



NC Capital Area **Metropolitan Planning Organization**

WELCOME!

*Today's TCC meeting is being held online.
The meeting will begin shortly.*

Please be prepared to mute your audio following roll call.

Call In: 650 479 3208 Meeting Code: 2536 648 6450 Meeting Password: meet

PUBLIC COMMENTS SPEAKER SIGN UP SHEET:

https://docs.google.com/spreadsheets/d/12y4fboX0ymudEWIEfVkJI_gqNx4Dwnt-gDG4mygiQTA/edit?usp=sharing

Download Presentation Slides: <https://campo.legistar.com/Calendar.aspx>



NC Capital Area **Metropolitan Planning Organization**

Technical Coordinating Committee Meeting

April 6, 2023

10:00 AM

1. Welcome and Introductions

Roll Call of Voting Members & Alternates

City of Creedmoor

City of Raleigh (5)

County of Franklin

County of Granville

County of Harnett

County of Johnston

County of Wake (2)

GoCary

GoRaleigh

GoTriangle

Town of Angier

Town of Apex

Town of Archer Lodge

Town of Bunn

Town of Cary (2)

Town of Clayton

Town of Franklinton

Town of Fuquay-Varina

Town of Garner

Town of Holly Springs

Town of Knightdale

Town of Morrisville

Town of Rolesville

Town of Wake Forest

Town of Wendell

Town of Youngsville

Town of Zebulon

N.C. Dept. of Transportation (6)

N.C. State University

Raleigh Durham Airport Auth.

Research Triangle Foundation

Rural Transit (GoWake Access)

Triangle J. Council of Govts.

Triangle North Executive Airport

Federal Highway Administration

N.C. Turnpike Auth.

2. Adjustments to the Agenda

3. Public Comments

This is an opportunity for comments by those in attendance. Please limit comments to three (3) minutes for each speaker.

4. Minutes

4.1 TCC Meeting Minutes: March 2, 2023

Requested Action:

Approve the March 2, 2023 Meeting Minutes.

5. Regular Agenda

5.1 Rail Corridor Identification & Development Program

5.2 Complete 540 - Update

5.3 Southeast Area Study Update

5.4 2023 NCDOT Multimodal Planning Grant Applications

5.5 MTP Roadway Prioritization

5.1 Rail Corridor Identification & Development Program



NORTH CAROLINA
Department of Transportation

NC Corridor ID Program Opportunities

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

April 6, 2023

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)

- 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)

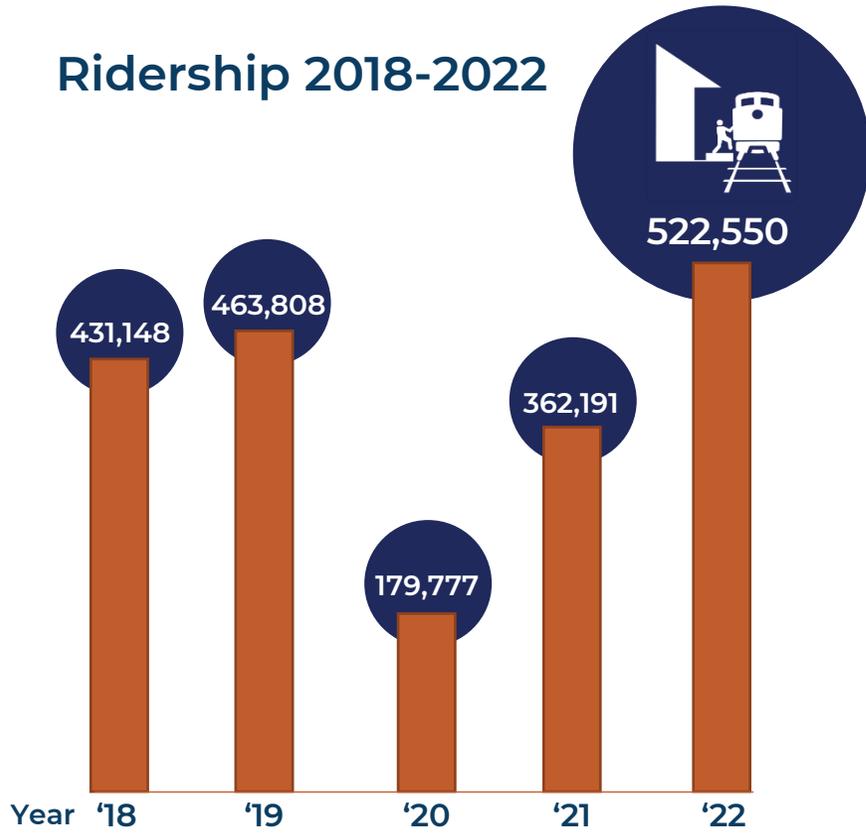




NC Intercity Passenger Rail Service

Highest ridership in 32-year history

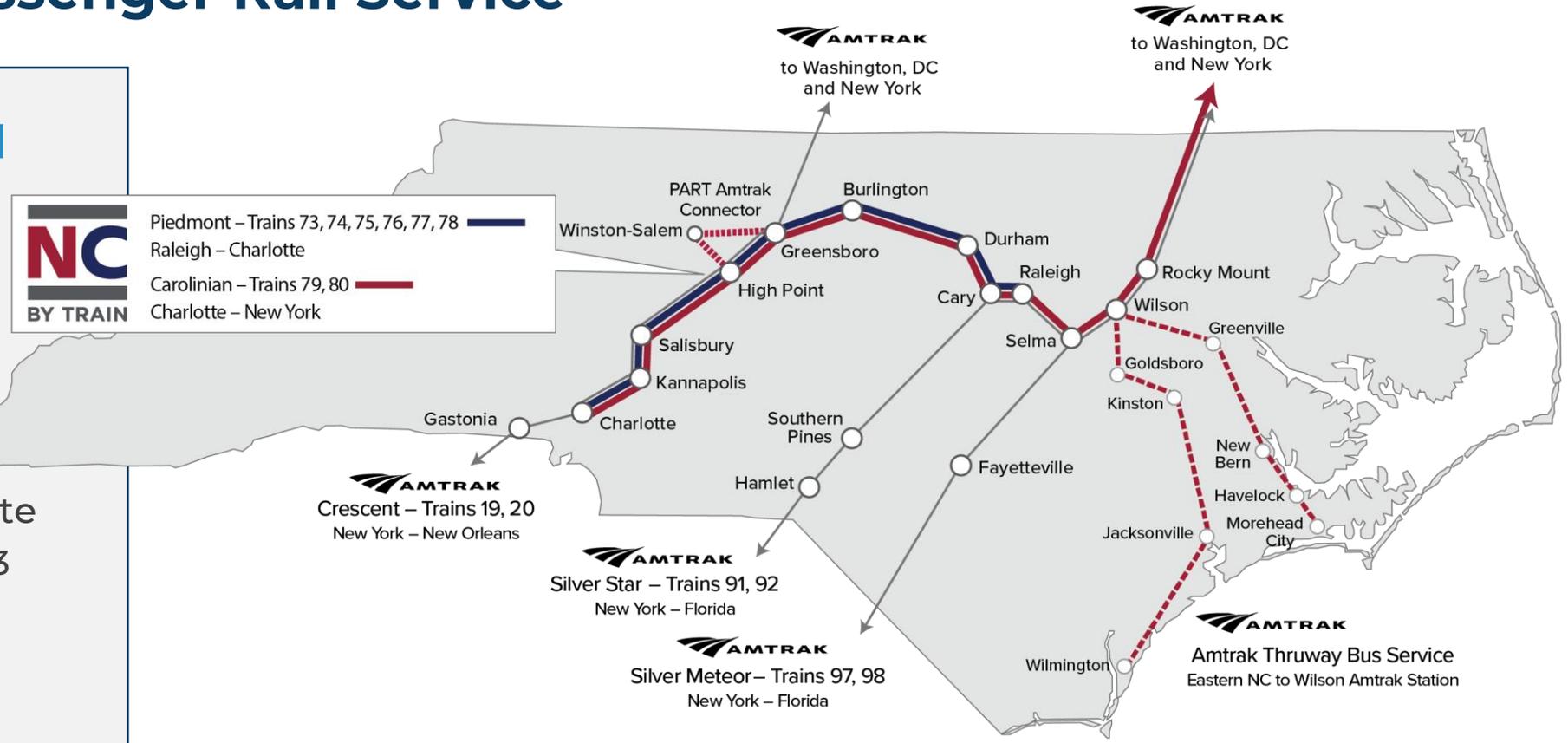
Ridership 2018-2022



NC Intercity Passenger Rail Service

Ridership at record breaking levels

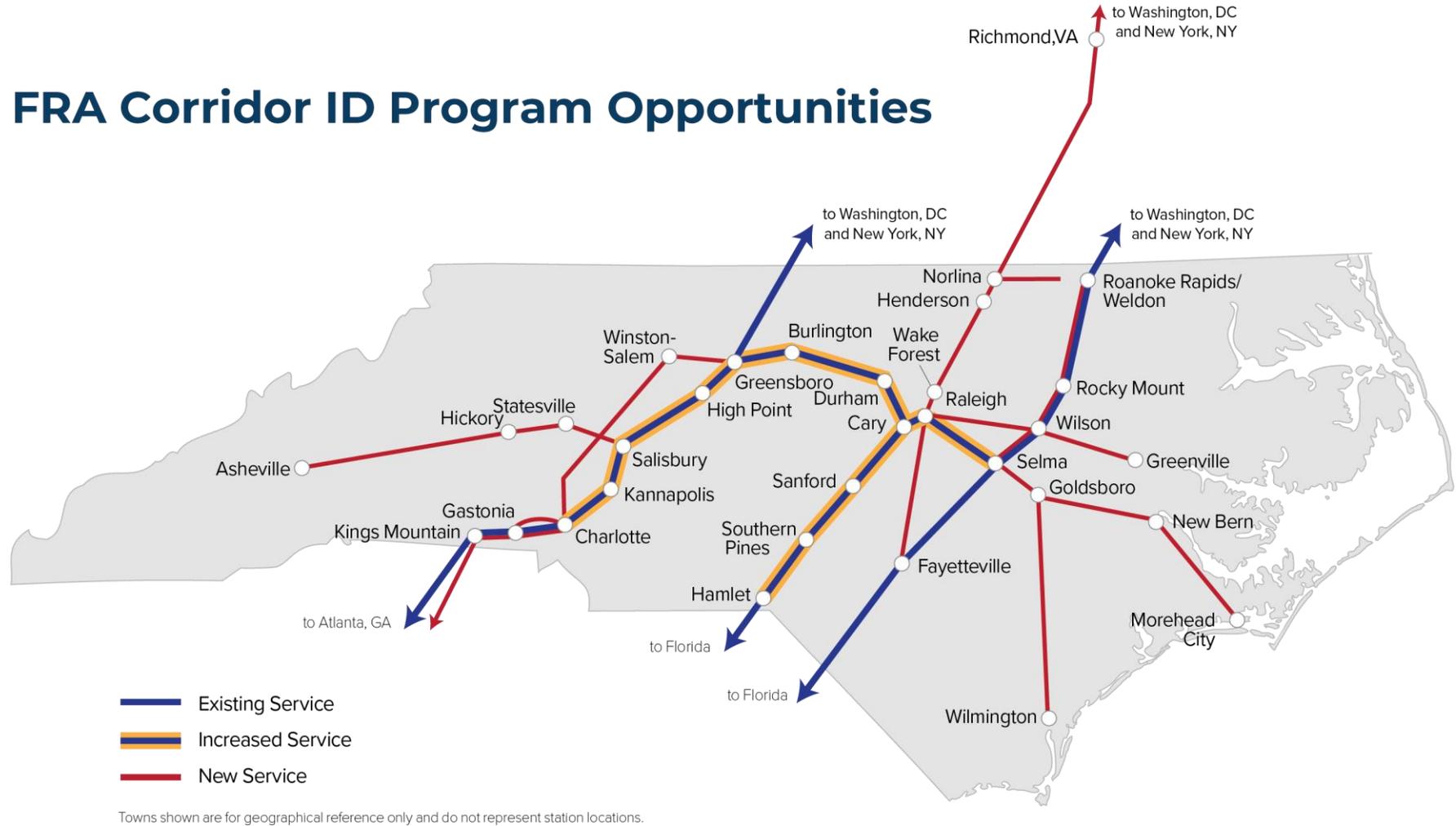
- *NC By Train*
 - among the best performing services during and post pandemic
- 5th Raleigh to Charlotte round-trip to start 2023
- Charlotte Gateway Station target 2026 completion



FRA Corridor ID Program Opportunities

12 Corridors Submitted:

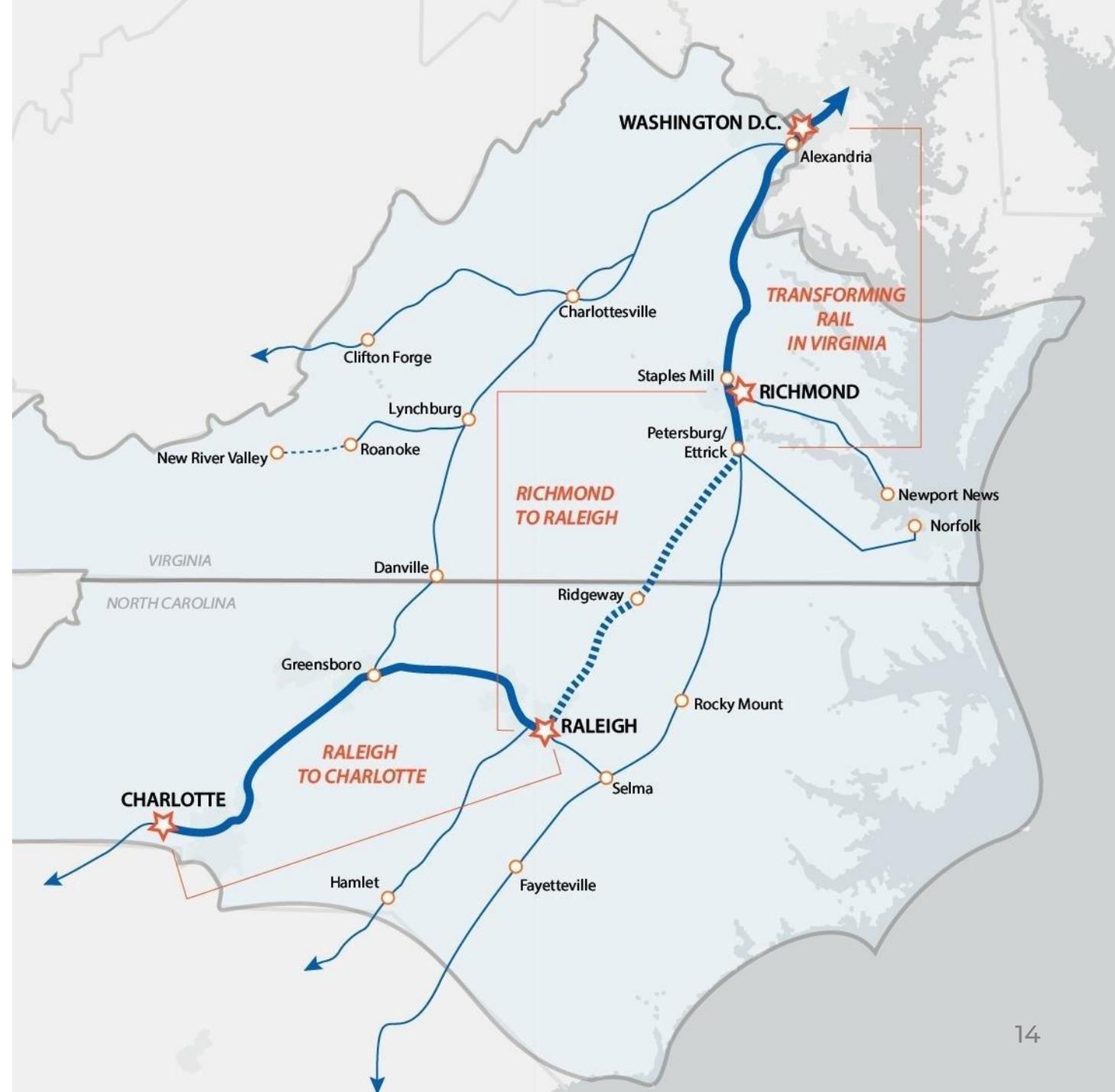
- Charlotte to Washington, DC
- Wilmington to Raleigh
- Charlotte to Kings Mountain
- Greenville to Raleigh
- Winston-Salem to Raleigh
- Hamlet to Raleigh
- Morehead City to Raleigh
- Fayetteville to Raleigh
- Winston-Salem to Charlotte
- Weldon to Raleigh
- Atlanta, GA to Charlotte
- Salisbury to Asheville



DC to Charlotte Intercity Passenger Rail Corridor

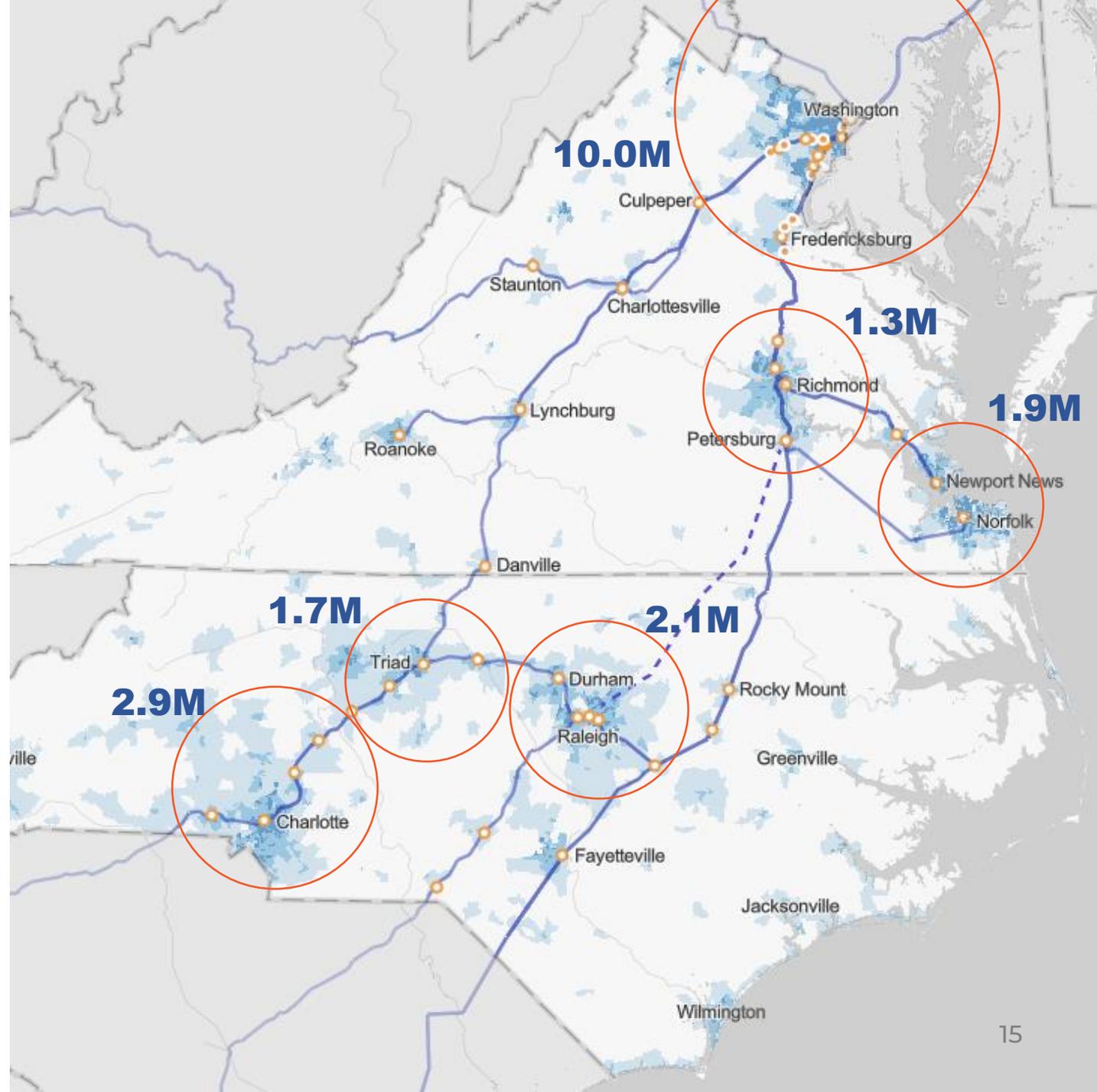
Three Segments

- **DC to Richmond**
(Transforming Rail in Virginia)
 - Virginia leading
- **Richmond to Raleigh**
 - Partnership with Virginia
 - NC leading
- **Raleigh to Charlotte**
 - NC completed Piedmont Improvement Program
 - Additional incremental improvements

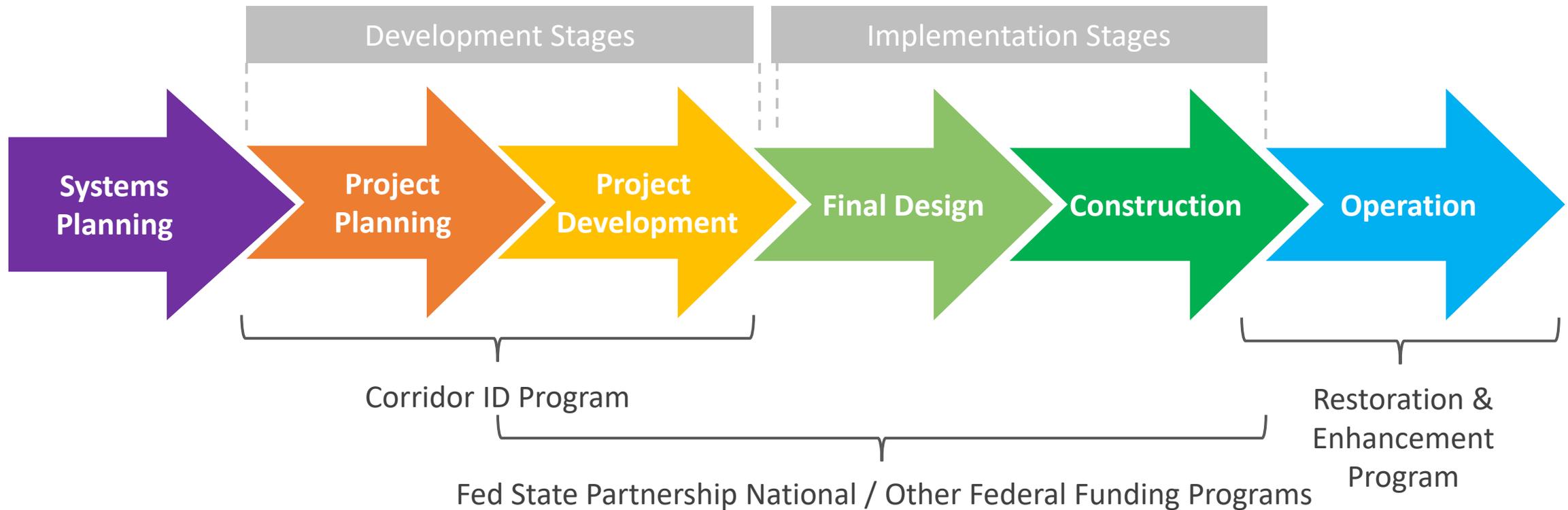


DC to Charlotte Corridor via S-line

- Direct connection between urban centers – 20M people – estimated to be 25M by 2040
- Additional capacity and over an hour in travel time saved between NC and VA
- Backbone of a regional multi-modal network
- Critical to further expanding the NC passenger rail system
- Provides freight network resiliency
- Environmental benefits
- Expands service to disadvantaged and underserved regions



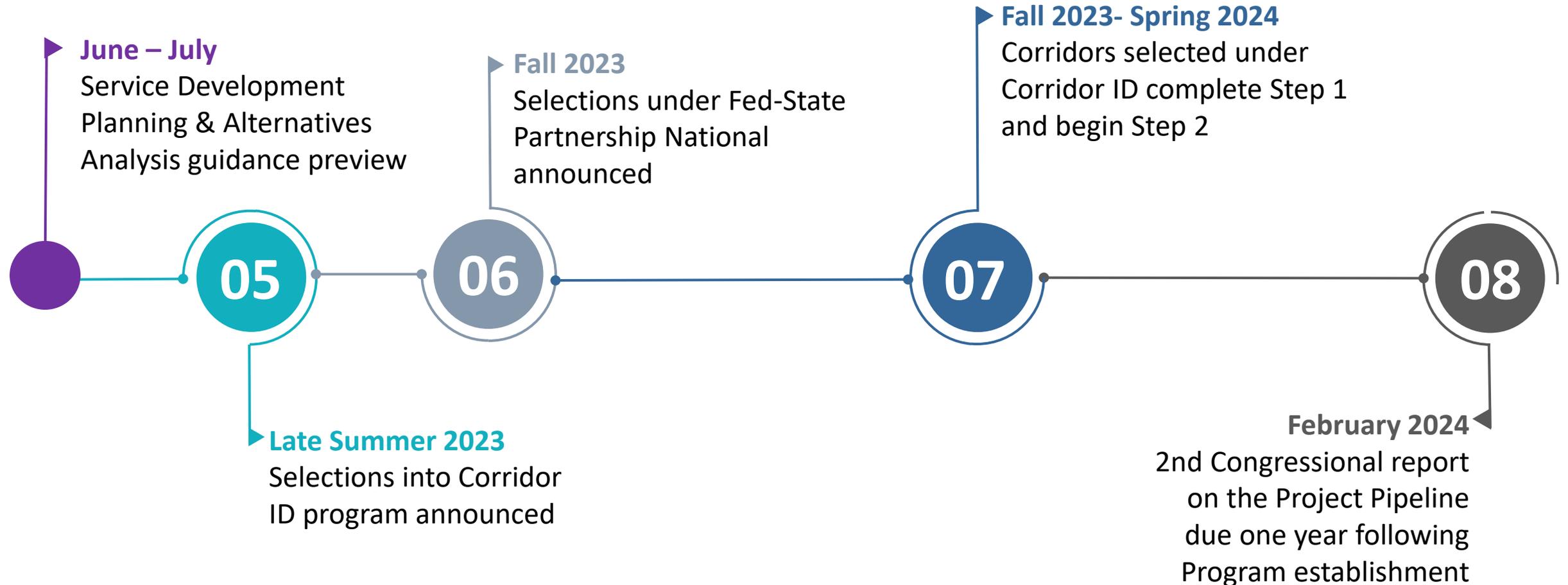
FRA Project Lifecycle Stages – Corresponding FRA Funding Programs



Corridor ID Timeline



Corridor ID Timeline



Bipartisan Infrastructure Law – FRA Perspective

[ADVANCED APPROPRIATIONS]

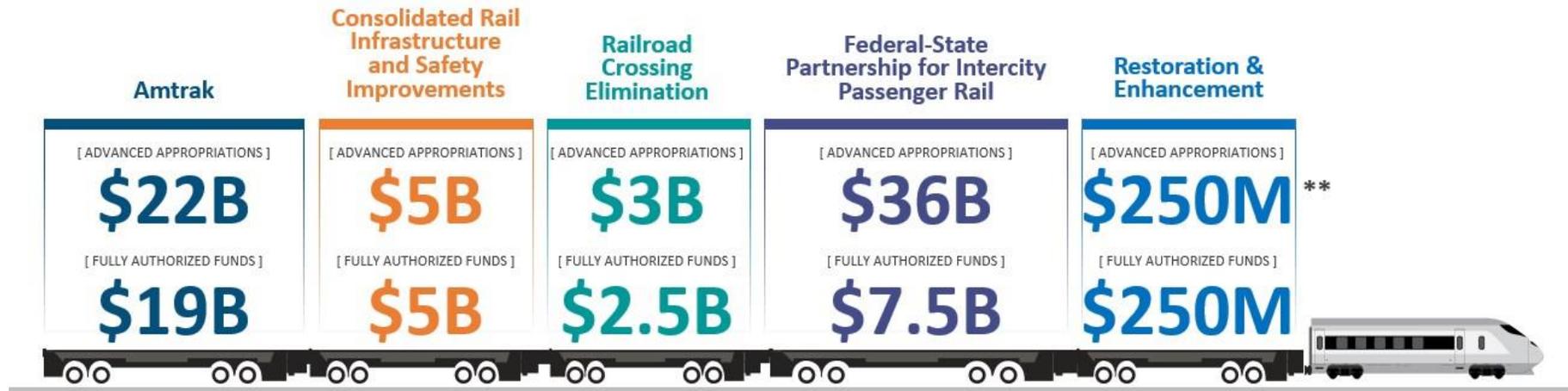
From FY22-FY26

\$66B in total funding

[FULLY AUTHORIZED FUNDS]

From FY22-FY26

\$36B* in total funding



* \$34.5 billion for grant programs; additional \$1.5 billion is authorized for FRA operations and R&D – not included in this graphic.
** Grants for Restoration & Enhancement (advanced appropriations portion) are funded through “takedowns” from Amtrak NN account; not included in totals to avoid double-counting.

Thank you!



5.1 Rail Corridor Identification & Development Program

Requested Action:
Received as information.

5.2 Complete 540 - Update



NC Capital Area **Metropolitan Planning Organization**

Complete 540 Update

Alan Shapiro, P.E.

April 6, 2023



N

Raleigh

Knightdale

Knightdale Bypass

Cary

Apex

Holly Springs Rd.

Garner

Holly Springs

Ten-Ten Rd.

Clayton

Fuquay Varina

A

STIP Project
R-2721A

B

STIP Project
R-2721B

C

STIP Project
R-2828

E

STIP Project
R-2829B

D

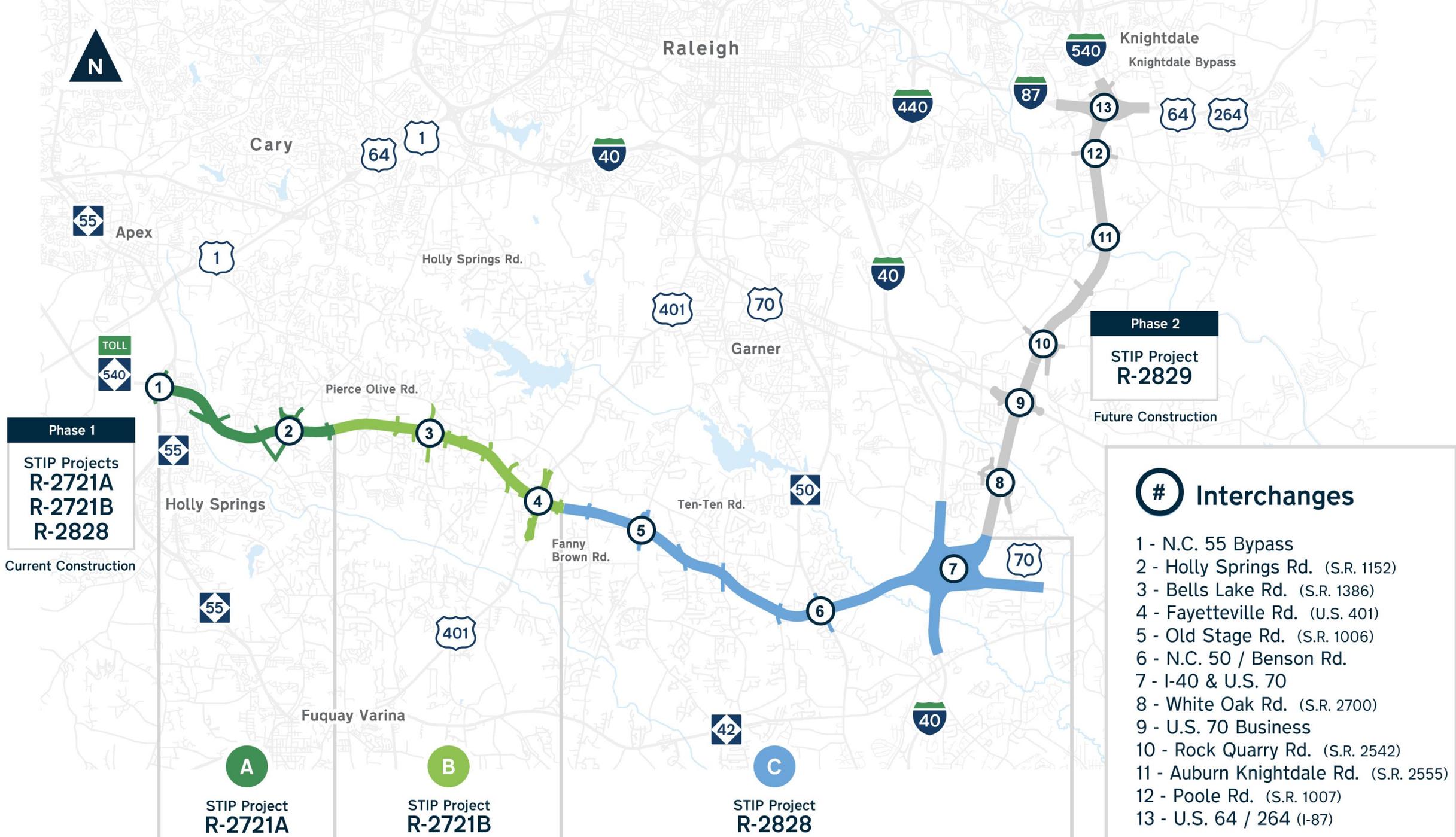
STIP Project
R-2829A

Interchanges

- 1 - N.C. 55 Bypass
- 2 - Holly Springs Rd. (S.R. 1152)
- 3 - Bells Lake Rd. (S.R. 1386)
- 4 - Fayetteville Rd. (U.S. 401)
- 5 - Old Stage Rd. (S.R. 1006)
- 6 - N.C. 50 / Benson Rd.
- 7 - I-40 & U.S. 70
- 8 - White Oak Rd. (S.R. 2700)
- 9 - U.S. 70 Business
- 10 - Rock Quarry Rd. (S.R. 2542)
- 11 - Auburn Knightdale Rd. (S.R. 2555)
- 12 - Poole Rd. (S.R. 1007)
- 13 - U.S. 64 / 264 (I-87)



Complete 540 Phase 1
of Construction



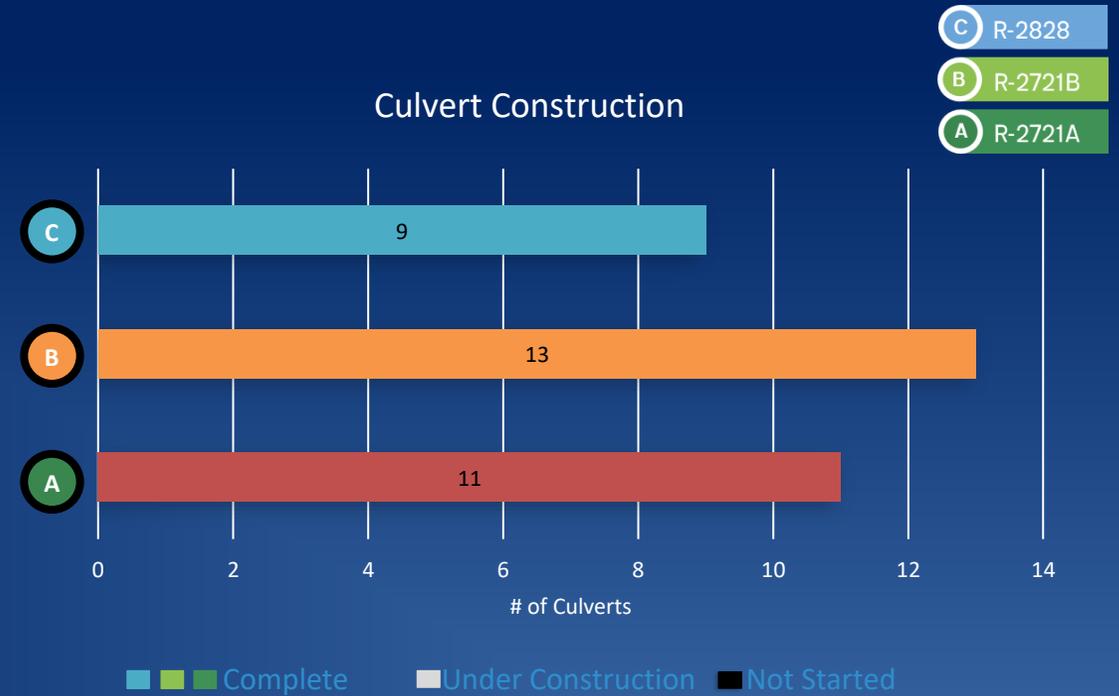
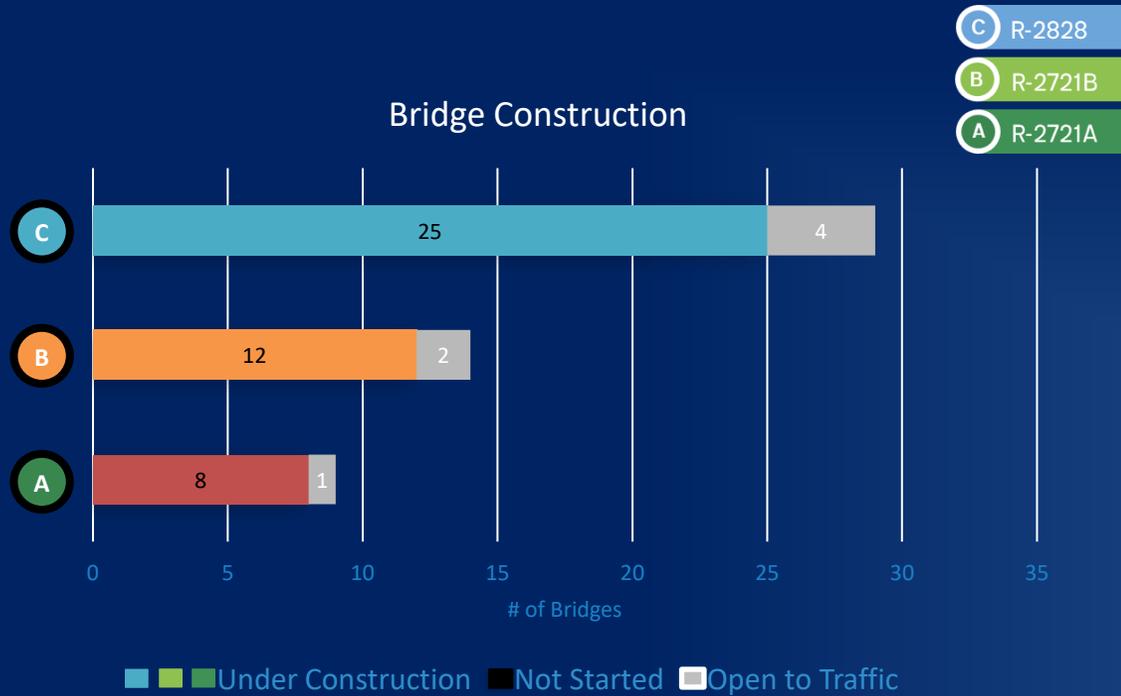
On Grade



Stabilized Soil and Bridge Construction



Bridge & Culvert Construction



Updated 3-9-2023

Noisewall Construction

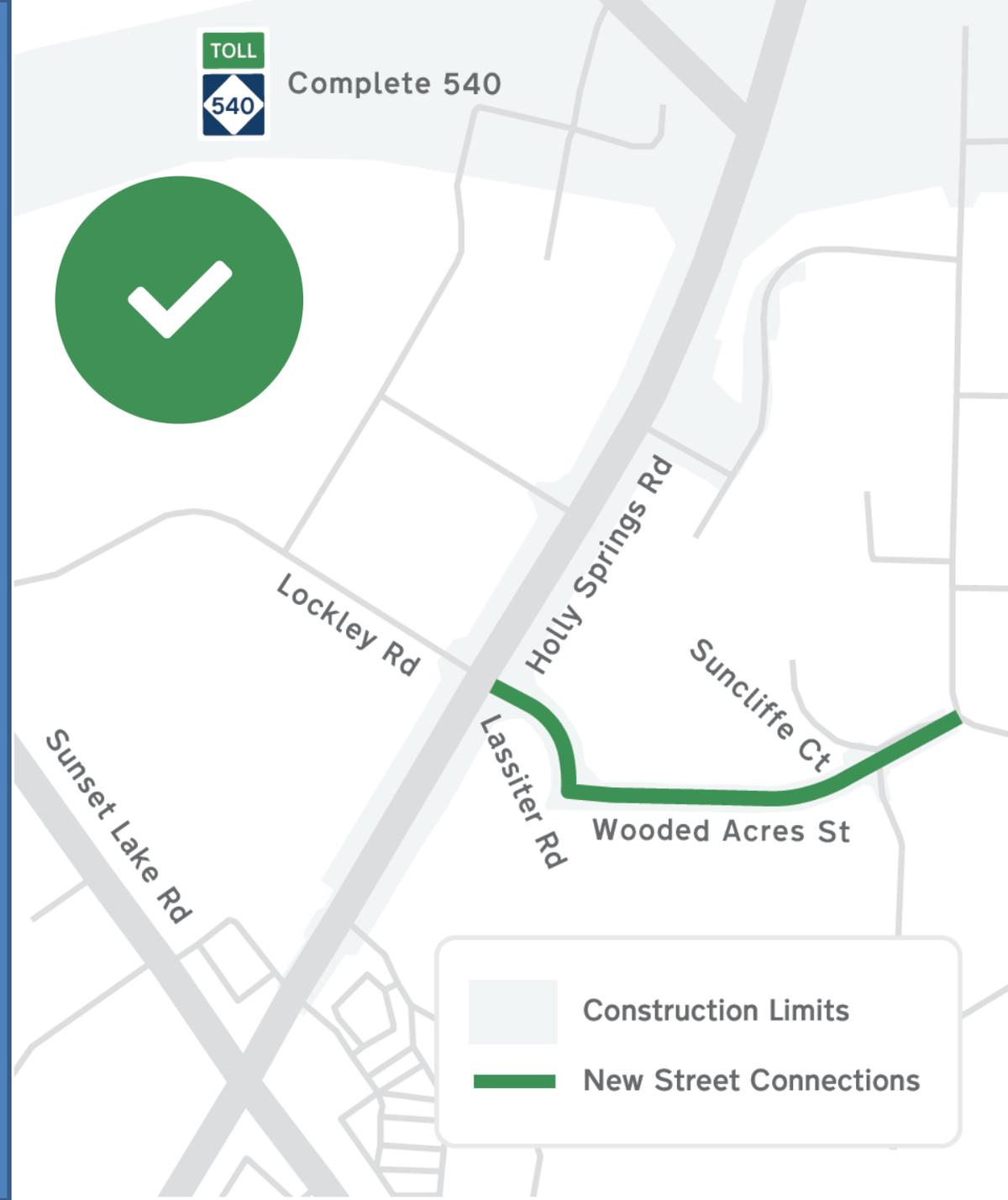


Paving



Complete 540 Openings

- River Falls Pedestrian Trail and Culvert
 - November 2022
- **Sunset Lake Road (1 of 2)**
 - **November 2022**
- US-401
 - November 2022
- **Holland Church Road**
 - **September 2022**
- Lassiter Road and Wooded Acres Street
 - August 2022
- **NC-50**
 - **August 2022**
- Deerborn Drive Extension
 - July 2022
- **New Bethel Church Road**
 - **July 2022**
- Kildaire Farm Road
 - May 2022
- **Johnson Pond**
 - **April 2022**
- Fanny Brown Road
 - November 2021



The background features a dark blue hexagonal grid pattern. Overlaid on this grid are several glowing, wavy trails of small particles in shades of light blue and green, creating a sense of motion and depth.

Complete 540 Phase 2

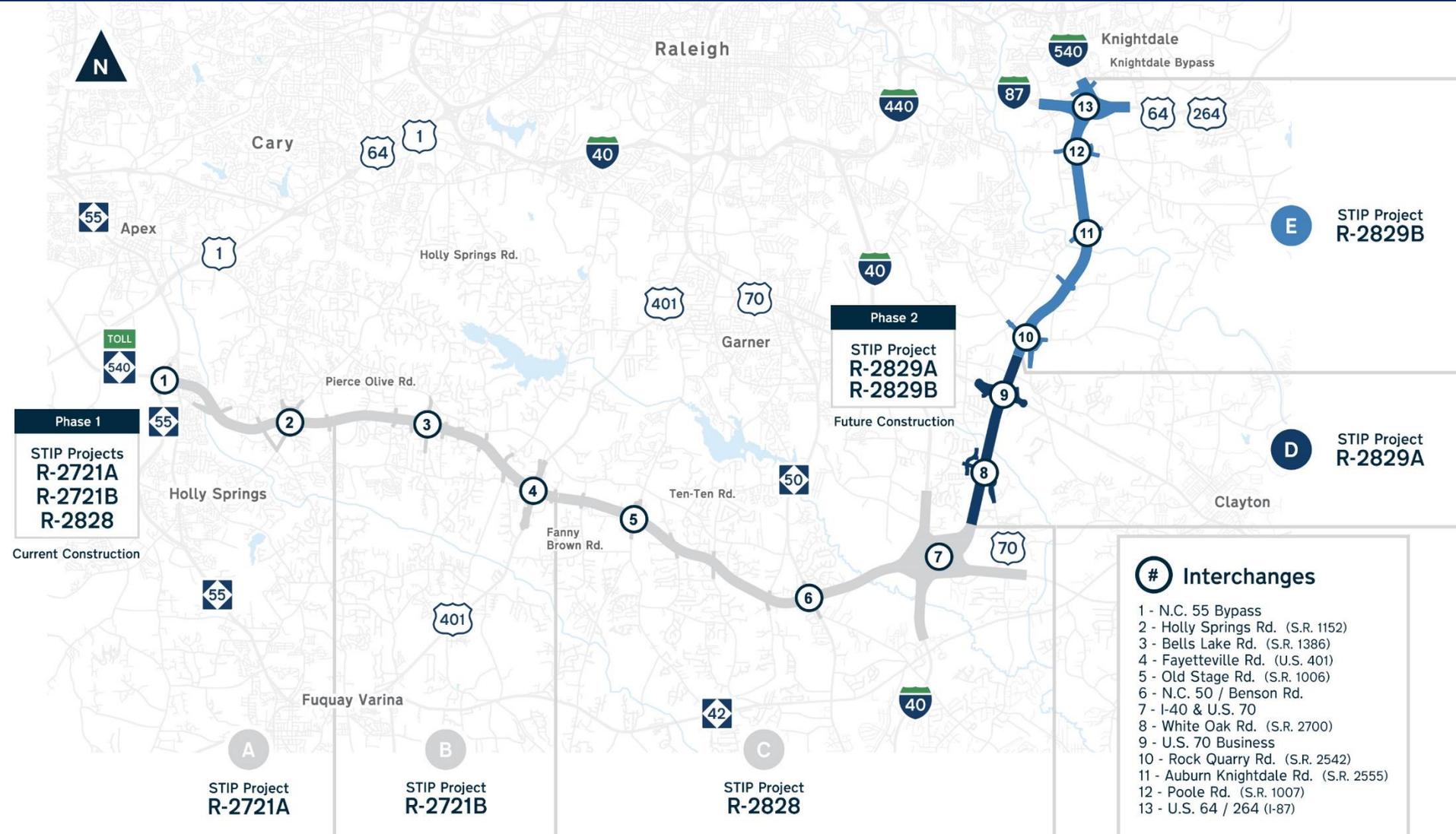
Complete 540 Phase 2

R-2829A

- 4.4 miles
- 2 full interchanges + 1 partial

R-2829B

- 6.6 miles
- 3 full interchanges + 1 partial



R-2829B

RFQ Advertisement	November 15, 2022	✓
Statement of Qualifications due from Design-Build Teams	December 20, 2022	✓
Department Announces Short-listed Teams	January 18, 2023	✓
Department Issues Industry Draft RFP to Short-listed Teams	January 18, 2023	✓
First Meeting with Short-listed Teams	February 1, 2023	✓
Department Issues Second Industry Draft RFP to Short-listed Teams	February 15, 2023	✓
Department Holds Statement of Qualifications Debriefs	Week of February 20, 2023	✓
Second Meeting with Short-listed Teams	March 1, 2023	✓
Department Issues Final RFP to Short-listed Teams	March 22, 2023	✓
Technical Proposals and Fuel Usage Factor Chart / Estimate of Quantities Due	June 22, 2023	
Sealed Price Proposals Due	July 11, 2023	
Technical Presentations by Short-listed Teams	July 12, 2023	
Open Price Proposals	July 18, 2023	
Department Holds Technical Proposal Debriefs (Pending Contract Execution)	Week of August 21, 2023	

NOTE: All dates are approximate and subject to change.

R-2829A

RFQ Advertisement	February 1, 2023	
Statement of Qualifications due from Design-Build Teams	February 28, 2023	
Department Announces Short-listed Teams	March 16, 2023	
Department Issues Industry Draft RFP to Short-listed Teams	March 16, 2023	
First Meeting with Short-listed Teams	April 4, 2023	
Department Holds Statement of Qualifications Debriefs	Week of April 17, 2023	
Department Issues Second Industry Draft RFP to Short-listed Teams	April 18, 2023	
Second Meeting with Short-listed Teams	May 2, 2023	
Department Issues Final RFP to Short-listed Teams	May 16, 2023	
Technical Proposals and Fuel Usage Factor Chart / Estimate of Quantities Due	August 24, 2023	
Sealed Price Proposals Due	September 12, 2023	
Technical Presentations by Short-listed Teams	September 13, 2023	
Open Price Proposals	September 19, 2023	
Department Holds Technical Proposal Debriefs (Pending Contract Execution)	Week of October 23, 2023	

NOTE: All dates are approximate and subject to change.

Complete 540 Phase 2 - Preconstruction Activities

Completed Activities

- Environmental Document
- Section 404/401 Corridor Permits
- Biological Opinion
- Air Quality Conformity
- Final Surveys
- Traffic Forecasts and Analysis
- Service Road Study
- Confirmation of Environmental Mitigation Availability
- Roadway and Structure
- Geotechnical Investigations
- Update Project Cost Estimate
- Refining Preliminary Design
- Developing Pavement Design and Life Cycle Analyses
- Railroad Coordination
- Industry Coordination

Activities Underway

- Advanced Acquisition of Certain Right-of-Way Parcels
- Coordination with Owners of Towers Regarding Needed Relocations
- Planning for Community Water and Sewer Conflict Resolutions
- Planning for Other Long Lead-Time Items
- Utility Coordination
- Developer Coordination
- Refine Plans for Right-of-Way Acquisition
- Design-Build Procurement

FAA Communications Tower Relocation – R-2829B

- Was on private property at Rock Quarry Road – Parcel 30 ~ Sta 1208+00
- Tower removed from property
- All work for this relocation was completed by others
- Ongoing coordination is underway



SBA Cell Tower Relocation – R-2829B

- Currently on southeast corner of the Raleigh Rugby Club property – Parcel 53 ~ Sta 1433+00
- All work for this relocation is being completed by others
- Ongoing coordination is underway
- Town of Knightdale has issued a special use permit
- NEPA underway



WELCOME

Session Agenda

9:00 a.m. – 9:30 a.m.	Open Registration for DBE Outreach Session
9:30 a.m. – 9:45 a.m.	Civil Rights Overview
9:45 a.m. – 10:15 a.m.	Certifications (DBE, SBE, HUB, SPSF)
10:15 a.m. – 10:45 a.m.	On-the-Job Training Program (OJT)
10:45 a.m. – 11:15 a.m.	Business Opportunity and Workforce Development
11:15 a.m. – 11:30 a.m.	Utilization and Contractor Compliance, Title VI, EEO
11:30 a.m. – 12:00 p.m.	NC Turnpike Authority Overview
12:00 p.m. – 1:00 p.m.	Networking/Lunch on your own and Open Registration for Industry Forum
1:00 p.m. – 3:00 p.m.	Industry Forum (Complete 540 Phase 2)
3:00 p.m. – 4:00 p.m.	Networking

Meeting Overview

The Outreach Session will include information about certification support services, Disadvantaged Business Enterprise (DBE) utilization and compliance, and laws governing DBE work with NCDOT. The Industry Forum will include a discussion on project scope, DBE goals, and contracting opportunities for the Complete 540 Phase 2 project.

Sign-in & Name Tags

When you sign in at the sign-in table, you will be handed a name tag. Name tag color categories below:

	DBE Firm
	Design Firm
	Prime Contractor
	Subcontractor

For your information, the sign in sheets from today's event will be posted on the NCDOT Design-Build website at <https://connect.ncdot.gov/Letting/Pages/Design-Build.aspx>

Meeting Refreshments

Vending machines and tables are located in the café of the McKimmon Center.

DBE Outreach Session

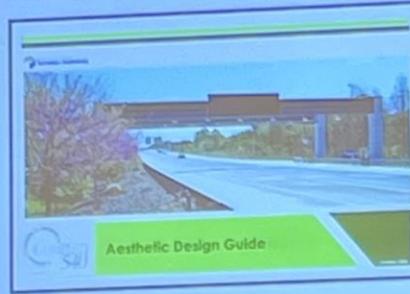


Phase 2 Industry Forum

netics

Complete 540 Phase 2 will continue the emphasis on aesthetics throughout the project corridor

TA has made minor revisions to the Aesthetic Design Guide (ADG) that was utilized during the construction of Complete 540 Phase 1



Authority

02

will continue the emphasis on aesthetics throughout the

revisions to the Aesthetic Design Guide (ADG) that was utilized during the construction of Complete 540 Phase 1



03



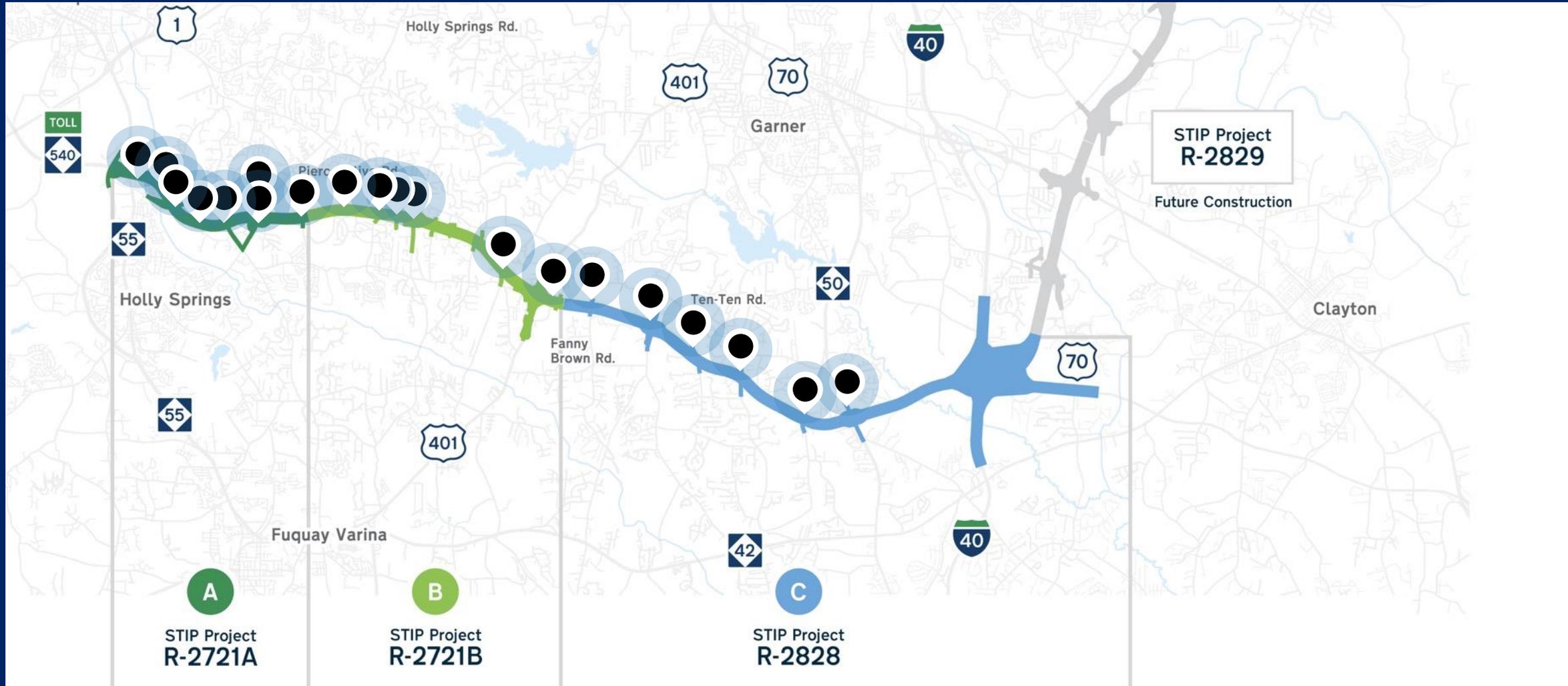
Prime/DBE Networking





For the Benefit
of the Neighborhood

Bike/Pedestrian/Multi-Use Accommodations – Phase 1

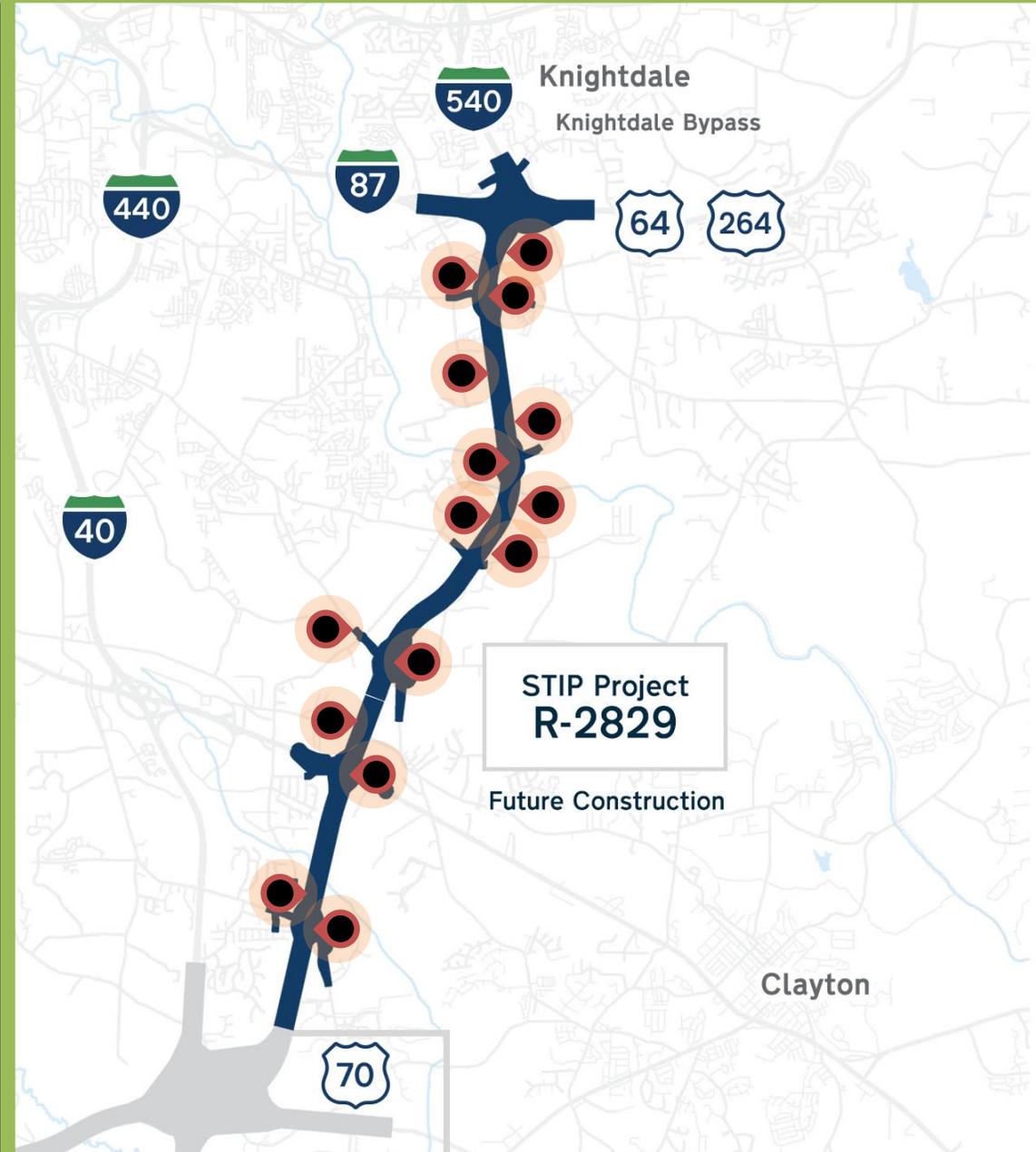


Bike/Pedestrian/Multi-Use Accommodations – Phase 2

- Collaboration with:



- Garner
- Knightdale
- Raleigh
- Wake County
- Wake County Public School System



The background features a dark blue field with a subtle, light blue hexagonal grid pattern. Overlaid on this are several dynamic, glowing trails of small particles in shades of light blue and green. These trails appear to flow and swirl across the frame, creating a sense of movement and energy.

Community Outreach



Complete 540 Outreach



Public Meetings

Nearly 4,000 participants over
101 public meetings



Informing Residents

25,650 postcards &
83 Nextdoor posts



Resident Inquiries

1,738 emails & 1,033 calls to
the Complete 540 Hotline

Resources at ncdot.gov/complete540

Complete 540 R-2828 Noise Wall Locations

Noise Wall #	Location	Length (feet)	Height Range (feet)	Construction Timeframe	Balloting Status
41	East of Fanny Brown Rd. South side of Complete 540	4,898	5-27	TBD	Approved
49E	West of Sauls Rd. South side of Complete 540	1,980	7-25	TBD	Approved
50	West of Sauls Rd. North side of Complete 540	2,025	14-21	TBD	Approved
53	East of Sauls Rd. North side of Complete 540	3,953	13-28	TBD	Approved
55	West of Benson Rd. North side of Complete 540	4,890	8-28	TBD	Approved
58	West of Benson Rd. South side of Complete 540	4,885	10-27	TBD	Approved
60	East of Benson Rd. North side of Complete 540	1,245	7-26	TBD	Approved

* Construction dates are subject to change.
Noise wall locations shown are approximate.

February 2021

Noise Wall Locations Handout

Construction Activities

Construction of the first phase of the Complete 540 project is underway and when complete, will extend the existing Triangle Expressway (N.C. 540) between N.C. 55 Bypass and I-40.

Complete 540 - Roadway and Municipalities

Layers and Legend:

- Phase 1 - Right of Way
- Controlled Access Right of Way
- Right of Way
- Edge of Travel Lane
- Lane Arrows
- Phase 1 - Roadway
- Bridge
- Roadway Pavement
- Pavement Removal
- Greenway/Multi-Use Path
- Phase 2 - Right of Way
- Design Corridor
- Controlled Access Right of Way
- Right of Way
- Edge of Travel Lane
- Phase 2 - Roadway
- Bridge
- Roadway Pavement
- Pavement Removal
- Greenway/Multi-Use Path
- Adjacent County Boundaries
- Other

Interactive Map for Construction Activities

Preferred Alternative Interactive Map

If you have any questions, please contact us at complete540@ncdot.gov or 1-800-554-7849



Contact Us



ncdot.gov/complete540



complete540@ncdot.gov



1-800-554-7849



[@NCTurnpike](https://twitter.com/NCTurnpike)

[@NC_QuickPass](https://twitter.com/NC_QuickPass)



5.2 Complete 540 - Update

Requested Action:
Receive as Information.

5.3 Southeast Area Study Update

Southeast Area Study Update

Technical Coordinating Committee

Agenda

1. Project Background
2. Public Engagement
3. Scenario Planning
4. DRAFT Modal Recommendations
5. Upcoming Steps
6. Q&A



Project Background

SEAS

SOUTHEAST AREA STUDY

UPDATE

What is the SEAS Update?

This study **integrates land use and transportation** to accommodate existing and future travel needs for the purpose of reevaluating and revising, as needed, the **unified vision and comprehensive transportation strategy** established in the 2017 SEAS.

Partnership



NC Capital Area Metropolitan Planning Organization



UPPER COASTAL PLAIN
RURAL PLANNING ORGANIZATION

SEAS

SOUTHEAST AREA STUDY

UPDATE

Growth and Expansion

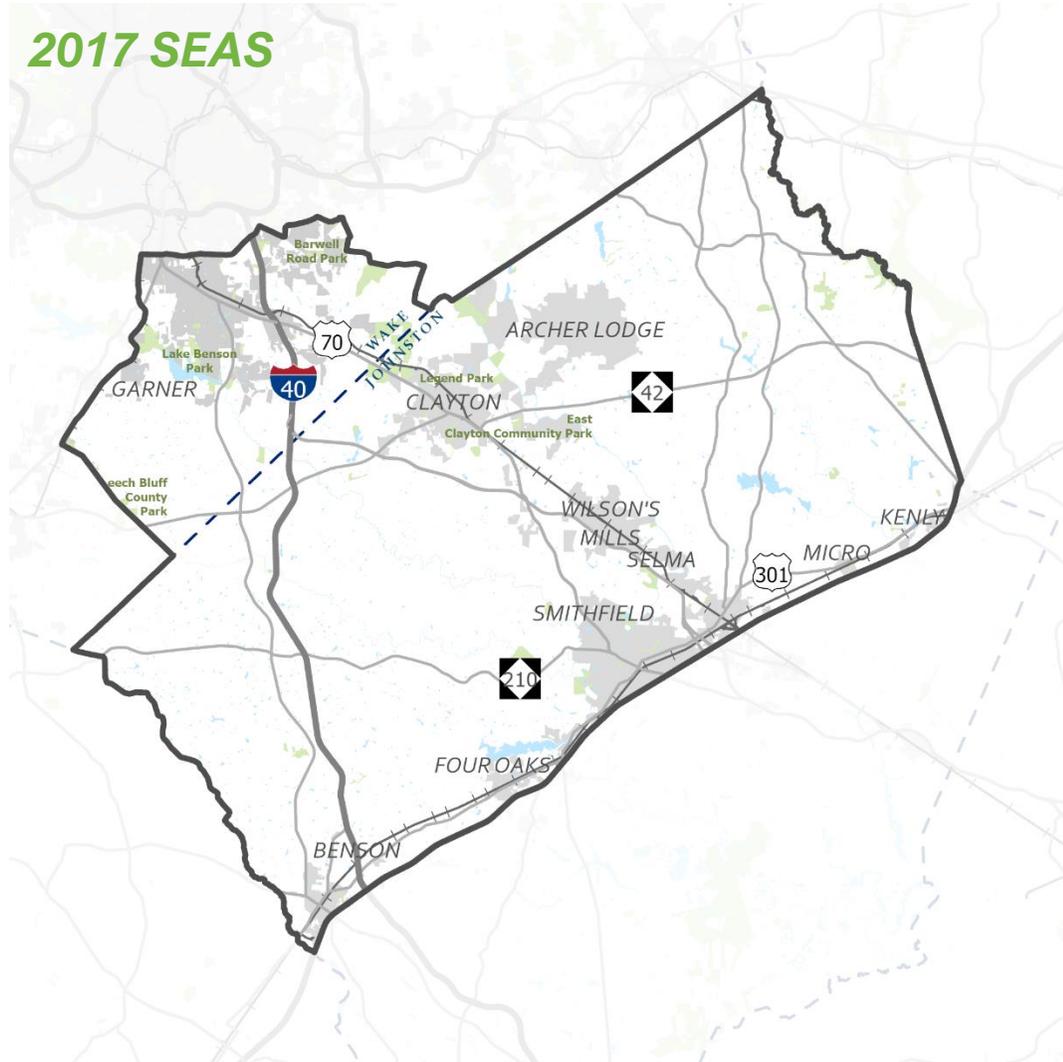
Population Growth

original 2017
study estimated
+10,000
people by 2022

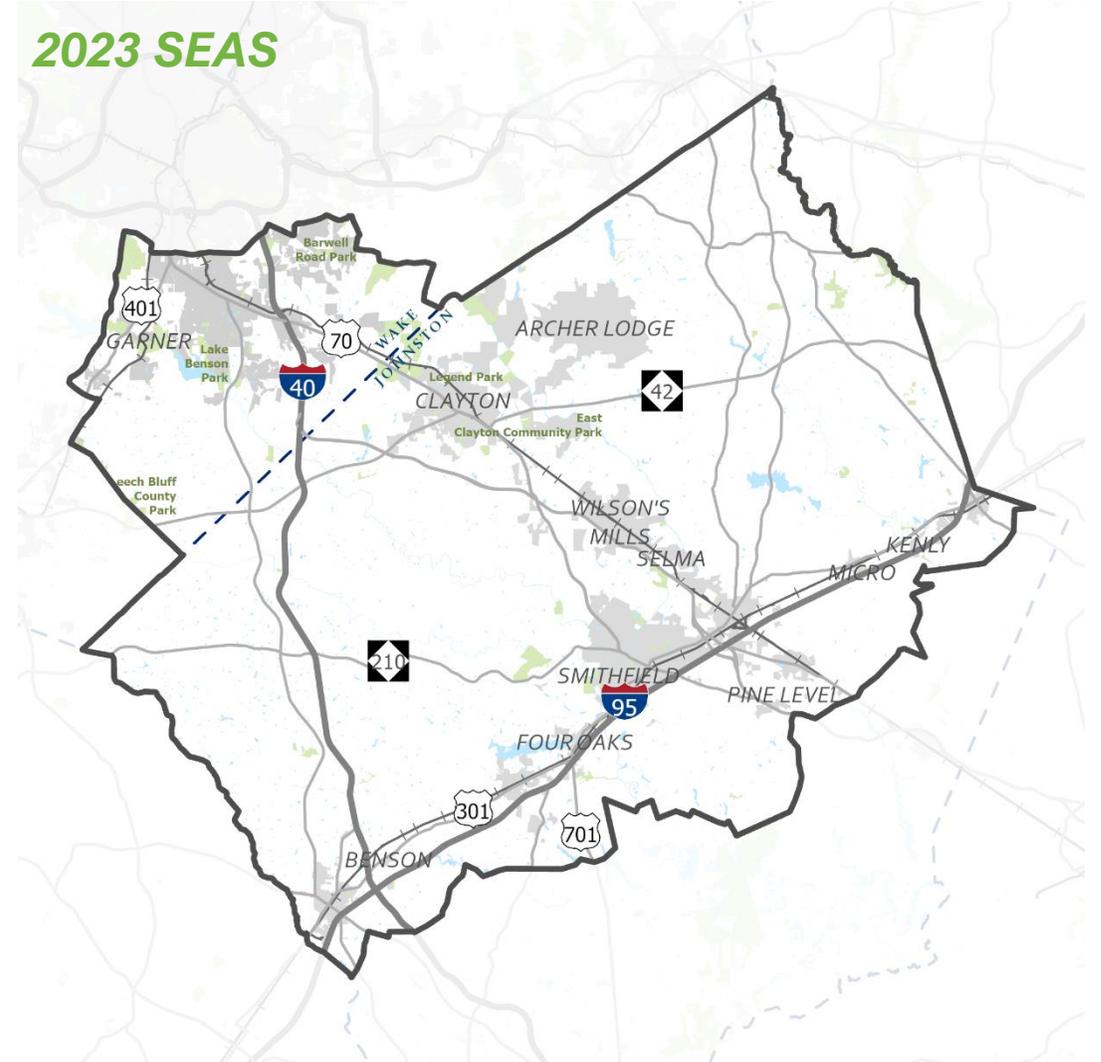


ACS data showed
+21,638
people by 2020

2017 SEAS



2023 SEAS



Guiding Principles



LIVABILITY

Enhance and promote our region's quality of life through transportation and land use decisions that equitably support public health, education, parks and recreation, public art, and local character.



TRAFFIC FLOW

Make it easier to move within and through our region by reducing congestion and improving roadway operations.



SUSTAINABLE GROWTH

Blend development decisions and transportation strategies to promote and sustain employment and population growth by offering housing and neighborhood choices to meet diverse needs while preserving the area's natural features.



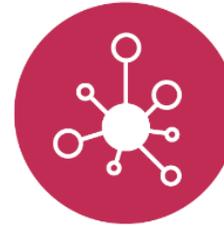
TRAVEL SAFETY

Promote a safer, more secure transportation system by reducing crashes, enhancing reliability and predictability, and improving emergency coordination.



ACTIVE TRANSPORTATION

Integrate our transportation network to provide travel choices, especially walking and cycling, for all users, regardless of age and ability.



NETWORK CONNECTIVITY

Link local and regional destinations through improved connections and enhanced integration among travel modes.



ECONOMIC VITALITY

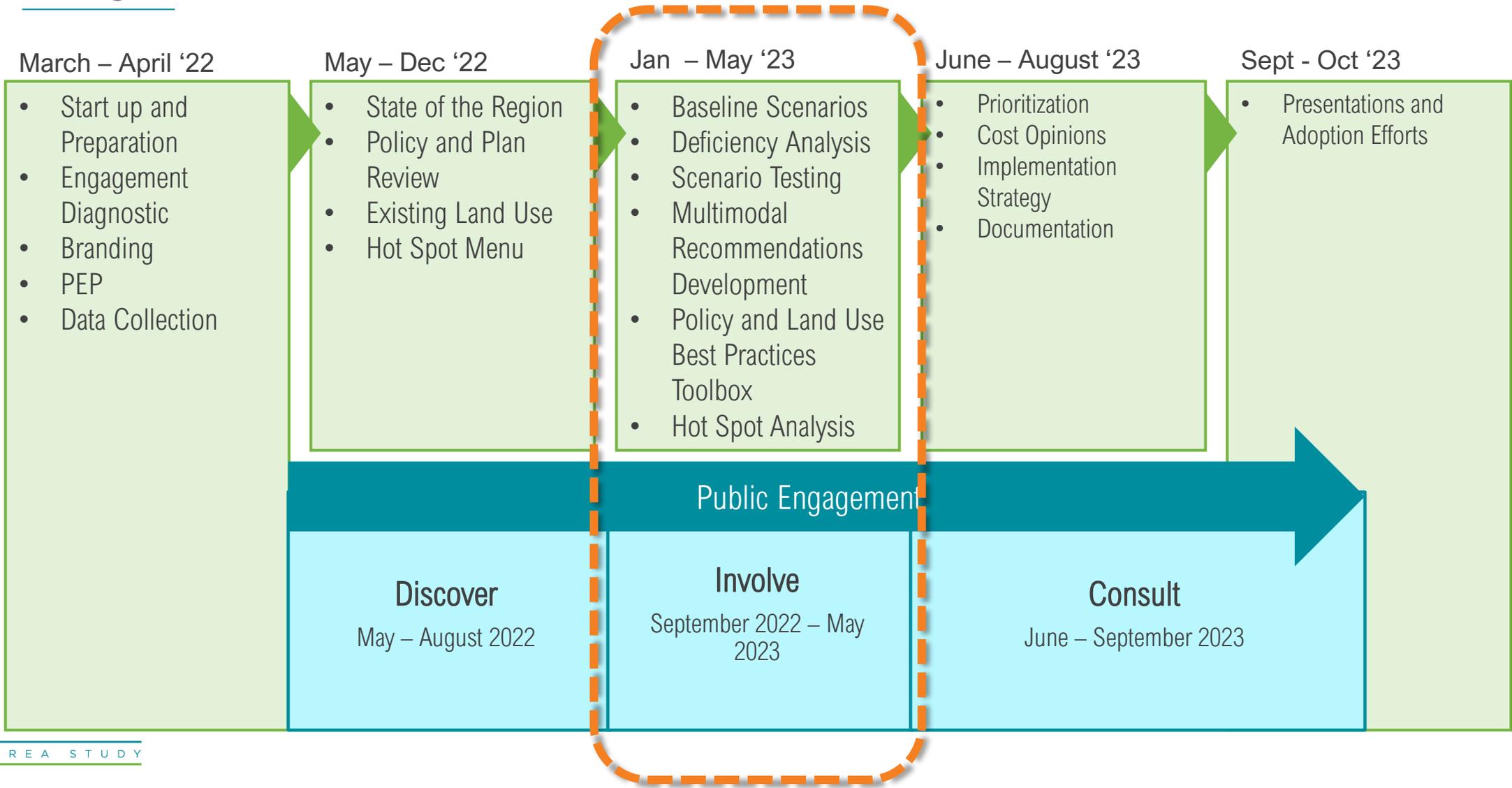
Grow our economy through a transportation network by connecting residents to jobs, goods, services, and opportunities within and beyond our region.



FREIGHT MOVEMENT

Support global competitiveness of our region through a transportation network that efficiently moves goods and services.

Project Schedule



Public Engagement



SEAS

SOUTHEAST AREA STUDY

UPDATE

Who's involved?



Engagement Phases

1

Discover

May – August 2022

2

Involve

September 2022 – May 2023

3

Consult

June – September 2023

Phase I Engagement | Overview

- Email & social media blasts
- Pop-up events
- Online survey
- Work with Committees
- Meetings with local jurisdictions & county planning staff

Online Survey



601 participants



6,610 individual data points



818 written comments

Jurisdictional Meetings

Meetings held with local planning staff from each of the 12 study area municipalities to vet the study scenario's planning process and preferred growth strategy



Pop-up Events

8 events from July 11 to July 29th across the study area



Committees



Stakeholder Oversight Team



Core Technical Team

Email & Social Media



Jurisdictional Meetings



Meeting 1

August 3rd

- Archer Lodge
- Clayton
- Garner
- Raleigh
- Johnston and Wake Counties



Meeting 2

August 4th

- Benson
- Four Oaks
- Kenly
- Pine Level
- Johnston County



Meeting 3

August 5th

- Smithfield
- Selma
- Wilson's Mills
- Johnston County



Meeting 4

January 11th

- Benson
- Four Oaks
- Kenly
- Micro
- Pine Level
- Smithfield
- Selma
- Wilson's Mills
- Johnston County



Meeting 5

January 11th

- Archer Lodge
- Clayton
- Garner
- Raleigh
- Johnston County
- Wake County

Phase II Engagement | Looking Ahead

- **Public Symposium**
- Email & social media blasts
- Draft Preferred Scenario
- Draft Modal Recommendations

Public Symposium



Email & Social Media



Committees



Stakeholder Oversight Team



Core Technical Team

Outreach Toolbox



Email and social media post templates

Scenario Planning

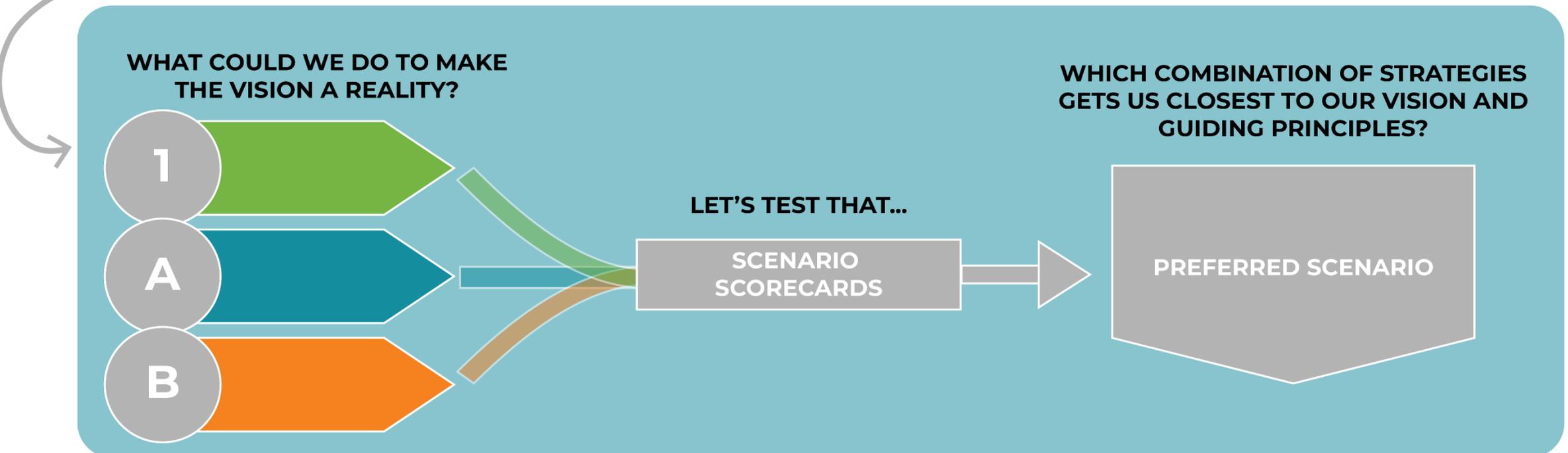
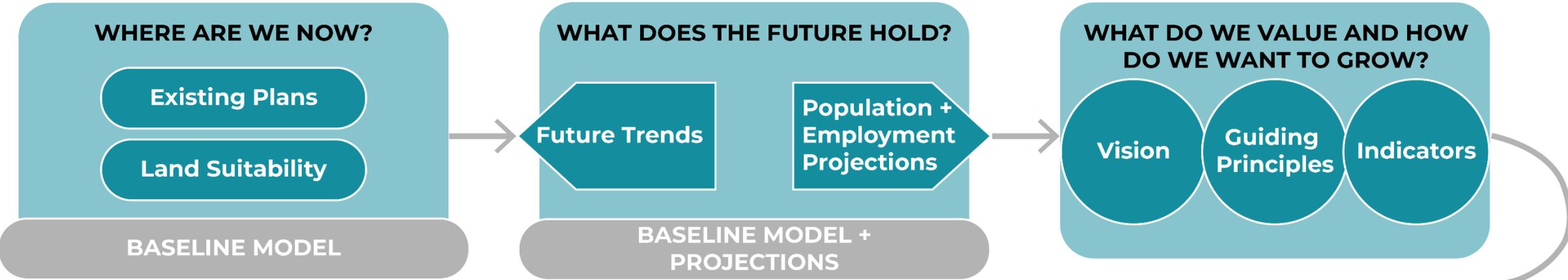


SEAS

SOUTHEAST AREA STUDY

UPDATE

Land Use Scenario Planning | Process



Scenario Development | Three Narratives

Scenario 1

Existing Plans (Dispersed)

- How growth would occur if we followed **current land use plans** where development continues an **outward pattern of single-family subdivisions** in suburban and rural areas enabled by the expansion of infrastructure

Scenario A

Corridors

- How growth would occur if **suburban and rural single-family growth** was **balanced** with **redevelopment and investment along major corridors** including a mix of retail, employment, & multifamily

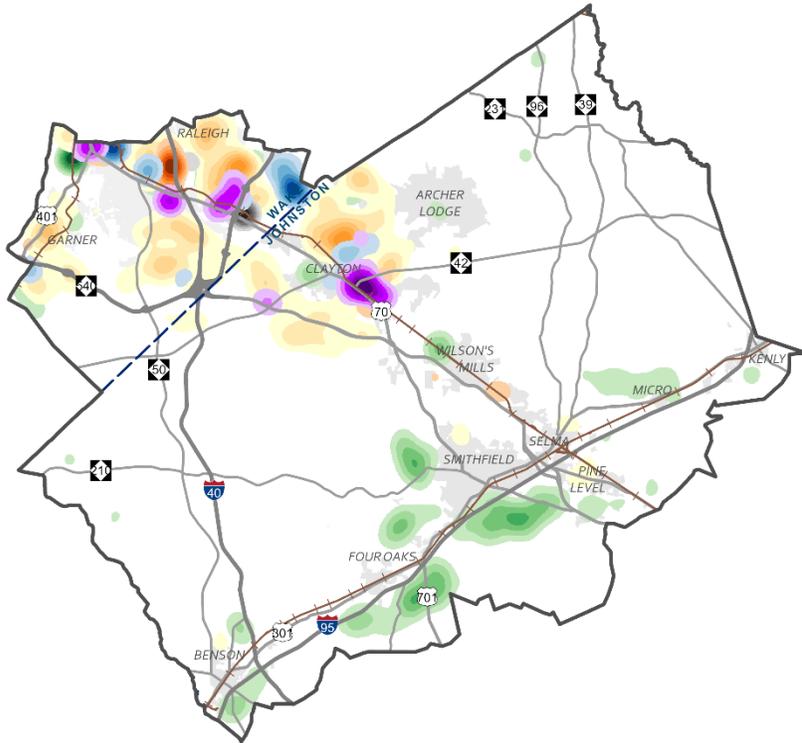
Scenario B

Centers

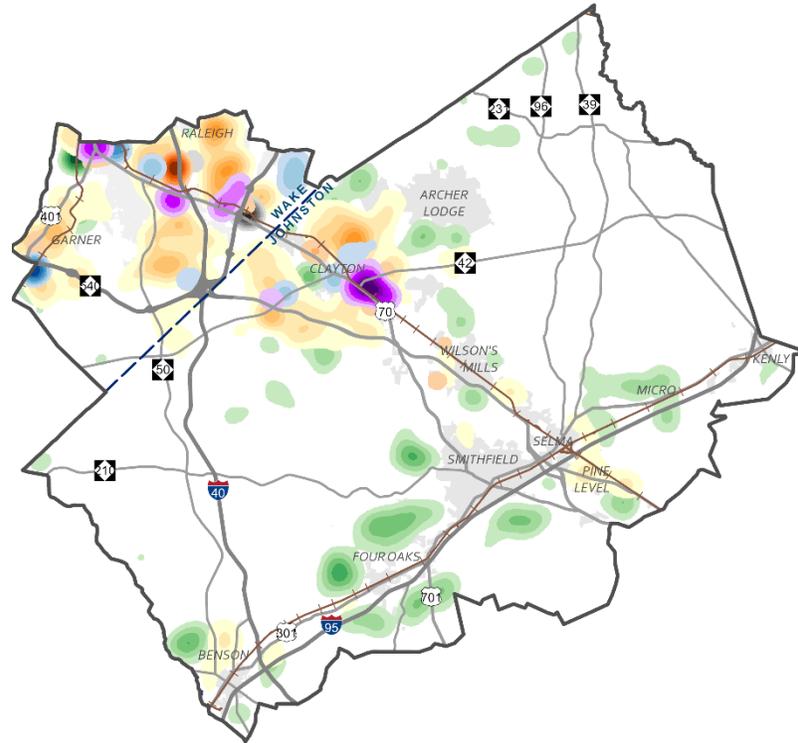
- How growth would occur if we focused **density** to core of existing downtown communities while **establishing new mixed-used centers** with a mix of retail, offices, homes, schools, parks & public spaces. More suburban neighborhoods are separated from employment and commercial areas, but have **multimodal connections** to them

Population and Employment Growth by Land Use Patterns

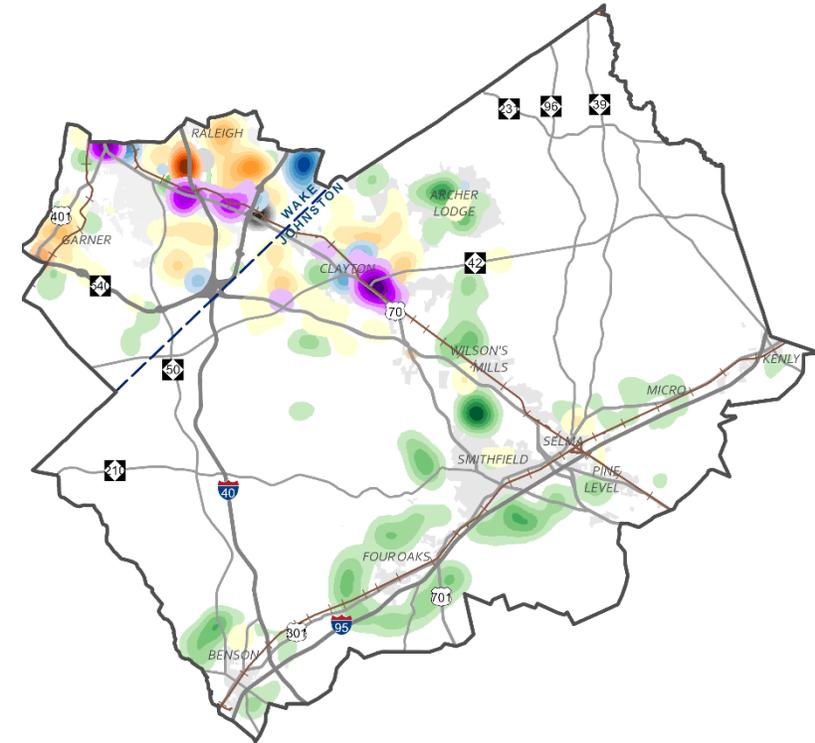
Existing Plans



Corridors



Centers



Rural



Suburban



City and
Town



Office and
Retail



Industrial



Special

Scenario Scorecard

Indicator	Existing Plans	Corridors	Centers	Guiding Principle
Land Consumed	59.45	▼	▼	
Net Residential Density	3.08	▲	▲	
Mix of Housing Types				
0-1 Units per Acre (Single-Family)	8,820	▼	▼	
2-4 Units per Acre (Single-Family)	42,310	▲	▼	
4-6 Units per Acre (Single-Family)	23,320	▼	▲	
6-10 Units per Acre (Townhomes)	4,600	▼	▲	
10-18 Units per Acre (Single-Family Attached)	300	▲	▲	
More than 18 Units per Acre (High Density Multifamily)	6,770	▼	▼	
Homes in Walkable Areas	16,390	▼	▲	
Homes within 1 mile of Employment Centers	78,080	▲	▲	
Homes near Transit				 
Homes that can walk to local bus route (1/4 mile)	13,780	▼	▲	
Homes that can walk to BRT (1/2 mile)	15,510	—	—	
Jobs near Transit				 
Jobs that can walk to local bus route (1/4 mile)	31,910	▲	▲	
Jobs that can walk to BRT (1/2 mile)	50,450	▲	▲	
Job and Home Balance	1.20	▲	▲	
Vehicle Miles Traveled	14,684,200	—	—	 
Vehicle Hours of Delay	22,000	▼	—	
Lane Miles of Congested Corridors	171	—	—	 

Excellent

Good

Fair

Poor

Very Poor



Draft Modal Recommendations

- Transit
- Bicycle and Pedestrian
- Roadway

SEAS

SOUTHEAST AREA STUDY

UPDATE

DRAFT Recommendations | Transit

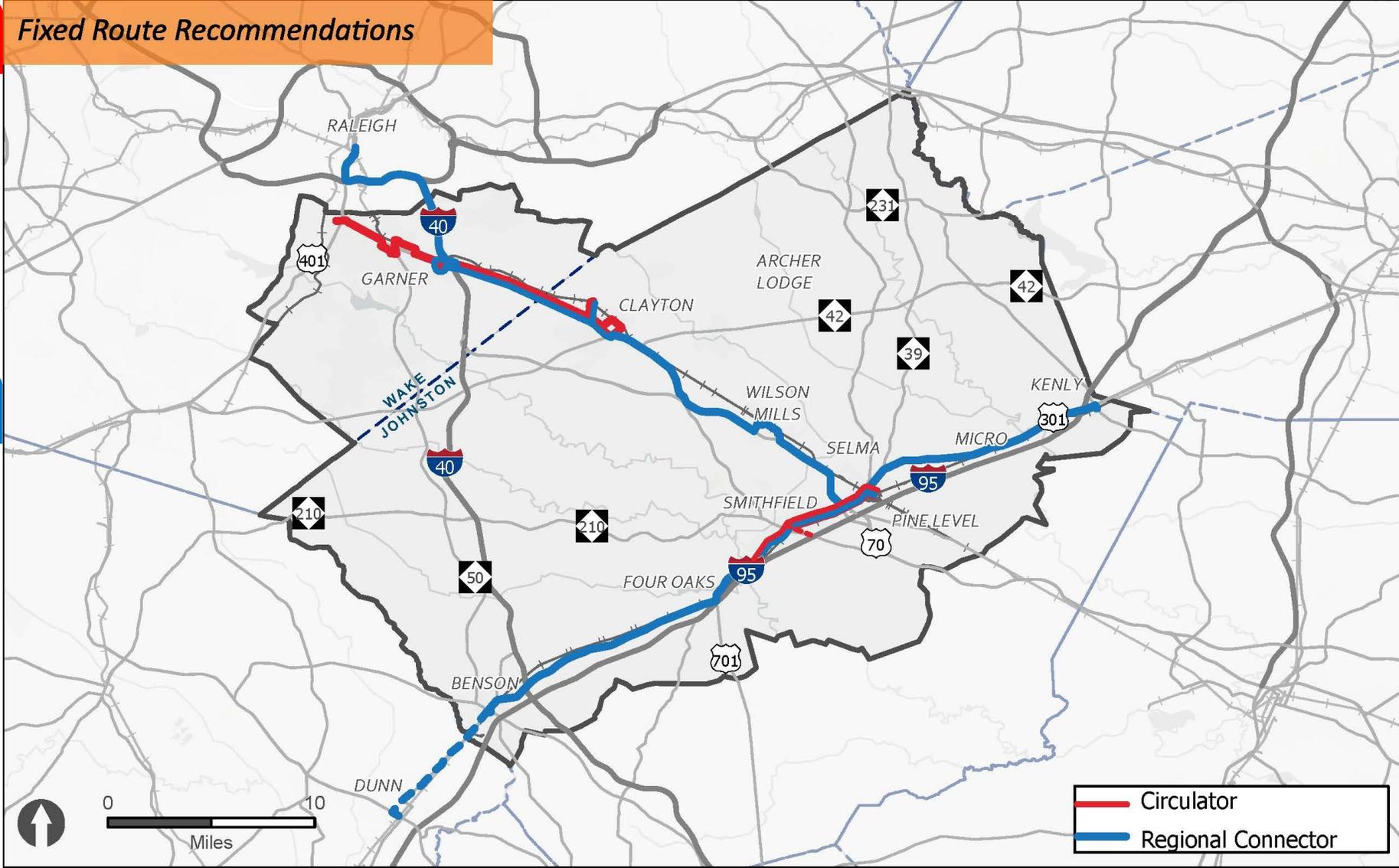
Circulator

- Connects over shorter distances
- To key destinations
- Regional transfer points

Regional Connector

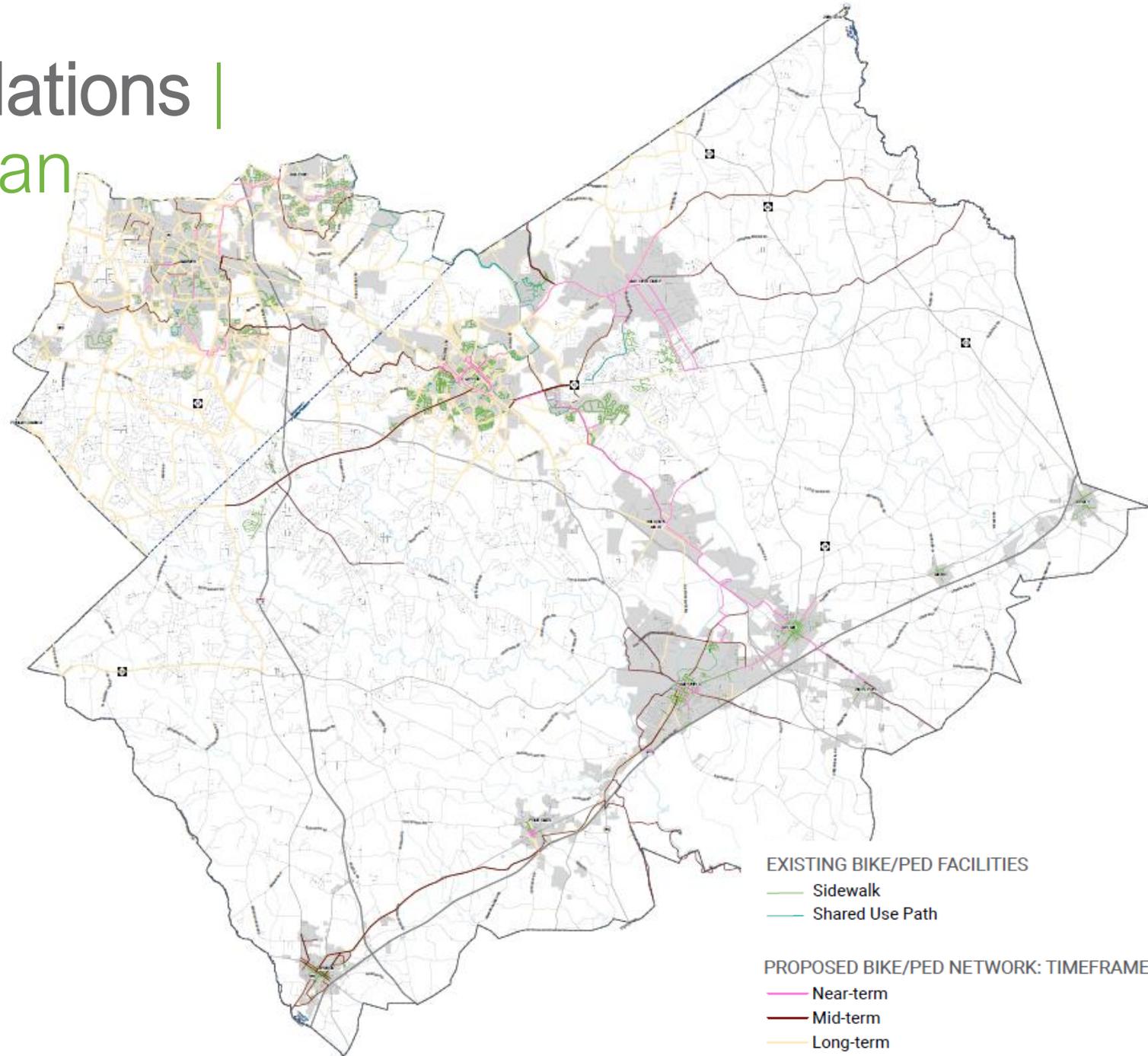
- Connects over longer distances
- To key destination
- Interregional transfer points

Fixed Route Recommendations



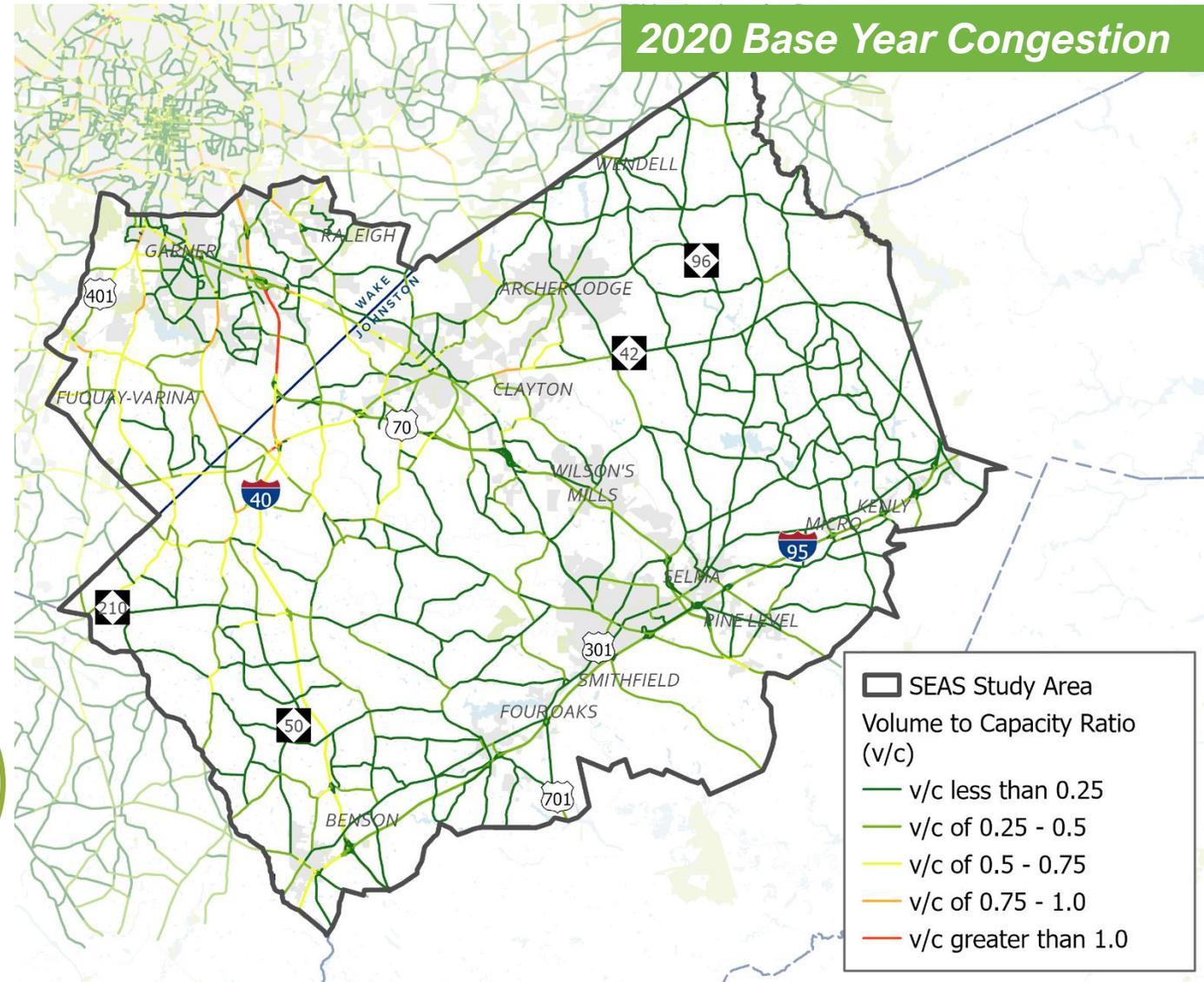
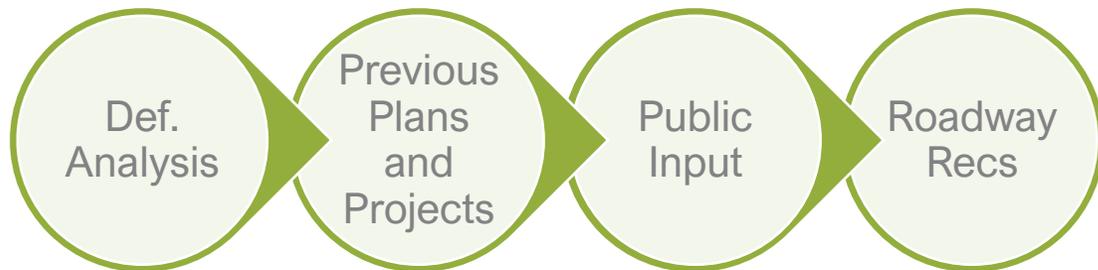
DRAFT Recommendations | Bicycle and Pedestrian

- Informed by Transportation Need and Disadvantaged Index
- Complete networks within jurisdictions
- Regional connections



DRAFT Recommendations | Roadway

- In development
- Deficiency Analysis
- Universe of Projects
 - 2050 MTP
 - 2017 SEAS
 - Local transportation plans



DRAFT Recommendations

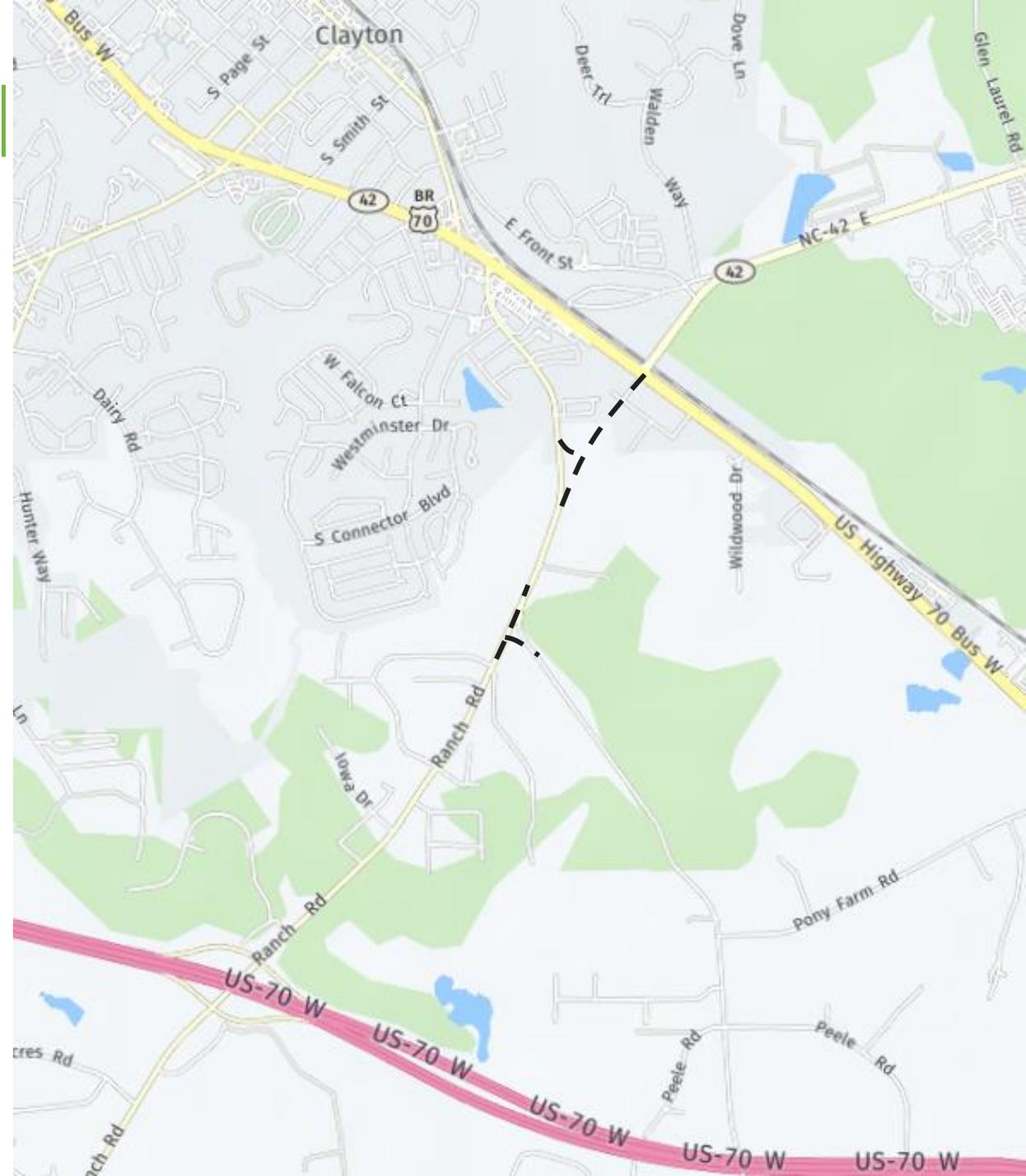
Hot Spot

US 70 Bus/NC 42/Future Ranch Rd

- Phase 1: Connect Future Ranch Road NC 42 (under construction)
- Phase 2: 4-lane widening on Ranch Road between 70 Bus and Clayton Byp - Reroute of NC 42 (built to state standards)

Phase 3: Interchange at NC 42 and US 70 Bus

- Need long term solution
- Development pressures
- Transit expansion



Upcoming Steps

- Exec. Board Meeting - April 19
- SOT Meeting
 - Review draft preferred scenario and draft modal recommendations
- Public Symposium
 - Public release of draft preferred scenario and draft modal recommendations
- Prioritization and Cost Estimation
- Documentation and Reporting
- TCC and Exec. Board Endorsement

SEAS

SOUTHEAST AREA STUDY

UPDATE



Questions?

SEAS

SOUTHEAST AREA STUDY

UPDATE



Thank You!

April 6th, 2023

SEAS

SOUTHEAST AREA STUDY

UPDATE

5.3 Southeast Area Study Update

Requested Action:
Receive as information.

5.4 2023 NCDOT Multimodal Planning Grant Application



NCDOT is accepting applications for the 2023 Multimodal Planning Grant Program, which provides planning funds for identifying bike and walking paths and transit connections.

The Town of Angier and the City of Raleigh are submitting applications

5.4 2023 NCDOT Multimodal Planning Grant Applications

Requested Action:

**Recommend Executive Board approval for the
Town of Angier and the City of Raleigh
resolutions of support.**

5.5 MTP Roadway Prioritization

AGENDA

01

Project Team

02

Project Purpose

03

Project Tasks & Schedule



Project Team

Project Prioritization Methodology

High Street Consulting

Project Roles



Brittany Gernhard
Project Manager



Kevin Ford
Technical Lead



Alice Beattie
Deputy Project Manager

NC Capital Area MPO

Project Roles

Tim Shortley
CAMPO
Project Manager

Mike Bruff
 CAMPO
 Transportation Modeling Engineer

Alex Rickard
 CAMPO
 Deputy Director

Gerald Daniel
 CAMPO
 Transportation Modeling Engineer

David Keilson
 NCDOT
 Division Planning Engineer Div. 5

Matthew Day
 Triangle J COG
 Director of Transportation

Shelby Powell
 CAMPO
 Deputy Director

Phil Geary
 NCDOT
 Transportation Engineer TPD

- ✓ Responsibilities: Review criteria, provide data, provide feedback

Project Purpose

- **Identify and develop a robust and systematic approach for prioritizing proposed roadway improvements for the MTP beyond traditional measures of effectiveness**
 - Aligned with CAMPO's strategic goals, national best practices, and CAMPO's constituent priorities.
 - Comprehensive, flexible and data-supported



Why are we here

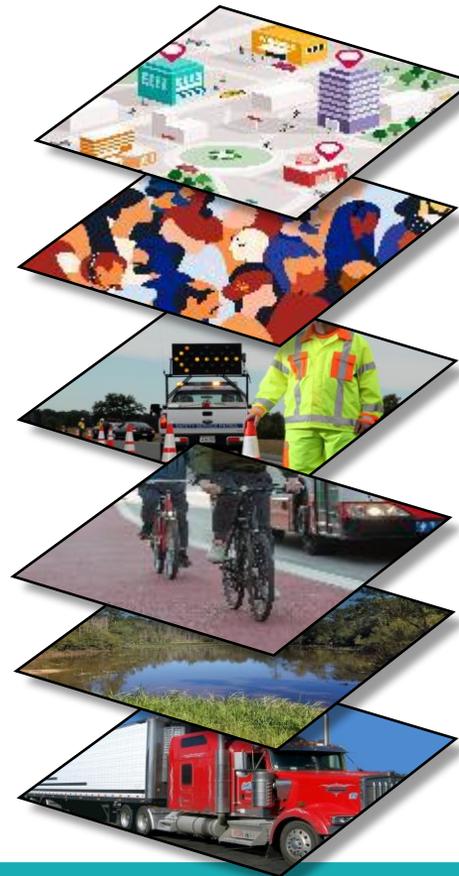
Current Project Prioritization

Payback Period Metric

- $Project\ Cost\ (\$) / Project\ Annual\ Benefit\ (\$)$
- Utilizing forecast of roadway travel time savings



Ideal Project Prioritization Incorporates Considerations for:



**Local
Planning**

Equity

Safety

Multi-modal

Environmental

Freight



Project Tasks and Schedule

Updated Project Prioritization Process

Task	Nov	Dec	Jan	Feb	Mar	April	May
Project Management							
Data Assessment & Peer Research							
Criteria and Methodology Development					★		
Project Scoring Resources							
Strategic Roadmap for Project Prioritization							

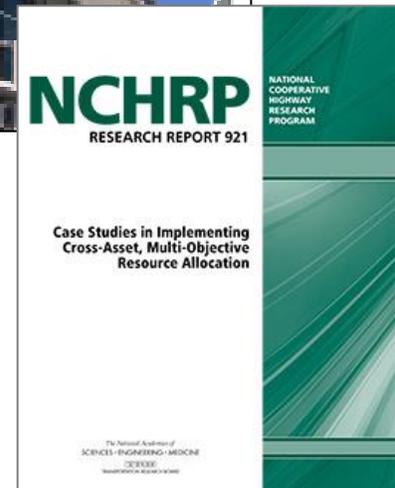
Task 2: Data Assessment, Peer Research Review and Analysis for Applicability

Example Resources



NC Capital Area Metropolitan Planning Organization

- What plans, documents, existing tools and other products influence the decision making process?
 - Current plans (MTP/CTP, Air conformity)
 - Programs and studies (hot spots, area / corridor studies)
 - Travel Demand Model
 - Environmental Justice Requirements
 - Published project maps and other visualizations



Discovery Calls for Data Collection and Assessment

Series of Conversations with Subject Matter Experts from CAMPO and NCDOT

Requests to share data including GIS files for planned project locations and descriptions, historic crash locations by severity, pavement conditions, build/no-build TDM outputs, SPOT outputs, etc.

Topics covered during calls:

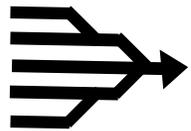
- Project data, work description, spatial location, and CMAQ data
- Travel Demand Model outputs
- Pavement condition data
- Safety/crash data
- Environmental justice data
- Economic/land use data
- Non-NBI bridge data
- Other tools available and their outputs
- INRIX or other travel time data
- Freight data
- Active transportation freight

Task 3: Criteria and Methodology Development and Documentation

Prioritization Criteria Development

Criteria and Methodology Development

What makes for a 'Good' Criteria Set?



Aligned with planning goals and objectives



Measurable with regularly available data



Representative of all project types and geographies



Differentiating to produce a clear ranking



Focused on impacts to key performance metrics



Intuitive to any audience and simple to explain

Draft Criteria

2050 MTP Goals and Objectives



Connect people and places

- **Access to Opportunity** - People residing within [x] minutes travel time of job and/or education destinations



Promote and expand multimodal and affordable transit choices

- **Access to Transit** – Prioritize projects that provide the most travel time savings along transit routes
- **Bike Infrastructure** – Prioritize projects that include bike lanes based on need identified by current Bike Score
- **Pedestrian Infrastructure** – Prioritize projects that include sidewalks, crosswalks, etc. lanes based on need identified by current Walk Score



Manage congestion and system reliability

- **Congestion** – Prioritize projects which will have the most impact on improving peak period travel times
- **Reliability** – Prioritize projects which will have the most impact on improving travel time reliability multiplied by VMT



Stimulate inclusive economic vitality and opportunity

- **Truck Congestion** – Prioritize projects which will have the most impact on improving truck travel times [bonus for projects on strategic freight corridors]
- **Truck Reliability** – Prioritize projects which will have the most impact on improving truck travel time reliability multiplied by truck VMT [bonus for projects on strategic freight corridors]
- **Density** – Prioritize projects that will improve walking, biking, transit in locations with a close ratio of jobs to residents within project’s census block group [or TAZ]
- **Relative benefit cost ratio** – Prioritize similar projects by total benefits compared to cost

Draft Criteria



Ensure equity and participation

- **Exploratory; may include** – Prioritize projects with benefits for communities of concern, plan alignment, documented community support or engagement, and/or reunification of communities bifurcated by transportation infrastructure.



Improve infrastructure condition and resilience

- **Functionally obsolete bridges** – Prioritize bridge projects that improve more functionally obsolete bridge deck area



Protect the human and natural environment and minimize climate change

- **Change in greenhouse gas (GHG) emissions** – Prioritize projects with greater reductions in GHG emissions



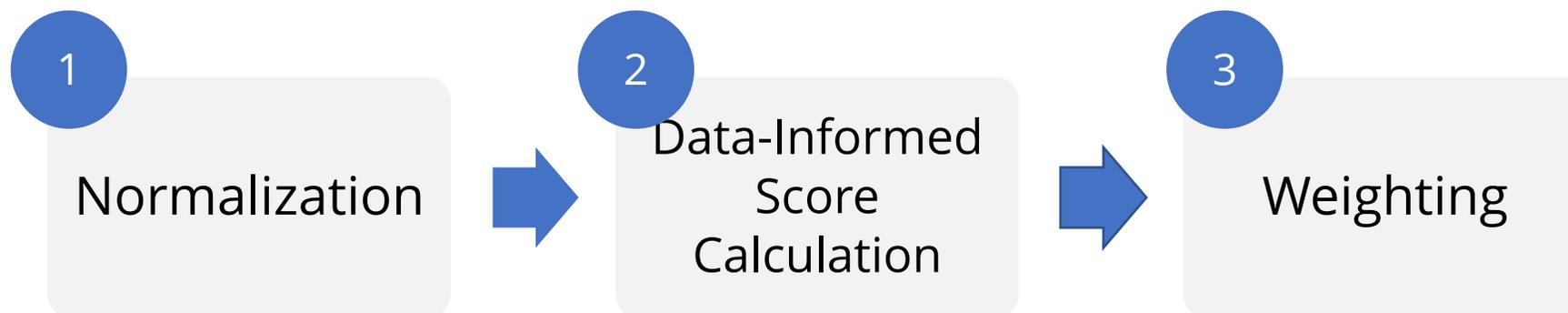
Promote safety, health and well-being

- **Safety** – Prioritize projects projected to have the greatest impact on reducing fatal and serious injury crashes

Task 4: Project Scoring Resources

Scoring Process

After criteria have been finalized, needs/existing conditions and project impact scores will be calculated. Then, scores will be combined using the following process:



Validate and Explore What Ifs?



ALTERNATIVE	VALUE	DISTRIBUTION
Interstate 76 Add Lane Capacity	.93	[Stacked bar: Blue, Green, Red, Orange]
Construct Park and Ride Facility along...	.85	[Stacked bar: Blue, Green, Red, Orange]
Interstate 10 Bridge Replacement and...	.84	[Stacked bar: Blue, Green, Red, Orange]
ATMS Implementation approaching...	.80	[Stacked bar: Blue, Green, Red, Orange]
Interstate 80 Corridor Reconstruction	.75	[Stacked bar: Blue, Green, Red, Orange]
Interstate 76 Managed Lanes	.74	[Stacked bar: Blue, Green, Red, Orange]
Interstate 70 Safety Enhancements	.72	[Stacked bar: Blue, Green, Red, Orange]
Interstate 70 Pavement Rehabilitation...	.67	[Stacked bar: Blue, Green, Red, Orange]
Interstate 280 Bridge Seismic Retrofit	.64	[Stacked bar: Blue, Green, Red, Orange]
State Route 43B Bridge Replacement	.62	[Stacked bar: Blue, Green, Red, Orange]
State Route 60 TWLTL Construction	.55	[Stacked bar: Blue, Green, Red, Orange]
US Route 101 River Bridge Reconstruction	.45	[Stacked bar: Blue, Green, Red, Orange]
Interstate 5 Major Rehabilitation	.31	[Stacked bar: Blue, Green, Red, Orange]
State Route 50 Deck Replacement and...	.22	[Stacked bar: Blue, Green, Red, Orange]

Validate rankings are reflective of agency values

Confirm equitable distribution by geography and project type

Explore performance implications of alternative policies

Task 5: Strategic Roadmap for Project Prioritization Planning Processes

Road Map for Project Prioritization Processes

The roadmap will help define a process for continued progress for performance-based prioritization and evaluating the process.

Elements may include:

- Outline how prioritization process fits into the MTP development process
- Review tools and resources to help manage impact-oriented project prioritization process
- Suggest opportunities to build out capabilities for project prioritization (planning contracts, federal grants, etc.)
- Outline methods to determine baseline weights for each criteria
- Demonstrate how scores can inform a fiscally constrained program
- What can CAMPO do now with the data and resources they have (short term)?
- What can CAMPO do with moderate change (medium term) and what are longer-term goals?



- Next Steps: Finalize development of Prioritization Tool w/ High Street (June 2023)
- CAMPO MTP/TIP Steering Committee Meetings (Fall 2023 - criteria & weights)
- TCC/Ex Board Recommendations on Development of 2055 MTP (2024)

Thank You

5.5 MTP Roadway Prioritization

Requested Action:
Receive as information.

Roll Call Vote for Action Items

4.1 March 2, 2023 Minutes

5.4 2023 NCDOT Multimodal Planning Grant Applications

City of Creedmoor
City of Raleigh (5)
County of Franklin
County of Granville
County of Harnett
County of Johnston
County of Wake (2)
GoCary
GoRaleigh
GoTriangle
Town of Angier
Town of Apex

Town of Archer Lodge
Town of Bunn
Town of Cary (2)
Town of Clayton
Town of Franklinton
Town of Fuquay-Varina
Town of Garner
Town of Holly Springs
Town of Knightdale
Town of Morrisville
Town of Rolesville
Town of Wake Forest

Town of Wendell
Town of Youngsville
Town of Zebulon
Federal Highway Administration
N.C. Dept. of Transportation (6)
N.C. State University
N.C. Turnpike Auth.
Raleigh Durham Airport Auth.
Research Triangle Foundation
Rural Transit (GoWake Access)
Triangle J. Council of Govts.
Triangle North Executive Airport

6. Informational Items: Budget

6.1 Operating Budget – FY 2023

6.2 Member Shares - FY 2023

Requested Action:
Receive as information.

7.1 Informational Item: Project Updates

Studies:

- Southeast Area Study Update
- U.S. 401 Corridor Study

Other Updates:

- Wake Transit/TPAC Updates
- FY 2024 Wake Plan Development Update
- FY 2024 Community Funding Area Program Update
- Safe Routes to School (SRTS)
- Non-Motorized Volume Data Program
- NCDOT Highway Project U-2719 Updates
- NC 540 Bonus Allocation Projects

7.2 Informational Item: Public Engagement Updates

Requested Action:
Receive as information.

8. Informational Item: Staff Reports

- MPO Executive Director
- NCDOT Transportation Planning Division
- NCDOT Division 4
- NCDOT Division 5
- NCDOT Division 6
- NCDOT Rail Division
- NC Turnpike Authority
- NCDOT Integrated Mobility Division
- TCC Members

ADJOURN

Upcoming Events - 2023

Date	Event
April 19 4:00 p.m.	Executive Board Meeting
May 4 10:00 a.m.	Technical Coordinating Committee Meeting
May 17 4:00 p.m.	Executive Board Meeting
June 1 10:00 a.m.	Technical Coordinating Committee Meeting
June 21 4:00 p.m.	Executive Board Meeting