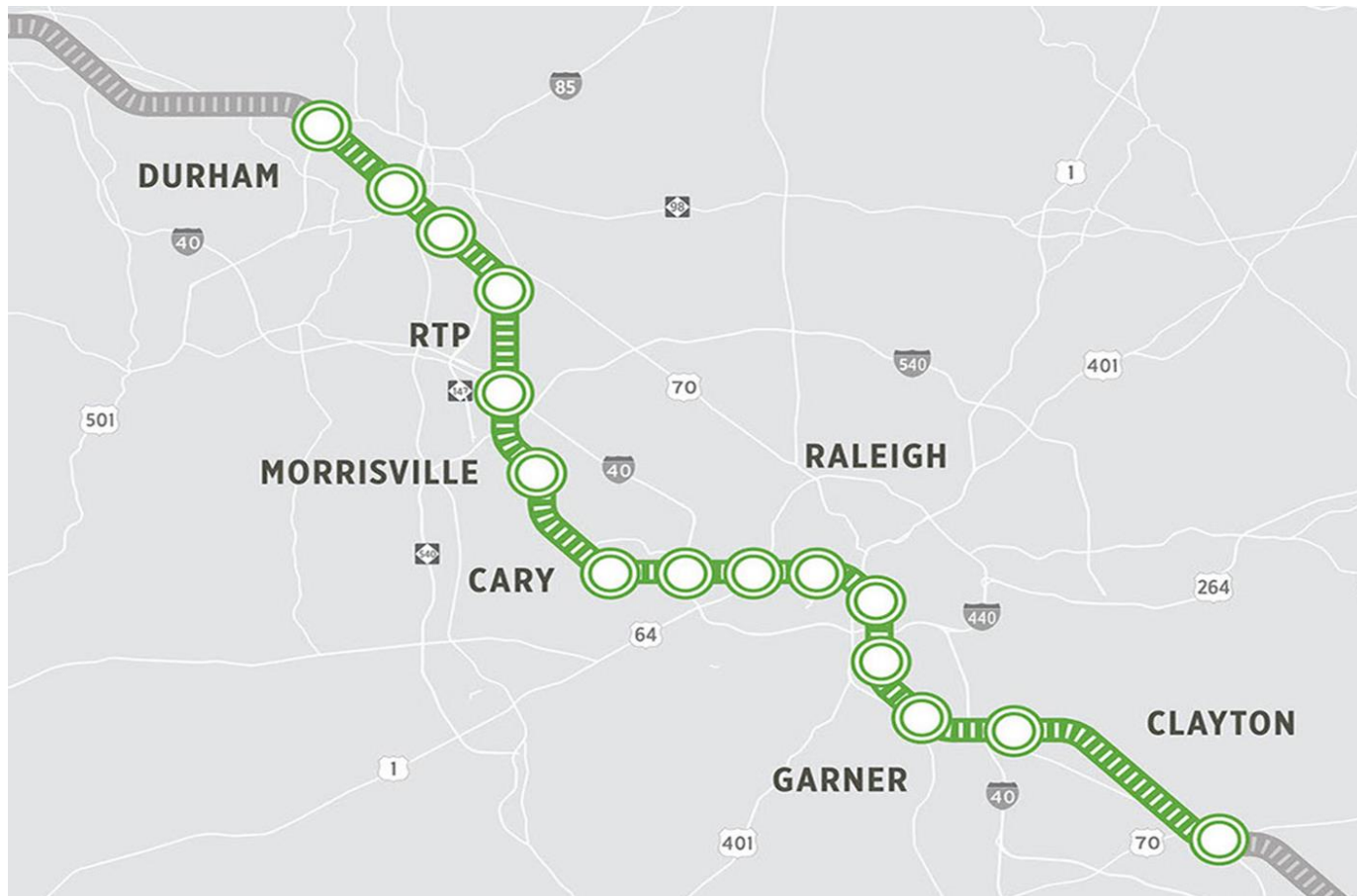
Regional  
Transportation  
Alliance  
August 20, 2021

# **GREATER TRIANGLE COMMUTER RAIL PROJECT**

## ***STUDY UPDATE***

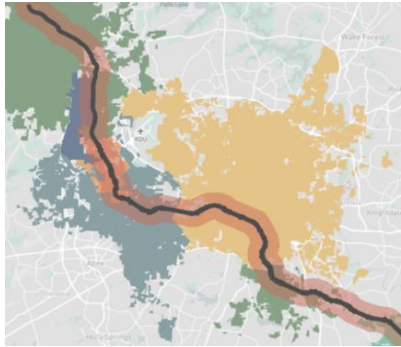


# Study Area & Stations



# What is in the current study?

## Rail Analysis



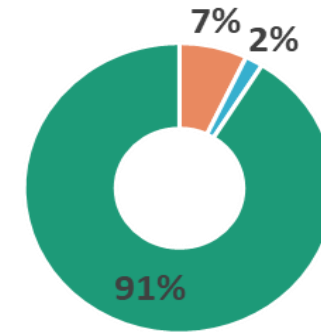
- Stop locations and schedules
- Rail infrastructure: track, bridges, vehicles
- Ridership and rail capacity modeling

## Opportunity Analysis



- Affordable housing
- Access to Jobs
- Land Use
- Job Creation Potential

## Engagement



- Three rounds of public engagement
- Business + colleges
- Focus groups
- Local governments
- Railroads



# Round 2 Public Engagement

**June 21- August 31**

## **Develop responses to feedback from Round 1:**

- How the service could work
- Who it could serve, beyond "traditional" commuters
- How it could provide access to jobs and affordable housing

## **Strategic efforts to educate:**

- Low-income community members and public housing residents
- Transit riders
- The Triangle's underserved communities
- Colleges and universities
- Businesses along the corridor and Chambers of Commerce



# Round II: Public Engagement Update

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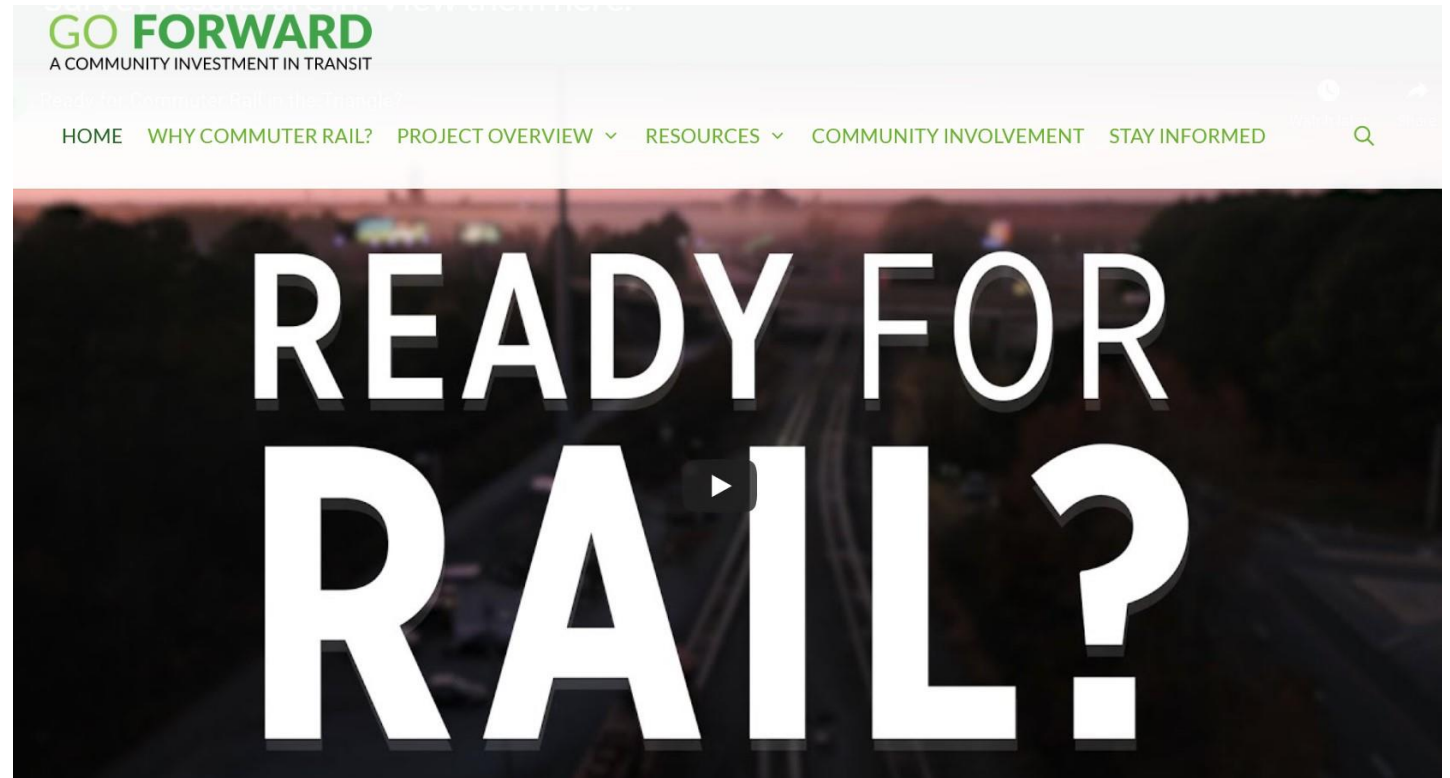
- Over 2,000 brochures distributed
- 25 businesses canvassed
- 17 tabling sessions
- 8 community-sponsored events
- 7 presentations



# New Web Site

[www.ReadyForRailInc.com](http://www.ReadyForRailInc.com)

- Packed with information, videos and a great animation showing how the region's growth could be served by commuter rail.
- Interactive station map with area descriptions.
- You can sign up for study updates by becoming *a Commuter Rail Insider!* More than 1,700 people have signed up.
- Organizations can use the web site to request a presentation.



## What Happens When the Study is Complete?

The County Sponsors will decide if the costs and benefits are acceptable.

If approved, the project will advance into development for environmental review, final design and application for federal funding.

Construction could start as early as 2025.

Service could start as early as 2030.

# WAKE BRT NETWORK

**Michael Moore**  
City of Raleigh



# Wake Bus Rapid Transit Program Update

August 2021



# Wake BRT Program Overview

## What is Bus Rapid Transit?

Bus Rapid Transit (BRT) is a high - quality, bus-based transit system that delivers fast, comfortable and cost - effective services at high capacities. BRT includes enhanced features that differ from local service.



Unique  
Branding



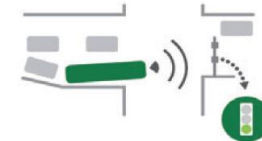
Enhanced  
Stations



Off – Board  
Fare  
Collection



Longer Span  
of Service  
Hours



Transit Signal  
Priority



Frequent  
On – time  
Service



Dedicated  
Lanes

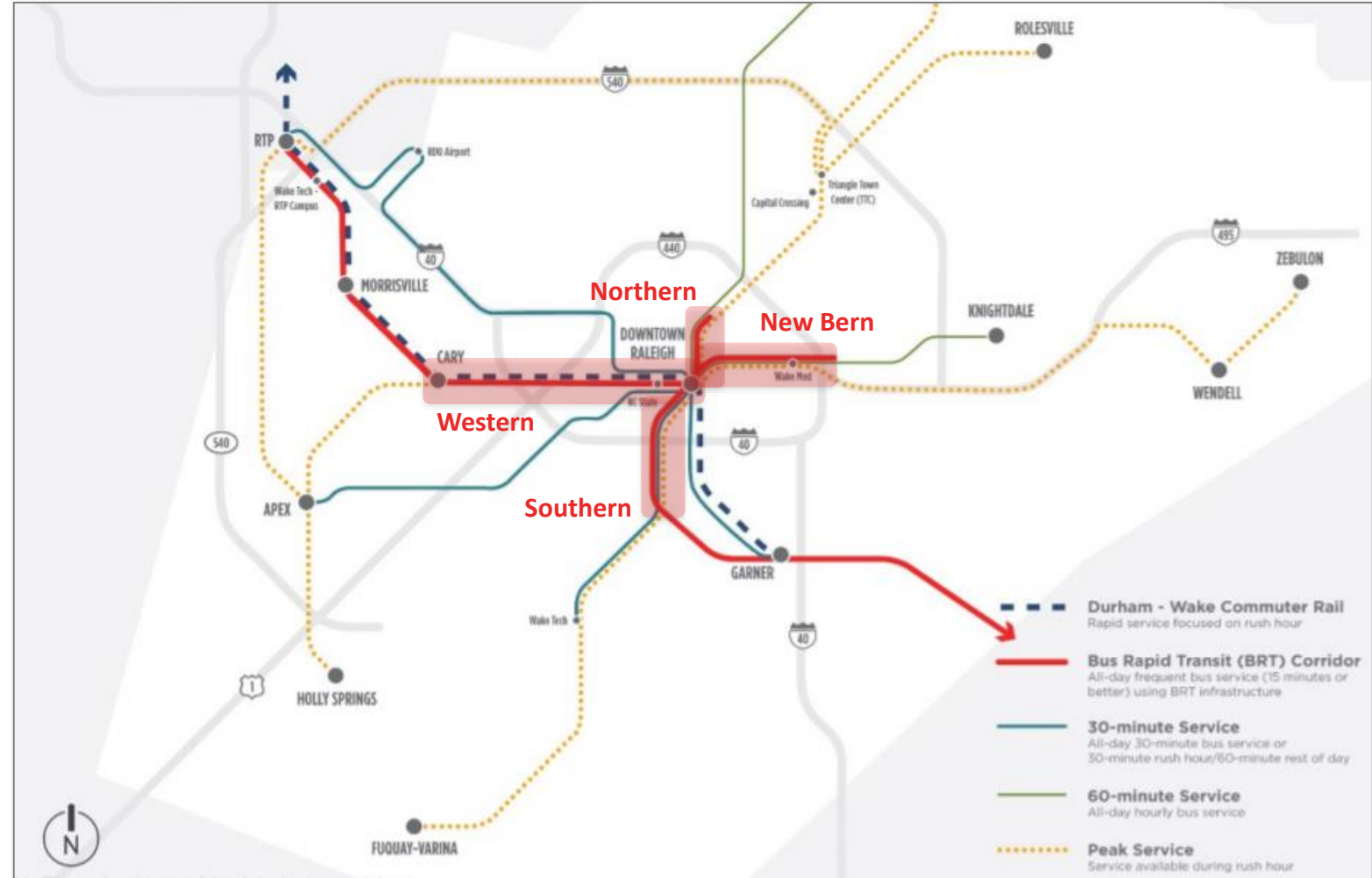


Specialized  
Vehicles



# Wake BRT Program Status

- City of Raleigh is project sponsor of the four core BRT corridors:
  - New Bern - 2024
  - Western - 2027
  - Southern - 2027
  - Northern - 2030
- CAMPO currently studying two (2) Wake BRT extensions:
  - Garner to Clayton
  - Cary to RTP
- Extensions planned to be operational in the 2028 – 2030 timeframe



# FTA CIG Small Starts Process

NORTHERN



SOUTHERN



WESTERN



NEW BERN



## STEP 1: Project Development

- PD Application
- Review Alternatives
- Locally Preferred Alternative (LPA)
- Local Funding Commitment
- Ratings Application
- Environmental Review (NEPA & SHPO)
- 3<sup>rd</sup> Party Agreements (NCDOT)
- Complete Engineering, Design, and Utility Coordination

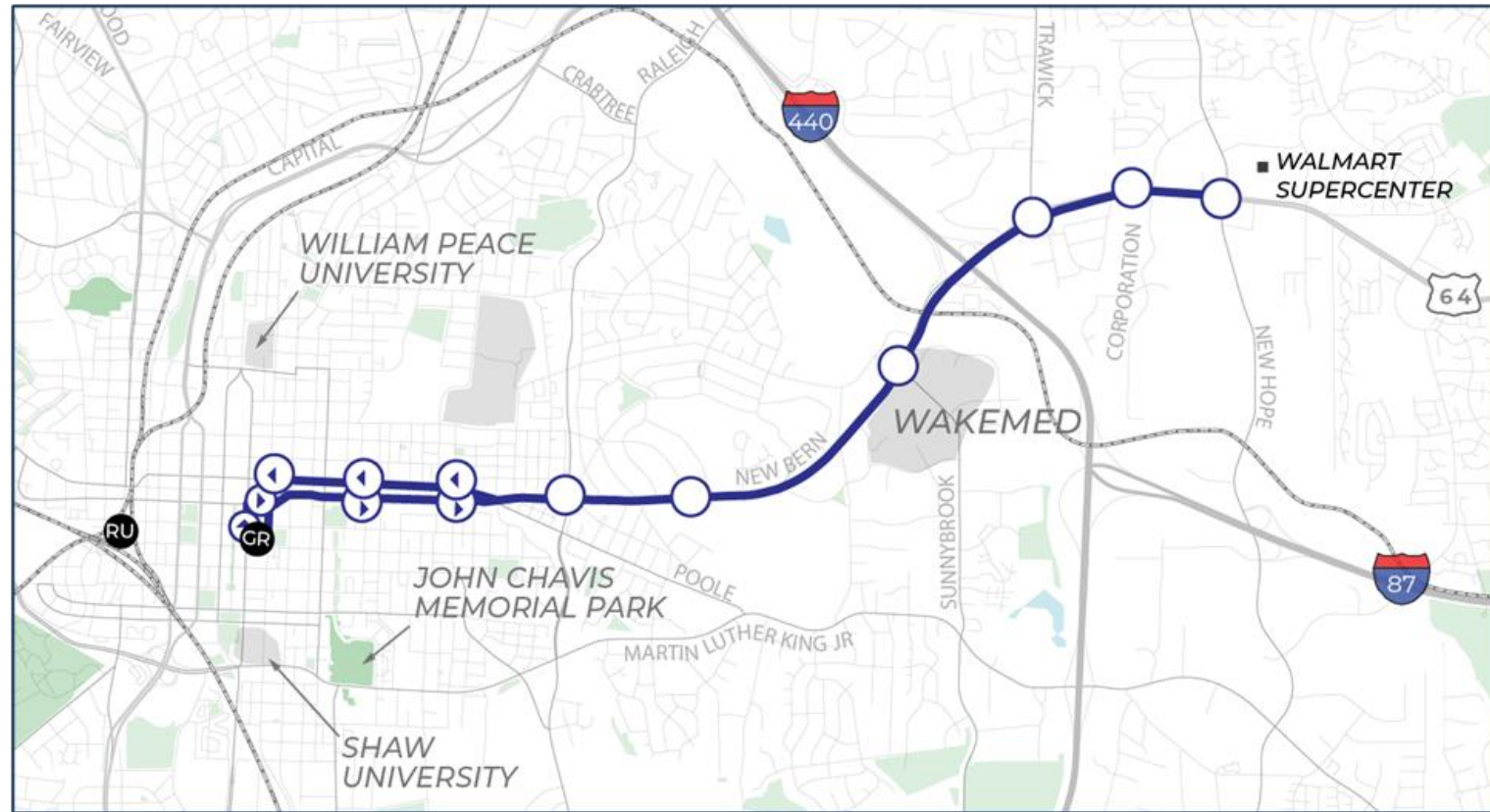
## STEP 2: Full Funding Grant Agreement

- Construction



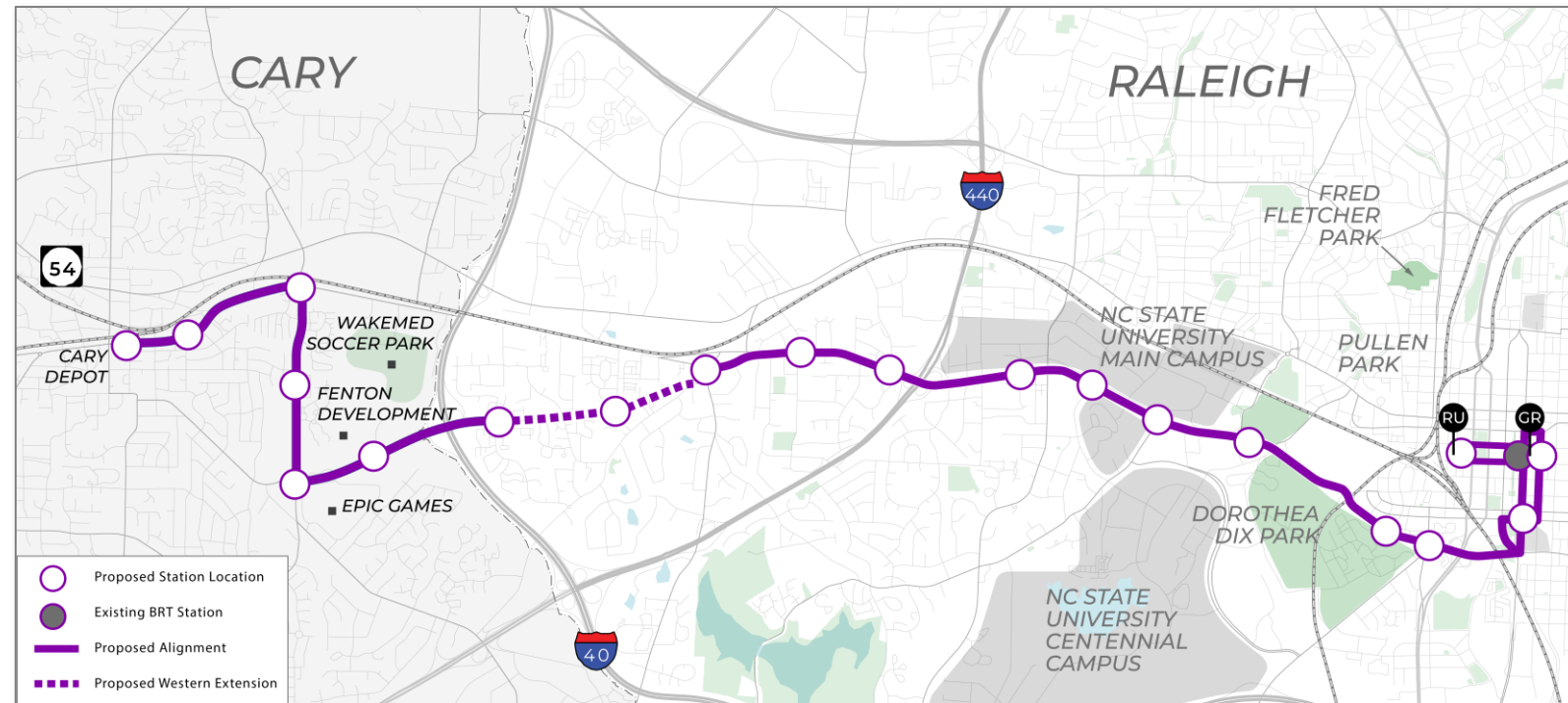
# Wake BRT: New Bern Ave Road to Construction

Date	Milestone
April 2021	60% design plans submitted to COR, NCDOT
Fall 2021	FTA document updates
Fall 2021	Value engineering
End of the year 2021	Complete 90% design
Winter 2022	Complete final design
Summer 2022	Construction start



# Western Corridor

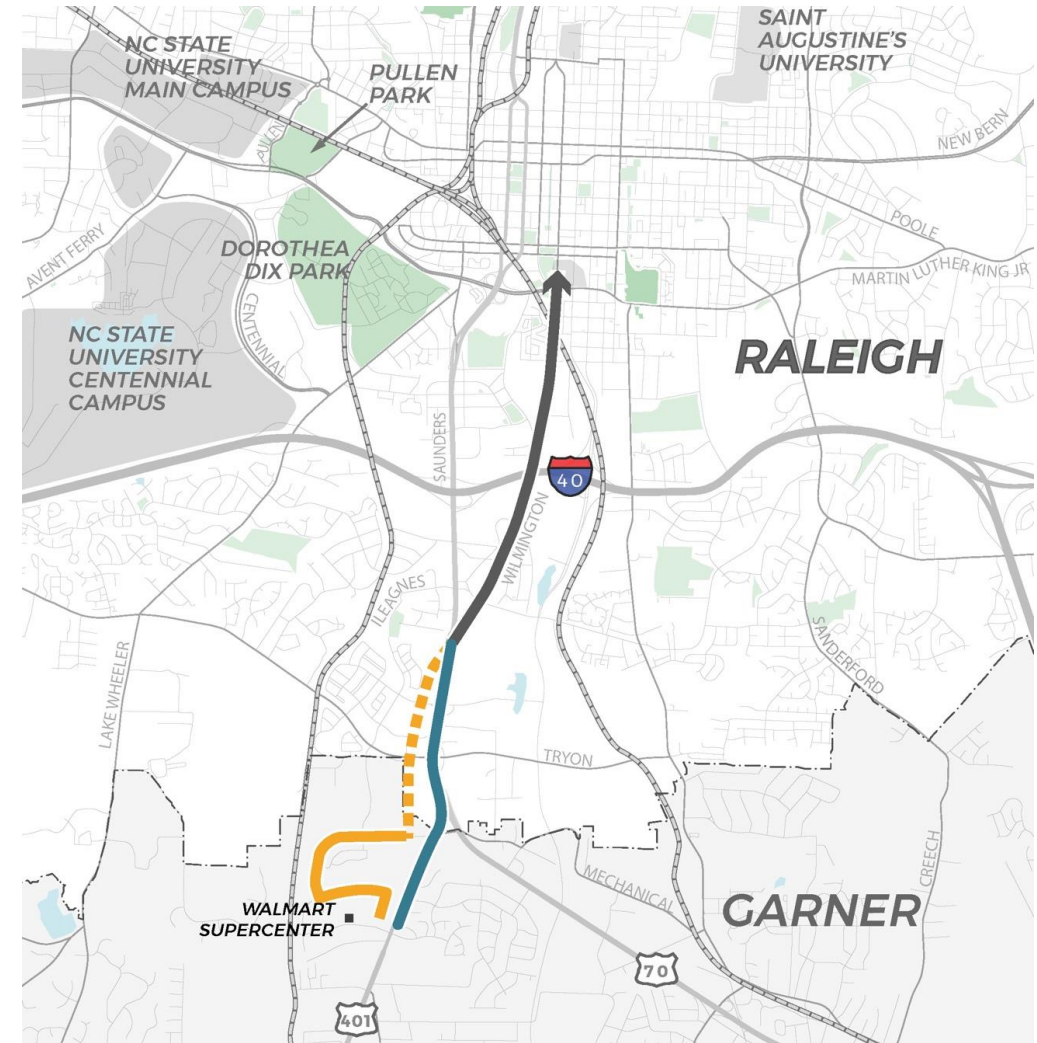
Date	Milestone
Summer 2020	Town of Cary City Council endorsed the Western LPA (July)
Summer 2020	City of Raleigh City Council endorsed the Western LPA (Aug)
Winter 2020	Accepted into Project Development
January 2021	Begin 0 – 30% design and NEPA
Fall 2022	Complete 0 – 30% design and NEPA
2022-2023	Final Design
2024-2025	Construction to begin (contingent on Federal Funding)





# Southern Corridor

Date	Milestone
October 2020	<i>Raleigh City Council endorsed S. Wilmington Street as preferred route for the northern section</i>
April 2021	<i>Town of Garner Council endorsed S. Wilmington Street Extension as preferred route for the southern section.</i>
April 2021	<i>Raleigh City Council endorsed full LPA</i>
July 2021	<i>Accepted into Project Development</i>
Fall 2021	<i>Begin 0 – 30% design and NEPA</i>
Fall 2022	<i>Complete 0 – 30% design and NEPA</i>
2023-2024	<i>Final Design</i>
2025-2026	<i>Construction to begin (contingent on Federal Funding)</i>



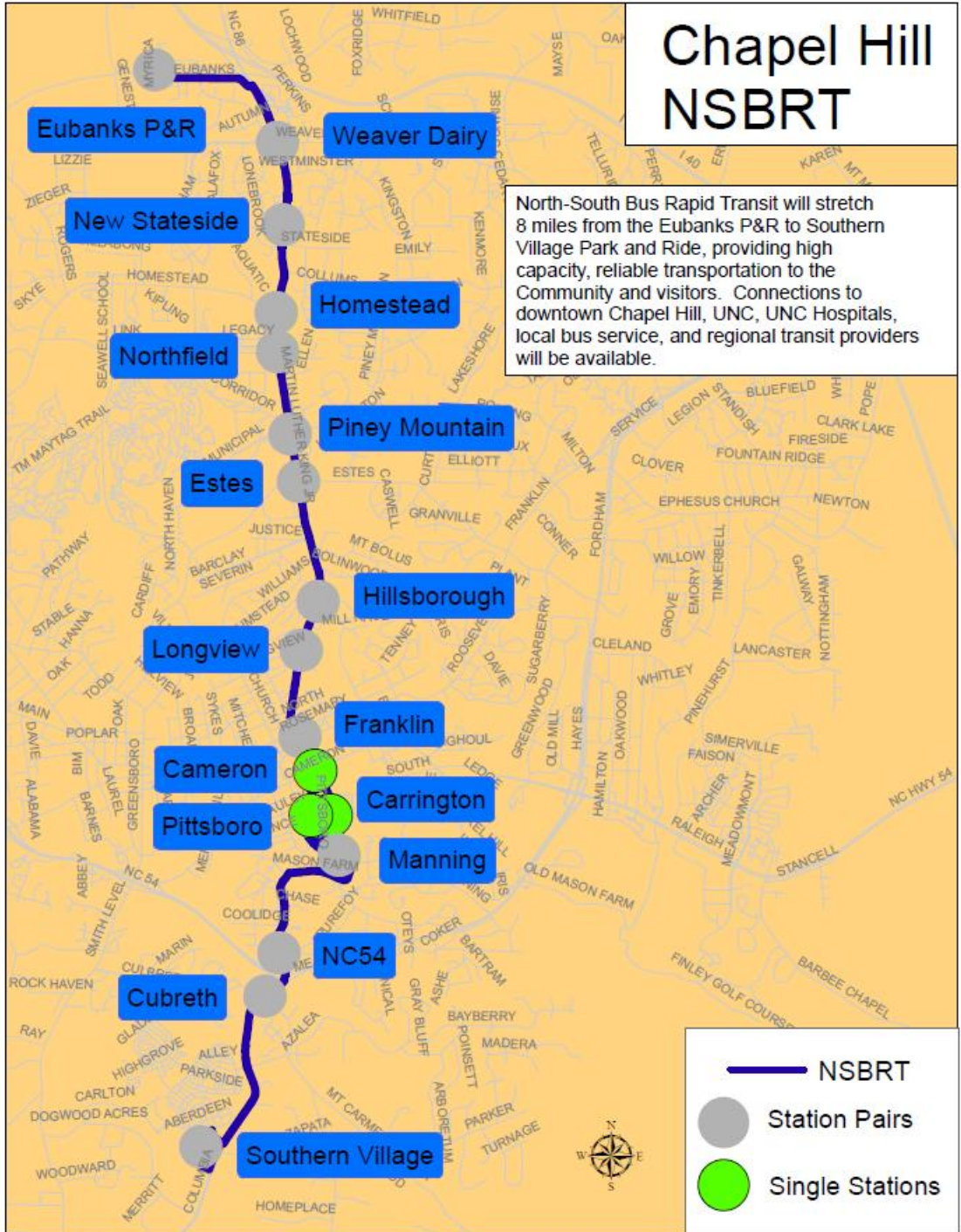
# CHAPEL HILL BRT NETWORK

**Matt Cecil**  
Town of Chapel Hill



# Chapel Hill NSBRT

North-South Bus Rapid Transit will stretch 8 miles from the Eubanks P&R to Southern Village Park and Ride, providing high capacity, reliable transportation to the Community and visitors. Connections to downtown Chapel Hill, UNC, UNC Hospitals, local bus service, and regional transit providers will be available.



**Chapel Hill  
transit**

Continues to Hillsborough

### Continues to Chatham County

-  NSBRT Planned  
 Proposed Chatham Extension  
 Proposed Hillsborough Extension  
 15-501 BRT



# DURHAM TRANSIT PLAN

Sean Egan  
City of Durham



CITY OF  
**DURHAM**

## Transportation

Durham County Transit Plan

August 20, 2021



## Core Principles

### Equity

*Investing in underserved and transit dependent communities*

Prioritize transit access and investment for Environmental Justice (EJ) communities including but not limited to minority race and ethnic populations (Black, Indigenous, Hispanic/Latinx, all racial and ethnic minorities), elderly populations, low-income households, Limited English Proficiency (LEP) communities, and zero-car households.

Provide transit options and access to affordable housing developments.

Improve access for people with disabilities.

### Community Trust

*Providing transparency throughout the planning and decision making processes*

Be transparent about how community feedback affects transit decisions.

Account for how transit funds are spent and the cost of different types of service.

Address what happened to recently discontinued or reduced services (light rail, BCC, etc.).

Actively engage residents and empower them to make decisions.

Provide real opportunities for residents to impact service design.

# Durham County Transit Plan – Current Projects

- Of the 946 bus stops in Durham, more than half require accessibility improvements
- Interlocal Agreement between City of Durham and GoTriangle enables streamlined project delivery for bus stops
- Current delivery is 20 stops/yr. – moving to 75/yr.
- Glen View Station stop (pictured) completed in September 2020



# Durham County Transit Plan – Current Projects

- Bus-Only lane allows
  - Improved bus stop
  - Pedestrian safety at intersections
  - 15-minute service from Downtown to Southpoint – Implemented Oct. 2020
- Six expansion buses ordered
  - Zero-Emissions, Battery-Electric
  - Delivery in early 2022
  - Enable increased service frequency and crosstown connections



100% Electric, Zero Emissions bus fleet grows to 8 vehicles



# Durham County Transit Plan – Current Projects



- Bus Access – Sidewalks and pedestrian safety improvements at intersections
- Bus Speed and Reliability
  - Identify where bus riders are delayed
  - Develop quick-build treatments using pavement markings, signage and signal timing
- Transit Emphasis Areas – Align with FAST Study recommendations
  - Fayetteville
  - Holloway
  - Village Transit Center
  - Durham Station Area

# City of Durham Priorities for DCTP

- Project Delivery
  - Focus on frequency, crosstown, and quick-build initiatives for implementation in 6-12 months
  - Advance corridor and transit center infrastructure to construction in the next 2-3 years
- Every bus stop in Durham is:
  - Accessible for people of all abilities
  - A safe and comfortable waiting area for riders,
  - Connected to sidewalks to complete the journey
- Frequency – All routes operate at least every 30 minutes, all day, Monday – Saturday
- Reliability – Implement transit signal priority and other solutions in locations where buses get stuck
- Extend hours – Early Morning, Late Night to reflect rider needs
- ACCESS service improvements for seniors and people with disabilities
- Equity – Invest in underserved communities
- Trust – Transparency and honesty about strengths and weaknesses of proposed projects to enable informed decision-making

# DCTP - Next Steps

- Community Engagement on scenarios concluding
- Updates to elected officials in Sep./Oct.
- Preferred scenario released in late October
- Adoption in early 2022



# INNOVATIVE APPROACHES

**Jim Beley, The Umstead Hotel**  
RTA travel experience chair

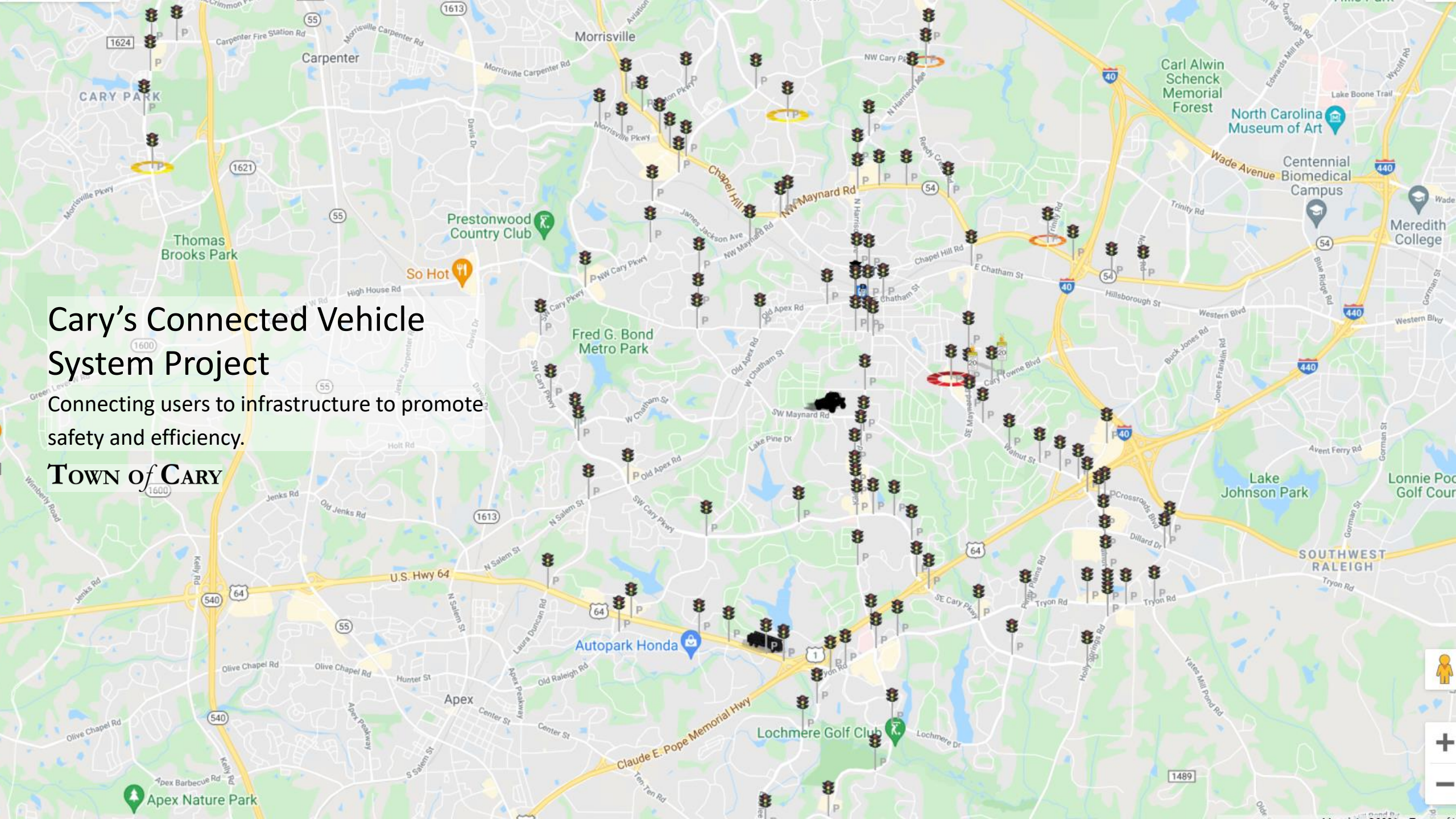
# CARY CONNECTED VEHICLE PROGRAM

Jerry Jensen  
Town of Cary

# Cary's Connected Vehicle System Project

Connecting users to infrastructure to promote safety and efficiency.

TOWN of CARY





# Emergency Vehicle Pre-emption System

Improve the emergency vehicle pre-emption range,  
yielding faster emergency response times and  
reducing confusion at intersections.

**TOWN of CARY**





Transit Priority  
Pre-emption System  
*TOWN of CARY*



## Upgrade School Zone Safety Beacons

Solar powered communication units will allow staff to remotely modify the beacons in accordance to each school schedule, unexpected closures and weather events.

TOWN of CARY







## Notify Motorists of Pedestrians & Cyclists

Solar powered communication units at rectangular flashing beacon crosswalks will notify motorists of pedestrians and cyclists wanting to cross the street.

**TOWN of CARY**





## Notify Motorists of Trains

Warn area motorists of temporarily road closures due to a train. Motorists may alter their route to avoid the delay.

TOWN of CARY



Notify Motorists of  
Signal Timing  
TOWN of CARY





# Project Status & Schedule

TOWN of CARY





# Marketing Efforts

App saturation is key to the success of the project.

*TOWN of CARY*



# NCDOT MULTIMODAL PARTNERSHIPS

**Dave Byerley, Truist**  
RTA intercity and commuter rail chair



# FAST STUDY; CSX CORRIDOR

**Julie White**  
NCDOT Deputy Secretary  
for Multimodal Transportation

# DISCUSSION



# DRAFT ACTION ITEMS: REGIONAL TRANSIT

**Jay Irby, First Citizens Bank**  
RTA regional transit chair

# DRAFT ACTION ITEMS: TRANSIT

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**RTA reaffirmation of support for Wake Transit plan**

**RTA comments on potential elements of future Durham and Orange transit scenarios**

# DRAFT ACTION ITEMS: FREEWAY ACCELERATION

Pete Marino, Smith Anderson  
RTA freeways chair



# DRAFT ACTION ITEMS: FREEWAYS

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**Transit priority shoulder as metropolitan standard for new/modernized freeway projects**

**Accelerated, scalable, “something sooner” / “rapid relief” freeway improvements**

# BREAK

# ACCELERATED METROPOLITAN MOBILITY – PART 2:

## RDU Airport, funding



# RDU INTERNATIONAL AIRPORT

**Denny Edwards, Greater Raleigh CVB**  
RTA business travel and tourism chair

# RDU AIR SERVICE AND INFRASTRUCTURE UPDATE

**Michael Landguth**  
RDU Airport Authority

# RTA RDU AID TASK FORCE RECOMMENDATIONS

**Harold Hicks**

RTA engagement chair; chair-elect



# RTA RDU AID TASK FORCE RECOMMENDATIONS

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- Federal - Funds for runway; fairer allocation; \$1 PFC, indexing
- State - Applaud legislature for ongoing, bipartisan support
- Airport - Raise parking fees; activate access fee; monetize land
- Local - Modernize, increase investments from airport co-owners

*Realign Vision 2040 with revenue reality, highlight implications*

# DRAFT ACTION ITEMS: RDU FUNDING - FEDERAL

**John McGeary, First National Bank**  
RTA funding and finance chair

# DRAFT ACTION ITEMS: RDU FUNDING – FEDERAL

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Maximizing federal support for relocating primary runway as primary federal focus

RTA encourages all member firms to commit to write letter of support for crescendo campaign



# DRAFT ACTION ITEMS: RDU FUNDING – LOCAL/AIRPORT

Rob Herman, Lenovo  
RTA commerce and logistics chair

# DRAFT ACTION ITEMS: RDU FUNDING – LOCAL/AIRPORT

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RTA requests that RDU increase parking fees, either all at once or scaling

RTA requests that RDU commence study of revenue potential of implementing airport access fee

RTA requests that RDU's four owners modernize and increase investments in RDU

# NEXT STEPS AND CLOSING

Harold Hicks, Fidelity Investments  
RTA chair-elect



# UPCOMING EVENT/MEETING DATES

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## **Accelerate 540 field visit**

Thursday, September 9 | 10 – 11 am

I-40/future I-42 (US 70 freeway) interchange

## **I-40 Regional Partnership – 13th Annual Meeting**

Friday, September 10 | 1 – 2:30 pm – Online meeting

## **RTA 20th Annual Meeting: The State of Mobility 2021**

Thursday, November 4 | 11:30 am – 1:30 pm

Embassy Suites Raleigh-Durham/Research Triangle in Cary

## **RTA Winter 2022 Leadership Briefing and Tour to South Florida and Miami**

January 26 – January 28



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ON TRANSPORTATION

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