



RTA REGIONAL
BUSINESS
LEADERSHIP

TRANSPORTATION BRUNCH 2024

16th Annual Meeting of the I-40 Regional Partnership

August 6 | 9 - 11:30 a.m. | Westin Raleigh-Durham Airport

#RTABRUNCH24

Opening Remarks

Jay Irby

RTA Chair

First Citizens Bank

RTA GOLD MEMBERS

AECOM

AMGEN

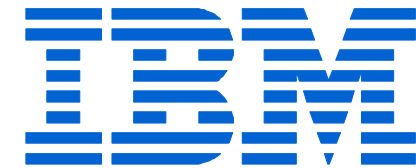
 **DUKE
ENERGY®**

EDGE 

 **First
Citizens
Bank**

Google

RTA GOLD MEMBERS



RTA GOLD MEMBERS



RTA GOLD MEMBERS



RTA SILVER MEMBERS



RTA SILVER MEMBERS



RTA SILVER MEMBERS





RTA MEMBER CHAMBERS OF COMMERCE

- | | | |
|----------------------|-------------------------------|---------------------------------|
| Angier | Garner | Roxboro Area |
| Apex | Hillsborough/Orange
County | Sanford Area Growth
Alliance |
| Benson Area | Holly Springs | Triangle East |
| Cary | Knightdale | Wake Forest |
| Chatham | Moore County | Wayne County |
| Chapel Hill-Carrboro | Morrisville | Wendell |
| Clayton | Raleigh | Wilson |
| Durham | Rocky Mount Area | Zebulon |
| Franklin County | Rolesville Area | |
| Fuquay-Varina Area | | |
| Franklinton | | |

RTA Transportation Brunch 2024

RTA SENIOR REGIONAL PARTNERS

Capital Area MPO
Durham-Chapel Hill-
Carrboro MPO
City of Durham
Chapel Hill Transit/
Town of Chapel Hill

Central Pines Regional
Council
GoRaleigh/City of
Raleigh
GoTriangle
Raleigh-Durham
Airport Authority

Town of Cary
Town of Holly Springs
Town of Morrisville
Town of Wake Forest



RTA BRONZE MEMBERS

Alfred Benesch &
Company

Atkins

AT&T North Carolina

Biogen

Clancy & Theys
Construction Company

CPL Architecture and
Engineering, PC

Dewberry

Gregory Poole Equipment
Company

Highwoods Properties

McKim & Creed

PNC

Strada Architecture PLLC

WakeMed Health &
Hospitals

RTA PREMIER SPONSOR

Research Triangle Foundation of North Carolina

RTA EVENT SPONSORS

Martin Marietta

RDU Airport Authority

The Sunrock Group

Town of Cary



RTA Transportation Brunch 2024

RTA OUTGOING CHAIRS



Richard Adams
Kimley-Horn
Choices & Trade Offs



Dave Byerley
Truist
Intercity & Commuter Rail



Dennis Edwards
Greater Raleigh CVB
Tourism & Business



Adrienne Elder
Duke Energy
Streets & Intersections

RTA OUTGOING CHAIRS



Pete Marino

Smith Anderson
Freeway & Regional Blvd



John McGeary

First National Bank
Funding & Finance



Julia Wright

Dominion Energy
Legislative & Policy



Rob Herman

Lenovo
Commerce & Logistics

RTA OUTGOING CHAIRS



Kevin Howell

NC State / UNC Health
Rapid Research



Nate Knuffman

UNC Chapel Hill
System Performance



Brett LeCheminant

UBS
Risk Management / Resilience



Will Letchworth

McAdams
Events



Scott Ralls

Wake Technical
Community College
Equity & Workforce

Event Overview

Joe Milazzo

RTA

Jennifer Portanova

NCDOT

I-40 Regional Partnership

The I-40 Regional Partnership is a cooperative initiative of the RTA business coalition and NCDOT in concert with other partners.

The I-40 Regional Partnership provides an ongoing focus on Interstate 40 in order to maintain and enhance its viability for travel and commerce, and to improve the travel experience on I-40 and core reliever/alternate routes.



I-40 Regional Partnership

Annual Meeting History

Oct. 10, 2023 – SAS, Cary

Oct. 13, 2022 – Joint Force Headquarters (JFHQ),
Raleigh

Sep. 10, 2021 – *online meeting*

Aug. 11, 2020 – *online meeting*

Oct. 17, 2019 – SAS, Cary

Oct. 18, 2018 – Research Triangle Park
Headquarters, RTP

Oct. 25, 2017 – Research Triangle Park
Headquarters, RTP

Oct. 24, 2016 – Research Triangle Park
Headquarters, RTP

June 18, 2015 – Joint Force Headquarters (JFHQ),
Raleigh

June 12, 2014 – Joint Force Headquarters (JFHQ),
Raleigh

June 4, 2013 – Joint Force Headquarters (JFHQ),
Raleigh

Dec. 20, 2012 – Research Triangle Park
Headquarters

June 28, 2012 – Research Triangle Park
Headquarters

Dec. 6, 2011 – Fidelity Investments, Cary

Sep. 13, 2011 – Cisco Systems, Research Triangle
Park

April 26, 2011 – NetApp, Research Triangle Park

Dec. 7, 2010 – Research Triangle Park
Headquarters

Sep. 24, 2010 – Fidelity Investments, Durham

June 15, 2010 – NetApp, Research Triangle Park

June 16, 2009 – Research Triangle Park
Headquarters

I-40 Regional Partnership

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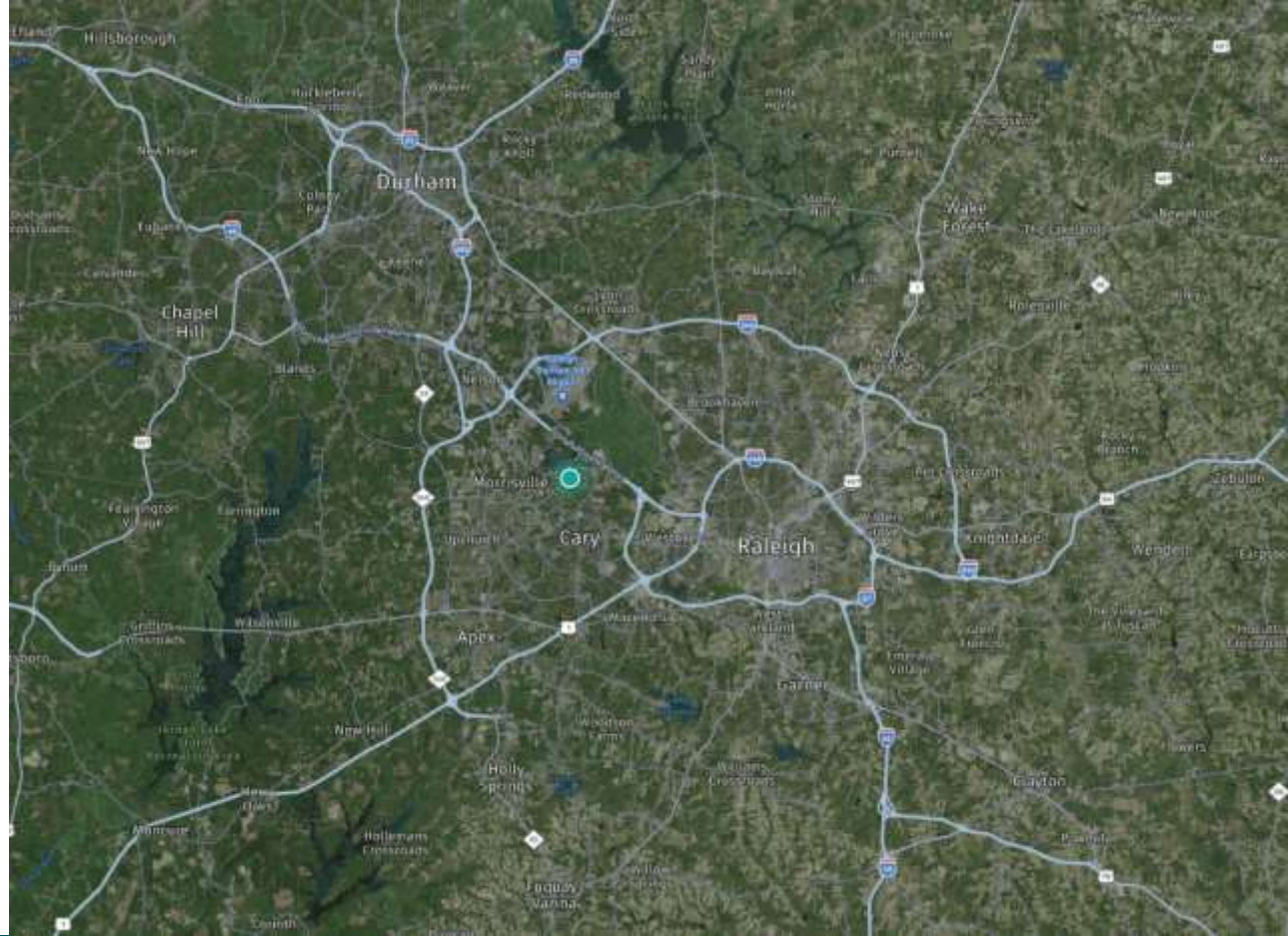
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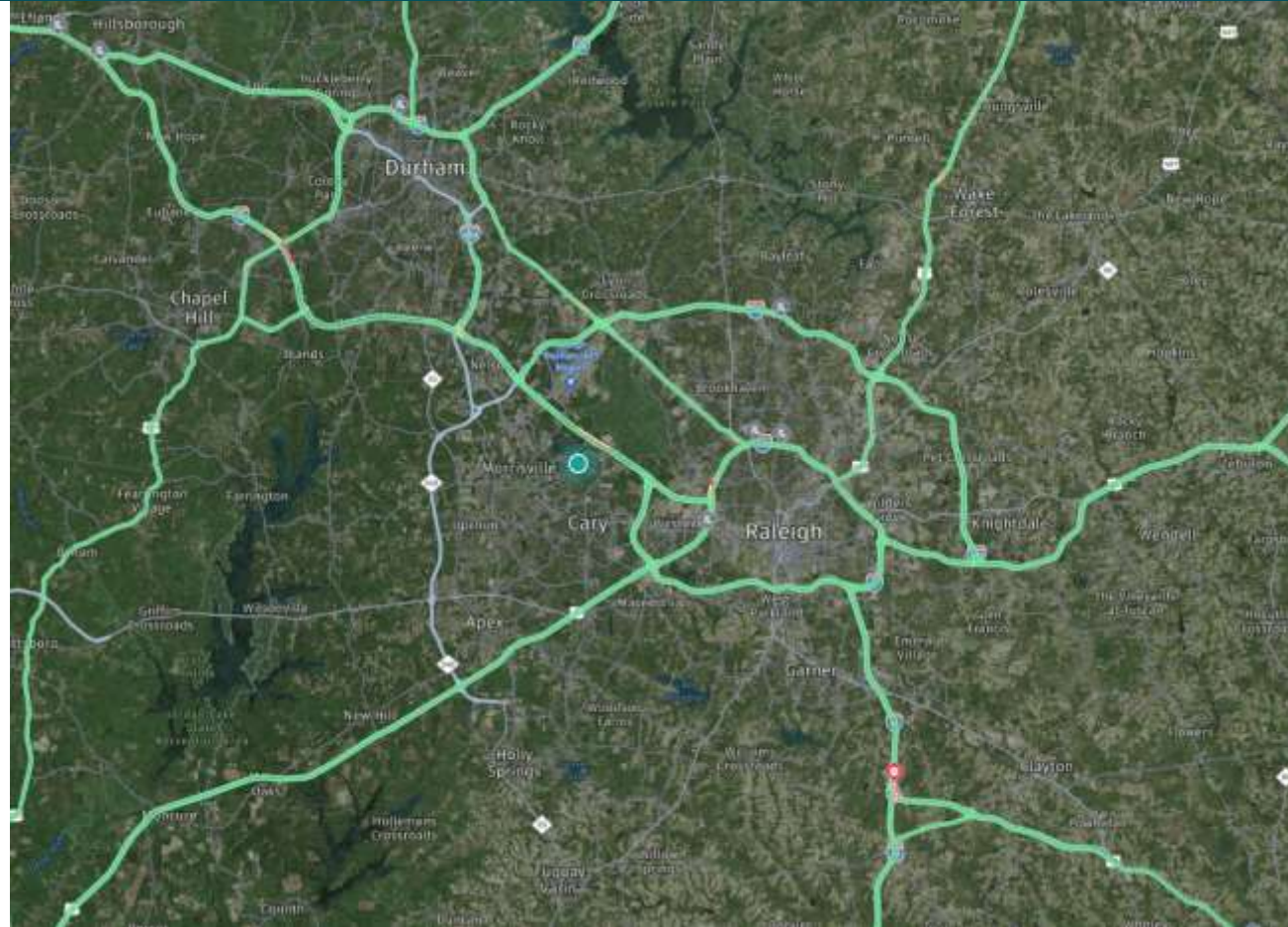
June 16, 2009 – Research Triangle Park
Headquarters



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Branch 2024





RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



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RTA Transportation Brunch 2024



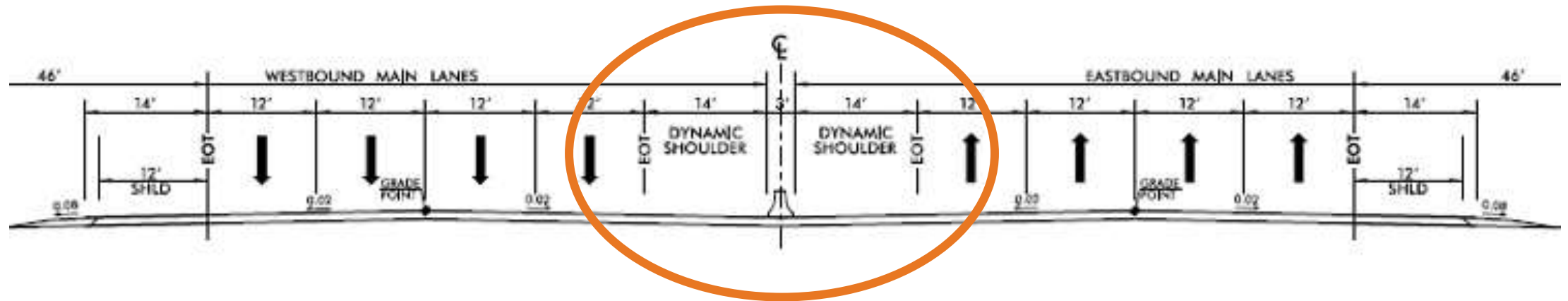
RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



PROPOSED I-40 CORRIDOR CROSS-SECTION



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024



RTA Transportation Brunch 2024

Opening Remarks

Julie White

Deputy Secretary

Multimodal Transportation

NCDOT

Brennon Fuqua

Integrated Mobility Division,
Interim Director
NCDOT

John Vine-Hodge

Integrated Mobility Division; Deputy
Director – Planning and Programming
NCDOT

Greg Saur

FAST Study Manager

WSP

Freeway, Arterial, Street, and Tactical (FAST) Transit 2.0

FAST

A decorative graphic on the left side of the slide features a large teal triangle pointing towards the top right, with a smaller lime green triangle below it. A horizontal black line spans across the middle of the slide, starting from the left edge and ending at a small orange dot on the right. Another small orange dot is located at the intersection of the teal triangle and the horizontal line. The word 'FAST' is written in a bold, white, italicized sans-serif font, positioned to the left of the horizontal line.

FAST Transit



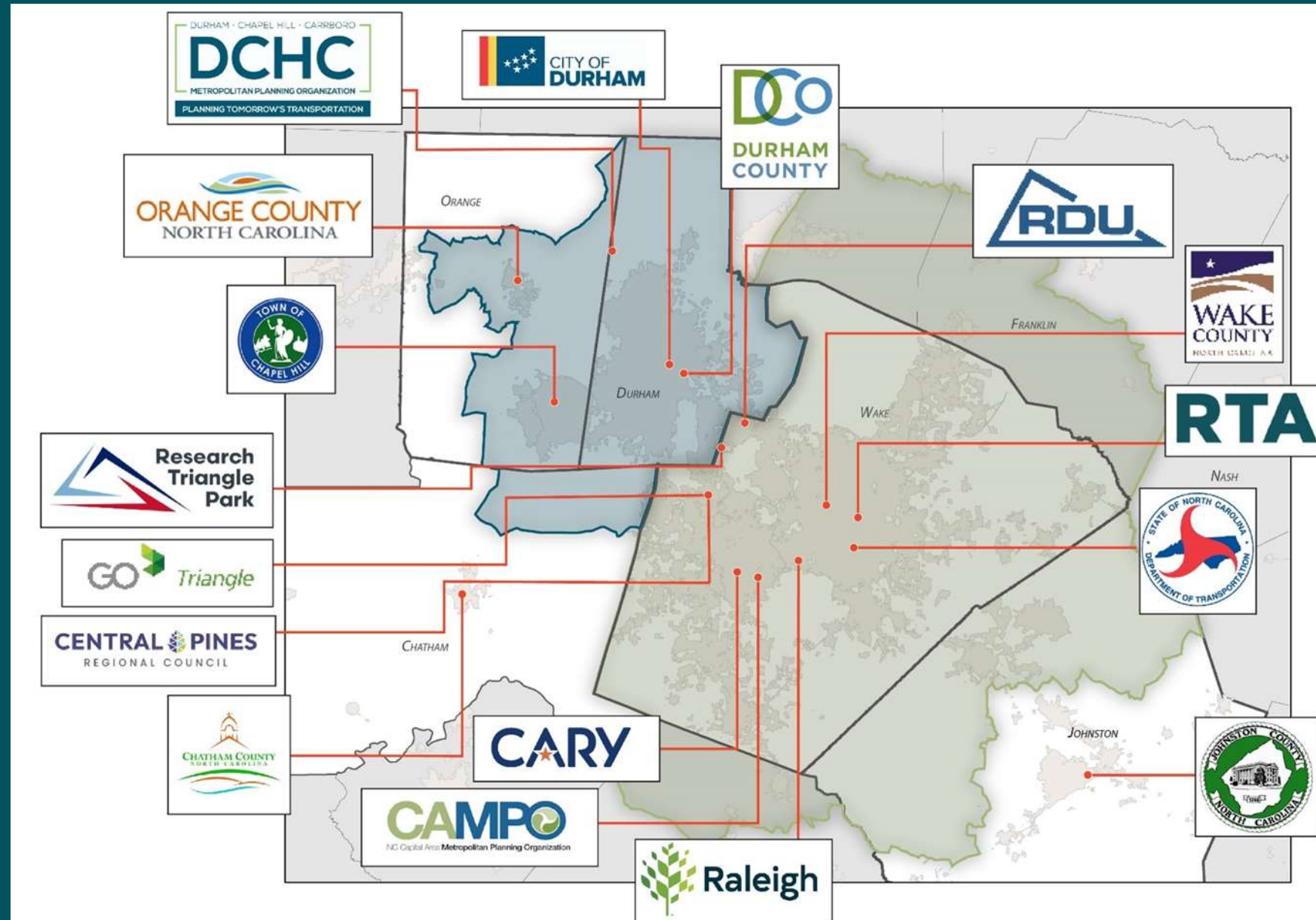
FAST transit is a scalable approach for quickly integrating “transit advantage” infrastructure along the roadway system to support enhanced transit service. The “FAST” approach prioritizes transit efficiency and reliability while improving mobility for all users.

A regional **FAST network** is a series of interconnected FAST corridors with transit advantage infrastructure that can deliver rapid, frequent, and easy-to-use transit service.

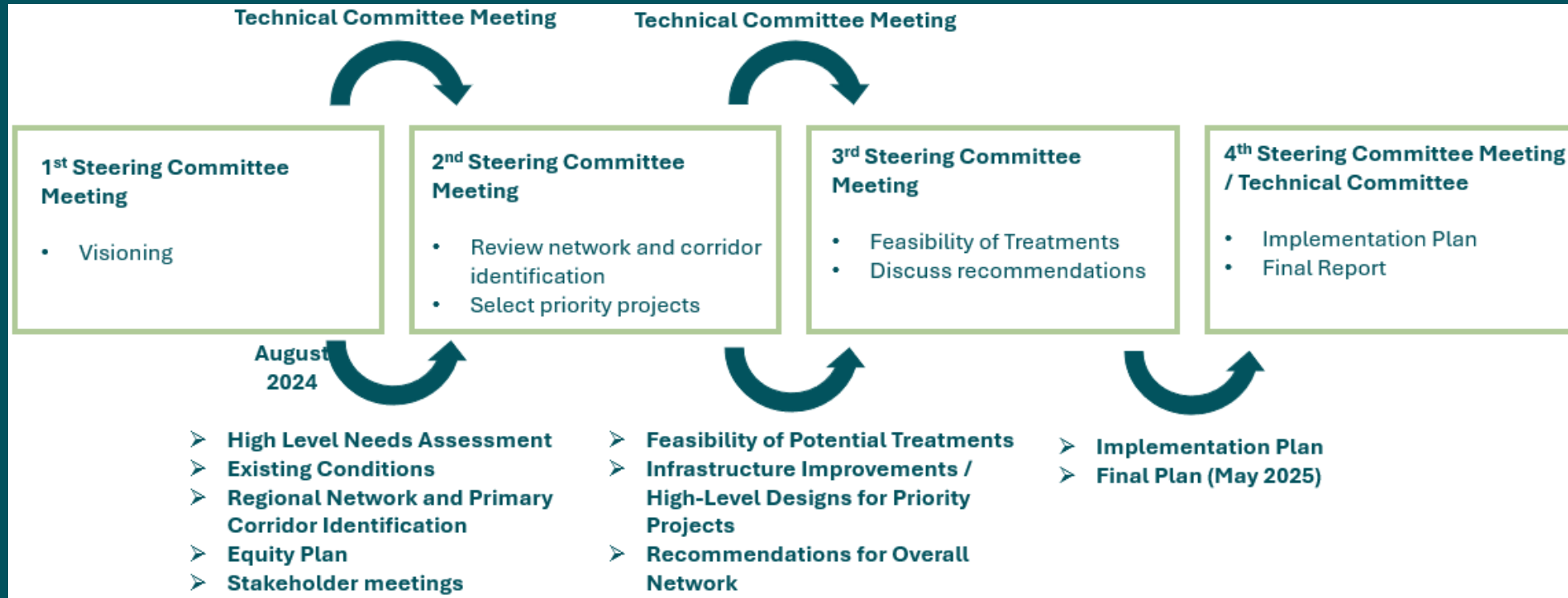
Regional Partners

NCDOT Units

- Highway Divisions 4, 5, 7, 8
- Transportation Mobility & Safety
- Roadway Design Unit
- Integrated Mobility Division



Project Schedule



NCDOT Roles

- Facilitating complete streets design
- Evaluating project feasibility
- Supporting project implementation

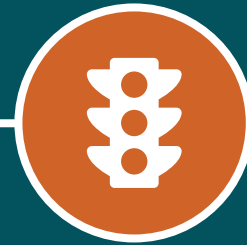
Potential Focus Strategies



**Bus Station /
Stop Design
Layout**



**Direct BRT
linkages
to RDU**



**Transit Signal
Prioritization
Standardization**



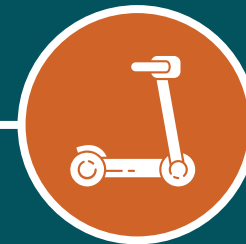
**Express Lanes,
Expanded BOSS,
Dynamic
Shoulders**



**Bicycle &
Pedestrian Access
Improvements**



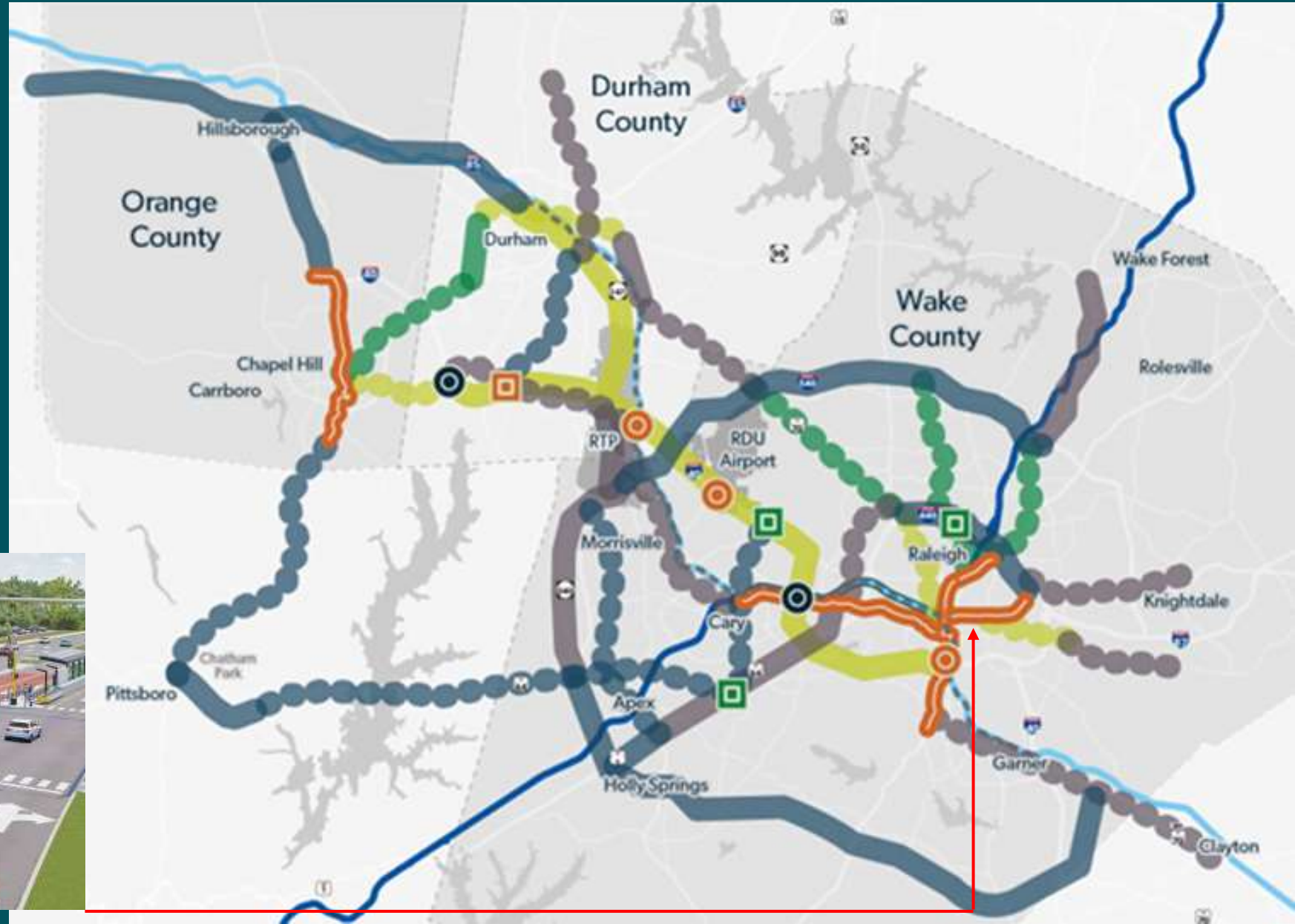
**Mobility-as-a-Service
& Single Digital
Ticketing Solutions**



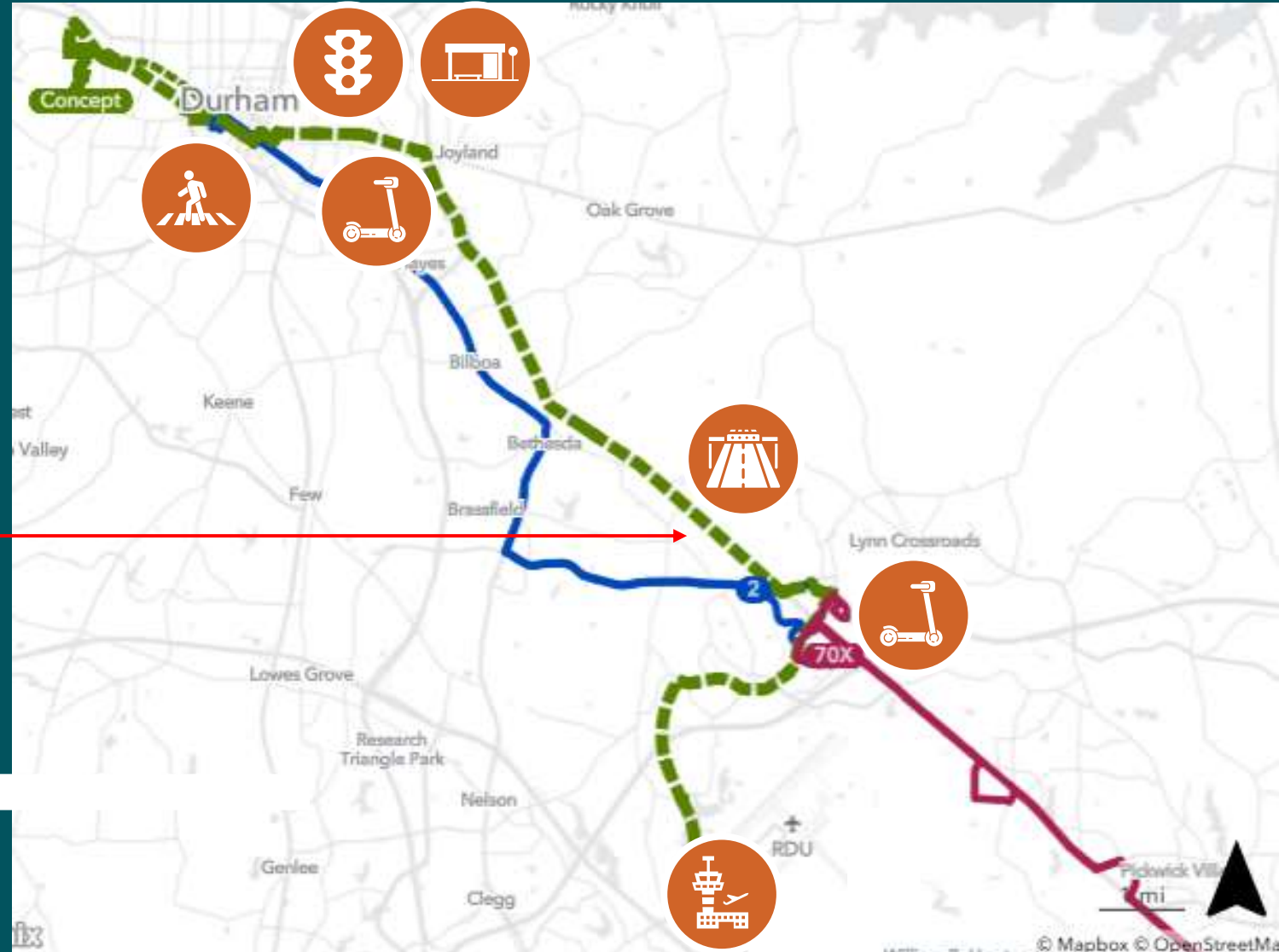
**Mobility Hubs,
Complete Streets, &
Micro-mobility Solutions**

FAST

FAST 1.0 Network



Illustrative Concept



Illustrative Concept



Freeway Concept

Freeway Exchange
Transit Center

Freeway
Transit Service

Arterial Transit Service



Multimodal Freeways

Tracy Parrott

Deputy Division Engineer

Division 5

NCDOT



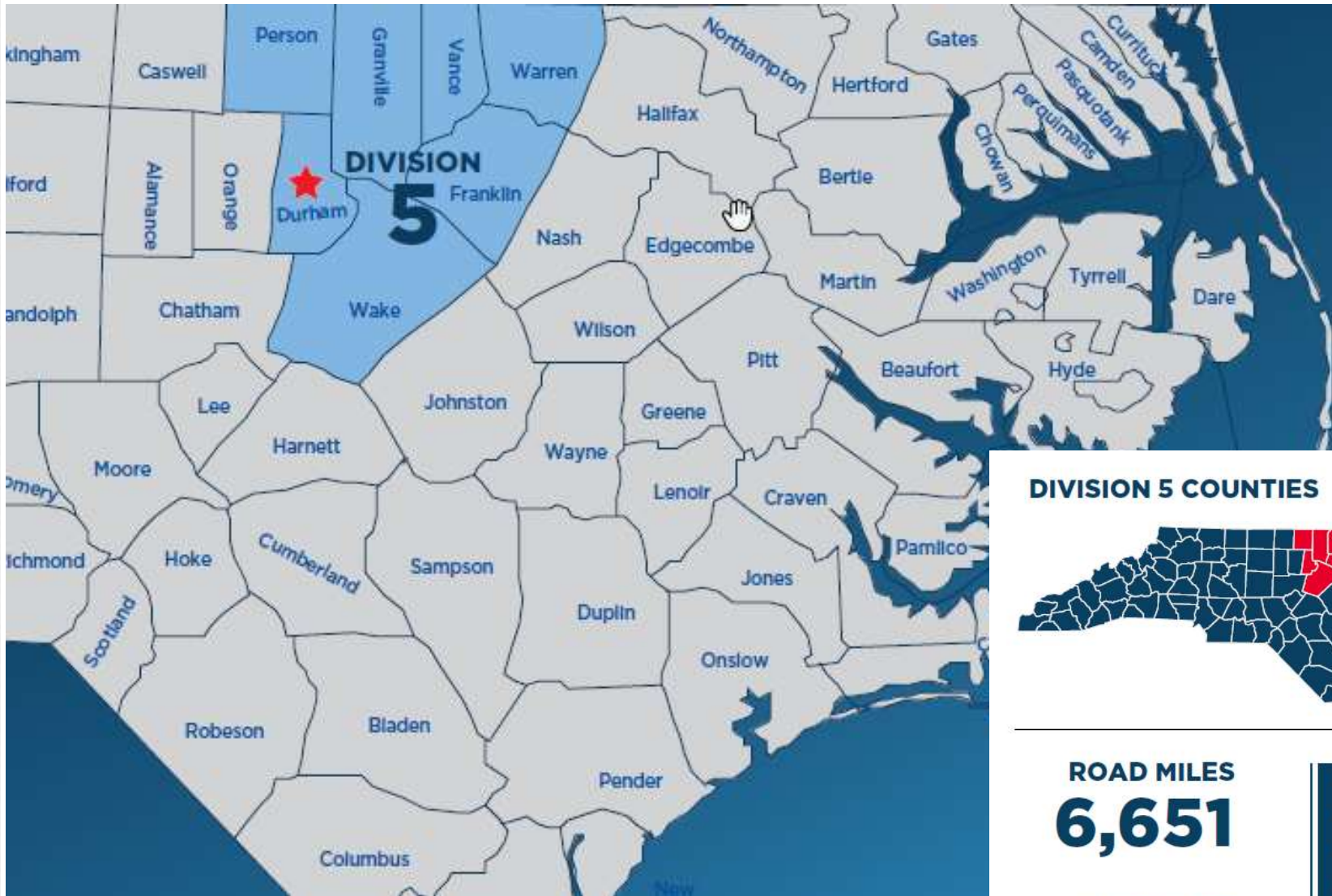
NORTH CAROLINA
Department of Transportation



NCDOT Projects Update

August 6, 2024

Tracy Parrott, Deputy Division Five Engineer



DIVISION 5 COUNTIES



DURHAM
FRANKLIN
GRANVILLE
PERSON

VANCE
WAKE
WARREN

Positions 543 Vacancy 34%

As of February 2023

ROAD MILES
6,651

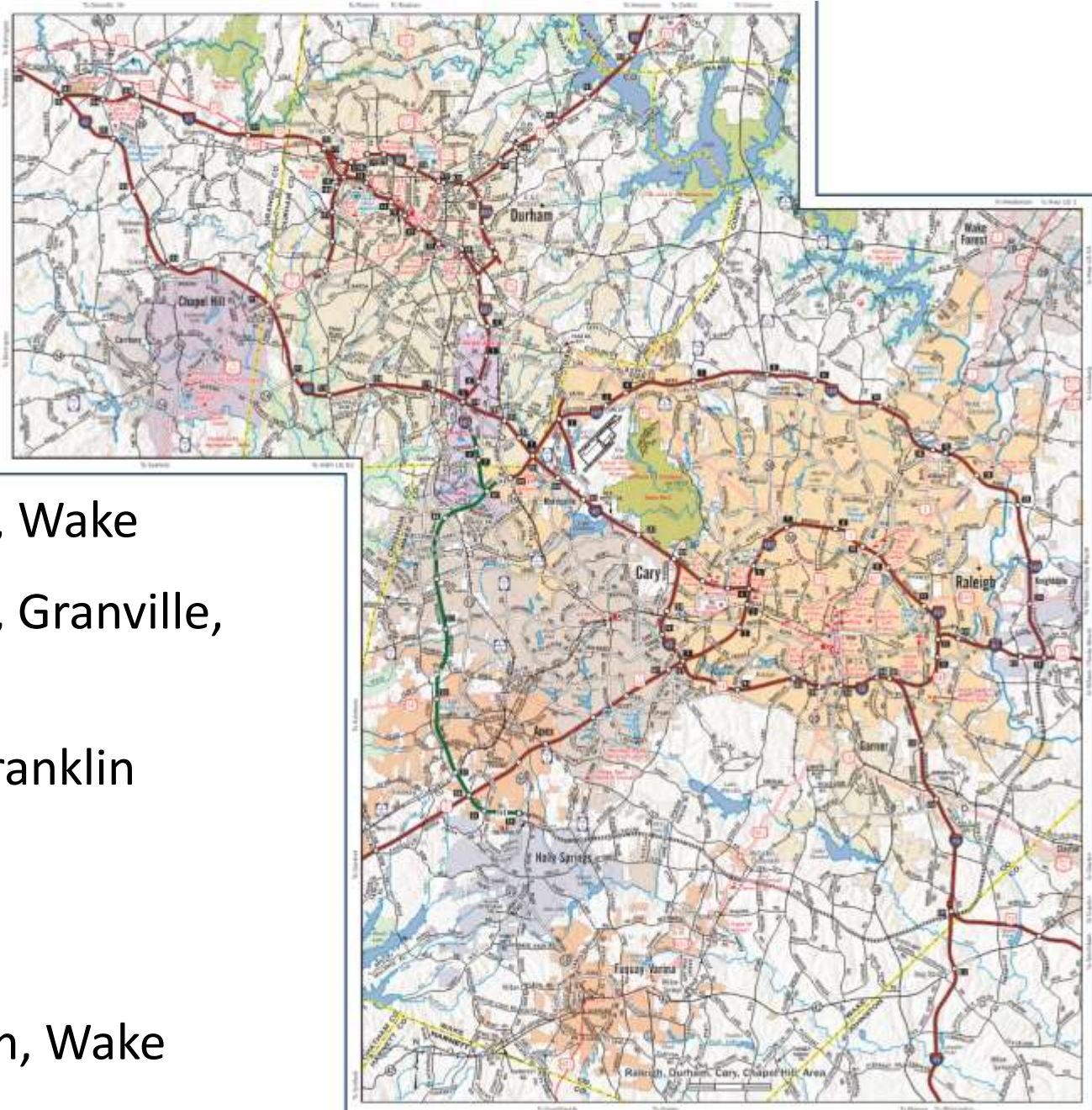
LANE MILES
14,562



PASSENGER
RAIL STATIONS



CARY
DURHAM
RALEIGH



Interstates:

- I-40 – Durham, Wake
- I-85 – Durham, Granville, Vance, Warren
- I-87 – Wake, Franklin
- I-440 – Wake
- I-540 – Wake
- I-885 – Durham, Wake

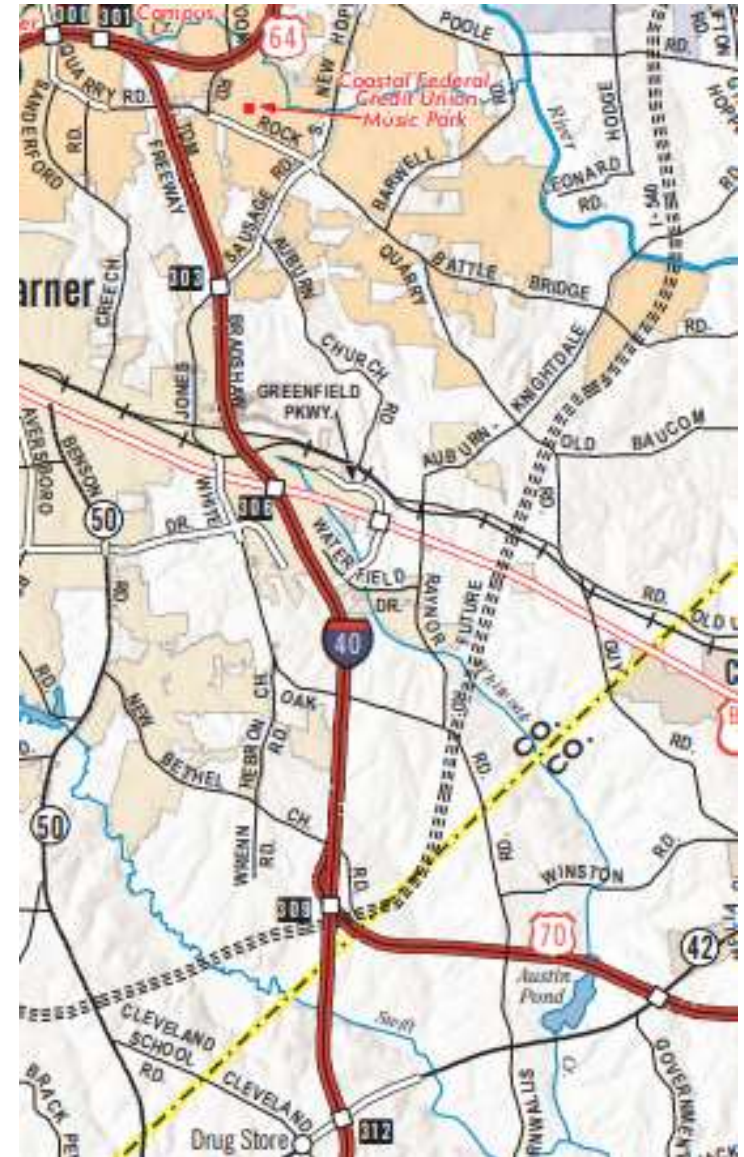
Primary Routes:

- US 15-501 – Durham
- US 70 – Durham, Wake
- US 1 – Wake
- US 401 – Wake, Franklin
- US 64 – Wake
- NC 54 – Durham, Wake

ACTIVE PROJECTS

I-40 (I-5111, U-4739, U-6093):

- 14 miles of widening and modernization from I-440 to Cornwallis Road in Johnston Co.
- \$432M Design Build Project
- Complete to US 70 Freeway / Future I-42 at future 540
- Cleveland Road interchange will be fully open this month (August 2024)
- Substantial Completion of entire project by next month (September 2024)
- *Relieve congestion for all modes of travel; existing BOSS corridor*



ACTIVE PROJECTS



ACTIVE PROJECTS



ACTIVE PROJECTS



NC 42

Cleveland School Road

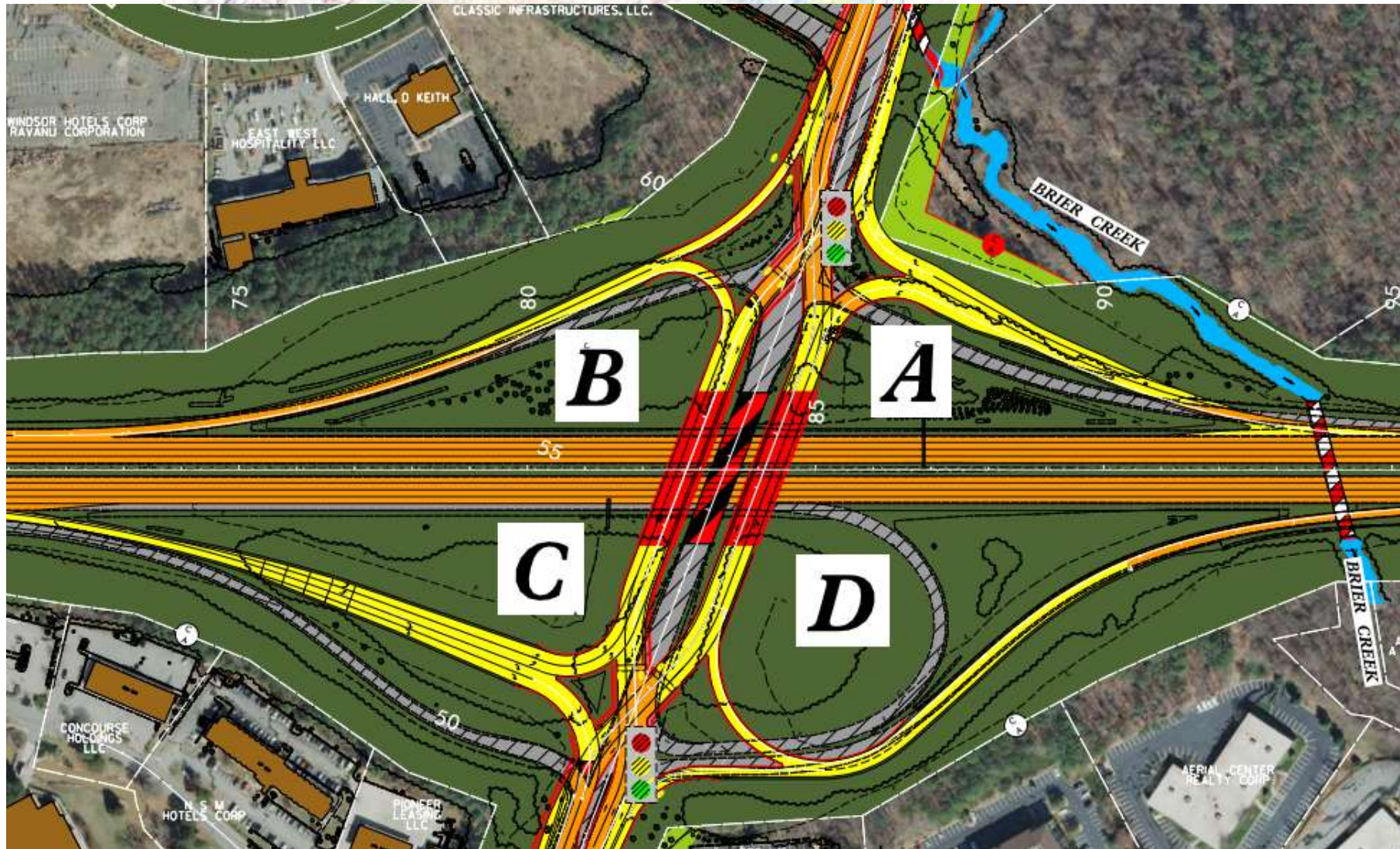
ACTIVE PROJECTS



I-40 Interchange at Airport Blvd (I-5700):

- Diverging Diamond Interchange (DDI) over I-40
- *Pedestrian Accommodations thru DDI*
- Auxiliary lanes on I-40, EB & WB
- Connects with similar project recently completed on I-40 at Aviation Parkway
- \$35M Project
- Completion in Summer 2025

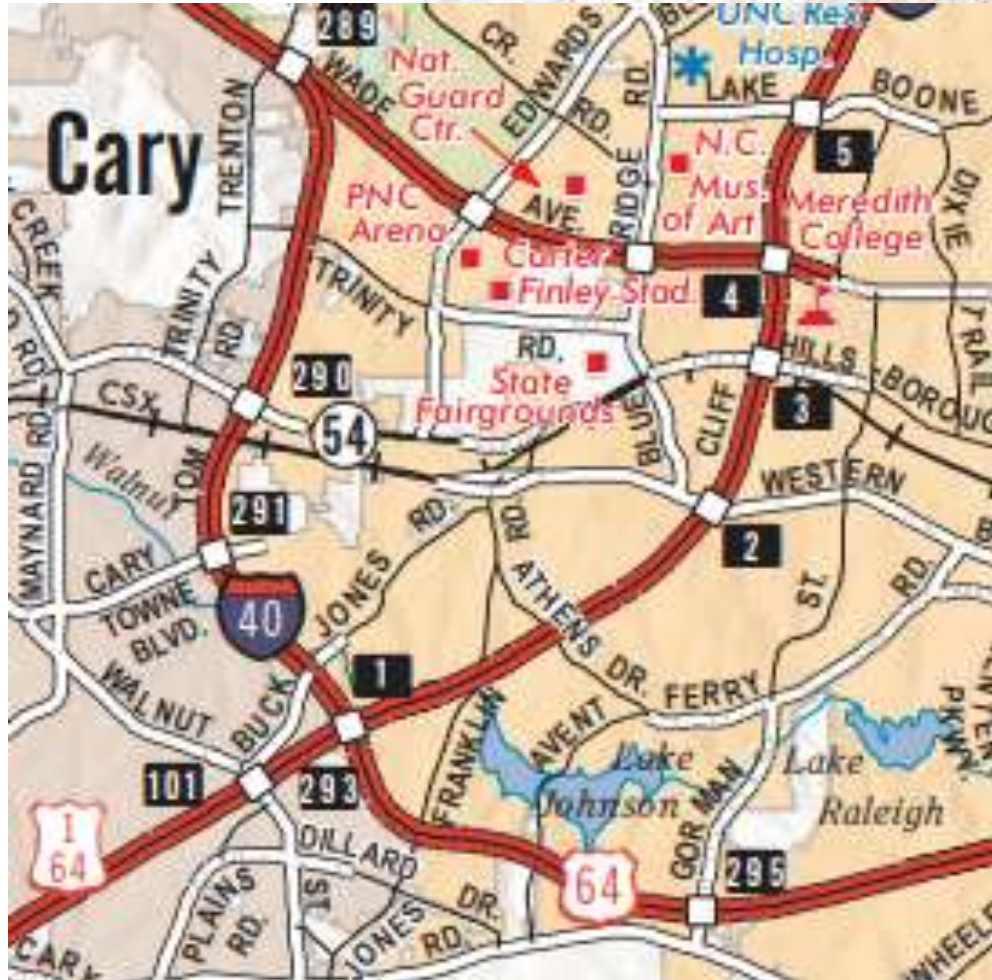
ACTIVE PROJECTS



ACTIVE PROJECTS



ACTIVE PROJECTS



I-440 Walnut to Wade (U-2719, U-4437):

- 5.5 miles; Oldest Section of I-440 Beltline
- \$346M Design Build Project
 - *Includes Blue Ridge Rd. grade separation*
- Widening from 4 to 6 lanes
- Reconstructing interchanges, bridges, pavement – modernizing the roadway
- Highly Phased Construction
- U-2719 - Substantial Completion Fall 2025
- U-4437 – Substantial Completion Winter 2025

ACTIVE PROJECTS

Wade
Avenue



ACTIVE PROJECTS

Wade
Avenue



ACTIVE PROJECTS

Wade
Avenue



ACTIVE PROJECTS

Western
Boulevard



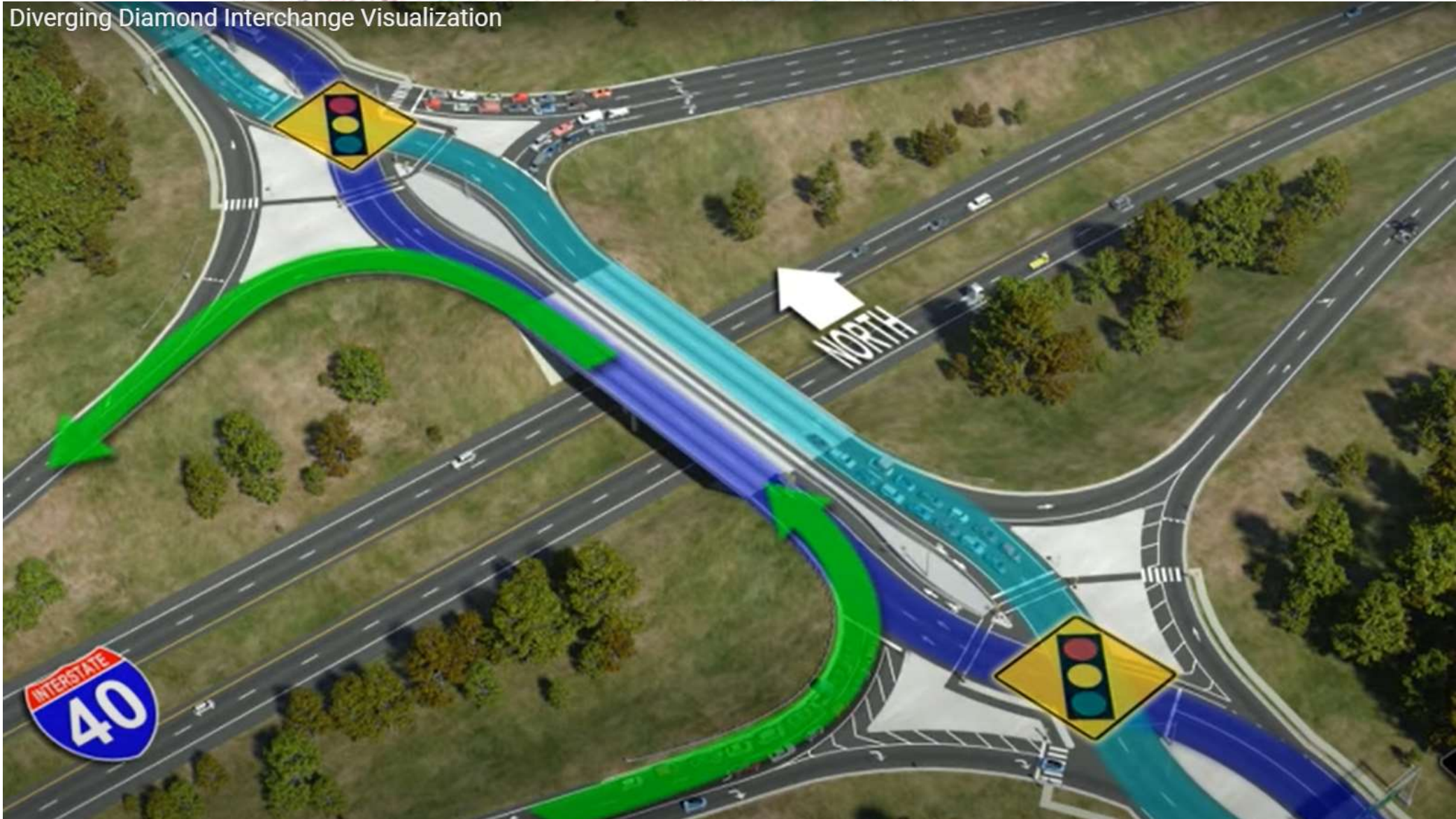
ACTIVE PROJECTS

Western
Boulevard



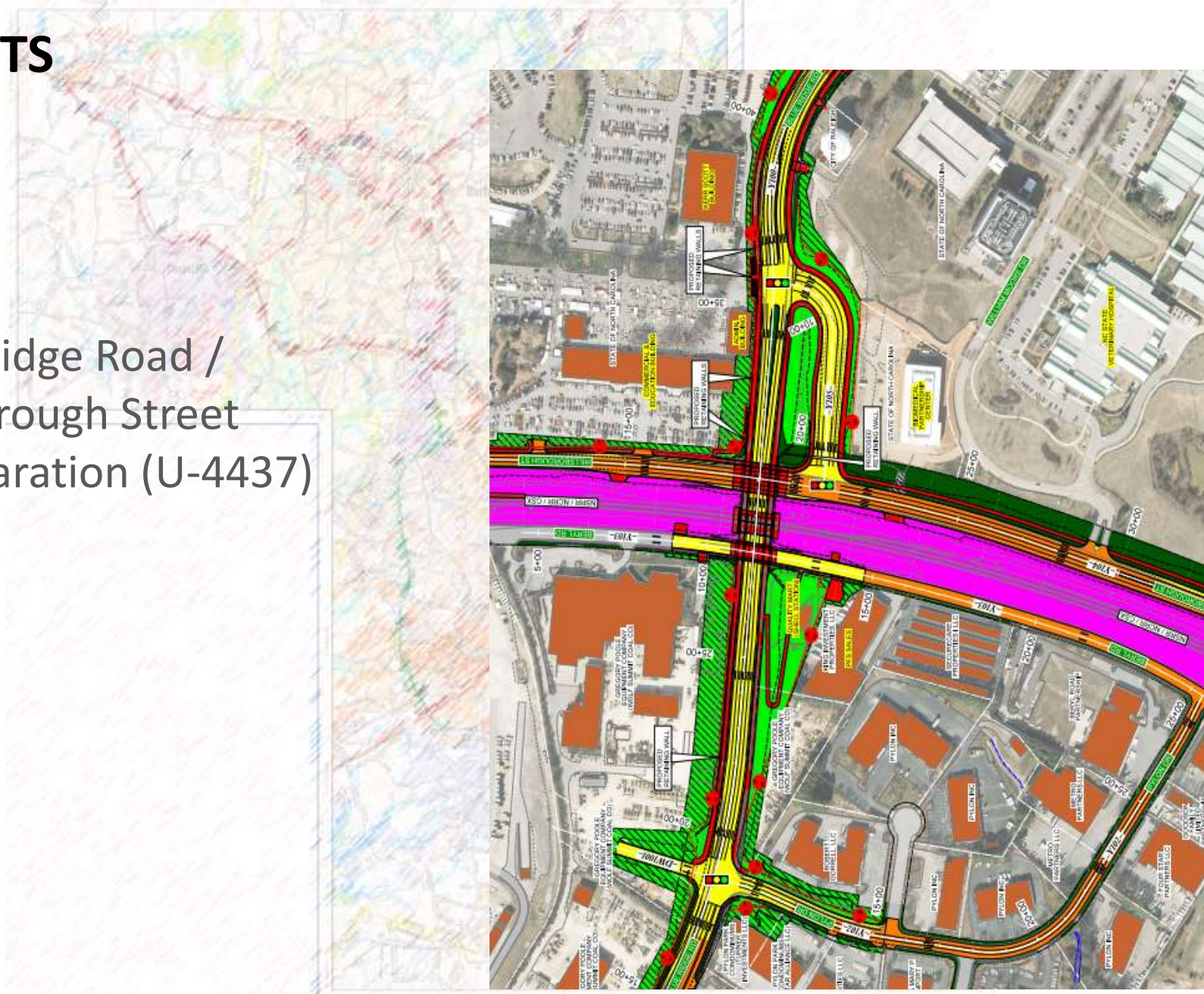
ACTIVE PROJECTS

Diverging Diamond Interchange Visualization



ACTIVE PROJECTS

Blue Ridge Road /
Hillsborough Street
Grade Separation (U-4437)



ACTIVE PROJECTS

Blue Ridge Road /
Hillsborough Street
Grade Separation (U-4437)



ACTIVE PROJECTS

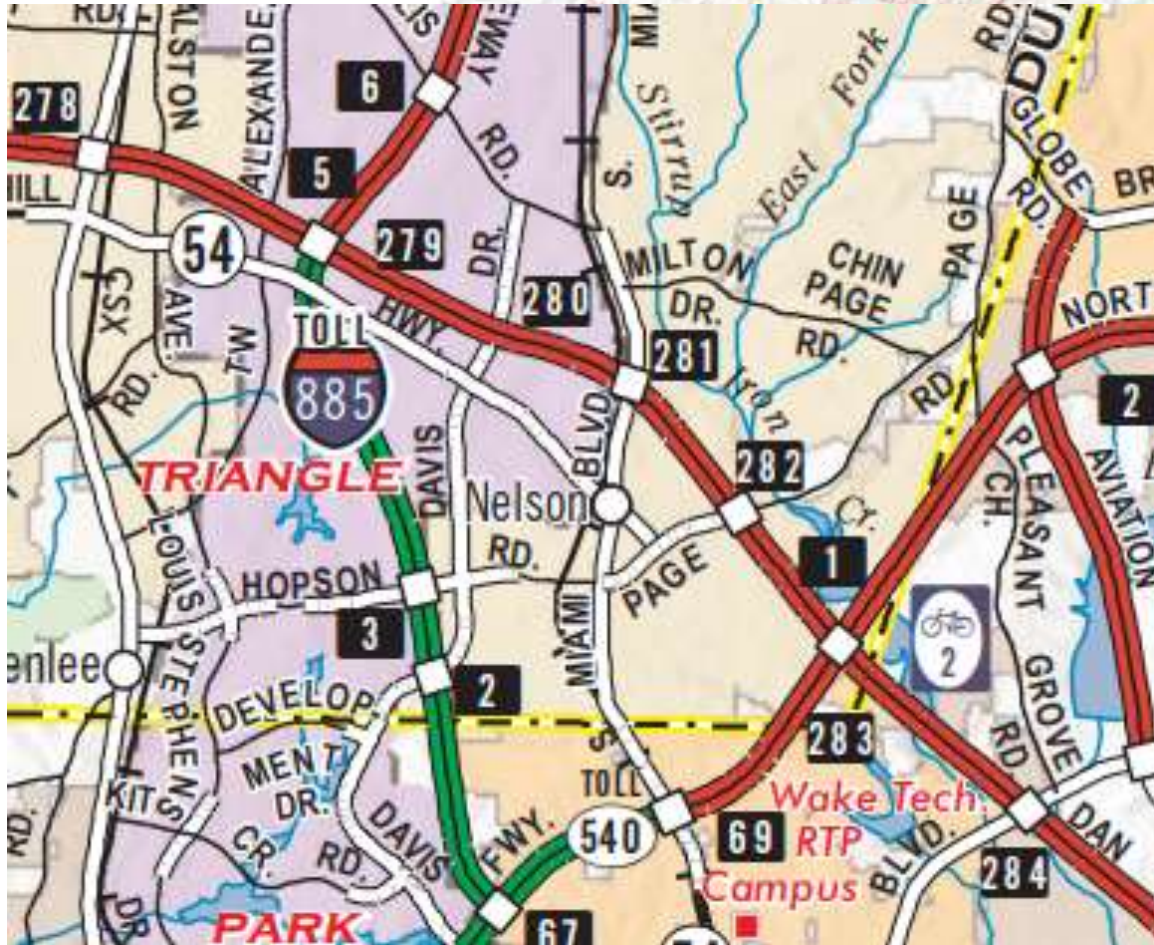
Blue Ridge Road /
Hillsborough Street
Grade Separation
(U-4437)







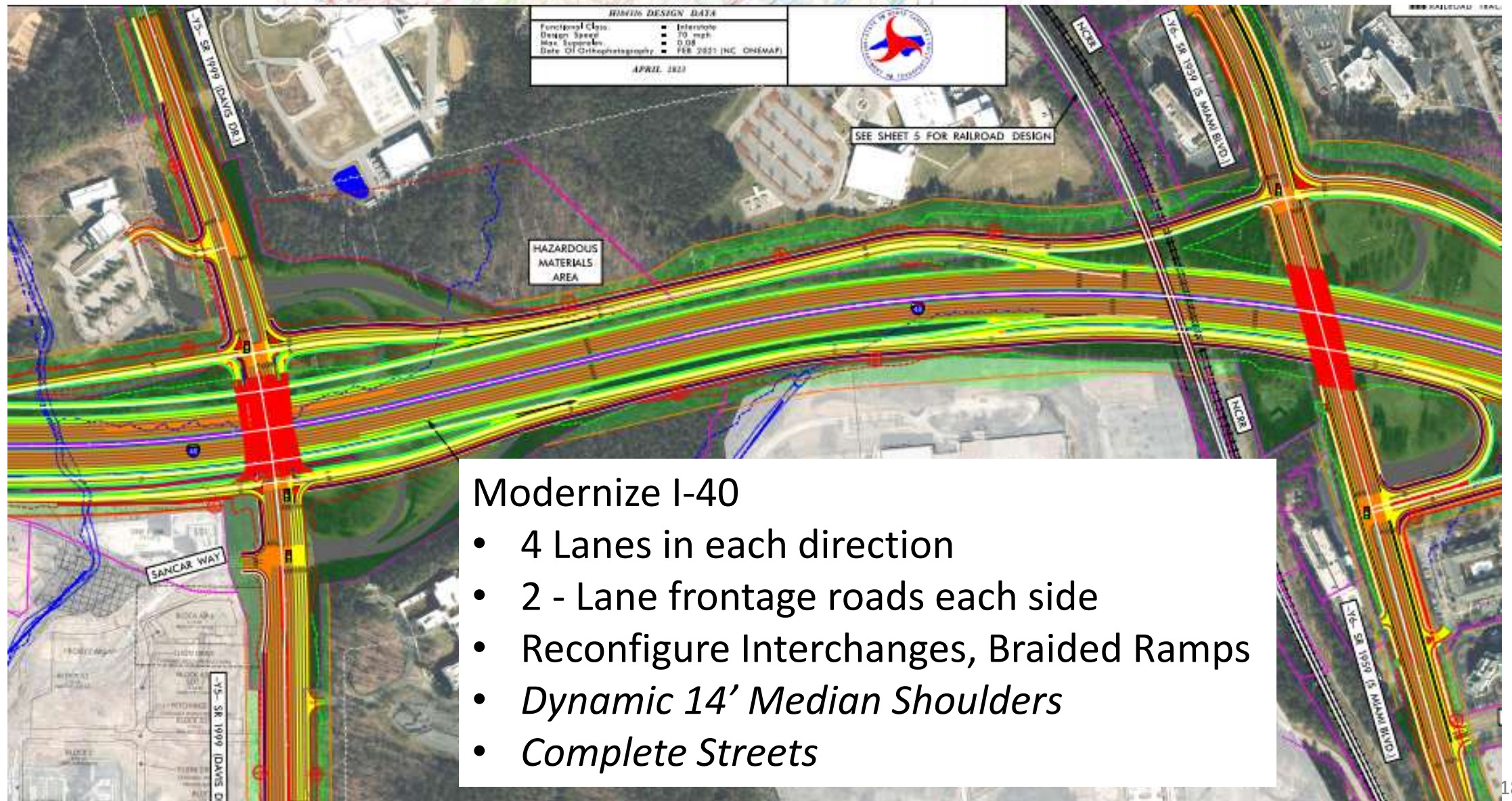
FUTURE PROJECTS



I-40 in Research Triangle Park:

- 5 miles, NC 55 to Airport Boulevard
- 200,000 AADT – highest in N.C.
- Strategic Truck Corridor (7-10K trucks/day)
- 5 Major Interchanges:
 - I-885, I-540
 - Davis Drive, Miami Blvd, Page Road
- Numerous merges/diverges

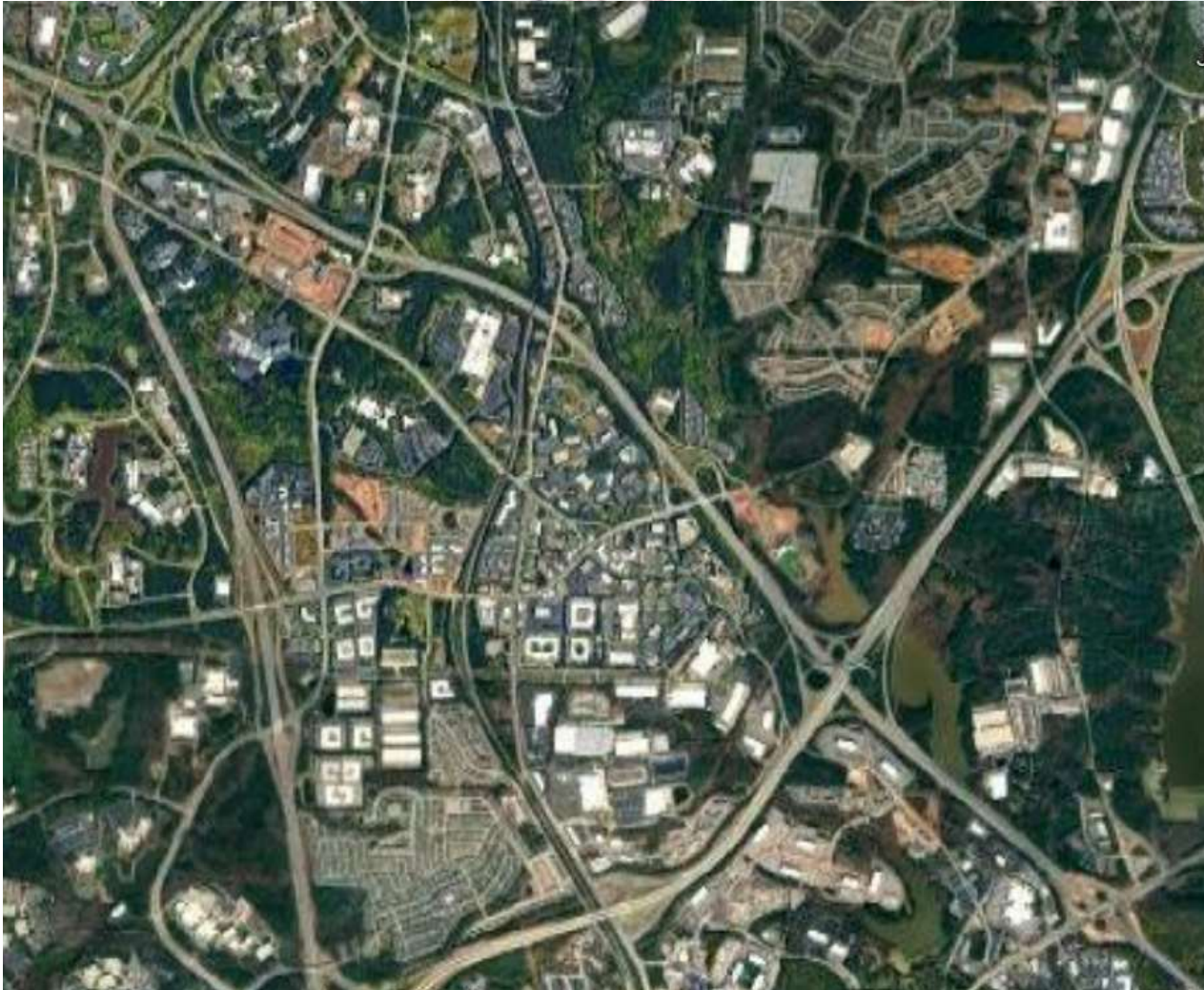
FUTURE PROJECTS



Modernize I-40

- 4 Lanes in each direction
- 2 - Lane frontage roads each side
- Reconfigure Interchanges, Braided Ramps
- *Dynamic 14' Median Shoulders*
- *Complete Streets*

FUTURE PROJECTS



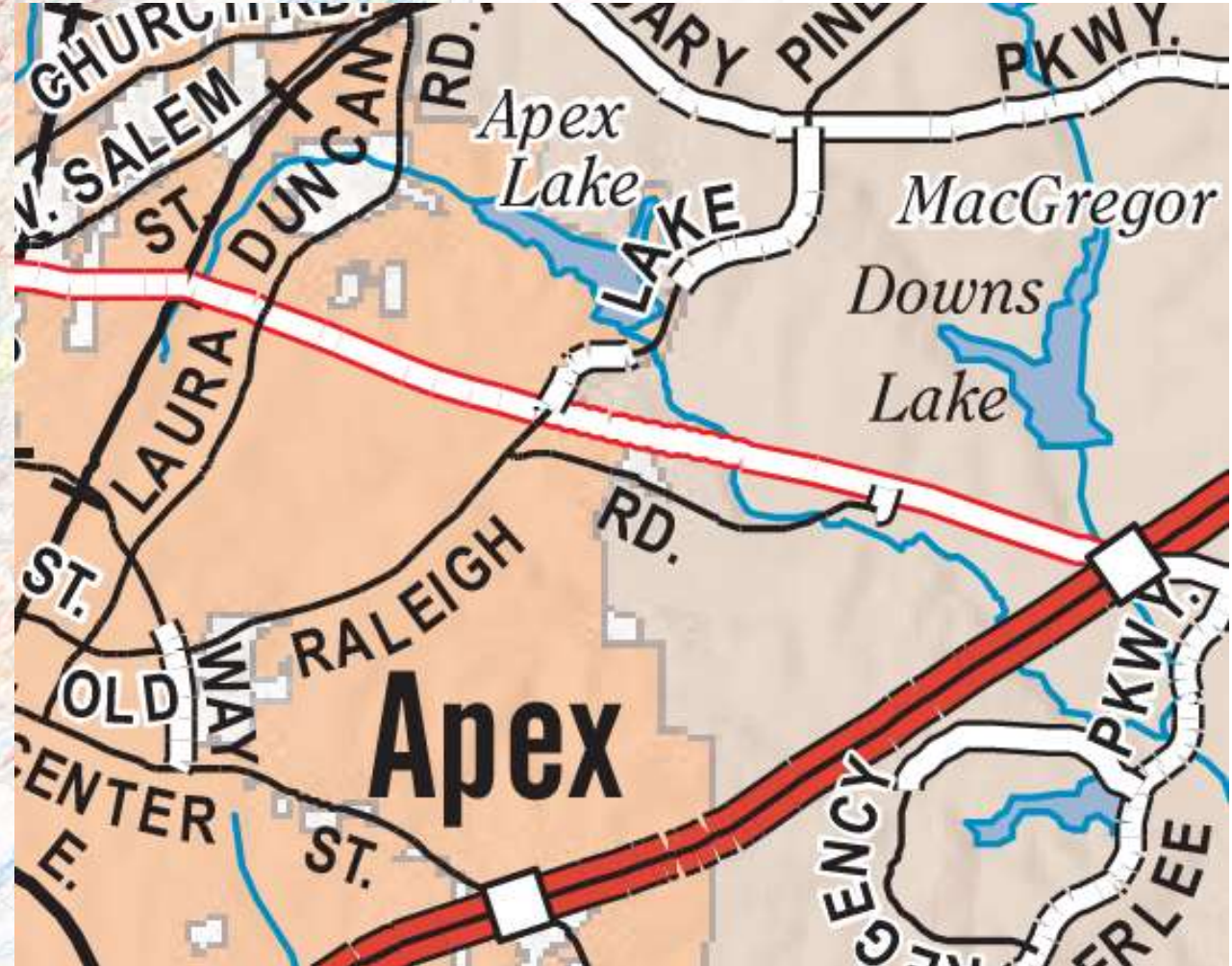
I-40 in Research Triangle Park:

- Estimated Cost - \$500.4M
- Not in 2024-2033 STIP
- Did not score sufficiently in Prioritization P7.0 for selection on the Statewide Tier
- Continuing to evaluate strategies

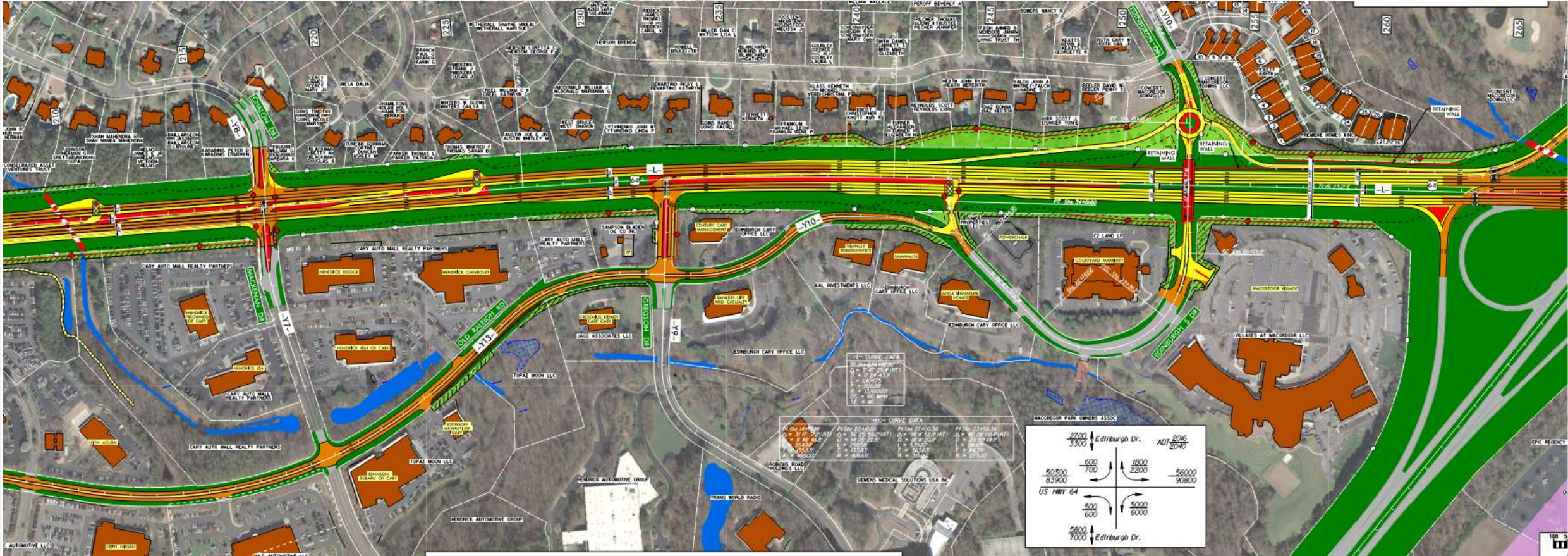
FUTURE PROJECTS

U-5301 – US 64 Cary / Apex:

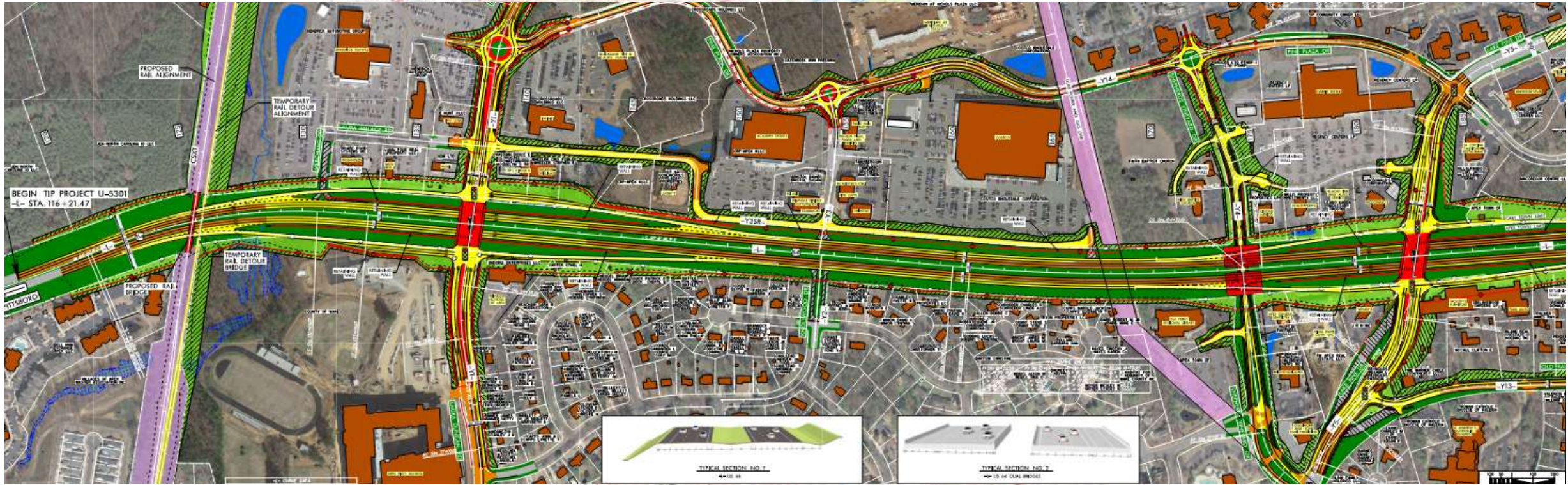
- 3 miles
- US 1 to West of Laura Duncan Rd
- Included in 2024-2033 STIP
- Widen to RCI corridor
- Interchanges:
 - Lake Pine Drive
 - Laura Duncan Road
- *Complete Streets – service roads, cross streets*



FUTURE PROJECTS

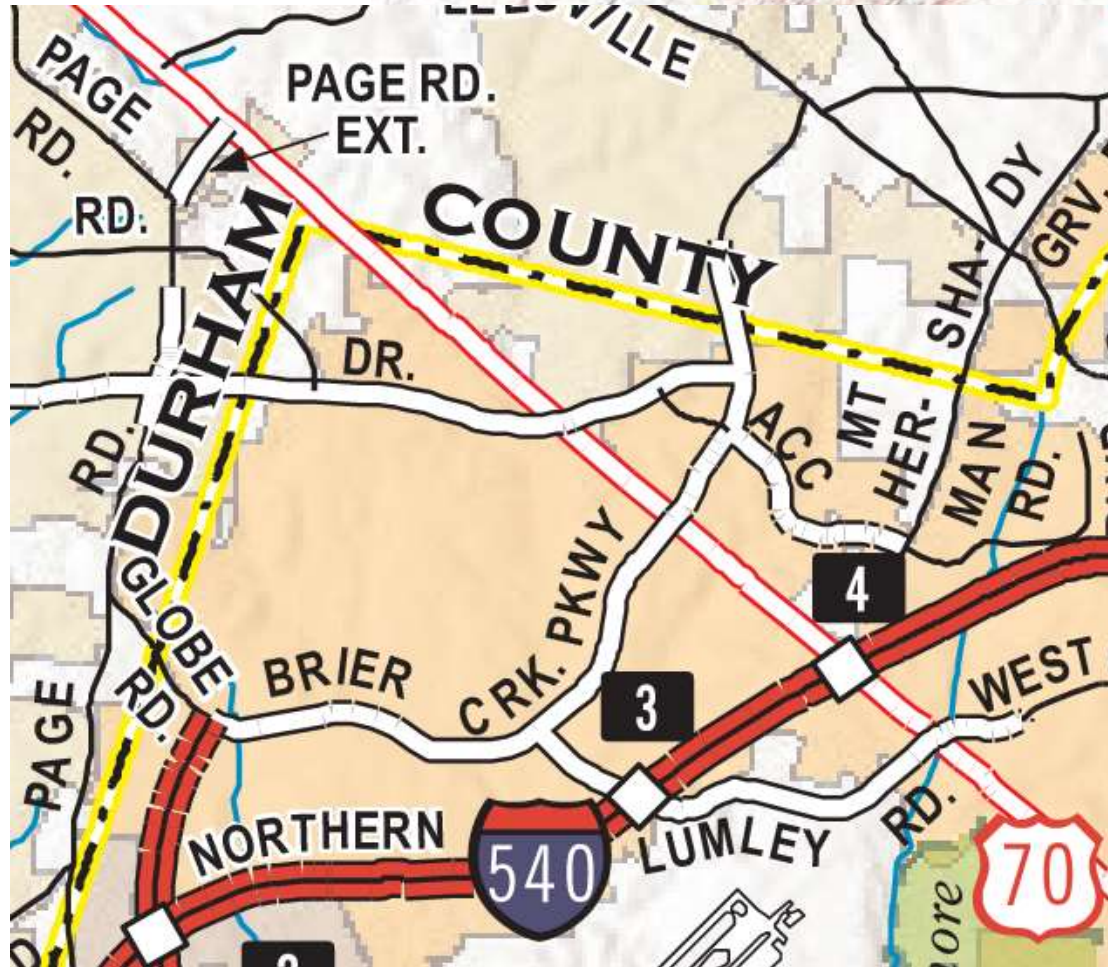


FUTURE PROJECTS



- ROW: FY 2027
- CONSTRUCTION: FY 2030

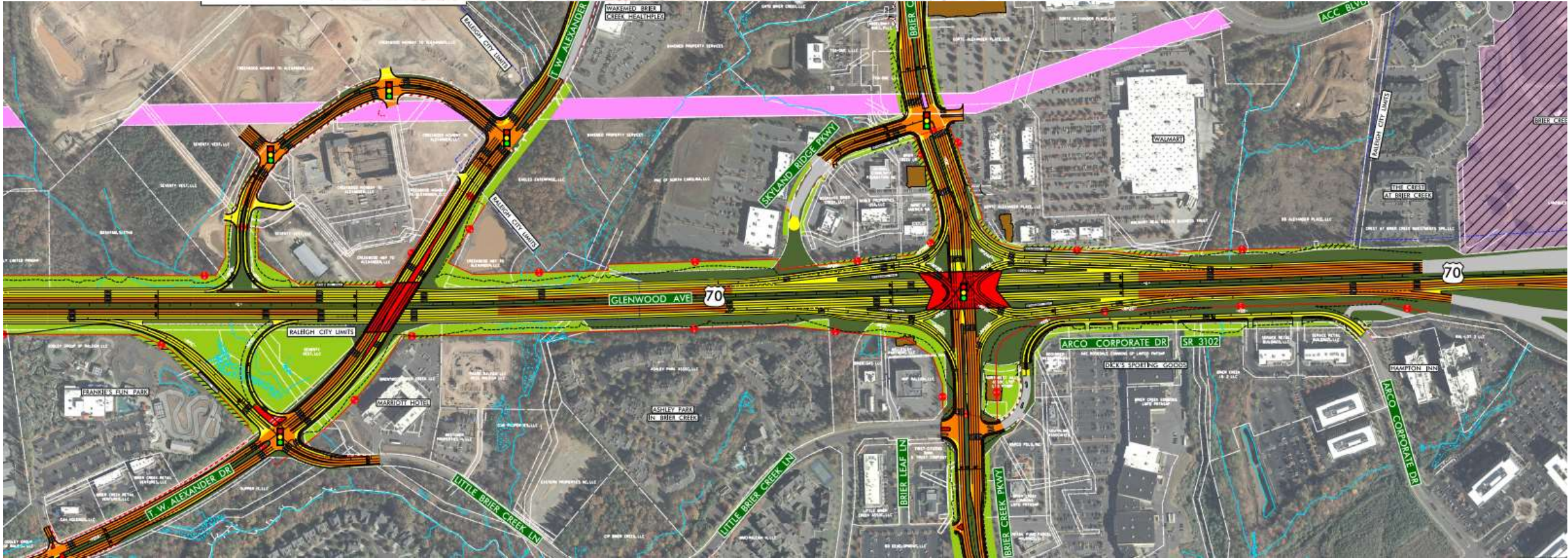
FUTURE PROJECTS



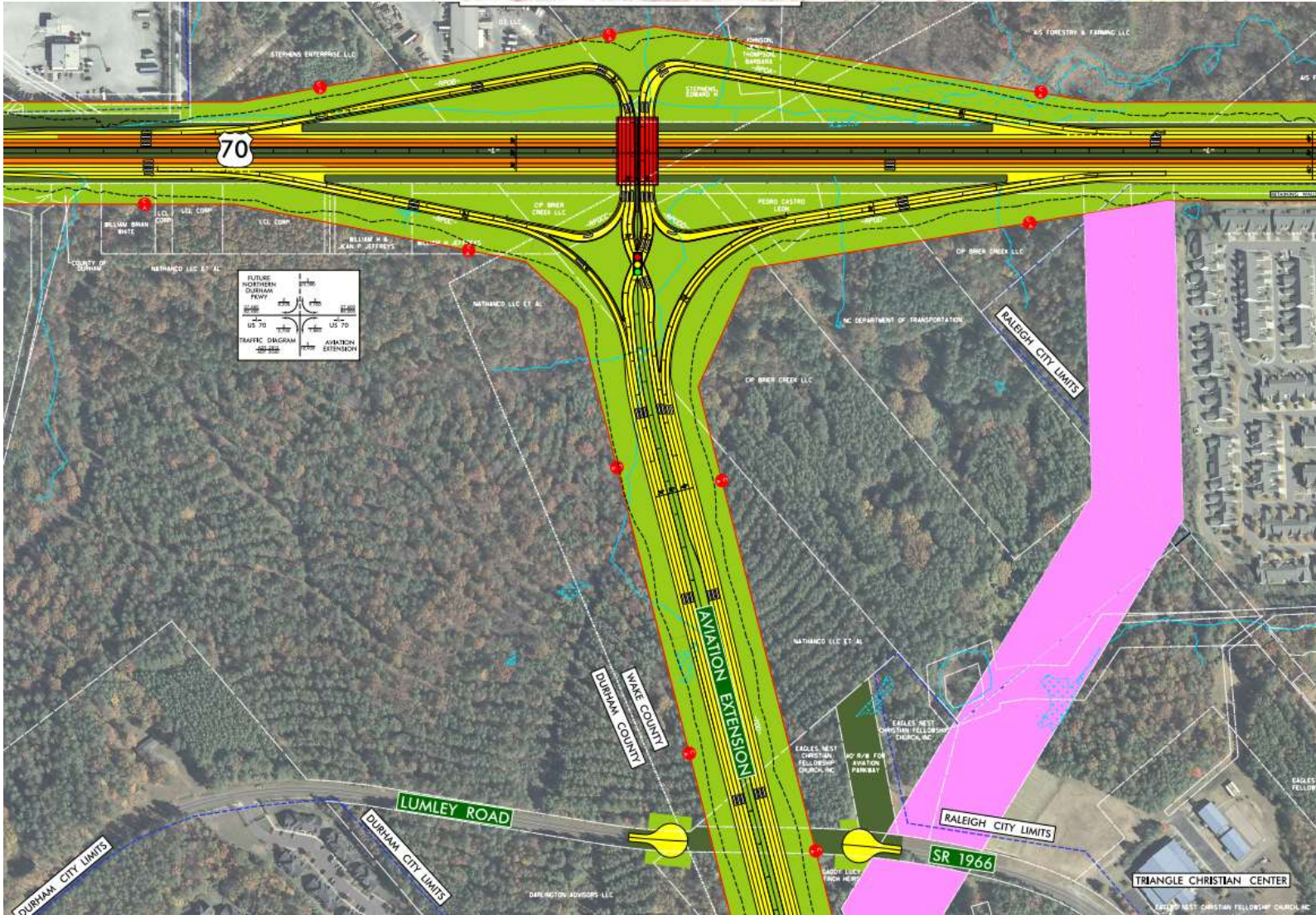
U-5518 – US 70 in western Wake

- 2.5 miles, I-540 to Page road Extension
- Included in 2024-2033 STIP
- Convert to Freeway
- Interchanges:
 - Brier Creek Parkway
 - TW Alexander Drive
 - Aviation Parkway Extension
- *Complete Streets – interchanges, cross streets*

FUTURE PROJECTS



FUTURE PROJECTS

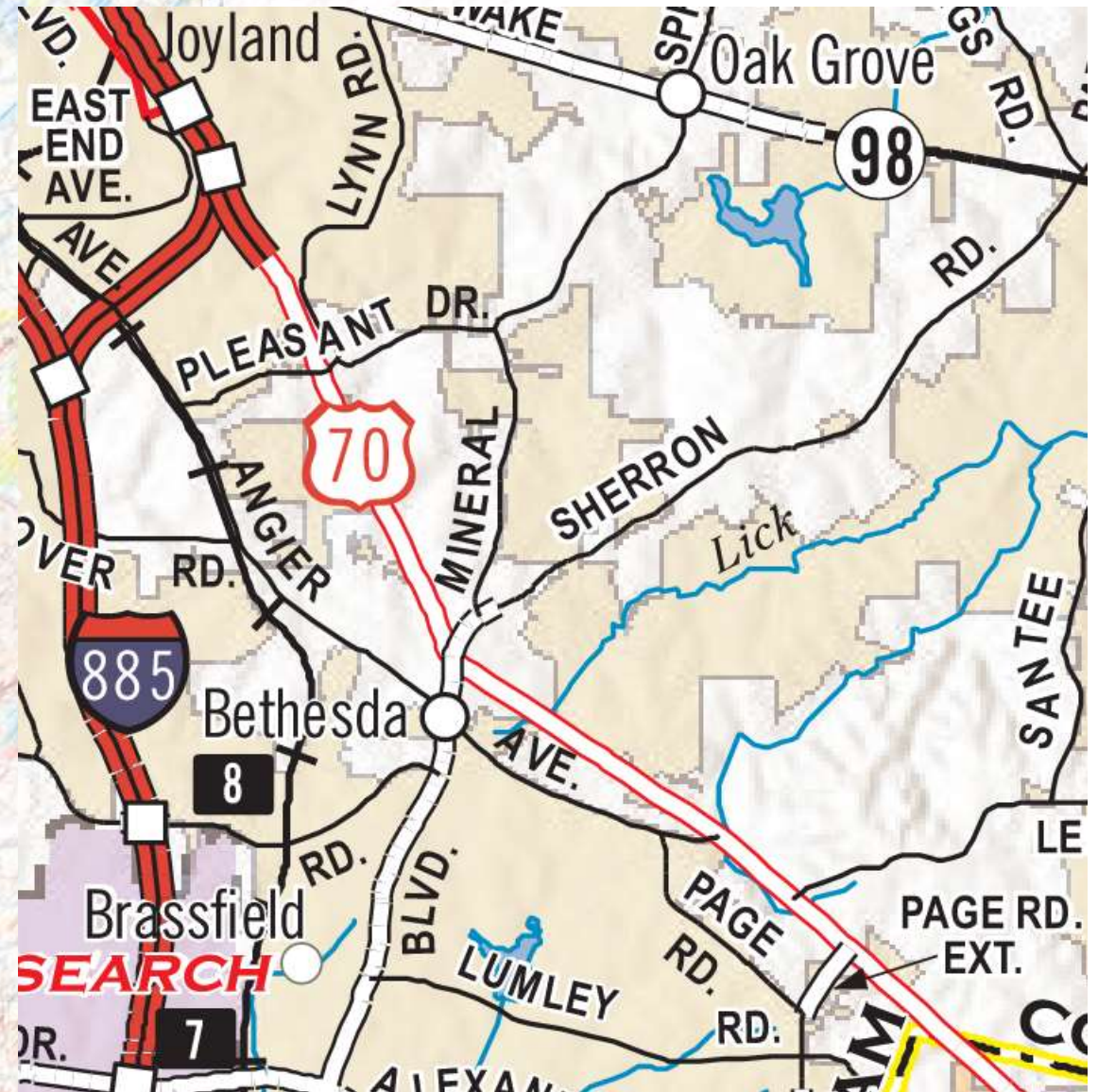


- Significant Utilities
- Currently coordinating relocations
- DESIGN BUILD LET - 2028

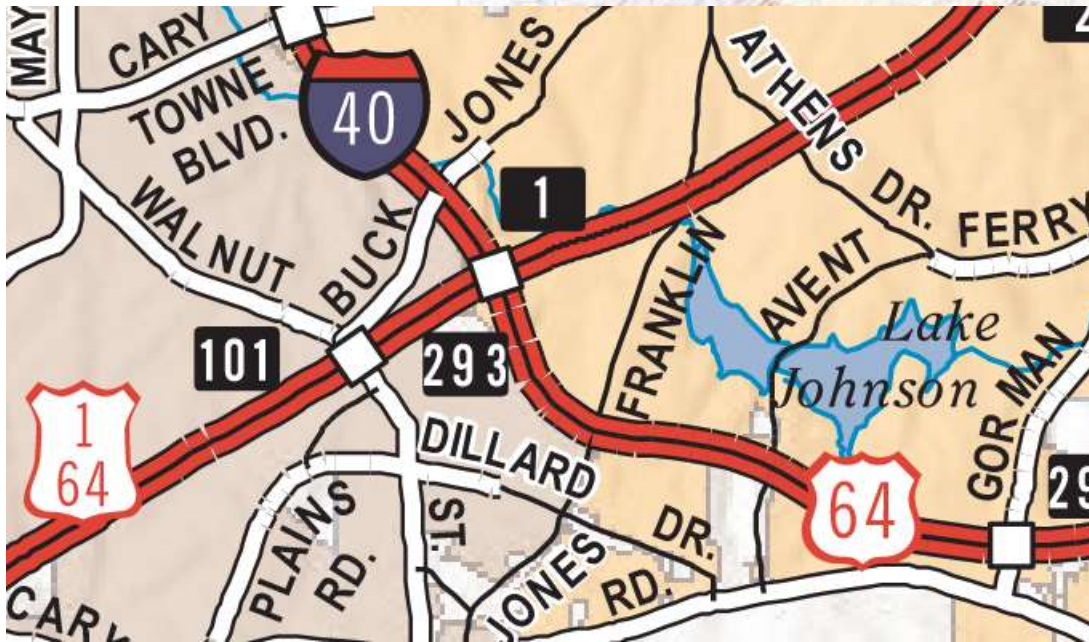
FUTURE PROJECTS

U-5720 – US 70 in eastern Durham

- 3+ miles, I-885 to Page Road Extension
- Not in 2024-2033 STIP
- Prior NCDOT work:
 - Alternate evaluations
 - Convert to Freeway
 - Interchange at Miami/Mineral Springs/Sherron Road
- Awaiting DCHCMPO Corridor Study, traffic analysis comparison



FUTURE PROJECTS



I-5703 / I-5701: I-40 / I-440 / US 1-64

- Included in 2024-2033 STIP
- Upgrade I-40 / I-440 / US1-64 Interchange
 - Add Flyover Bridges
 - Eliminate back-to-back loop merges
- Revise Walnut Street Interchange
- I-40 Auxiliary Lanes to Lake Wheeler Rd.

FUTURE PROJECTS

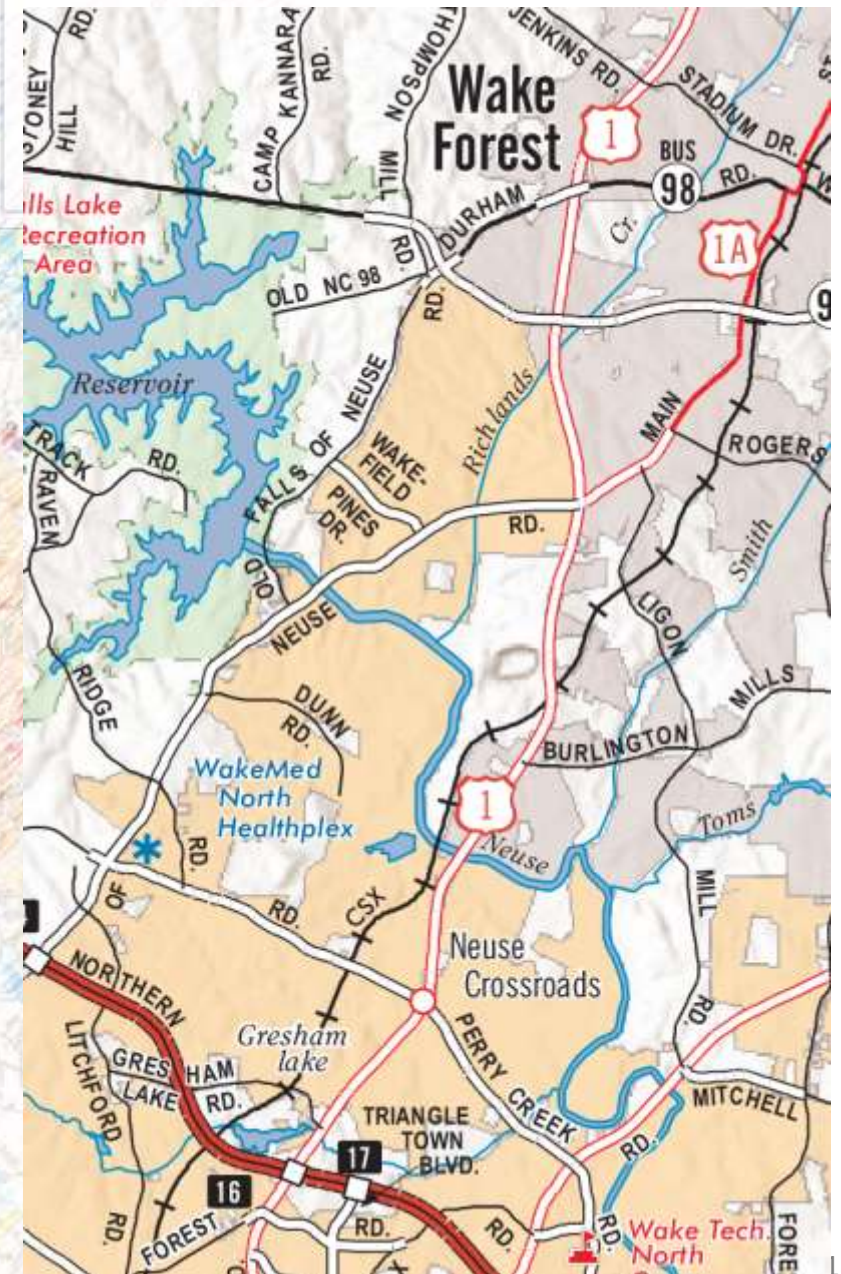


DESIGN BUILD LET: 2027

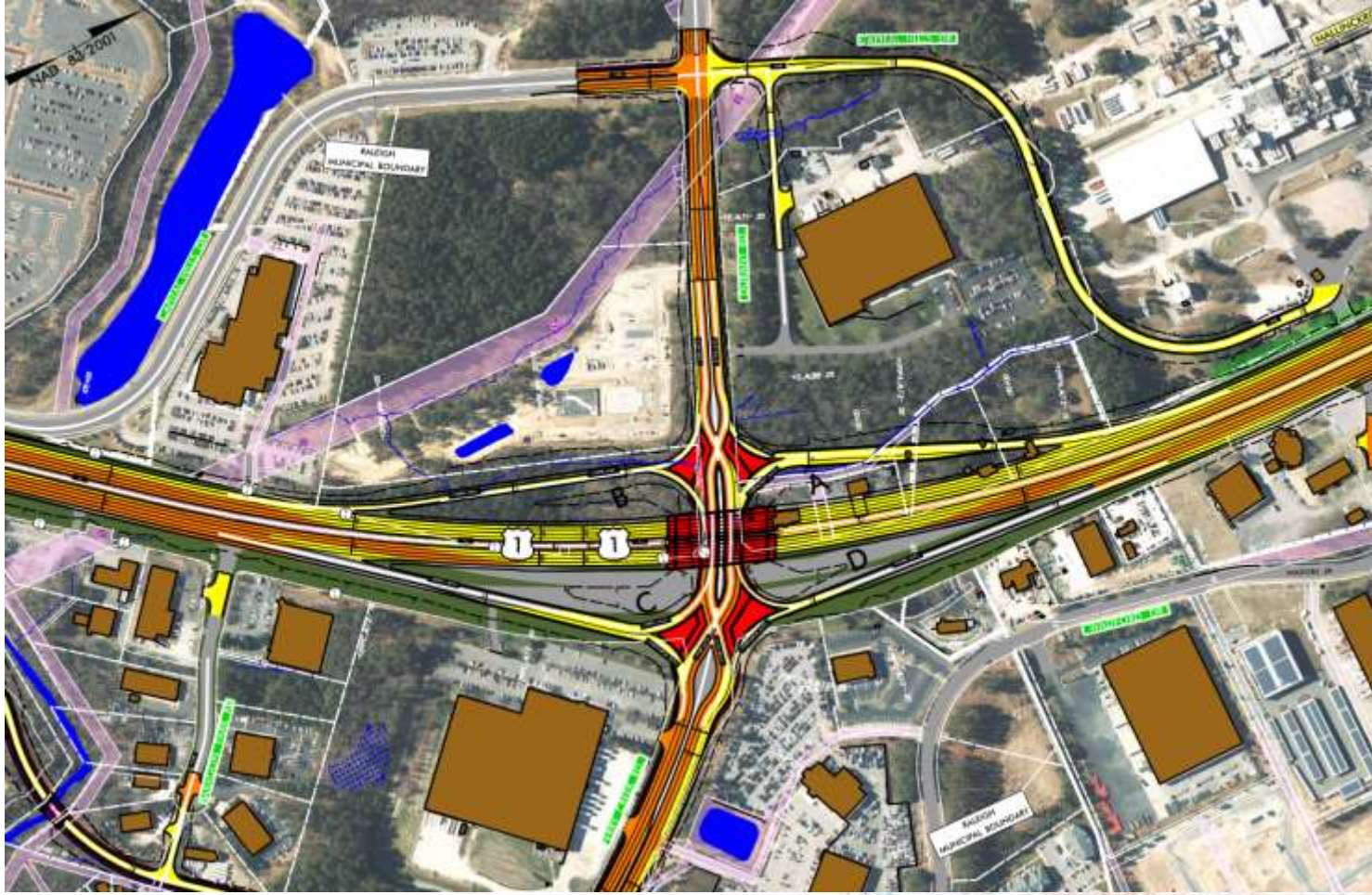
FUTURE PROJECTS

U-5307: Capital Boulevard

- 10+ miles, I-540 to Franklin County
- Convert to Freeway, with service roads
- Interchanges:
 - Durant/ Perry Creek Road
 - Burlington Mills Road
 - Falls of Neuse Rd./ US 1A
- Design Considerations:
 - *Bike/Ped – Complete Streets*
 - *Grade Separations*
 - *Service Roads*
 - *BOSS, dynamic shoulders, BRT (?)*



FUTURE PROJECTS



- U-5307A – I-540 to Durant/Perry Creek Rd.
 - Committed in 2024-2033 STIP
 - Cost Estimate - \$389.4M
 - DESIGN BUILD LET: Early FY 2026

FUTURE PROJECTS



- U-5307B – Neuse River, Burlington Mills Road
- U-5307C – Falls of Neuse Rd / US 1A, NC 98 Bus
 - Recently selected for Statewide Tier – Prioritization P7.0
 - Programming TBD
 - Cost Estimate - \$440.7M



FUTURE PROJECTS

- U-5307D – NC 98 Bus to Purnell/Harris Rd.
 - Unfunded
 - Cost Estimate - \$279.4M
- Total Corridor Cost - \$1.04B
- NCTA – Traffic & Revenue Study
- Toll Option to Accelerate Funding and Construction



Toll Revenue

JJ Eden

Executive Director

NC Turnpike Authority

N.C. Turnpike Authority Update

J.J. Eden

August 06, 2024





Why Tolling?

1

Build
Projects Faster

2

More
Travel Options

3

Improved
Travel Times

4

Additional Funding
Source

5

Support
Growing Populations



Why Tolling?

1

Build
Projects Faster

2

More
Travel Options

3

Improved
Travel Times

4

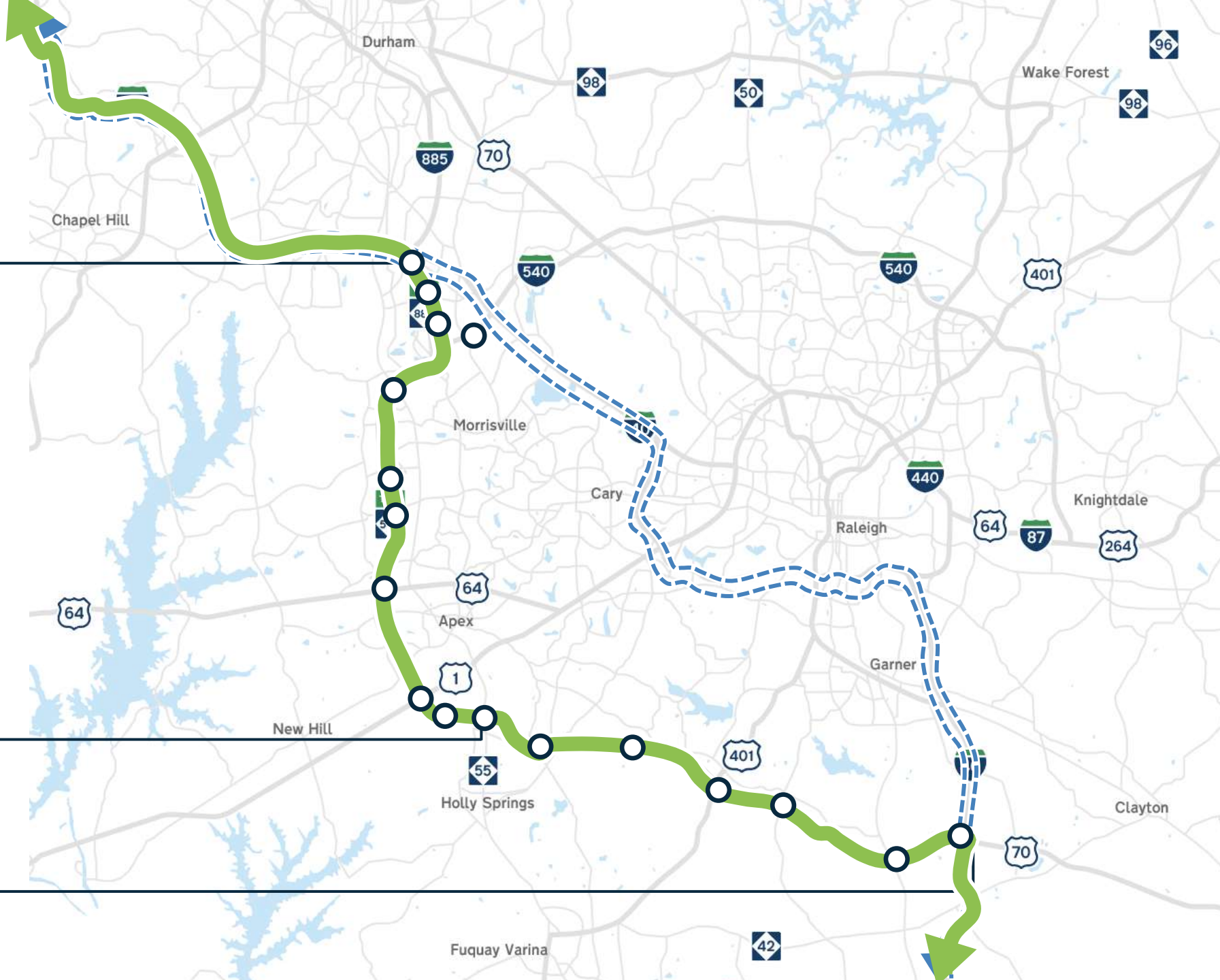
Additional Funding
Source

5

Support
Growing Populations

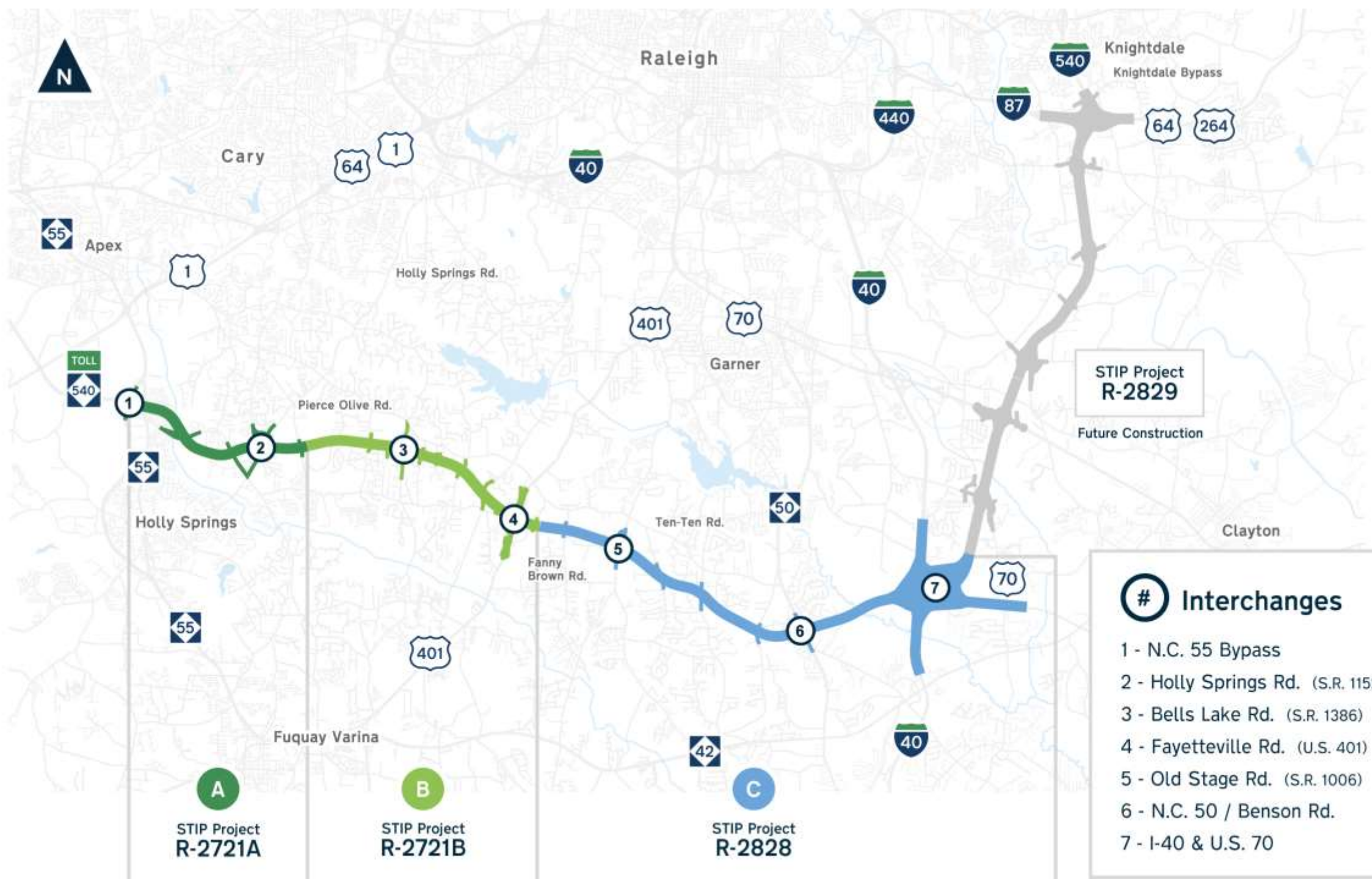
Triangle Expressway
Open to traffic

Complete 540 Phase 1
Under construction





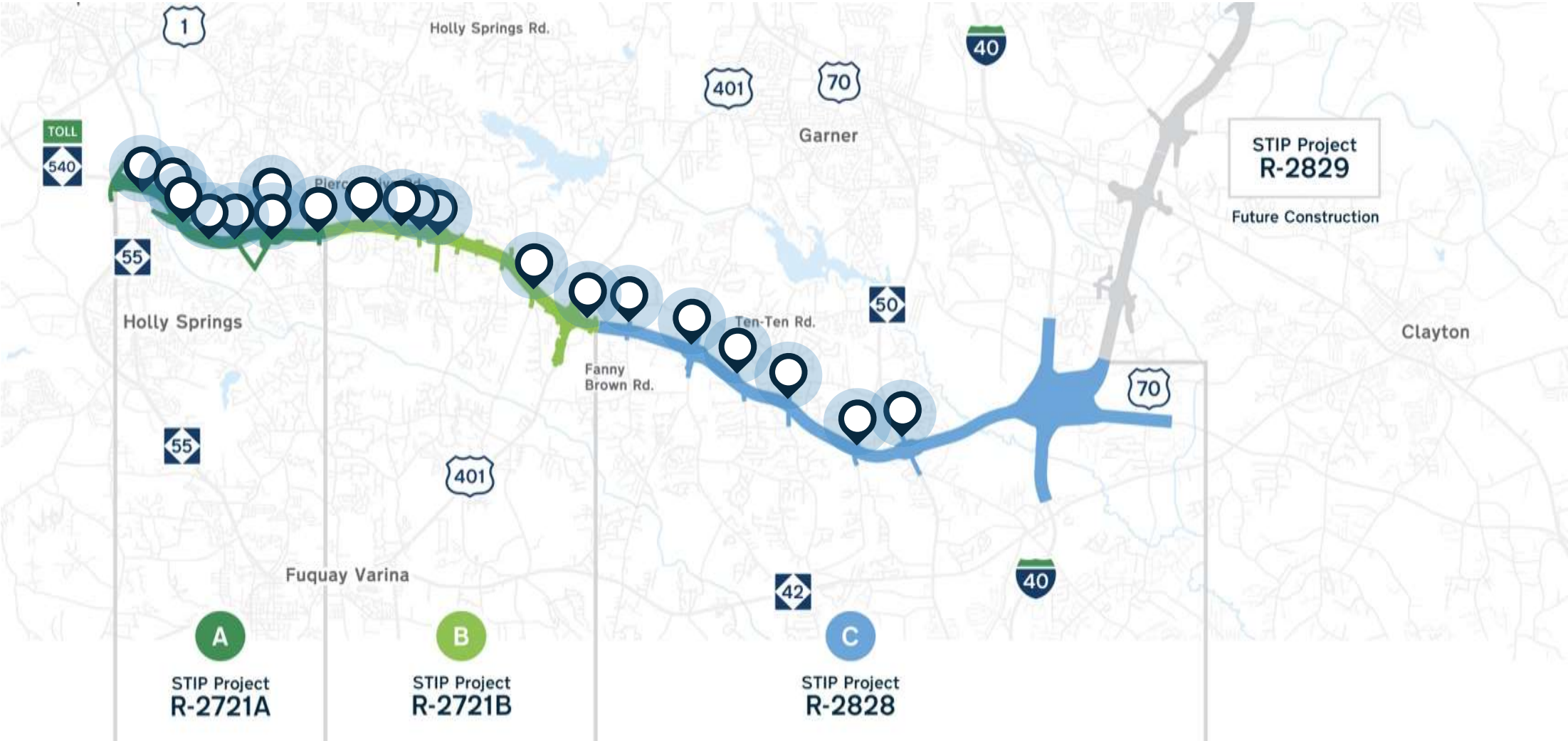
Complete 540
Phase 1 Construction



I-40, U.S. 70/ I-42 and the future Toll N.C. 540



Bike/Pedestrian/Multi-Use Accommodations



Uniqueness



Over \$80 million in work during Phase 1 for DBEs



Relocated a beehive from a house



Worked with NC Native Plant Society to relocate plants



Unearthed artifacts from ~10,000 years ago



Incorporated inlaid pavement markings



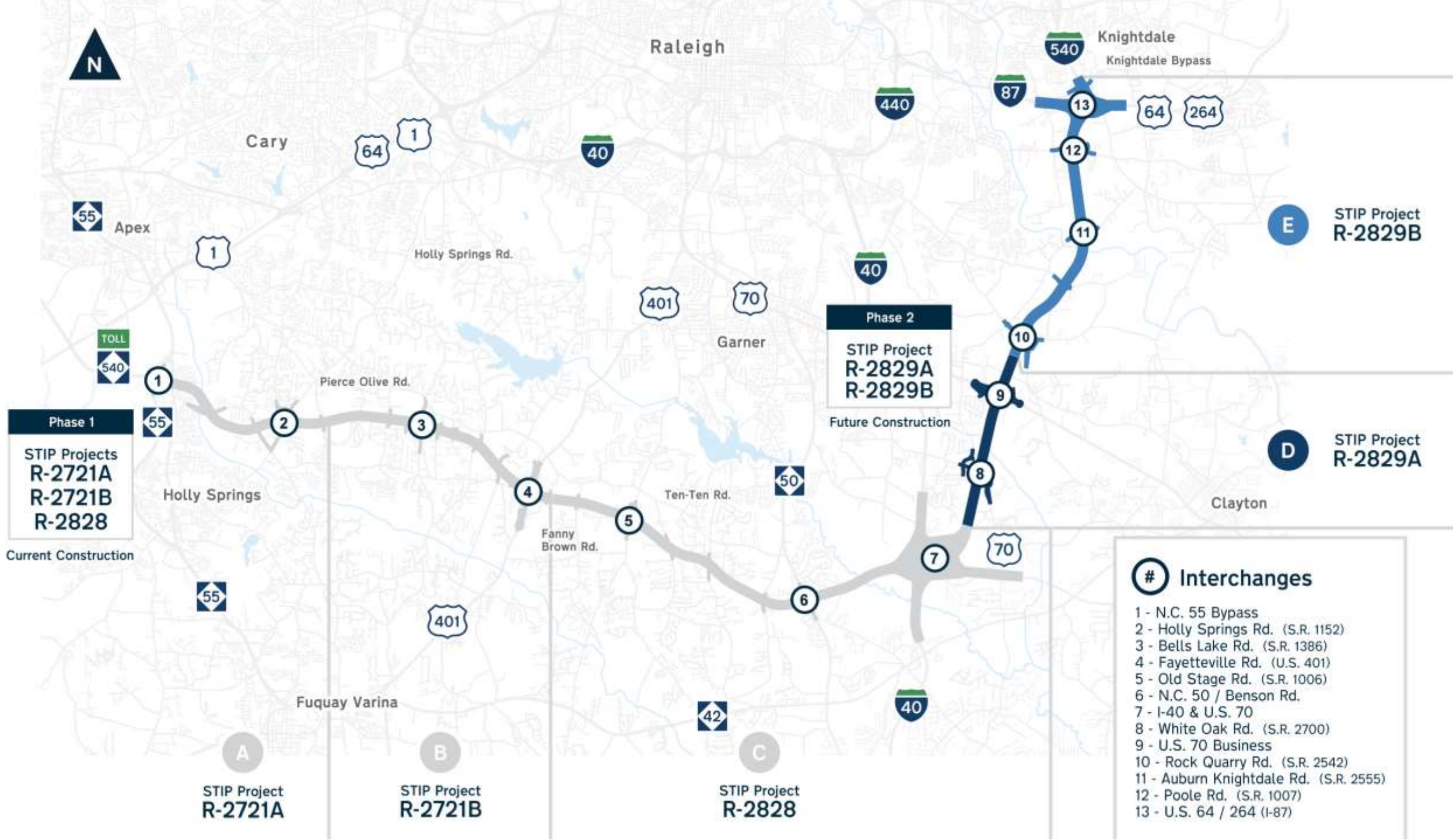
NCTA is exploring options to incorporate transit accommodations





Complete 540

Phase 2



Phase 2 Groundbreaking



The background features a dark blue field with a subtle, light-colored hexagonal grid pattern. Overlaid on this are several dynamic, glowing trails of small particles. These trails originate from the left and curve towards the right, with colors ranging from light blue to bright green. The overall aesthetic is modern and digital.

Capital Blvd

Capital Blvd Update



Request

In early 2024, NCDOT received a request from CAMPO to explore alternative funding options. RTA and the Town of Wake Forest recently sent NCTA a letter, reaffirming support.



Current Status

In coordination with CAMPO, Traffic and Revenue work is underway, including expressway and express lanes options.



Next Steps

The Traffic and Revenue analysis is expected to complete before the end of the year. NCDOT will present findings to CAMPO.



I-40 Regional Partnership

Jennifer Portanova

NCDOT Mobility and Safety Division,
State Transportation Systems

Management Operations Engineer and
I-40 Regional Partnership Executive



NORTH CAROLINA
Department of Transportation

Assessment of I-40 in the Triangle

Jennifer Portanova, PE, CPM

NCDOT Transportation Systems Management and Operations (TSMO) Engineer
I-40 Regional Partnership Executive

August 6, 2024

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

Effects of Congestion

Safety

Increased Travel Times

Crashes

Secondary Crashes

Lost Revenue

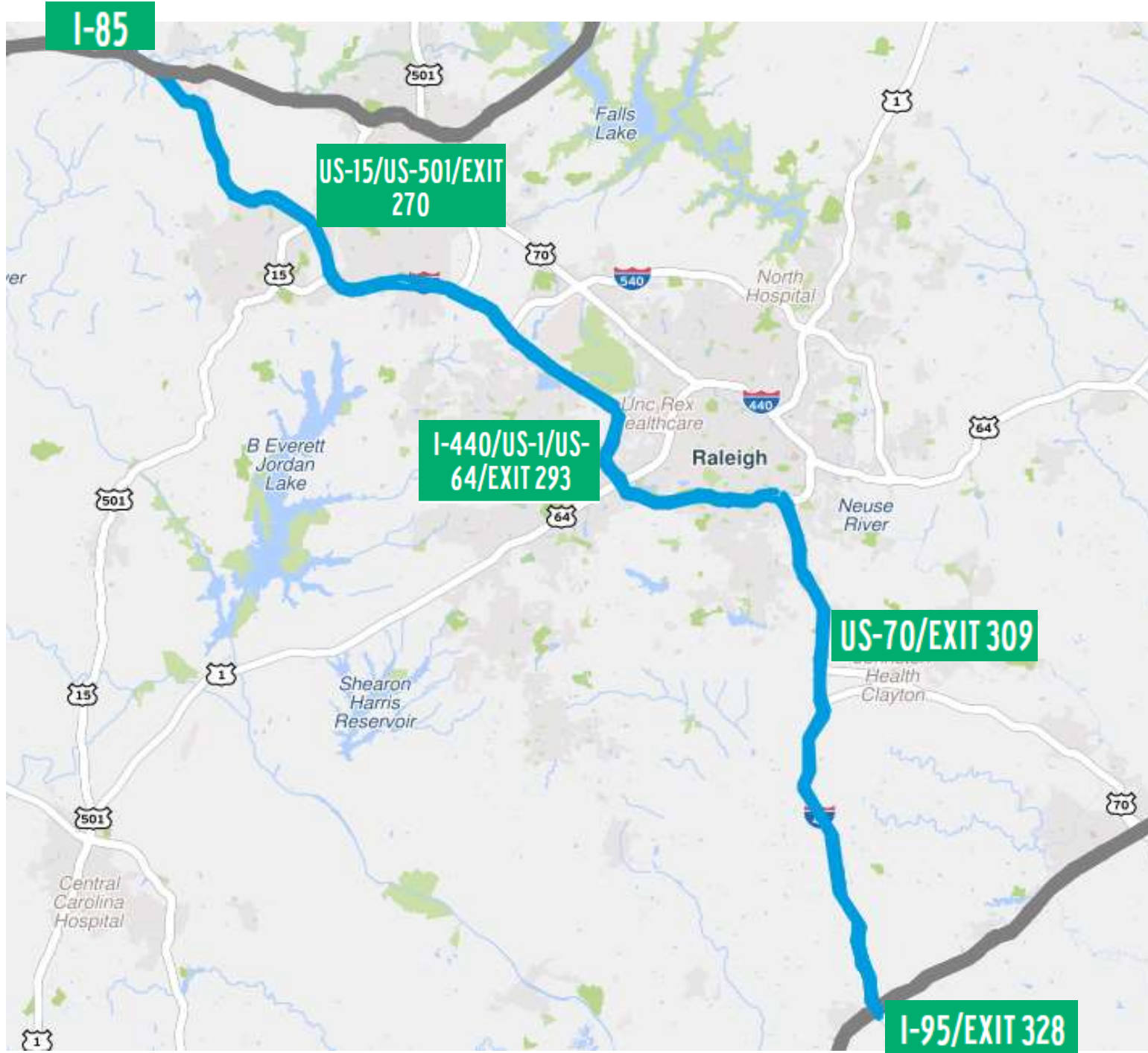
Delayed Commerce

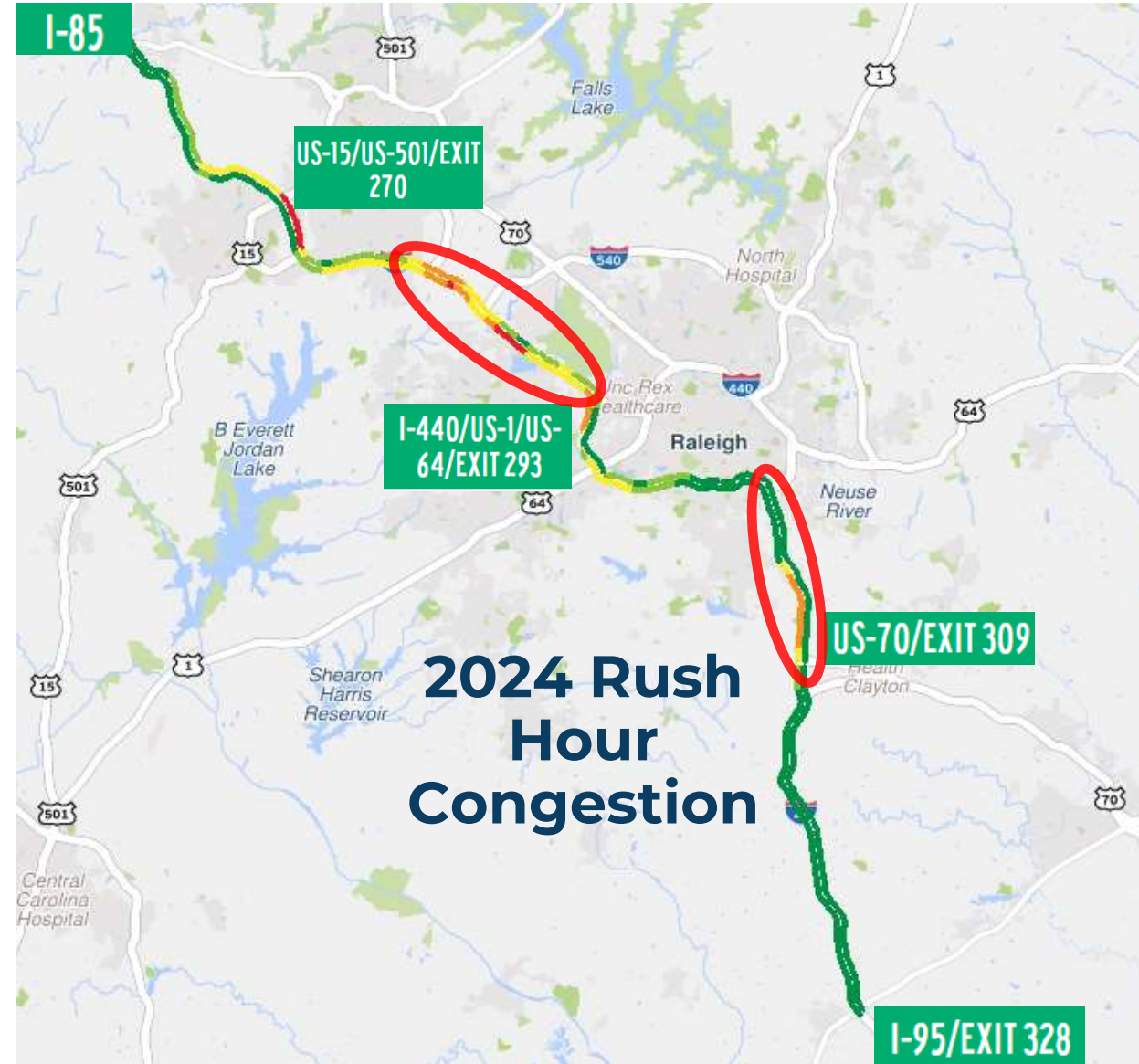
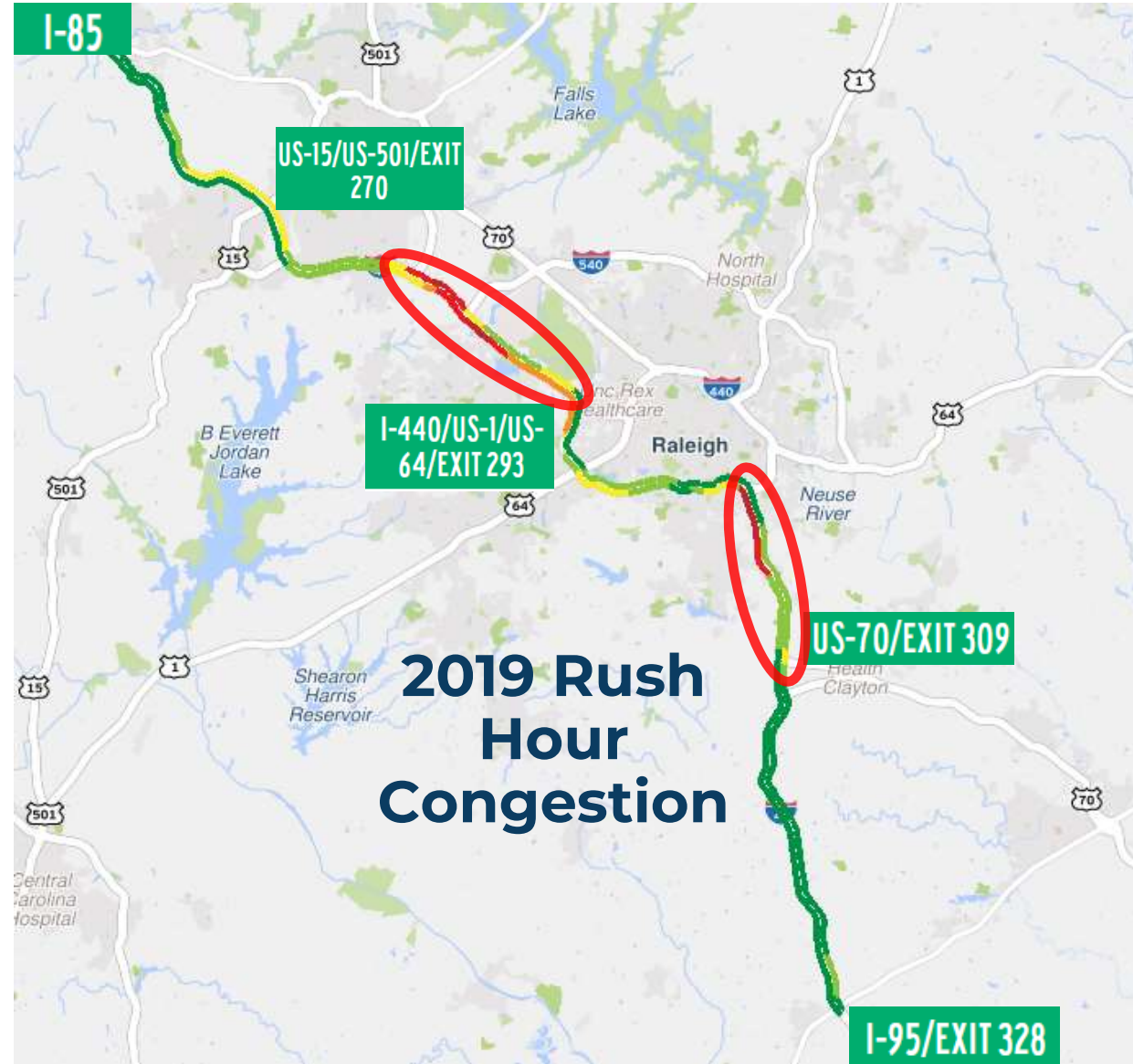
Reduction in Air Quality

Logistics Interruption

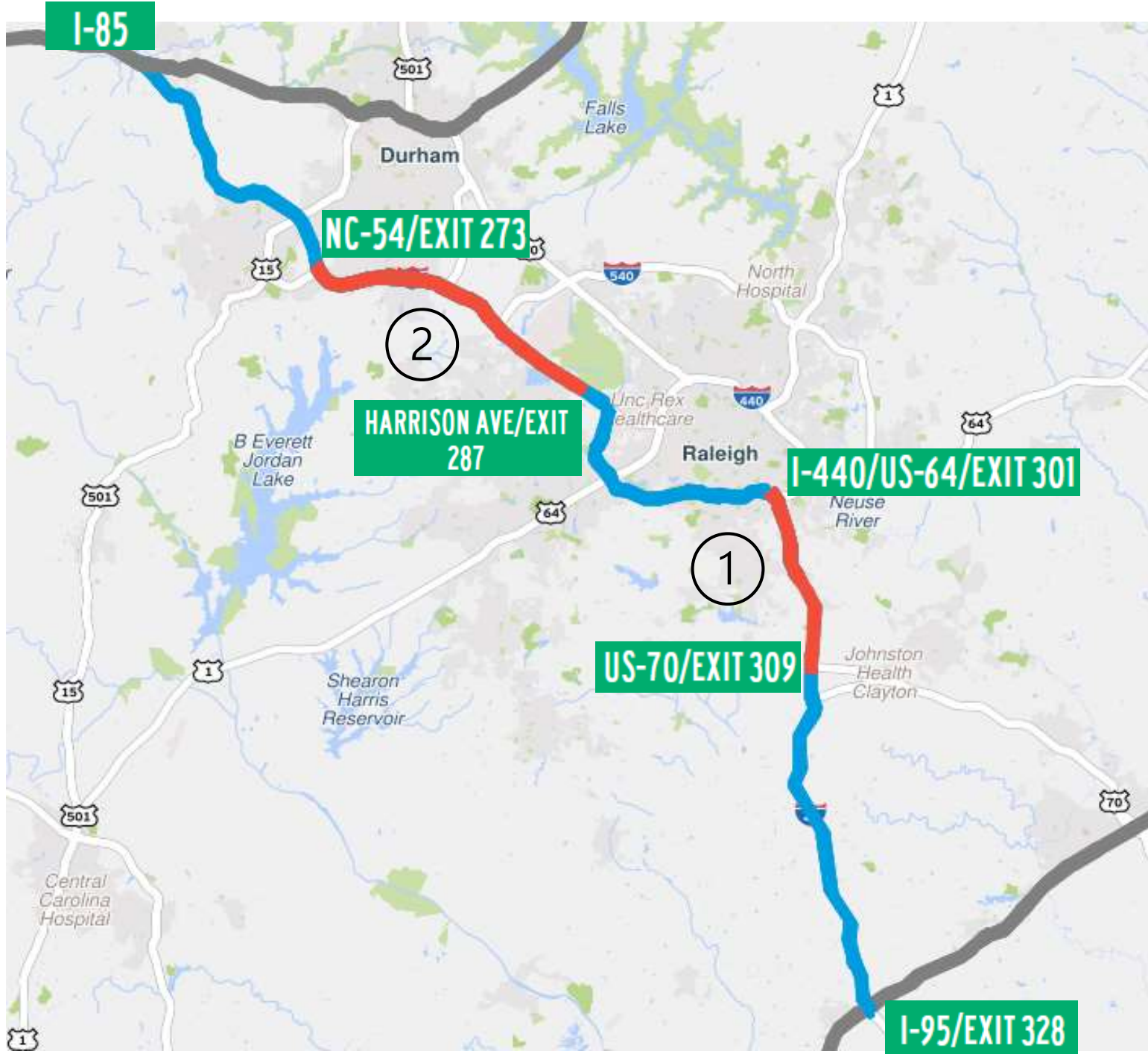
User Delay Cost

**I-40
from
I-95 to I-85**



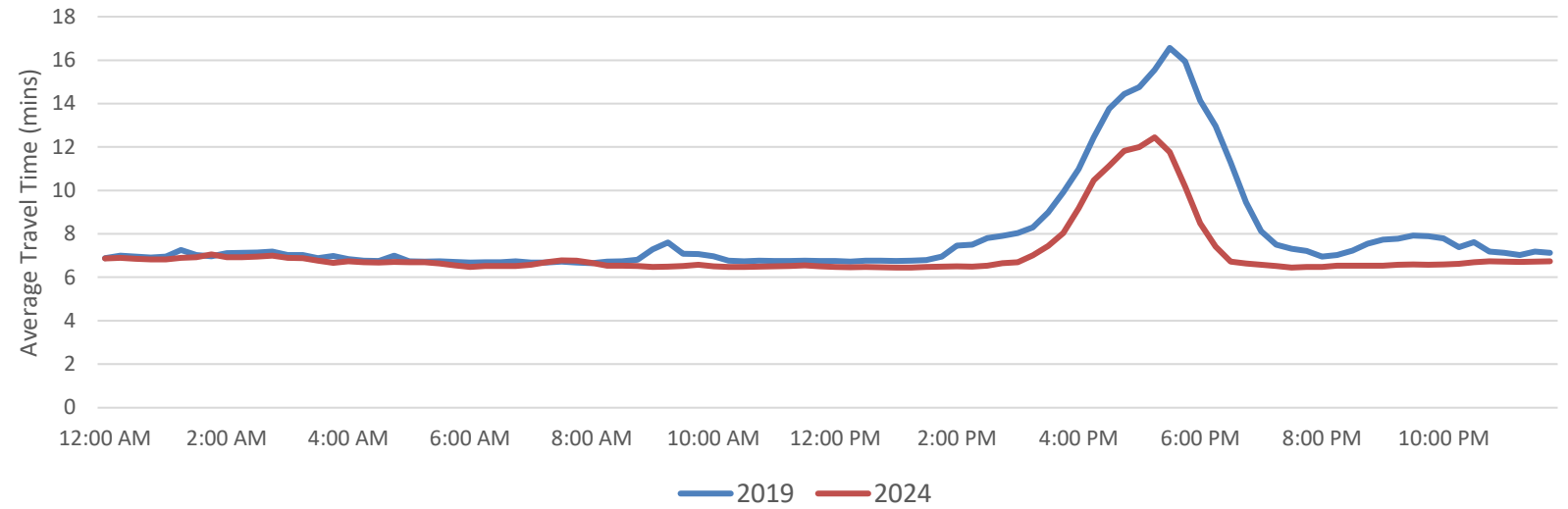


Areas of Interest

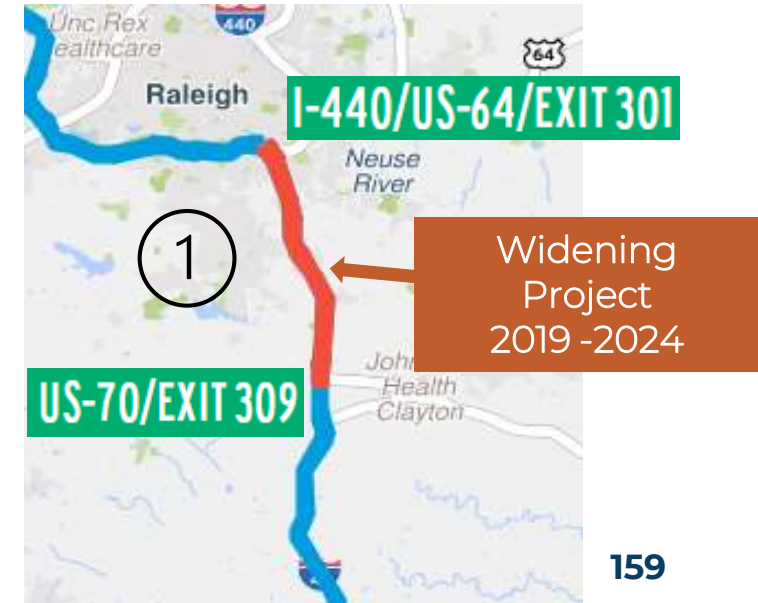
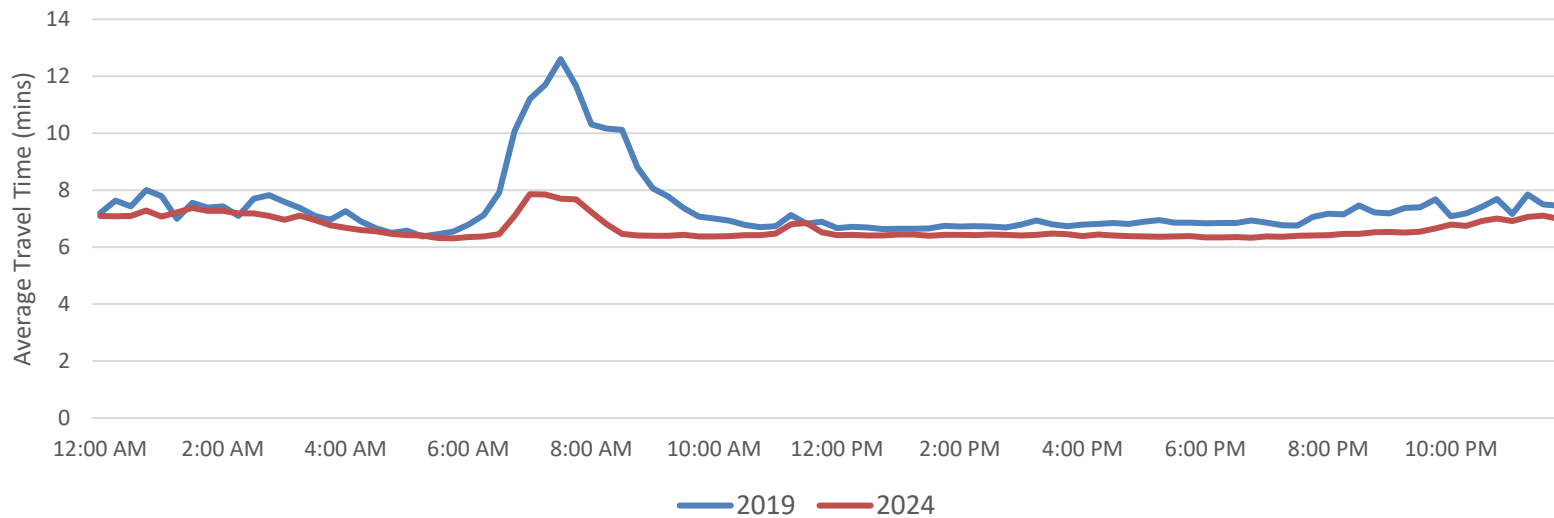


Area 1: Travel Times I-440 to US 70

I-440/US 64 to US 70 Eastbound March Weekdays

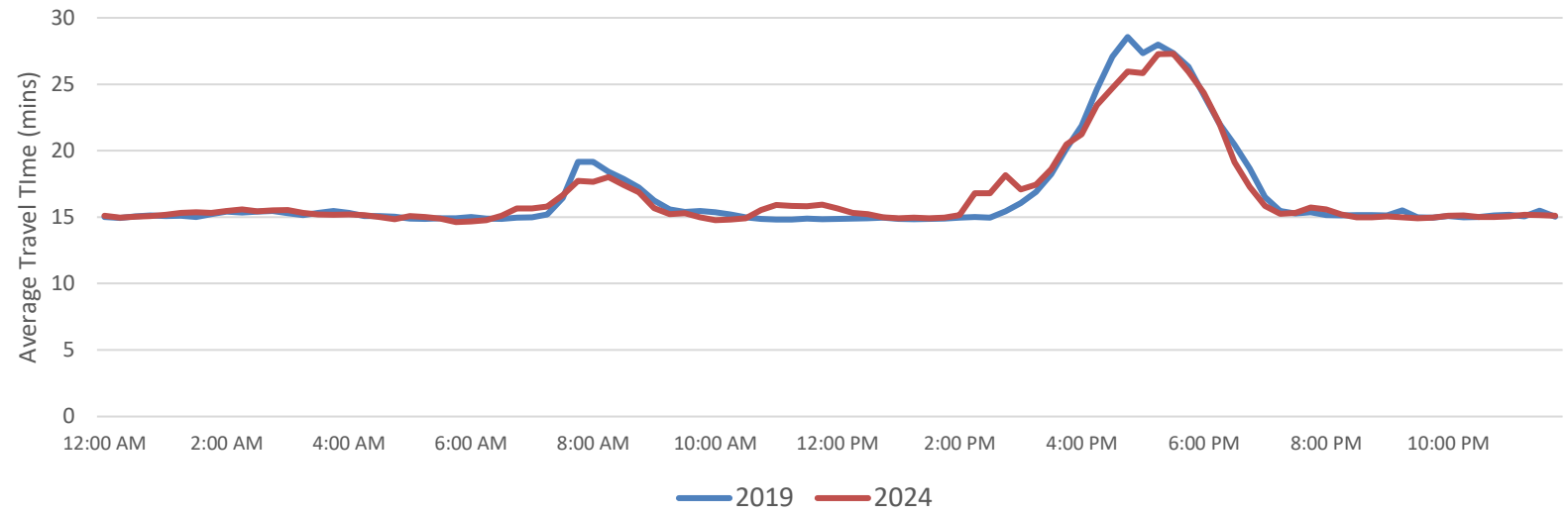


US 70 to I-440/US 64 Westbound March Weekdays

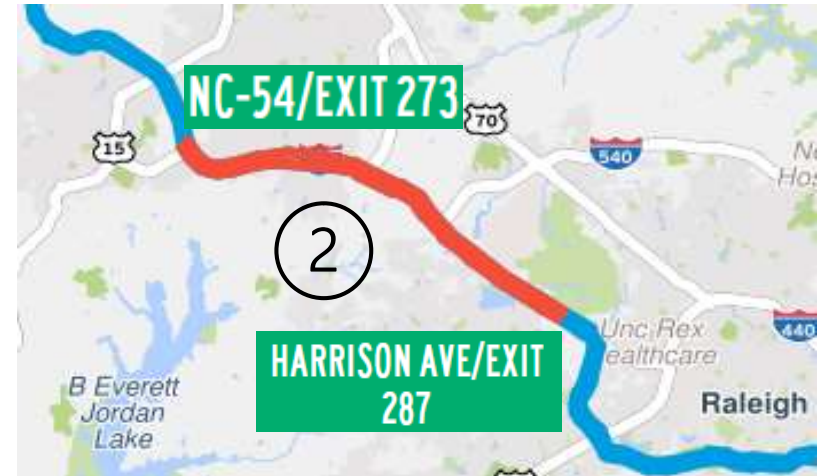
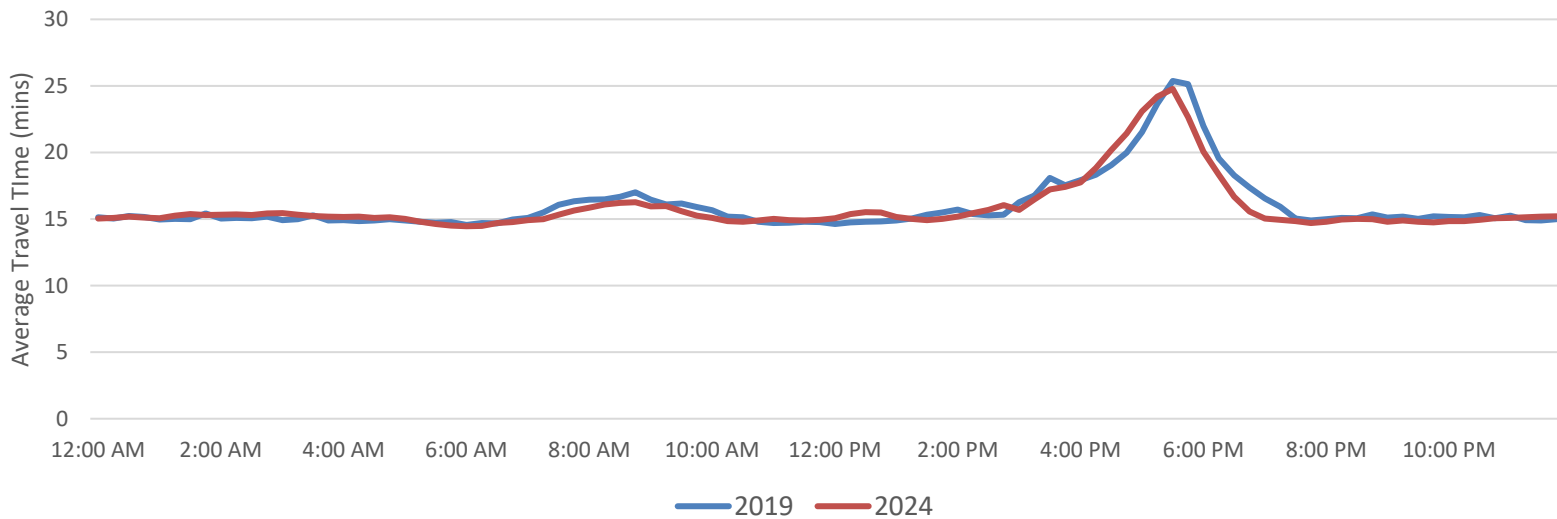


Area 2: Travel Times NC 54 to Harrison Ave

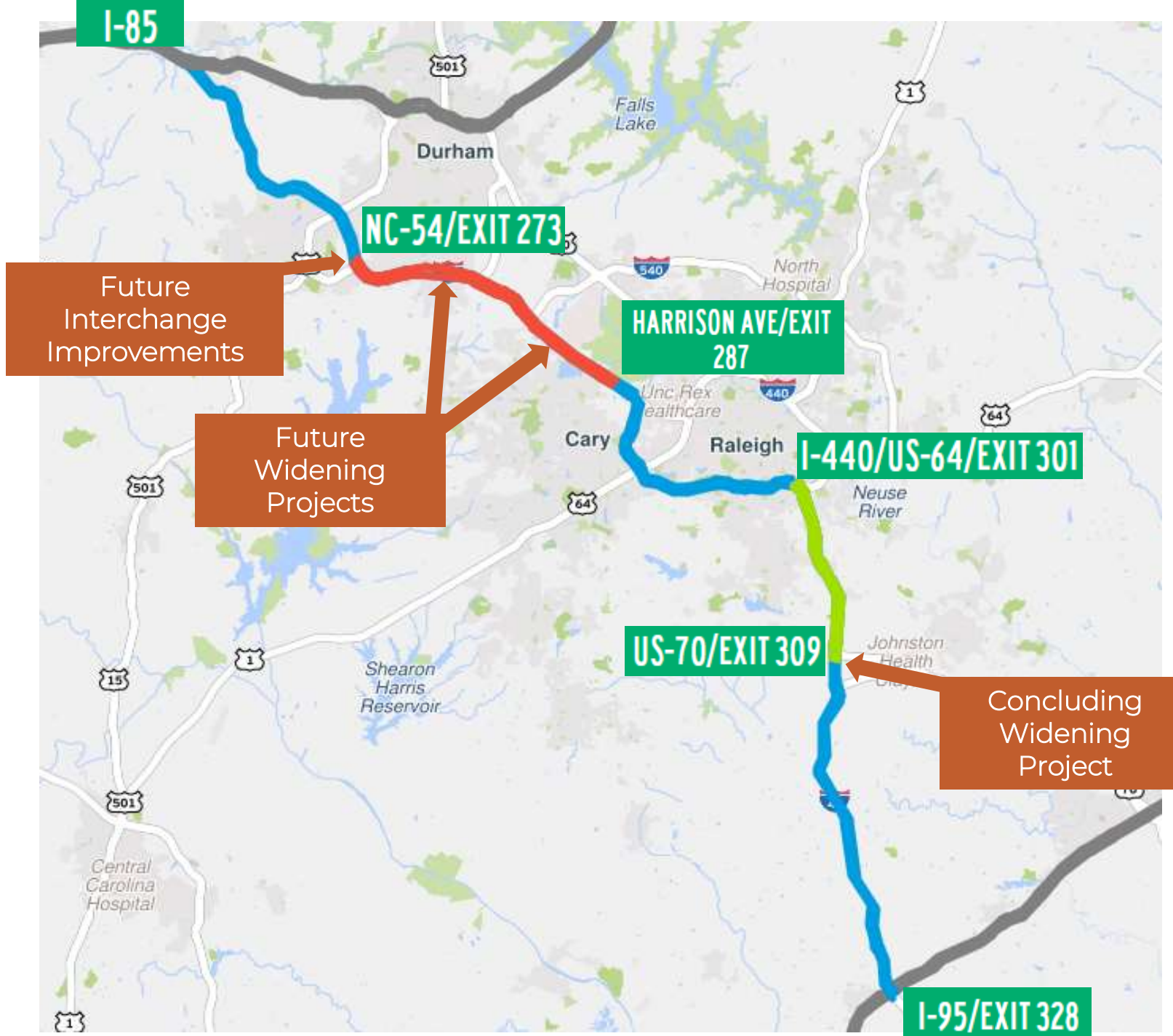
NC 54 to Harrison Ave Eastbound March Weekdays

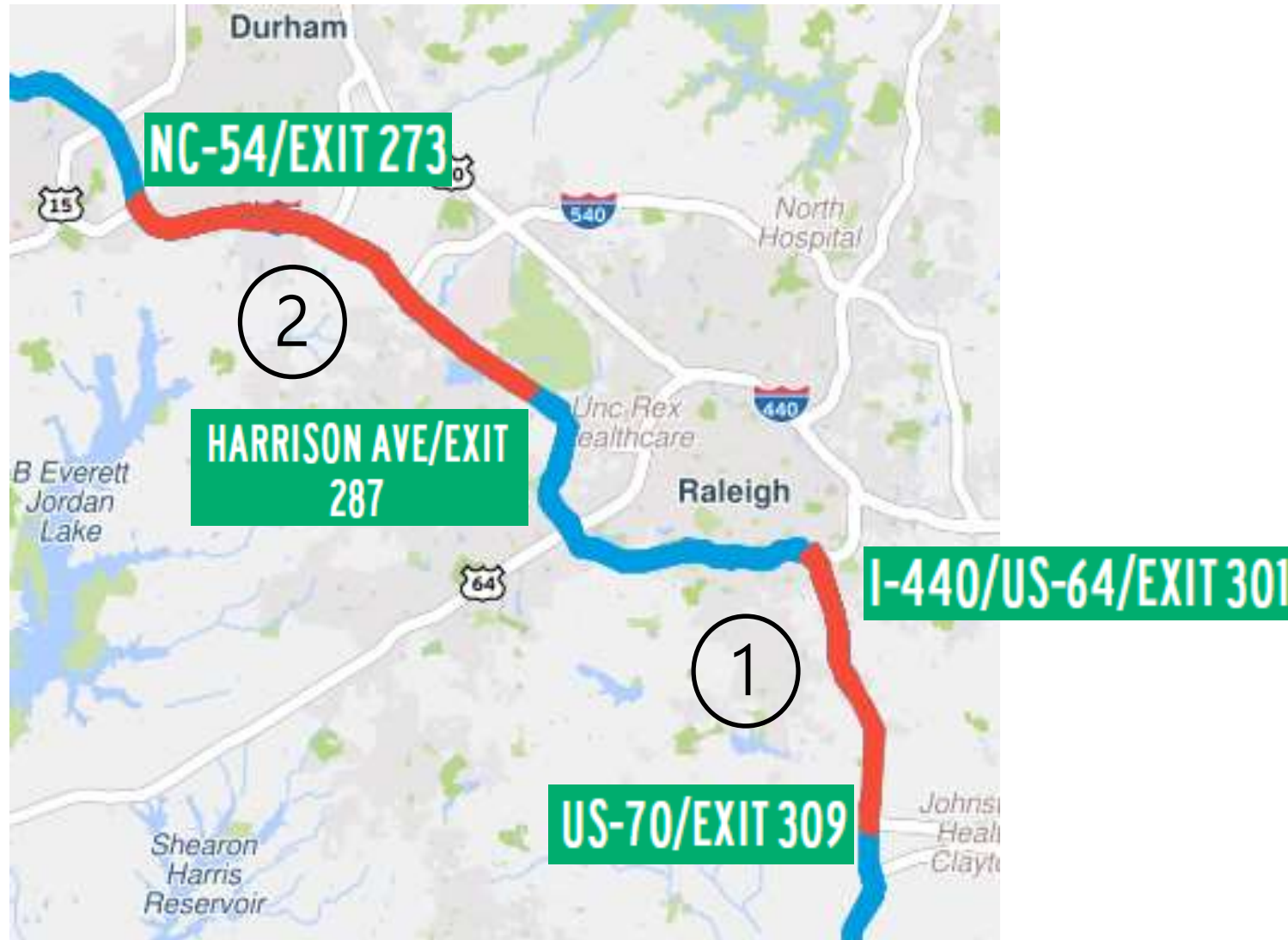


Harrison Ave to NC 54 Westbound March Weekdays



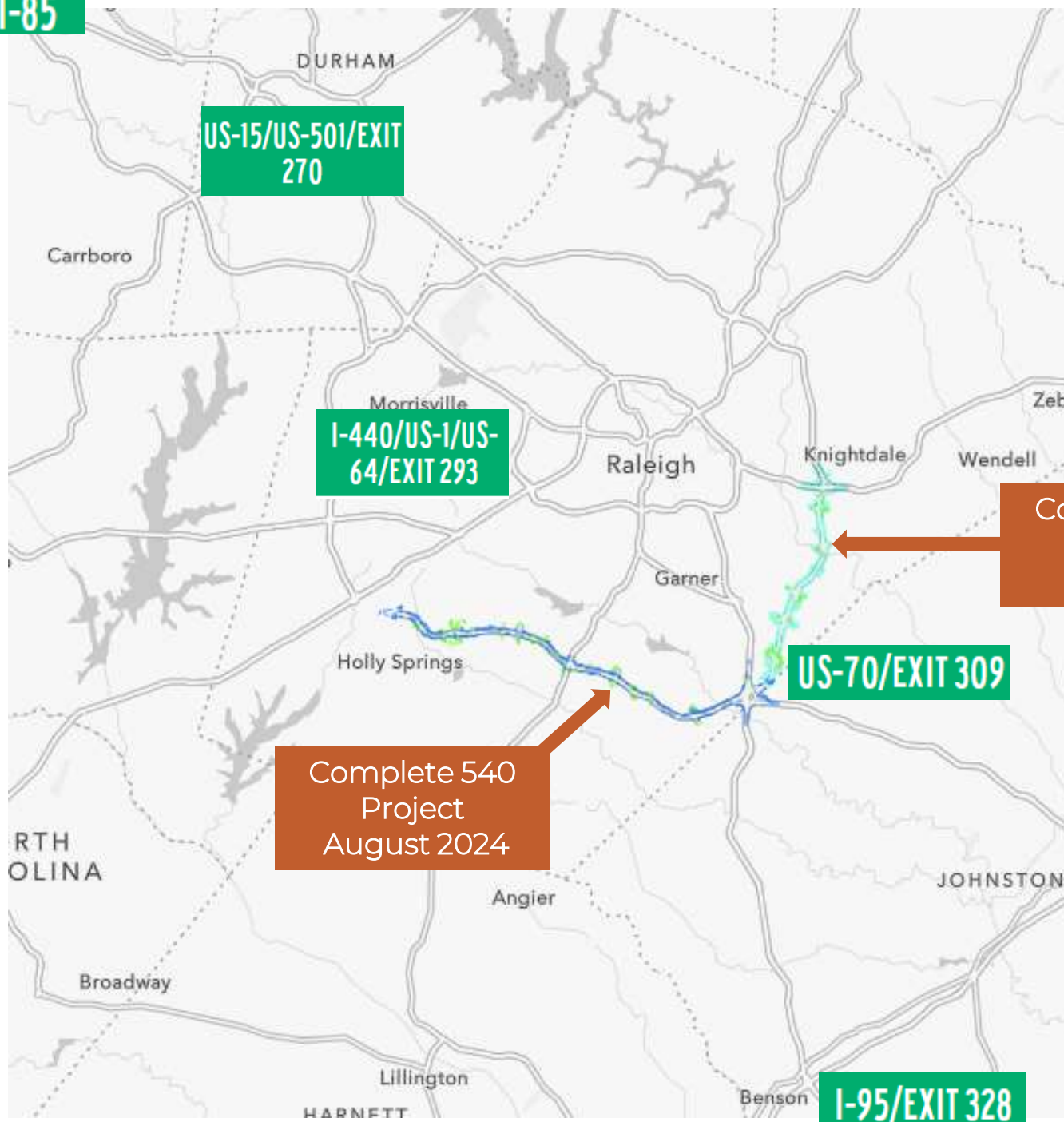
Long Term Plans





Moving Forward

- Impacts of I-540
- Operational Risk Assessment
- Continued growth
- Further investigation
- I-40 tactical solutions review



Importance of Multimodal

Scott Levitan

RTA Legislative and Policy Chair
Research Triangle Foundation of
North Carolina



RTA REGIONAL
BUSINESS
LEADERSHIP



TRANSPORTATION BRUNCH 2024

16th Annual Meeting of the I-40 Regional Partnership

August 6 | 9 - 11:30 a.m. | Westin Raleigh-Durham Airport

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