Joint Board Meeting of the Capital Area MPO & Triangle West TPO

January 29, 2025

Call to Order & Welcome

Comments from the Public

Limit 3 minutes per speaker

Introduction & Meeting Purpose

NORTH CAROLINA
Department of Transportation

NC Passenger Rail Network Update

Julie White, Deputy Secretary of Multi-Modal Transportation

January 29, 2025

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

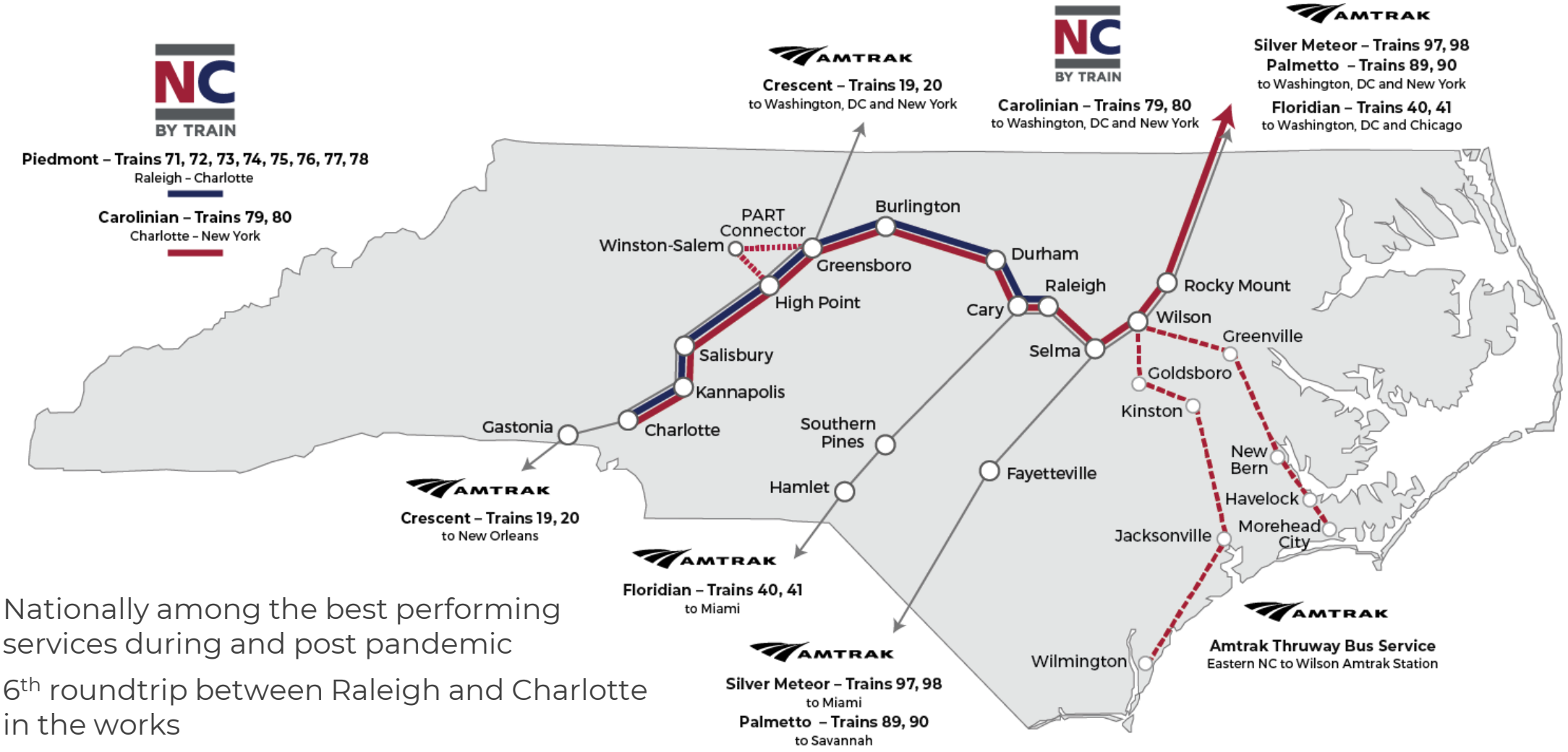
Types of Passenger Rail Service

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

ncdot.gov

NC Intercity Passenger Rail Service

Ridership at record breaking levels

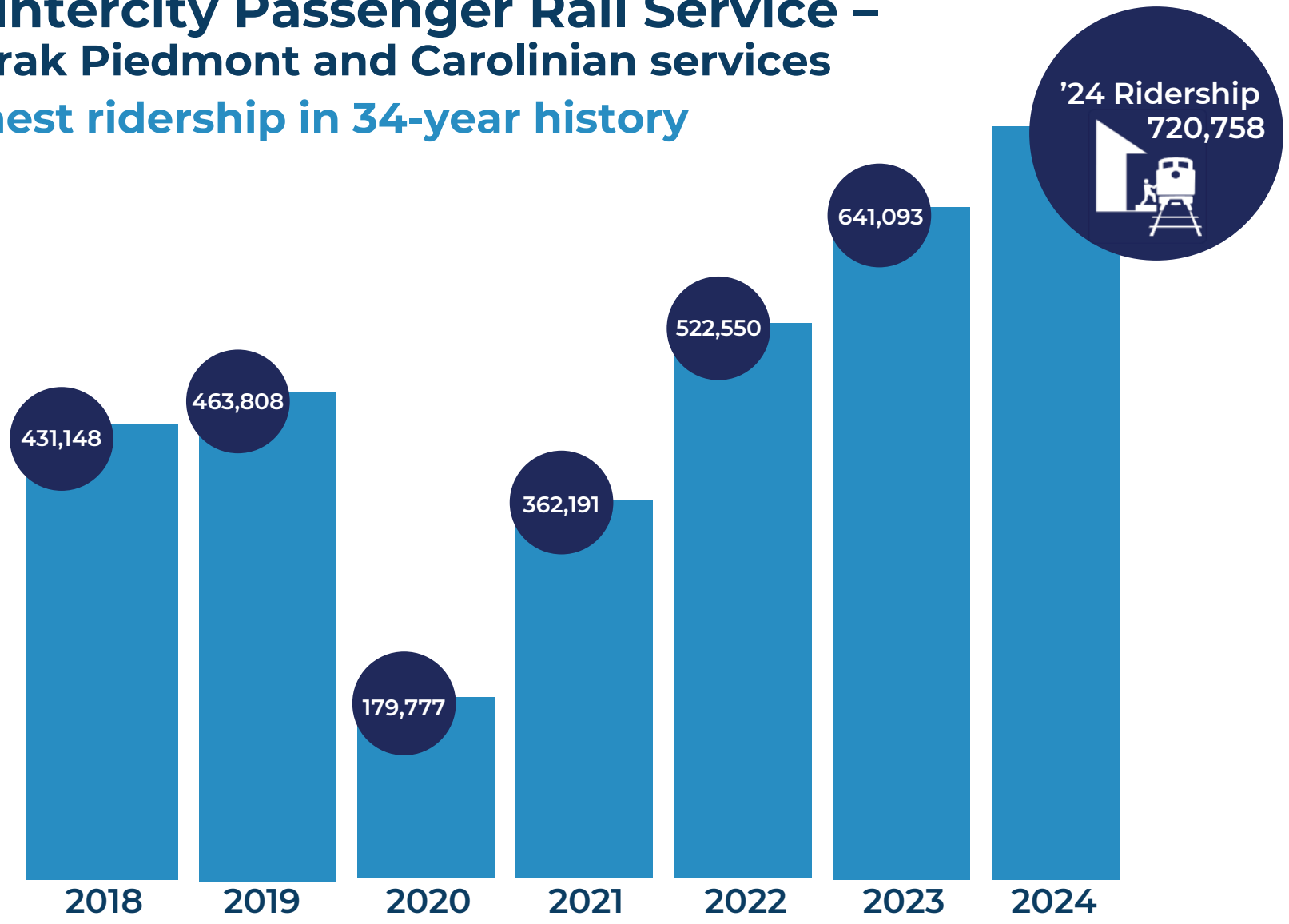


- Nationally among the best performing services during and post pandemic
- 6th roundtrip between Raleigh and Charlotte in the works

ncdot.gov

NC BY TRAIN

NC Intercity Passenger Rail Service –
Amtrak Piedmont and Carolinian services
Highest ridership in 34-year history



What is the S-Line?

Critical missing link for connecting the Southeast to D.C. and the Northeast Corridor

SOUTHEAST CORRIDOR

What's new on the S-Line?

In December 2023 NCDOT was awarded $1.09B in Federal Funds to construct the Raleigh to Wake Forest segment with service to Wake Forest to begin in 2030.

In July 2024 we broke ground on the first project along the segment, the Durant Road Grade Separation.

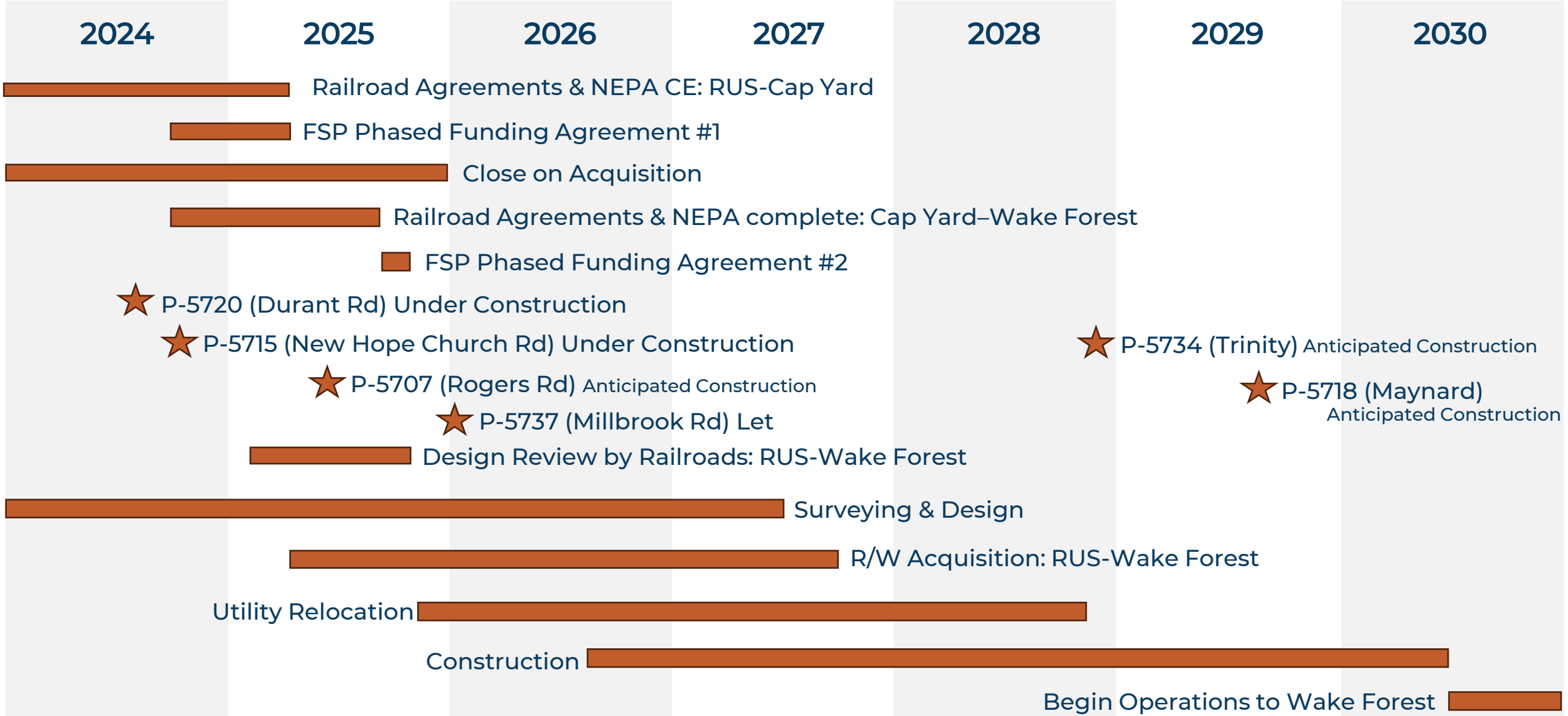
Contractor selected for New Hope Church Road in Fall 2024.

In December 2024 we reached agreement with CSX to acquire the corridor.

What needs to happen on the S-Line in 2025?

- ✓ Secure initial funding ($13.2M) for Wake Forest Rail Station/Mobility Hub
- ✓ Begin construction on New Hope Church Road grade separation
- ○ Complete due diligence on the S-Line corridor and close on acquisition
- ○ Begin construction on Rogers Road grade separation (Fall 2025)
- ○ Identify non-federal match needed for Wake Forest to state line ($380m)
- ○ Secure remaining $43.5M for Wake Forest Station/Mobility Hub

S-Line Program Schedule for Service to Wake Forest



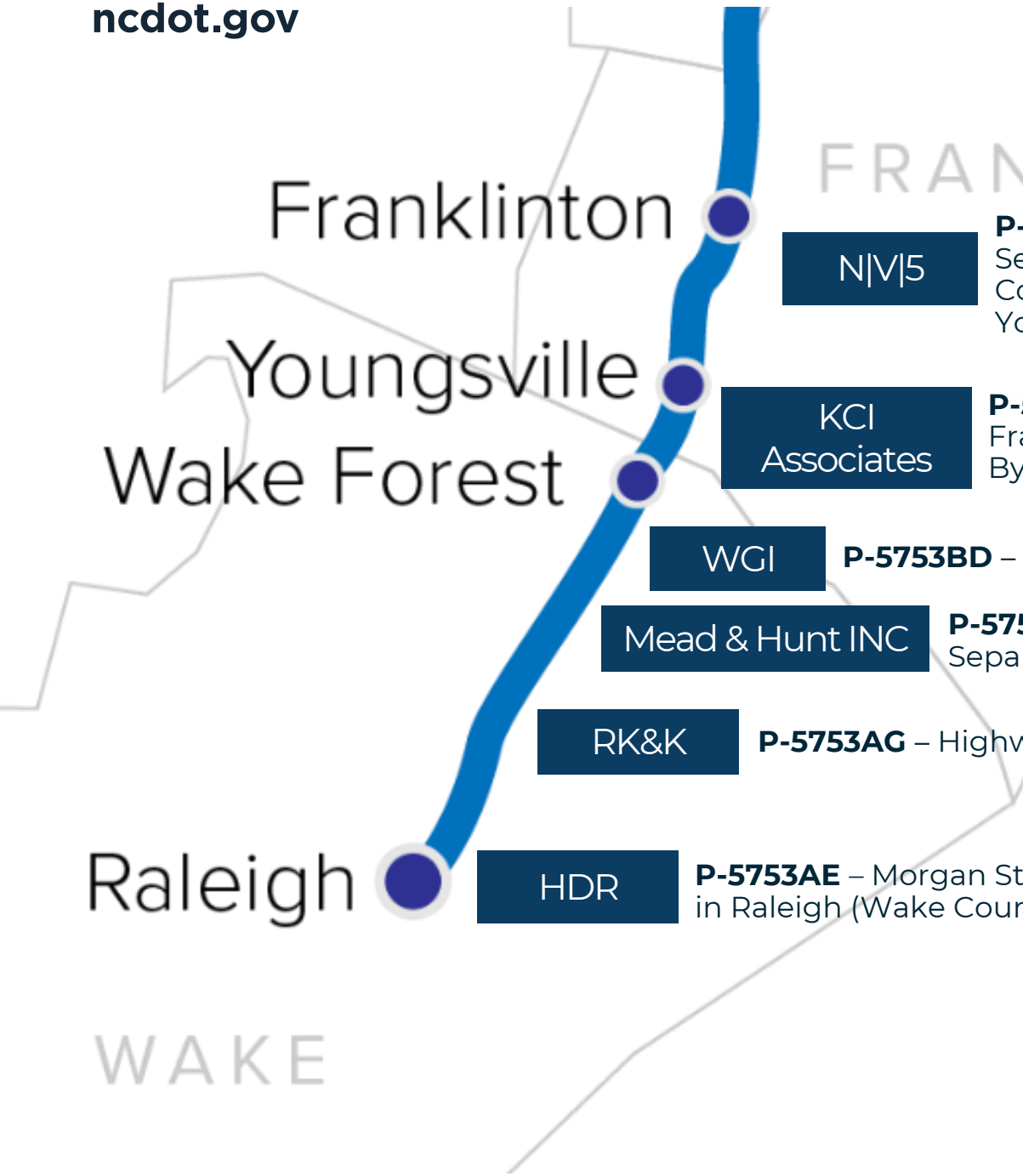
30% Rail Design – NC Segments

GEC: Benesch

TIP Project Segment	Design Contracts		Rail Design Teams
P-5753 D	NC-PE 1	S-90.07 to S-105.7	AECOM
P-5753 C	NC-PE 2	S-105.7 to S-124.7	TranSystems
P-5753 B	NC-PE 3	S-124.7 to S-136.0	Gannett Fleming
	NC-PE 4	S-136.0 to S-152.3	HDR
P-5753 A	NC-PE 5	S-152.3 to S-157.5	HNTB

30% Roadway Design - NC Segments

GECs: RK&K and TGS Engineers



N|V|5

P-5753BF – Bert Winston Rd Grade Separation, Cedar Creek Rd Grade Separation, Hawkins St Pedestrian Connector, College St Pedestrian Connector, NC 56, and Mason St Pedestrian Grade Separation in Youngsville/Franklinton (Franklin County)

KCI Associates

P-5753BE – Pine St Pedestrian Grade Separation, Main St Grade Separation, Franklin St Pedestrian Grade Separation, Cross St Ext, and Future NC 96 Bypass Grade Separation in Youngsville (Franklin County)

WGI

P-5753BD – Holding Ave Grade Separation in Wake Forest (Wake County)

Mead & Hunt INC

P-5753AH – Gresham Lake Rd Grade Separation, Ligon Mill Rd Grade Separation, and Seawell Rd in Raleigh/Wake Forest (Wake County)

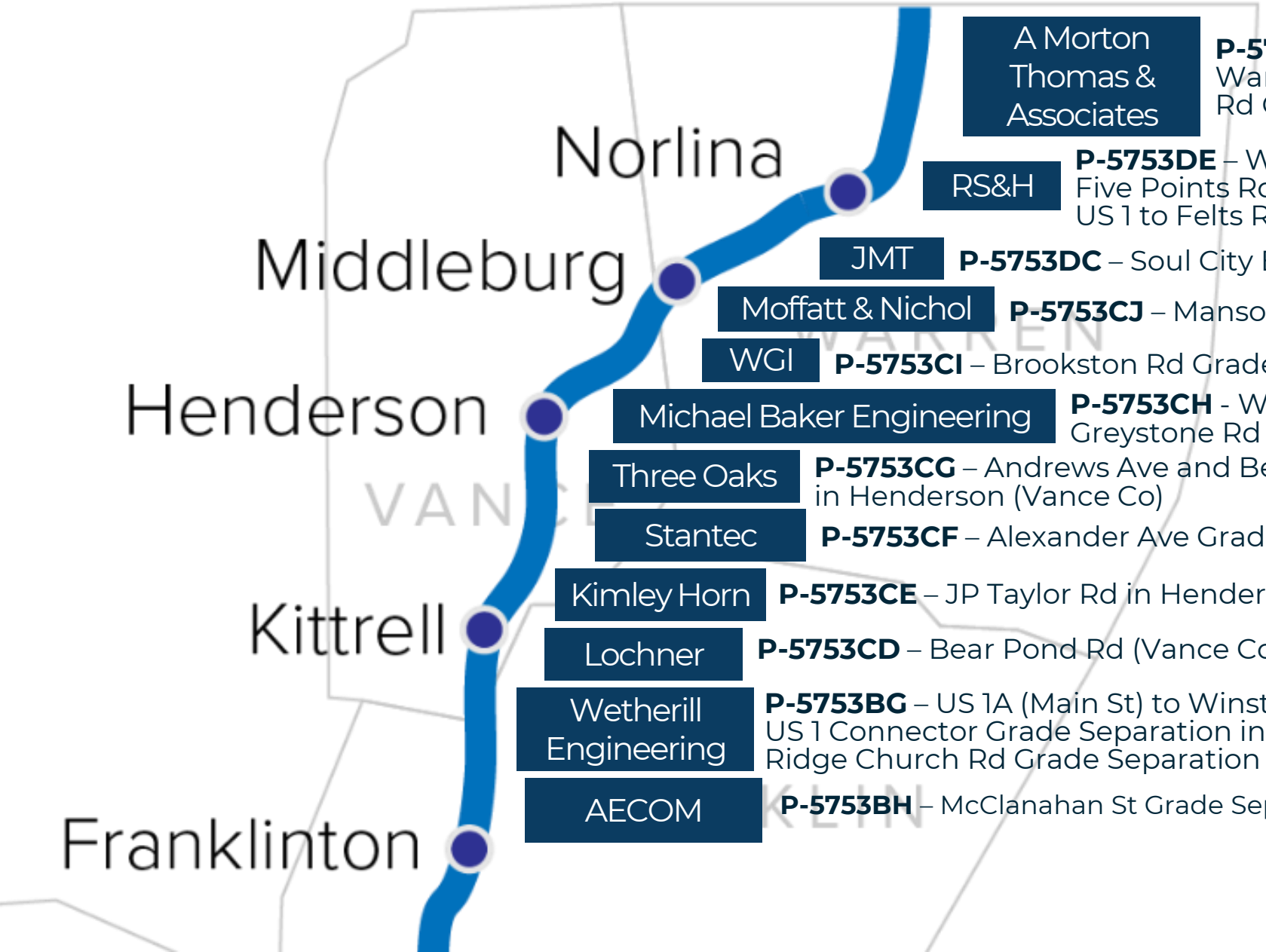
RK&K

P-5753AG – Highwoods Blvd Grade Separation in Raleigh (Wake County)

HDR

P-5753AE – Morgan St Grade Separation and Jones St Pedestrian Grade Separation in Raleigh (Wake County)

30% Roadway Design - NC Segments



A Morton Thomas & Associates	**P-5753DD** – US 401/158, Main Street/ Rose St, Warren Plains Rd, and Warren Plains-Norlina Rd Grade Separation in Norlina (Warren Co)
RS&H	**P-5753DE** – Weldon Rd Ext to Wise-Five Points Rd, Wise-Five Points Rd to US 1 Connector Grade Separation, and US 1 to Felts Rd Connector (Warren Co)
JMT	**P-5753DC** – Soul City Blvd Grade Separation (Warren Co)
Moffatt & Nichol	**P-5753CJ** – Manson Axtel Rd Grade Separation (Warren Co)
WGI	**P-5753CI** – Brookston Rd Grade Separation (Vance Co)
Michael Baker Engineering	**P-5753CH** - Warrenton Rd, Greystone Service Rd, and Greystone Rd Grade Separation (Vance Co)
Three Oaks	**P-5753CG** – Andrews Ave and Beckford Rd Grade Separation in Henderson (Vance Co)
Stantec	**P-5753CF** – Alexander Ave Grade Separation in Henderson (Vance Co)
Kimley Horn	**P-5753CE** – JP Taylor Rd in Henderson (Vance Co)
Lochner	**P-5753CD** – Bear Pond Rd (Vance Co)
Wetherill Engineering	**P-5753BG** – US 1A (Main St) to Winston St Connector and Montgomery Rd to US 1 Connector Grade Separation in Franklinton (Franklin County), and Oak Ridge Church Rd Grade Separation (Vance Co)
AECOM	**P-5753BH** – McClanahan St Grade Separation in Kittrell (Vance Co)

S-Line Mobility Hubs – Community Readiness

- Began Mobility Hub Feasibility Studies with seven towns

✓ **Sanford**	✓ **Franklinton**
✓ **Apex**	✓ **Henderson**
✓ **Wake Forest**	✓ **Norlina**
✓ **Youngsville**	

- In process of site selection and completing feasibility studies
- Completing NEPA / environmental analysis and preliminary design
- Beginning discussions of identifying non-federal funds for future federal grant applications to progress beyond preliminary engineering
- $13.2M in federal funds for the Wake Forest Mobility Hub awarded January 2025
  - Additional $43.5M+ needed for full buildout

Mobility Hub Concepts

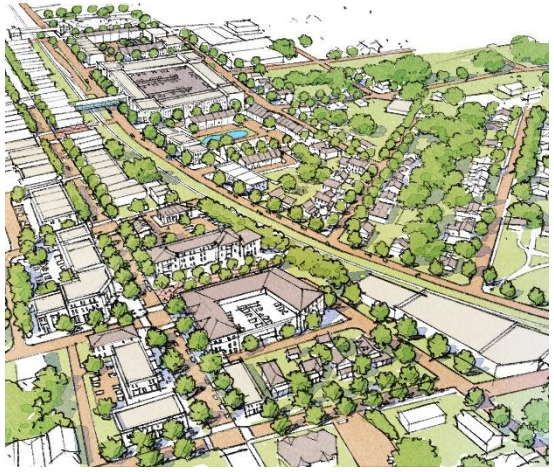
Apex

Franklinton

Wake Forest

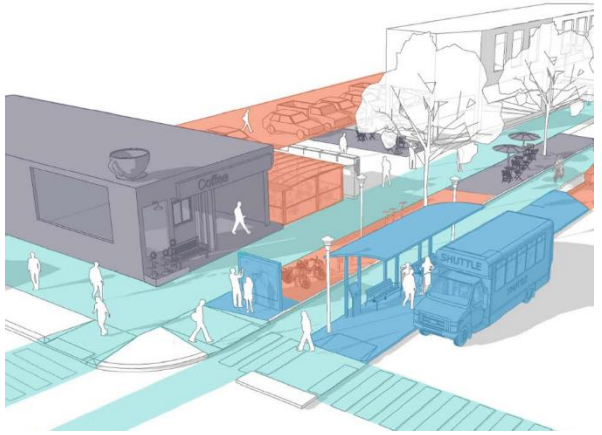
Norlina

Henderson



Sanford

Youngsville



North Carolina Intercity Rail Expansion Opportunities

Seven Corridors Awarded

- ✓ Charlotte to Washington, DC
- ✓ Salisbury to Asheville
- ✓ Raleigh to Wilmington
- ✓ Charlotte to Kings Mountain
- ✓ Raleigh to Fayetteville
- ✓ Raleigh to Winston-Salem
- ✓ Charlotte to Atlanta

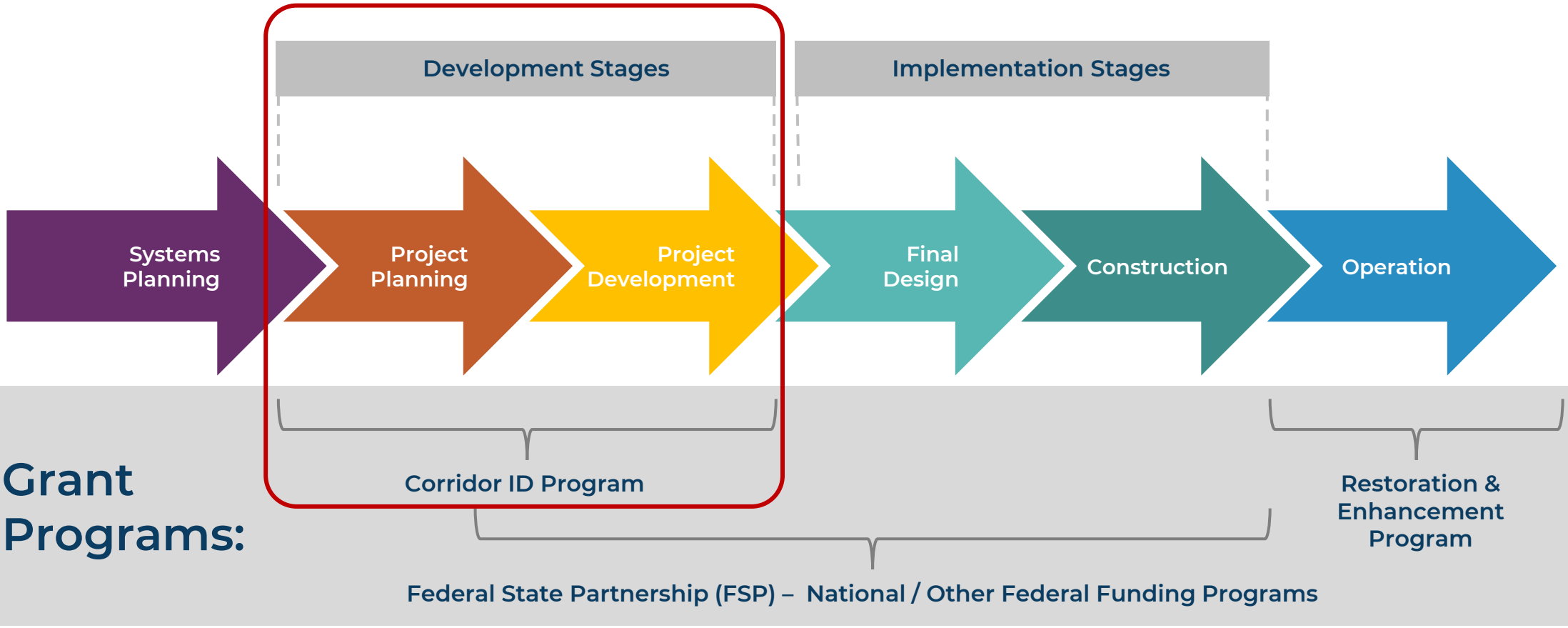
Future Corridors that support ridership in the Triangle region:

- Raleigh to Greenville
- Raleigh to Hamlet
- Raleigh to Morehead City
- Raleigh to Weldon

Towns shown are for geographical reference only and do not represent station locations.

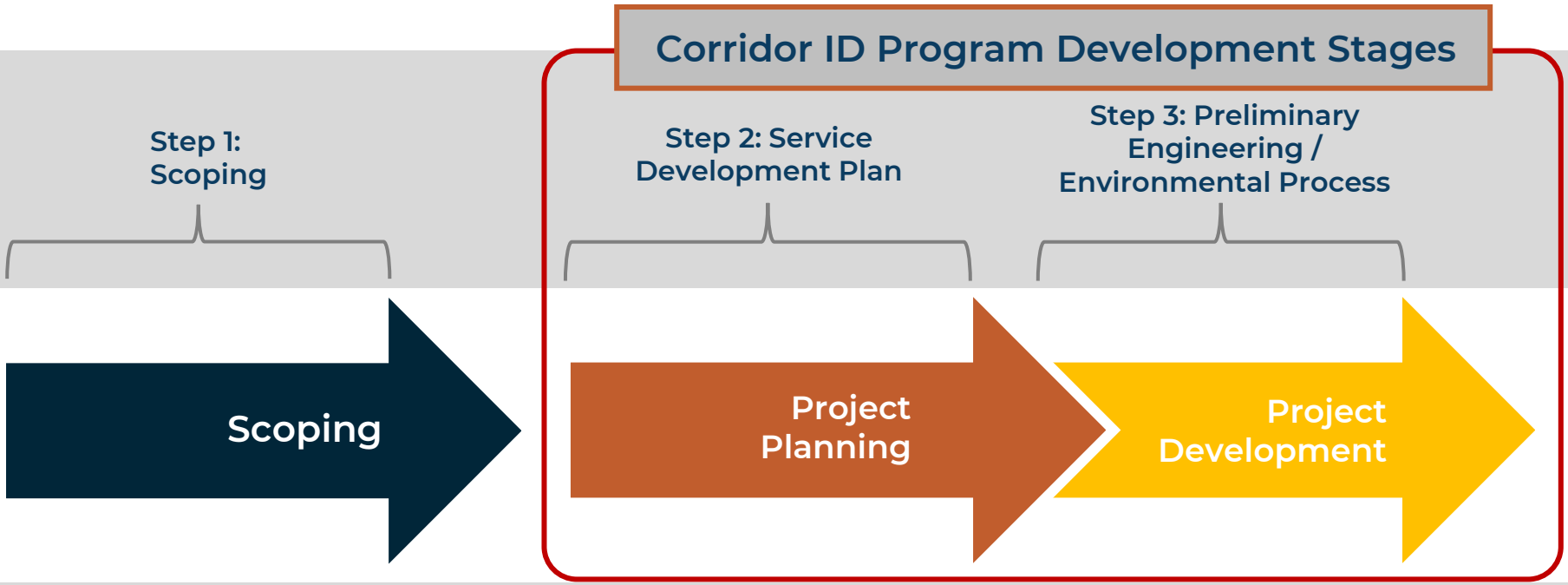
Corridor ID Process

FRA Project Lifecycle Stages and Corresponding FRA Funding Programs



Corridor ID Process

Each Step will have a separate grant agreement



Step 1

$500K funding

$0 match required for CID grants

Step 2

$1.5M – $4M Cost range*

10% Match required

$150K – $400K Match range*

**Dependent on corridor complexity.*

Step 3

TBD Cost Range*

20% Match required

When will the trains run?

- **FRA Guidance**
  - 7-12 years for new service
  - Later for higher levels of service and more complex corridors needing more investment
- **Looking Ahead**
  - Seven NC corridors in planning stage
  - State / Local match(es) needed for construction will be determined as project progresses
- **Feasibility Studies Completed**
  - Western NC Corridor
    - $665M estimated capital costs
    - 20% local and state match of $133M
  - Southeastern NC Corridor
    - $810M estimated capital costs
    - 20% local and state match of $162M
- **Upcoming Feasibility Studies**
  - Fayetteville
    - Capital costs and coordination with railroad partners TBD

Thank you!

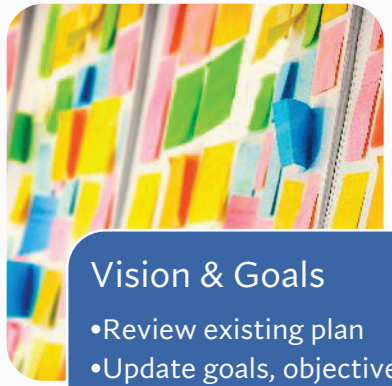
Alternatives Analysis Scenarios to Study

Matt Day, Transportation Director, Central Pines Regional Council

Chris Lukasina, Executive Director, Capital Area MPO

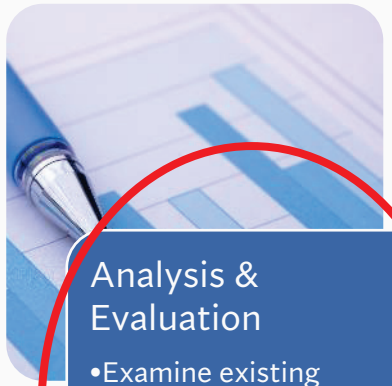
Doug Plachcinski, Executive Director, Durham-Chapel Hill-Carrboro MPO

Typical Plan Update Development Process



Vision & Goals

- Review existing plan
- Update goals, objectives & performance measures



Analysis & Evaluation

- Examine existing conditions
- Forecast future problems
- Develop & analyze alternative scenarios

Preferred Option

- Select preferred option
- Analyze fiscal feasibility
- Confirm preferred option

Final Plan

- Finalize fiscal constraint
- Air quality conformity documentation
- Adoption

Review of the Pre-MTP "Learning Scenarios"

Transit-focused Scenario

Equity-focused Scenario

Reducing Growth of Vehicle Miles Traveled (VMT)

Flexible Funding Scenario

Highway-focused Scenario

Learning Scenario: Transit-focused

Scenario Description:

Maximizing transit ridership by focusing all future growth in areas served by transit and doubling the frequency of transit services.

Key Takeaways from the Transit-focused Scenario:

- There are real, positive benefits to the functioning of the transportation system by investing in additional transit services and focusing future development around transit services, across a wide array of performance measures, including:
  - Transit ridership and passenger service miles
  - Job Access within 30 minutes by transit & walking from low-income and high-zero-car areas
  - Number of households and jobs in proximity to high-quality transit services
  - Acres of land consumed by future development

- Would see increases in automobile delay measures, but relatively limited overall

Generally Positive Performance Measure Results

Learning Scenario: Equity-focused

Scenario Description

Examined options for policy interventions that would result in more equitable transportation outcomes – considered three options: (A) moving jobs to people; (B) moving people to jobs; and (C) adding more affordable housing in transit-served areas

Key Takeaways from the Equity-focused Scenario:

- Each option has a mixture of performance measure outcomes, but some better than others:
  - Option A: generally mixed results
  - Option B: generally positive results, but does perform worse than baseline on congestion and delay measures
  - Option C: generally positive results, but does perform poorly on delay measures specifically for disadvantaged communities
- Activities to promote/provide affordable housing near jobs (especially retail, service, and industrial jobs) as in Option B and to promote/provide affordable housing near high-quality transit services as in Option C appear to have the best potential to improve transportation equity, but would require additional external actions beyond what the transportation planning process can achieve on its own

Generally Mixed-to-Positive Performance Measure Results

Learning Scenario: Reducing the Growth of VMT

Scenario Description:

Minimize growth of VMT by reducing per-capita VMT through concentration of development in transit-served areas, increasing transit frequencies, instituting a VMT-based fee, and increasing the rate of working from home

Key Takeaways from the VMT Reduction Scenario:

- This scenario has positive outcomes across all measures we considered as part of this exercise, including significant improvements compared to the baseline on:
  - Transit ridership and passenger service miles
  - Congested VMT
  - Hours of delay for low-income households
  - Jobs within 30 minutes by transit for low-income and zero-car households
  - Population and jobs near high-quality transit
  - Acres of land consumed by development

- Each of the four component factors contributes to the outcome, and even a lesser/more realistic combination of these factors could still have an effect on VMT growth

Positive Performance Measure Results

Learning Scenario: Flexible Funding

Scenario Definition:

Three options for alternative funding assumptions: (A) removing STI funding categories/tiers; (B) removing all STI funding caps and restrictions; and (C) shifting more money toward maintenance and operations/less toward capacity expansion.

Key Takeaways from the Flexible Funding Scenario:

Each option had generally negative-to-neutral outcomes:

- Option A
  - Worse than baseline on transit ridership/service miles, congested VMT, auto congested travel time, and hours of delay
  - Better than baseline on transit congested travel time
- Option B
  - Worse than baseline on transit ridership/service miles, congested VMT, auto congested travel time, hours of delay, and jobs accessible by auto
  - Better than baseline on overall VMT and fuel consumption
- Option C
  - Worse than baseline on majority of measures
  - Only scenario with better maintenance/operations

Generally Negative Performance Measure Results

Learning Scenario: Highway-focused

Scenario Description:

Examining continued low-density, highway-oriented development patterns, with an assumption of massive investment in the freeway network (doubling of lane miles). The scenario is extreme and unrealistic, but is still useful as a way to examine what could happen if such a type of investment *were* possible.

Key Takeaways from the Highway-focused Scenario:

- The Highway-focused Scenario had a mixture of positive and negative outcomes in comparison to the baseline scenario.
- A number of roadway congestion-related measures saw significant improvement, including an 86% decrease in hours of delay, a 22% increase in job access by automobile for low-income households, and a 9% reduction in congested travel times
- Measures related to transit generally performed worse than the baseline, with lower transit ridership and reduced job and housing access by transit
- Environment and quality of life measures also performed worse in the Highway-focused Scenario, with higher VMT, greenhouse gas emissions, fuel consumption, and land consumption

Generally Mixed Performance Measure Results

Learning Scenario Elements to Carry Forward into *Destination 2055* Alternatives Analysis

Key Scenario Elements	Origin Scenario
Keep Key and Halo Hubs, REINVEST Neighborhoods, Mobility Hubs & Mobility Choice Places from 2050 MTP, but **update** to reflect any changes made to these categories and **increase** density/employment in those areas where possible	• Modified/updated from 2050 MTP • VMT Growth Reduction Scenario • Transit-focused Scenario
Increase transit frequency (where possible) and add additional high-frequency corridors	• Transit-focused Scenario
Additional **focus** on affordable housing growth in transit-served areas	• Equity Scenario
Assumption of **increased** Work From Home	• VMT Growth Reduction Scenario
Increase assumed share of funding going to maintenance and operations	• Flexible Funding Scenario
Flexible modal investment strategy for non-STI/local/additional revenue assumptions	• Modified/updated from 2050 MTP • Flexible Funding Scenario
Additional local/regional funding source (agnostic on actual source)	• Modified/updated from 2050 MTP • VMT Reduction Scenario

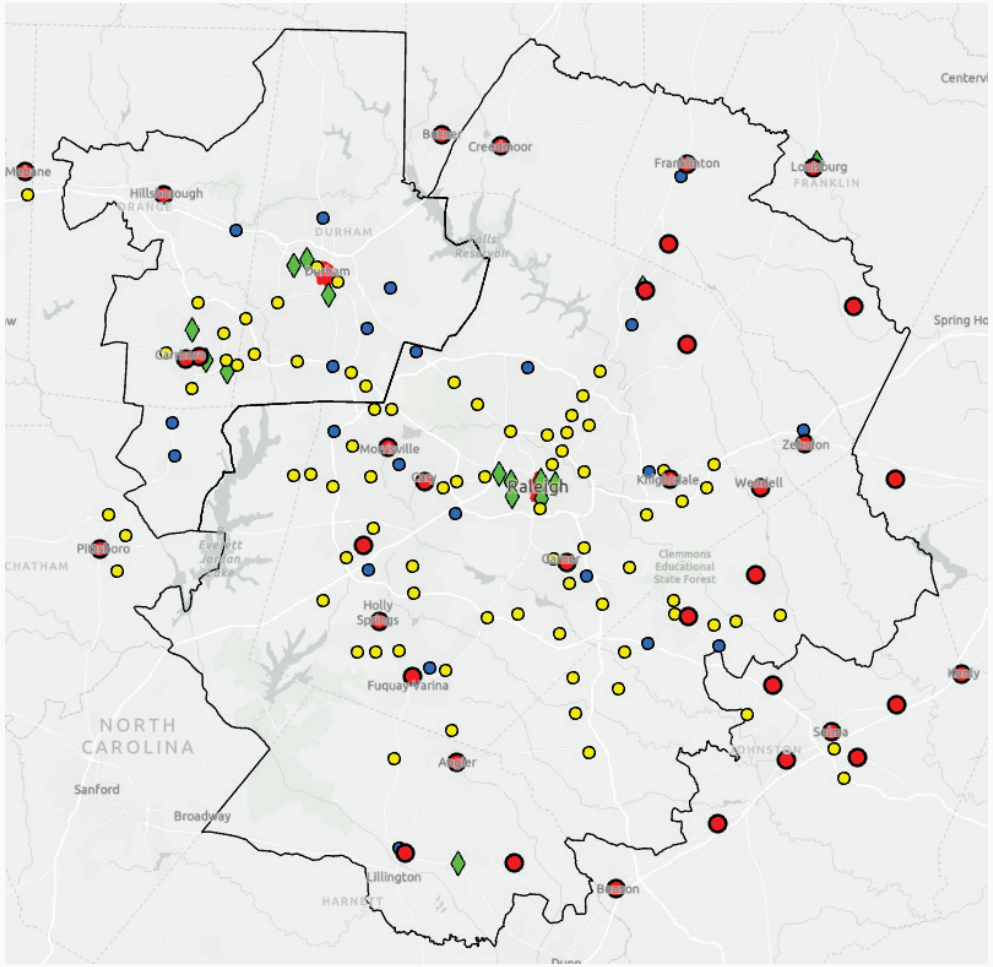
Recommended Alternatives to Study in *Destination 2055*

Capital Area MPO & Durham-Chapel Hill-Carrboro MPO Joint Board Meeting

Before we begin...some helpful Definitions

Key Hubs	Description	Examples
Anchors	Places with the highest concentrations of jobs and services, plus places with moderate intensity and an anchor institution that can influence mobility-based policy decisions	• Metropolitan Central Business Districts • Major Universities • Major Medical Centers • Research Triangle Park
Mainstays	Places with regionally significant concentrations of jobs, either outright or in comparison to their surroundings	• Many mid-sized town and city centers • Some suburban centers, often along major transportation corridors
Mobility Hubs	Mixed-use regional activity centers along existing major transportation corridors	• Hubs identified as activity centers in various plans • Locations served by fixed-guideway transit or frequent bus service (at least every 20 minutes) • Locations near medical facilities

Before we begin...some helpful Definitions



Building the Alternatives

- Each alternative is based on two sets of assumptions:

A **Development Foundation** that describes the anticipated land use patterns for future growth

A **Mobility Investment Foundation** that describes the anticipated transportation investments/network

- These get combined in various ways to create scenarios

Building the Alternatives

Development Foundations

P Community Plans

Future development patterns and densities based on adopted local land use plans

O Opportunity Places

Building on community plans, but with additional emphasis on development around anchor institutions, mobility hubs, affordable housing opportunity sites, and equitable transit-oriented development (details vary based on paired mobility foundations)

Mobility Investment Foundations

E Existing & Committed

Existing network, plus projects underway or planned in next 4-5 years

T Trend Investment

Future network investments similar to current conditions/investments

M Mobility Corridors

Building on Trend, but with additional funding available to invest

C Complete Communities

Building on Mobility Corridors above, but with more additional funding focused on transit, active transportation, and complete/safe streets

CAMPO NC Capital Area Metropolitan Planning Organization

DURHAM - CHAPEL HILL - CARRBORO DCHC METROPOLITAN PLANNING ORGANIZATION

***Destination 2055* Scenario Framework**

Development Foundation	Mobility Investment Foundation				
	E Existing & Committed	**T** Trend	**M** Mobility Corridors	**C** Complete Communities	**U** Unconstrained
P Community Plans	Deficiency & Needs Scenario	Plans & Trends Scenario	Shared Leadership Scenario		
O Opportunity Places				All Together Scenario	
B Build Out					

Note: moving from left to right, and from top to bottom, each scenario builds on the elements of the preceding scenarios.

Deficiencies & Needs Scenario

Scenario Purpose:

- To explain what might happen if all anticipated growth occurs, but we do not make changes to the transportation network
- To provide an initial baseline of comparison for other alternatives
- To provide information about potential locations of future needs/system deficiencies

Important Note:

- This scenario is purposefully unrealistic. However, it provides us with useful information for the overall MTP analysis.

Deficiencies & Needs Scenario

Development Foundation:

P Community Plans

- Based on future land use category designations shown on locally-adopted land use plans
- Initial input was gathered from local jurisdictions in late 2023/early 2024, with further review in late 2024

Mobility Investment Foundation:

E Existing + Committed

- Only includes existing infrastructure, plus those projects that are underway or committed for funding within the next 4-5 years (current TIP period)

Plans & Trends Scenario

Scenario Purpose:

- Represents a likely future if there are no changes to current patterns of transportation funding and investment decisions or land use planning policies
- Based on current trends and restrictions for revenue

Important Note:

- This is the “simplest” alternative to implement, but that does not mean it is “easy” to achieve

Plans & Trends Scenario

Development Foundation:

P Community Plans

- Based on future land use category designations shown on locally-adopted land use plans
- Same as in Deficiency & Needs scenario

Mobility Investment Foundation:

T Trend Investment

- State funding in line with NCDOT forecasts
- Constrained by STI limitations (funding categories, mode caps, corridor caps, etc.)
- Federal funding maintained at current IIJA levels
- Transit investments consistent with county plans/funding forecasts
- Rail – partnerships for increased intercity passenger services
- Local funding as identified by jurisdictions

Plans & Trends Scenario

CAMPO Example Projects:

- Highway:
  - Completed Outer Loop & widened/improved major highways
  - Fewer improvements to secondary roads
- Transit/Rail:
  - Partnerships for increased intercity passenger rail service
  - BRT services (Raleigh N/S/E/W, Cary N/S, Midtown)
  - Bus frequency and area coverage improvements based on Wake Transit plan

DCHC MPO Example Projects:

- Highway:
  - 2050 MTP Highway Projects
  - Plus capacity improvements & new projects since 2050 plan
- Transit/Rail:
  - Current Intercity Passenger Rail
  - Chapel Hill NS BRT line
  - Bus improvements from short range plans, county transit plans, and a few timing changes

Shared Leadership Scenario

Scenario Purpose:

- Analyze a future with stronger local/state/federal partnerships and emphasis on multimodal investments in key “Mobility Corridors”
- Assumes additional funding amounts (NC FIRST Commission; modest local and federal increases) and flexibility (STI flexibility beginning in second decade of plan)

Elements Incorporated from Learning Scenarios & Other Feedback:

- Additional transit and multimodal investment
- Increased work from home percentage
- Consider increasing share of funds to maintenance and operations
- Consider increasing share of funds earmarked for safety projects

Shared Leadership Scenario

Development Foundation:

P Community Plans

- Based on future land use category designations shown on locally-adopted land use plans
- Same as in Plans & Trends scenario

Mobility Investment Foundation:

M Mobility Corridors

- Take the base of investments from the Trend Scenario, *PLUS:*
  - Additional state funding based on NC First Commission recommendations, starting in second decade
  - Modest growth of federal funding to keep pace with inflation
  - Additional transit investments beyond the horizon of county transit plans
  - Modest increase in local funding amounts
  - Added flexibility in STI restrictions beginning in second decade

Shared Leadership Scenario

CAMPO Example Projects:

- Highway:
  - Completed Outer Loop & widened/improved major highways
  - Fewer improvements to secondary roads
- Transit/Rail:
  - Partnerships for increased intercity passenger rail service, plus Regional Rail in Wake County
  - BRT services (Raleigh N/S/E/W, Cary N/S, Midtown, NC 54, I-40)
  - Bus frequency and area coverage improvements based on Wake Transit plan

DCHC MPO Example Projects:

- Highway:
  - 2050 MTP Highway Projects
  - Congestion Management Process (CMP) Projects and other needed projects
- Transit/Rail:
  - Current Intercity Passenger Rail
  - 2-3 BRT lines based on 2050 MTP with adjustments (incl. Chapel Hill NS BRT line)
  - Bus improvements from short range plans, county transit plans, with adjustments

CAMPO NC Capital Area Metropolitan Planning Organization

DURHAM - CHAPEL HILL - CARRBORO DCHC METROPOLITAN PLANNING ORGANIZATION

All Together Scenario

Scenario Purpose:

- Serves as an ambitious scenario that looks at what might be possible if the region is able to bring in additional funding/more flexibility in funding
- Has an additional focus on improvements to transit, active transportation, and complete/safe streets

Elements Incorporated from Learning Scenarios & Other Feedback:

- Additional transit frequency/corridors and multimodal investment, above and beyond Shared Leadership Scenario
- Additional density of development in areas with high-frequency transit, mobility hubs, areas near anchor institutions
- Increased local funding toward safety, maintenance & operations
- Additional funding flexibility, particularly with local funding

All Together Scenario

Development Foundation:

O Opportunity Places

- Built on same base assumptions as Community Plans, but with additional focus increased development around:
  - **Anchor Institutions** (universities)
  - **Mobility Hubs** (major activity centers)
  - **Affordable Housing**
  - **Equitable TOD**

Mobility Investment Foundation:

C Complete Communities

- Take the base of investments from the Mobility Corridors foundation, *PLUS:*
  - Additional local/regional funding (source of funding is agnostic)
  - Potential for additional funding from state or other regional partners
  - Additional focus on transit, active transportation and complete/safe street investments

All Together Scenario

CAMPO Example Projects:

- Highway:
  - Completed Outer Loop & widened/improved major highways
  - More improvements to secondary roads
- Transit/Rail:
  - Partnerships for increased intercity passenger rail service, plus expansion of Regional Rail beyond Wake County
  - BRT services (Raleigh N/S/E/W, Cary N/S, Midtown, NC 54, I-40)
  - Bus frequency and area coverage improvements based on Wake Transit plan

DCHC MPO Example Projects:

- Highway:
  - 2050 MTP Highway Projects
  - Plus Congestion Management Process (CMP) Projects and other needed projects
- Transit/Rail:
  - Current Intercity Passenger Rail plus Regional Rail
  - All 4 BRT lines based on 2050 MTP with adjustments
  - Bus improvements from short range plans, county transit plans, with adjustments

Scenario Comparison

	Deficiencies & Needs	Plans & Trends	Shared Leadership	All Together
Available Funding	$	$$	$$$	$$$$
Highway Investment		CAMPO:  DCHC: 	CAMPO:  DCHC: 	CAMPO:  DCHC: 
Bus Investment				
Rail Investment		CAMPO:  DCHC: 	CAMPO:  DCHC: 	CAMPO:  DCHC: 
Development Density				

Community Engagement Plan for Alternatives Analysis

DESTINATION 2055
Metropolitan Transportation Plan for the Triangle Region

Part One - Inform (March-April)

- Educational Info
  - MTP Development progress
  - Outcomes of Goals & Objectives
  - Rollout of Deficiency & Needs, Each Alternative Scenario

- Tactics range from **digital to in-person**
  - Videos, website, social media reels, handouts, pop-ups, community org presentations to ensure broad participation, more…
  - Translations

Part Two – Inform & Consult (April)

- Obtain and Consider Feedback on priorities for a Preferred Scenario
- Emphasis on infographics/visualizations

- Tactics – Same as Part One, **plus:**
  - Online & Paper Survey
  - Paid advertising
  - Virtual meeting/s

Destination2055NC.com

Discussion Prompt:

Based on what has been presented, do you have any questions?

Is there any feedback you would like staff to consider as they perform the technical work of defining and analyzing these alternatives?

CAMPO
NC Capital Area Metropolitan Planning Organization

TRIANGLE WEST
Transportation Planning Organization

Triangle Rail Study
Joint MPO Board Briefing

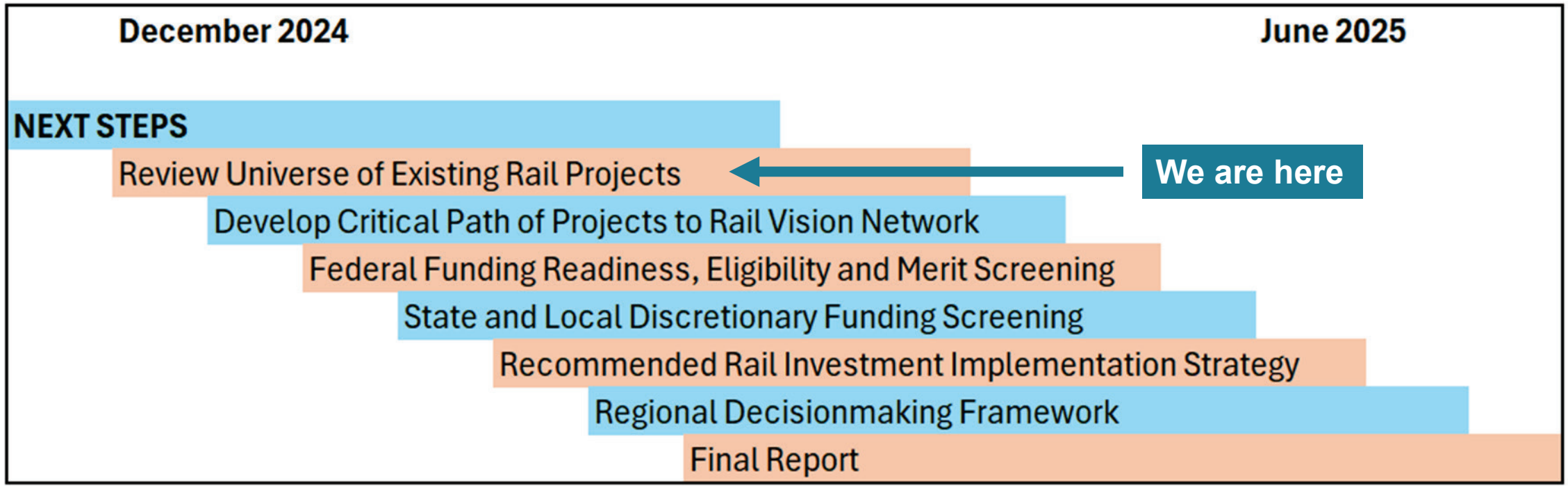
January 29, 2025

HDR

Triangle Rail Study

Project Overview and Timeline

Study Objective: Establish a high-level vision for rail investment in the Triangle region that can be implemented steadily and incrementally



Rail Terminology Review: Service Concepts

Light Rail

High-frequency urban service
Runs on street or in its own ROW
Incompatible with Freight Trains
Built under FTA Oversight

Not appropriate for this study

Commuter Rail

Downtown-focused peak service
Stations every 2 to 5 miles
Compatible with Shared Use (Freight & Passenger)
Built under FTA Oversight

May be relevant to this study

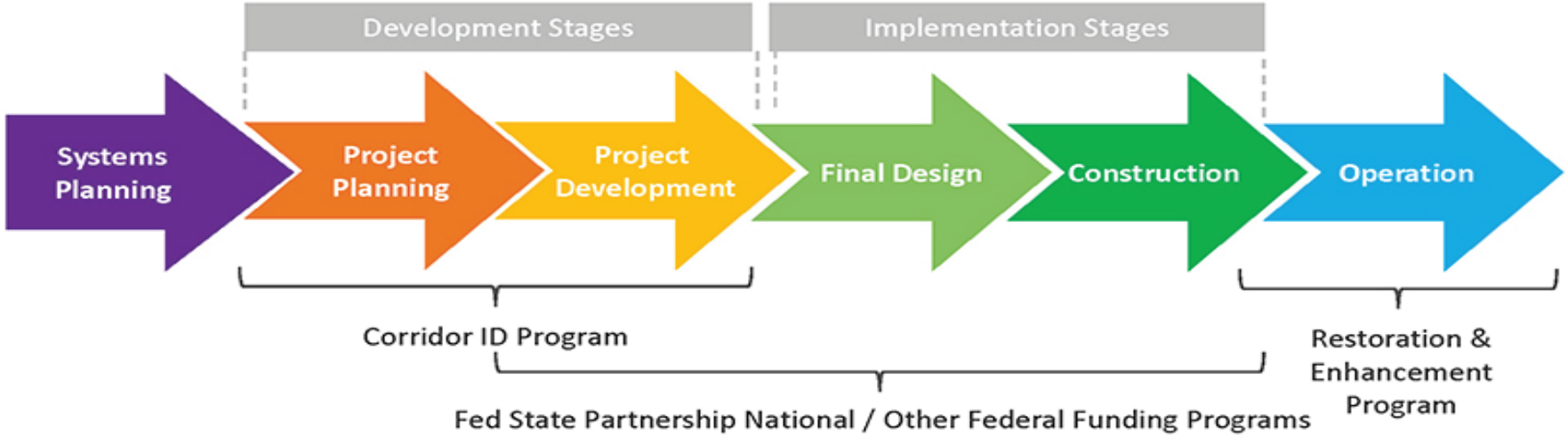
Passenger Rail

Intercity service
Stations every 7 to 20 miles
Compatible with Shared Use
Built under FRA Oversight (Title 49)

The focus of this study

FRA Capital Planning Guidance

- Describes principles of project development, is not tied any specific competitive grant programs
- Established definitions and expectations of FRA's Project Development Lifecycle:



- Established to structure project development under any funding program—focuses on substantive/technical project delivery from a disciplinary (not political) perspective.

Rail Visioning Committee (RVC) and Technical Steering Committee (TSC) Members

RVC

- City of Durham
- Town of Cary
- Town of Wake Forest
- Town of Morrisville
- Town of Hillsborough
- Town of Youngsville
- Durham County
- Orange County
- Wake County
- GoTriangle
- CAMPO
- TWTPO

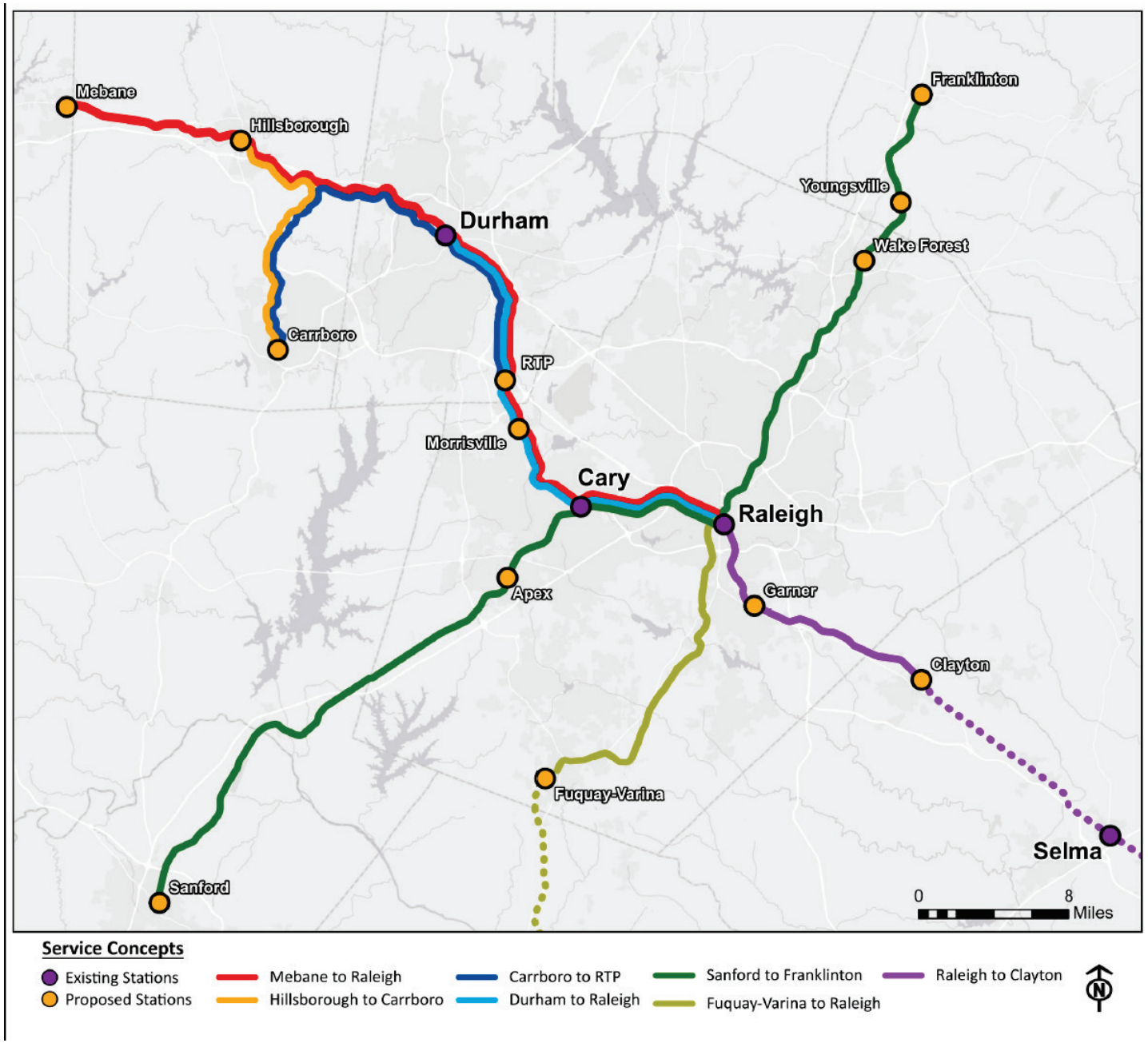
TSC

- NCDOT Rail Division
- NCDOT Division 5
- Town of Hillsborough
- Town of Wake Forest
- Town of Morrisville
- City of Durham
- City of Raleigh
- Town of Cary
- Wake County
- Durham County
- GoTriangle
- CAMPO
- TWTPO

Service Concepts Being Tested

Ordering investments by “How the Infrastructure Wants to Be Built”

HDR team to develop draft order from a technical point of view



Thank you!

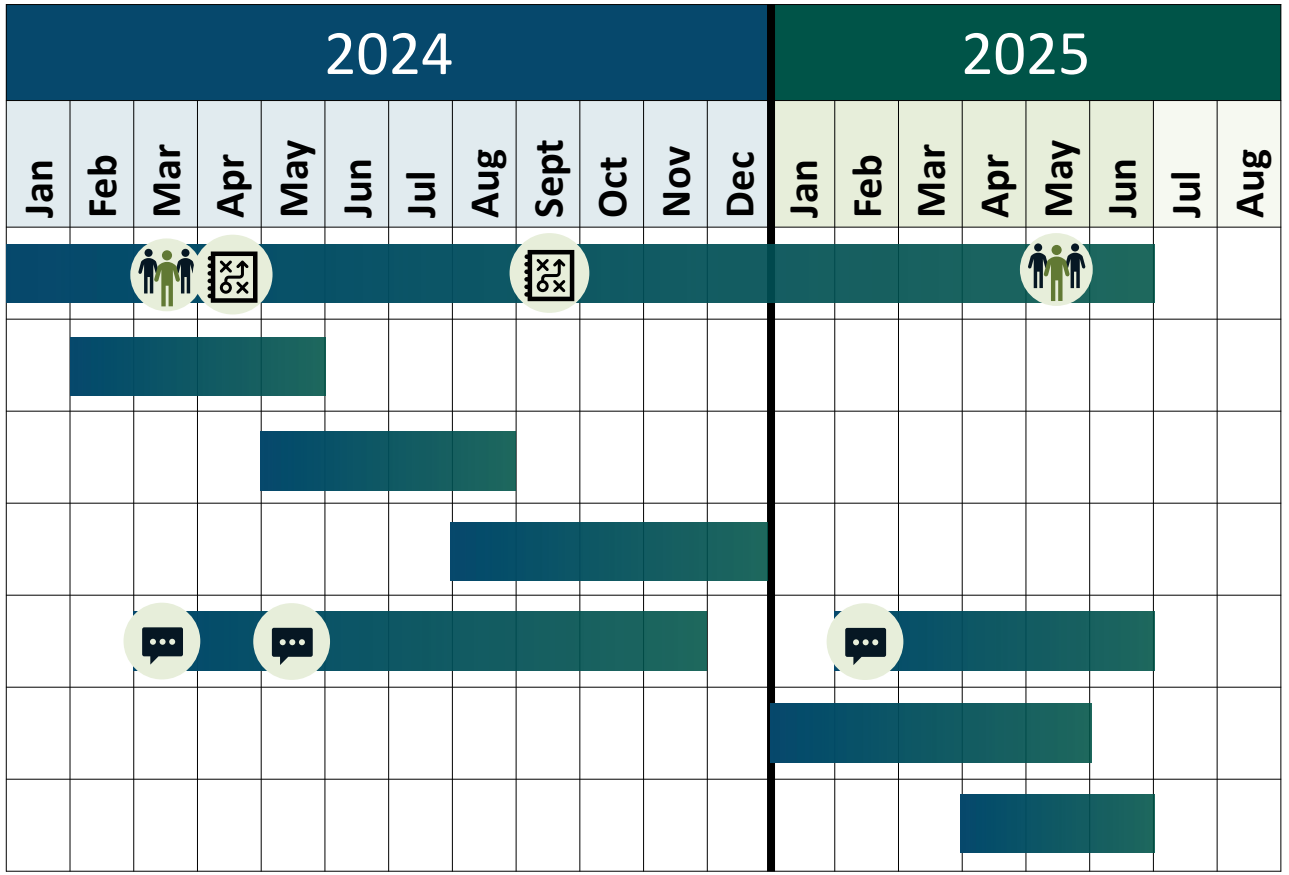
BLUEPRINT FOR SAFETY

CAMPO Regional Transportation Safety Action Plan

Joint Boards Meeting of CAMPO and DCHC MPO

January 29, 2025

Timeline



Leadership Workshop

Local Safety Plan Coordination

Technical Advisory Team Meetings

BLUEPRINT FOR SAFETY

CAMPO Regional Transportation Safety Action Plan

Public Feedback*

We asked you about **exponential regional growth, infrastructure accommodations and improvements, road use and behavior, and vulnerable road users** in the Capital Area Metropolitan Planning Organization (CAMPO) region of North Carolina.

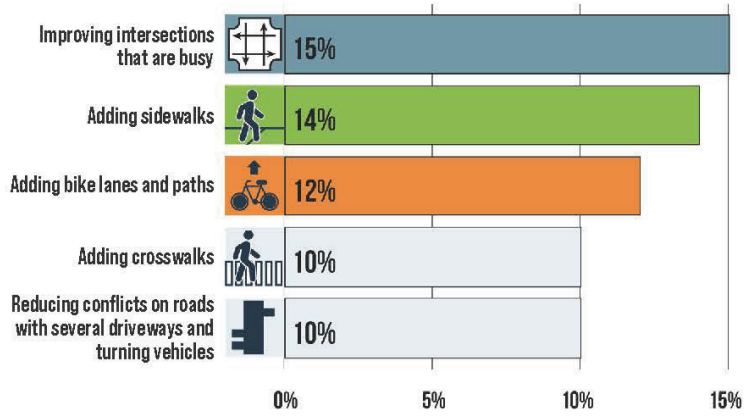
19 Engagement events hosted across the CAMPO region

218 People participated in providing input at these events

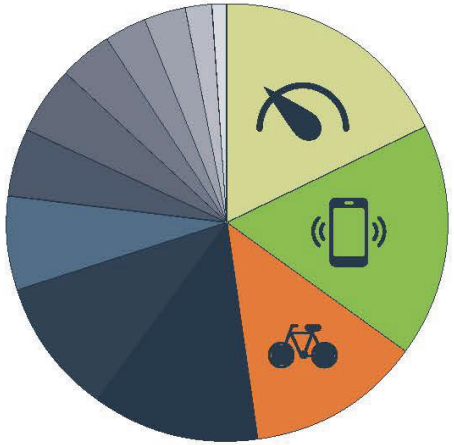
726 Total (individual) survey responses across the CAMPO region

*The survey was promoted between May 2024 and September 2024, and pop up events occurred between June 2024 and September 2024.

Survey respondents are most interested in the following safety improvements:



Survey respondents are most concerned about these safety issues:



- 18% Speeding
- 17% Distracted drivers, pedestrians, or bicyclists (smart phone use, earbuds, etc.)
- 13% Not enough safe places for people to walk, bike, or cross the road
- 12% People driving do not stop or yield when they should
- 10% Red light/stop sign running by drivers
- 7% Complex and busy intersections
- 5% Turning conflicts along busy roads
- 5% Other
- 4% Lack of roadway lighting at night
- 3% Impaired driving, walking, or bicycling (alcohol, marijuana, etc.)
- 3% Roads with poor visibility or sharp curves
- 2% People crossing outside of the crosswalk
- 1% Red light/stop sign running by people biking, scooting, skateboarding, etc.

"Our roadways have been overdesigned to forgive the mistakes of drivers, allowing them to drive faster with minimal consequences."

"People in the city see cyclists as a problem instead of part of the congestion solution."

"We need a hands-free law. By far, distracted driving is what makes the roads unsafe."

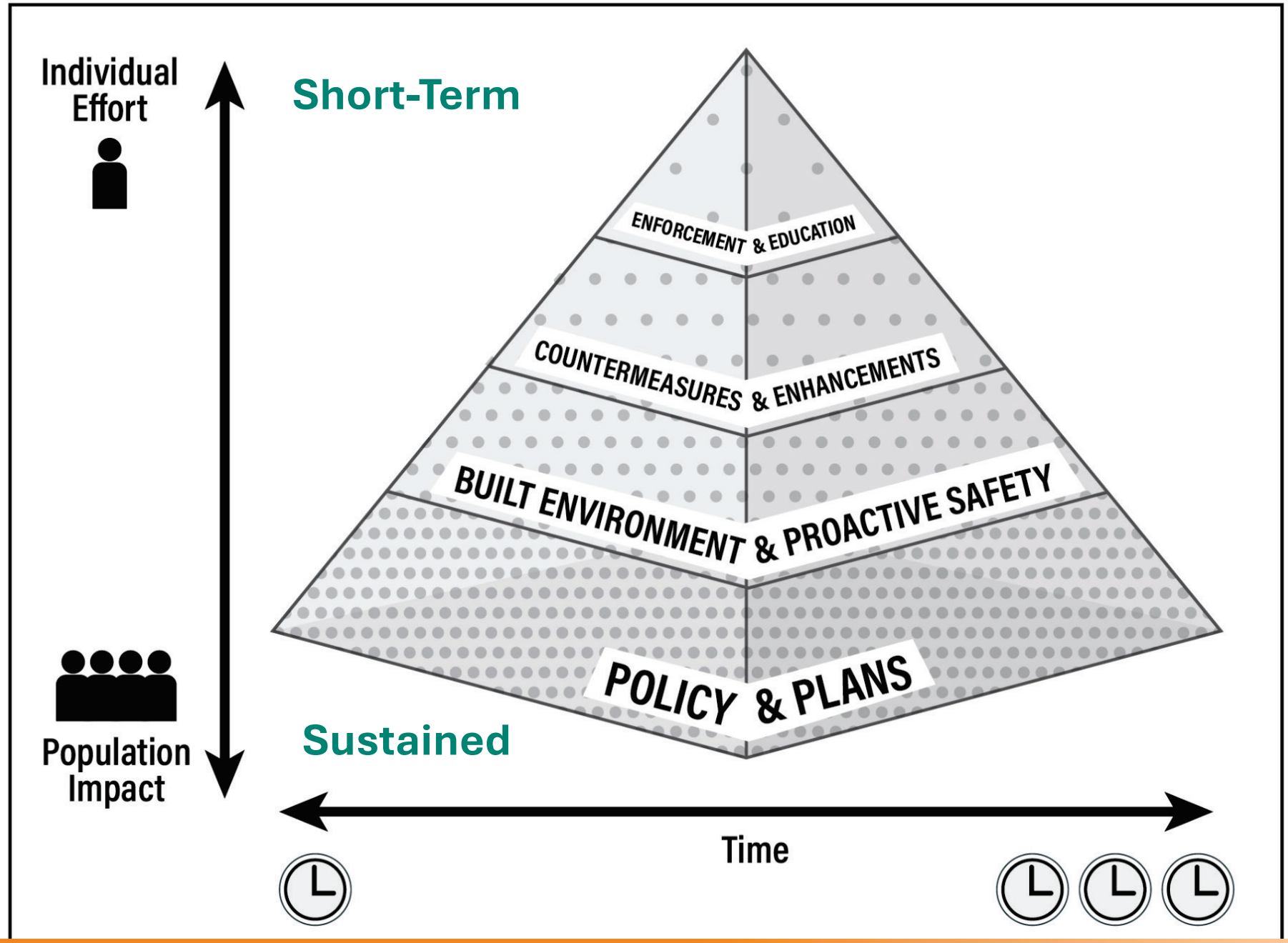
"The fewer cars on the road, the safer it is."

CAMPO
NC Capital Area Metropolitan Planning Organization

Public Engagement Summary

Crash Reduction Strategy

Safety Hierarchy

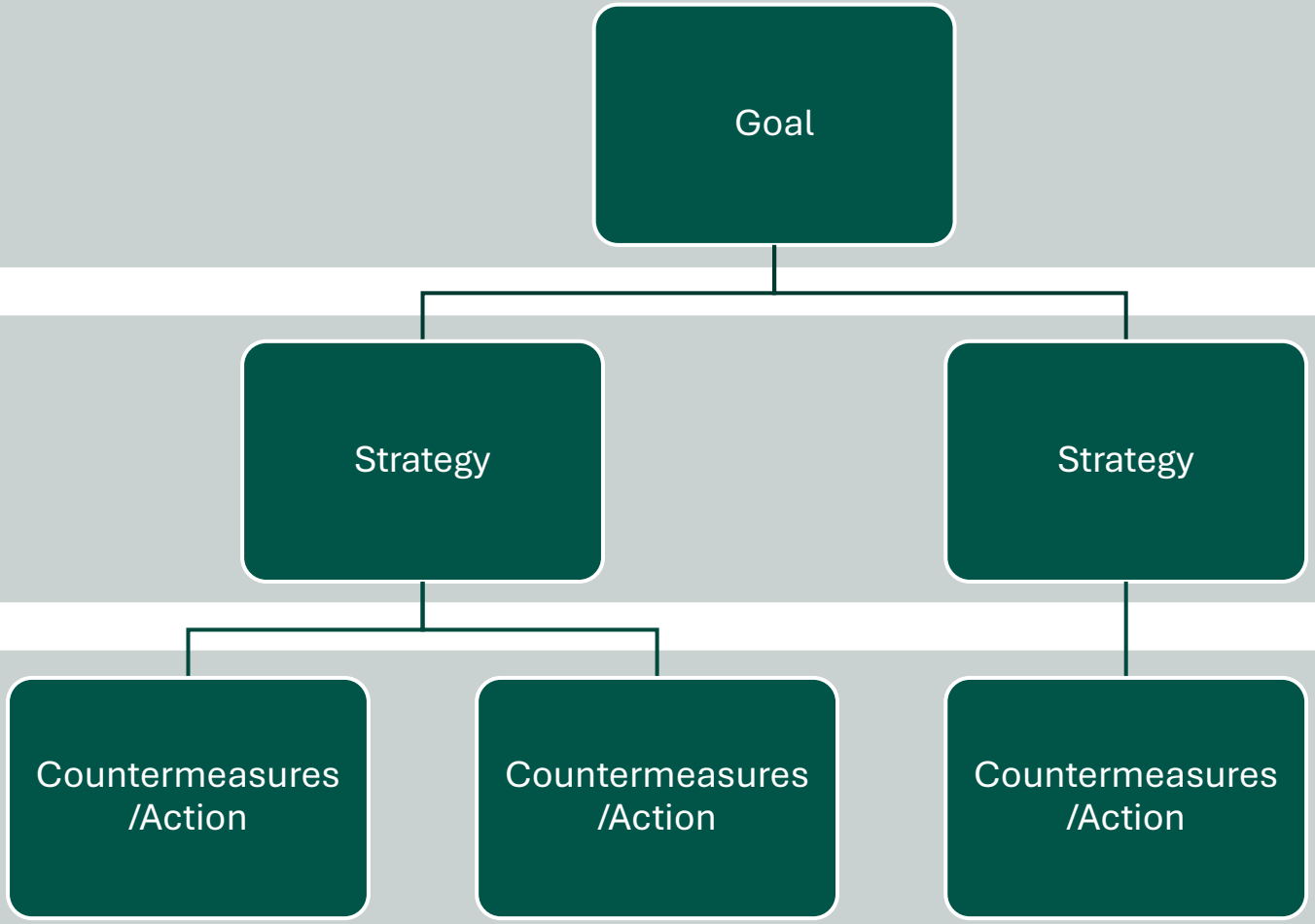


Framework: Policy Example

Deliver a robust program of safety projects

Improve project development procedures to address specific safety needs

Develop templates for locally-led corridor safety studies



Additional Policy Strategy Examples

Legislation and Guidance

- Create Complete Streets model policies
- Develop target speed setting guidance
- Promote countermeasure selection tools
- Review legislative barriers to countermeasures

Development Impacts

- Model the effects of land use, growth and housing changes on long-term safety
- Create tools for identifying safety needs based on development impacts

Plan and Project Development

- Create templates for CAMPO-funded safety studies
- Prioritize LAPP projects based on safety
- Develop a systemic safety program for near-term implementation
- Apply safety data via project scoping tools to assess safety needs in mid- and long-term projects
- Incorporate Safe System elements into all transportation system plans in the CAMPO region

Stay Connected

CAMPO: https://www.campo-nc.us/

NCDOT Traffic Safety Unit: https://www.ncdot.gov/initiatives-policies/safety/traffic-safety/Pages/default.aspx

Contacts for the Blueprint for Safety

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Thank you!

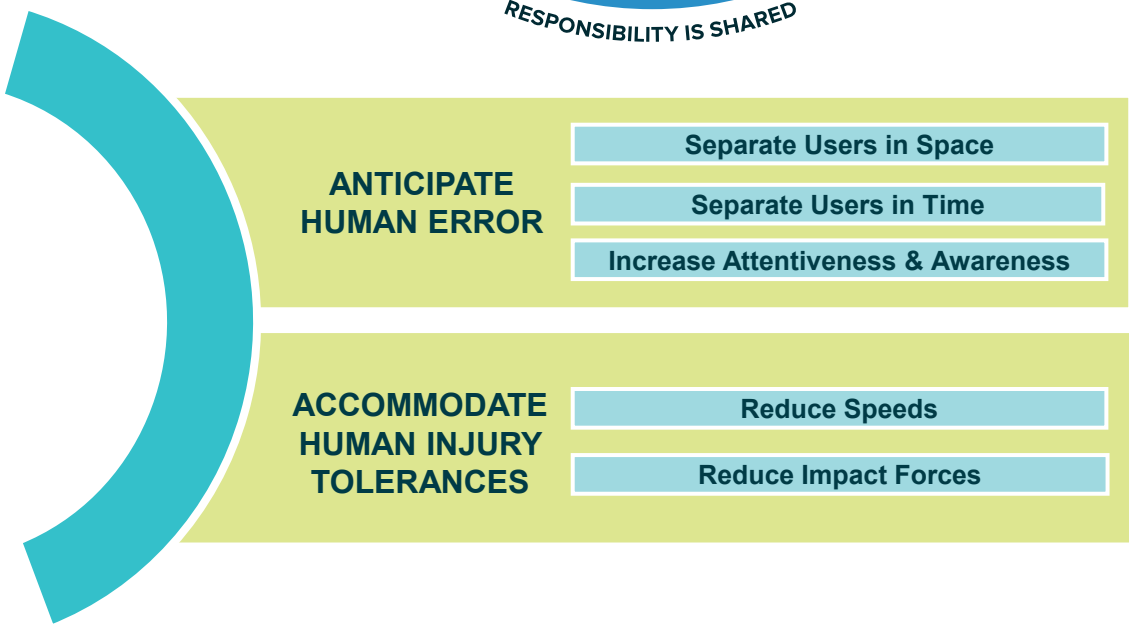
DCHC MPO Vision Zero

DCHC MPO VISION ZERO

TRIANGLE WEST
Transportation Planning Organization

The Safe System Approach & Framework

- Aims to eliminate fatal and serious injuries for all road users by:
  - accommodating human mistakes
  - keeping impacts on the human body at tolerable levels



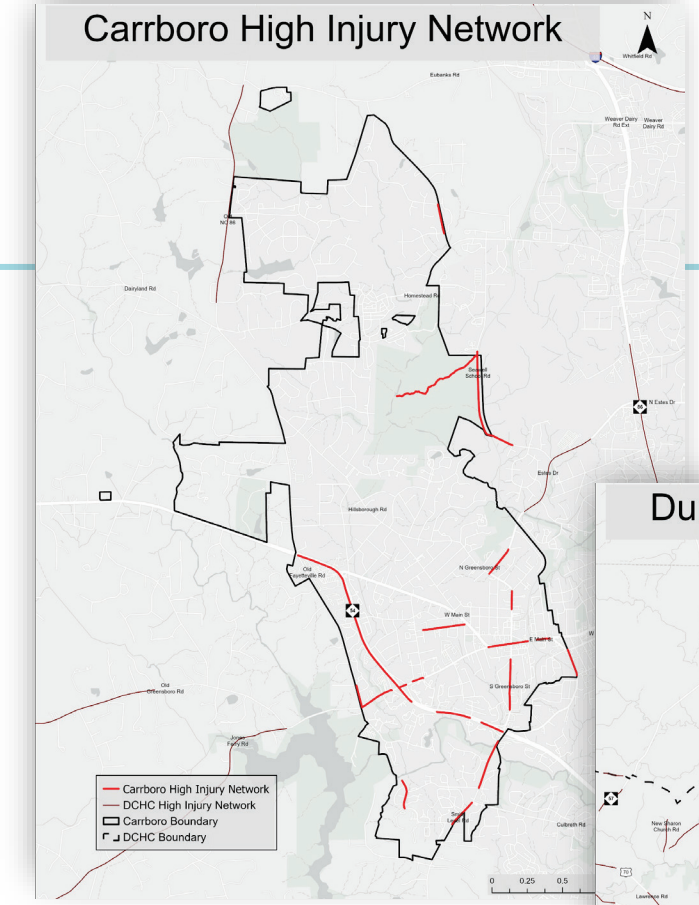
DCHC MPO
VISION ZERO

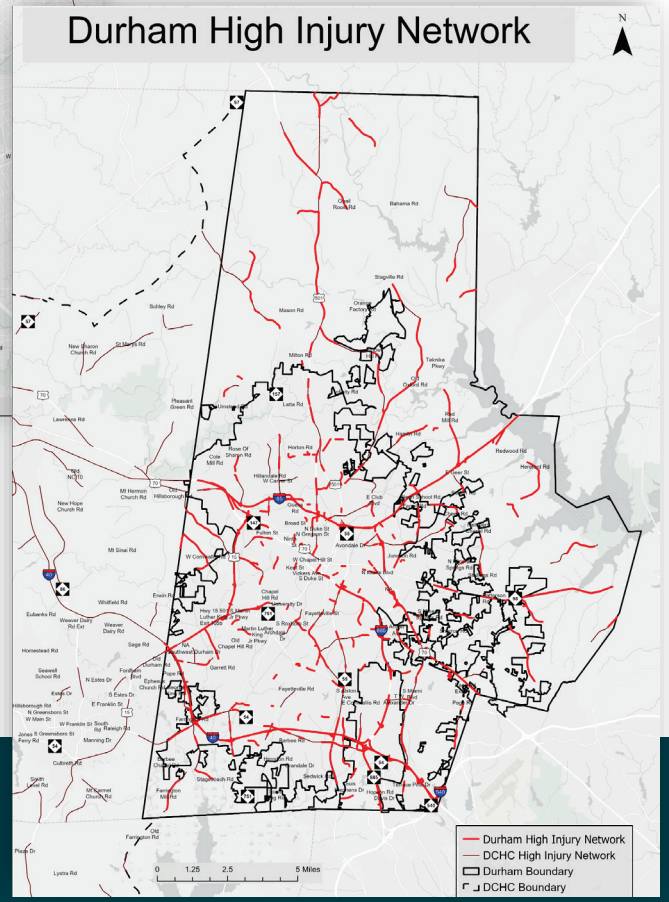
Engagement & Coordination

- In-Person Engagement
  - Safety Summit: Oct ‘24
  - TAC Workshops
  - Public Meetings: Fall ‘24, Spring ‘25
  - Neighborhood Meeting Materials
- Online Engagement
  - Project Website
  - Survey
  - Interactive Map

Existing Conditions

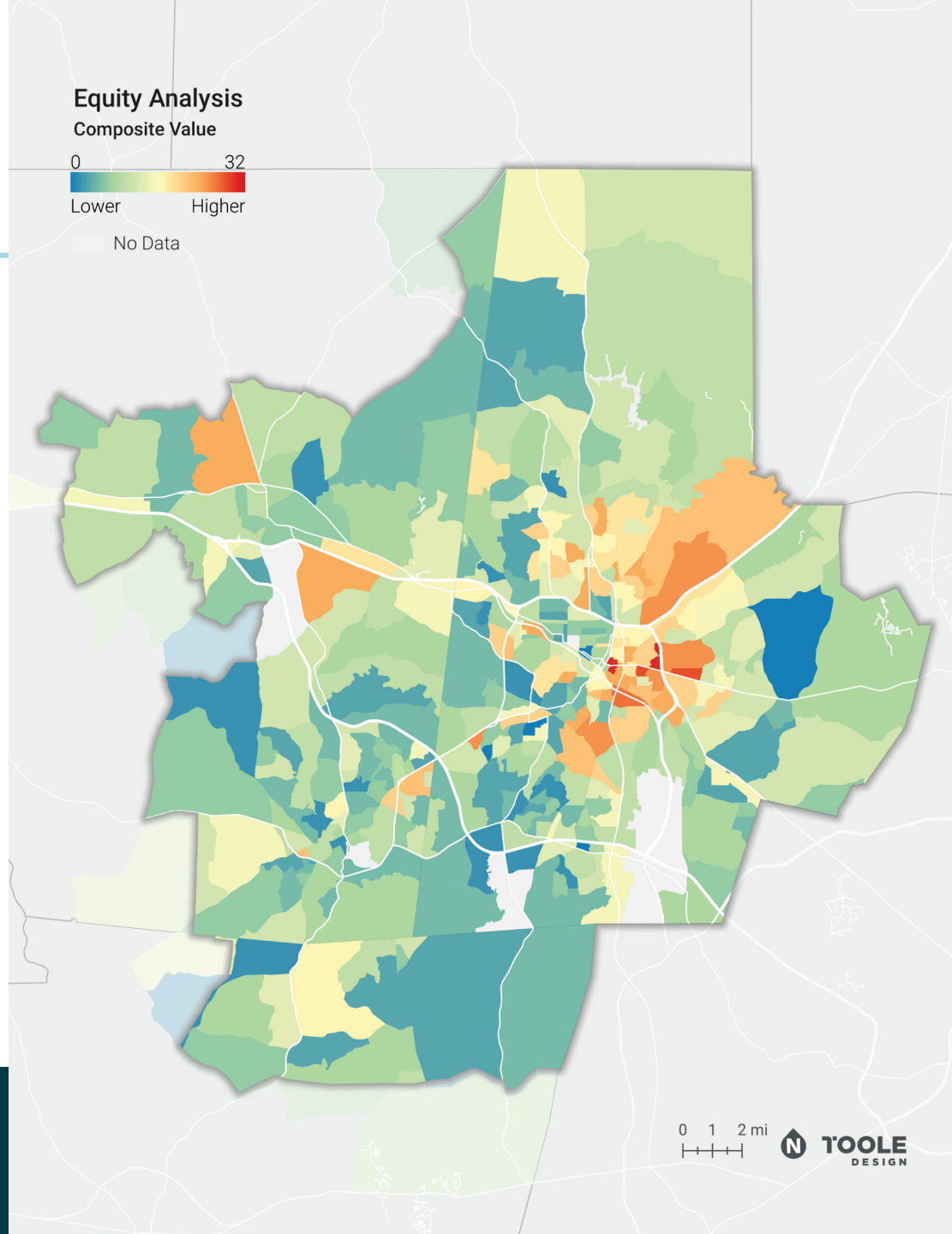
- Safety Analysis
  - High Injury Network (HIN)
  - High Risk Network (HRN)
  - Equity Analysis





Existing Conditions

- Safety Analysis
  - Equity Analysis: Vision Zero Focus Areas
    - Overall IPD identifies above average concentration locations with potential disadvantage
    - Basis for Vision Zero equity focus areas to guide engagement, strategies, and implementation



DCHC MPO VISION ZERO

Safety Action Categories

- Roadway safety resources and guidance
- Walking and biking in urban/downtown contexts
- Multimodal safety along multilane arterials
- Rural high-speed corridors
- Safe Routes to School
- Traffic calming on local streets
- Trail and railroad crossings
- Unsafe intersections
- Behavior and distraction
- Land Development practices and procedures
- Vulnerable Road Users (VRUs) at night

DCHC MPO
VISION ZERO

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- Publish annual reports for measuring progress with Vision Zero implementation, including crash data and other safety metrics for transparency and accountability.
- Develop and adopt a regional framework for developing annual safety targets that are focused on aggressively reducing fatal and serious injury crashes in the DCHC region.
- Convene a standing Transportation Safety Committee or Vision Zero Task Force to review crash and safety audit reports, coordinate efforts between jurisdictions, and track progress toward Vision Zero goals.

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- Remove permissive left turns during active pedestrian phases at intersections starting with intersections that include trail crossings and adjacent to transit stops.
- Construct separated pedestrian and bicycle facilities--detached sidewalks, sidepaths, separated bike lanes.
- Narrow travel lane widths on multilane arterials to support traffic calming and identify opportunities for repurposing existing roadway for multimodal facilities/amenities.

Safety Action Categories

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- Add pedestrian countdown signals and Leading Pedestrian Intervals (LPIs) at high risk signalized intersections
- Tighten turning radii to reduce turning speeds and include truck aprons on freight routes
- Close slip lanes where applicable, starting with the HIN
- Implement daylighting at urban high risk and mid-block intersections with on street parking

Safety Action Categories

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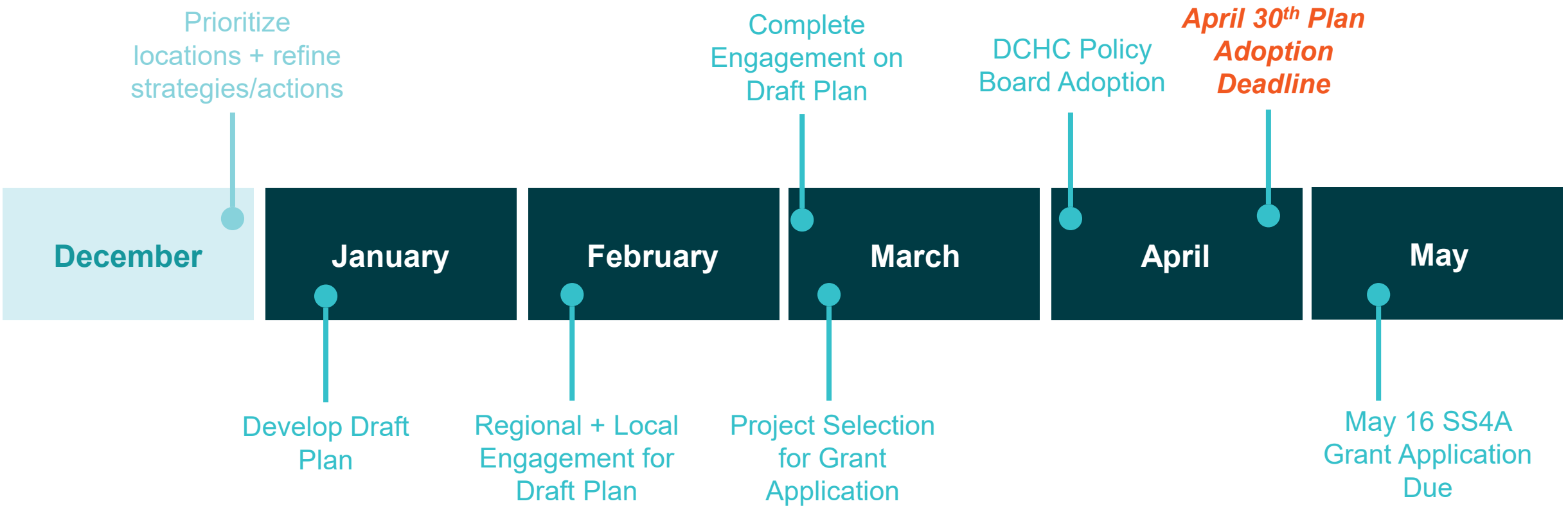
- Vulnerable Road Users (VRUs) at night

- Deploy access management strategies to combine driveways to adjacent properties, provide cross-access between developments, and construct medians to reduce conflicts near driveways and intersections
- Develop guidance and coordinate with external stakeholders to ensure that access for people walking, bicycling, and using transit is maintained during roadway or site construction and special events
- Review and update land use policies and development standards to prioritize the safety of all road users (e.g., block size, crosswalk spacing, access management)
- Integrate the HIN into project and development reviews

Timelines


Prioritize locations + refine strategies/actions
December
January
Develop Draft Plan
February
Regional + Local Engagement for Draft Plan
Complete Engagement on Draft Plan
March
Project Selection for Grant Application
DCHC Policy Board Adoption
April
April 30th Plan Adoption Deadline
May
May 16 SS4A Grant Application Due

Thank you!

DCHC MPO Vision Zero Action Plan

Project Website: Safety / Security | Durham Chapel Hill Carrboro MPO, NC
Project Story Map: https://storymaps.arcgis.com/stories/ea430cb6264641b59d522124459eeba5

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DCHC MPO VISION ZERO

TRIANGLE WEST
Transportation Planning Organization

Joint CAMPO/DCHC MPO Board Meeting

FAST 2.0
Freeway, Arterial, Street, and Tactical Transit

January 25, 2025

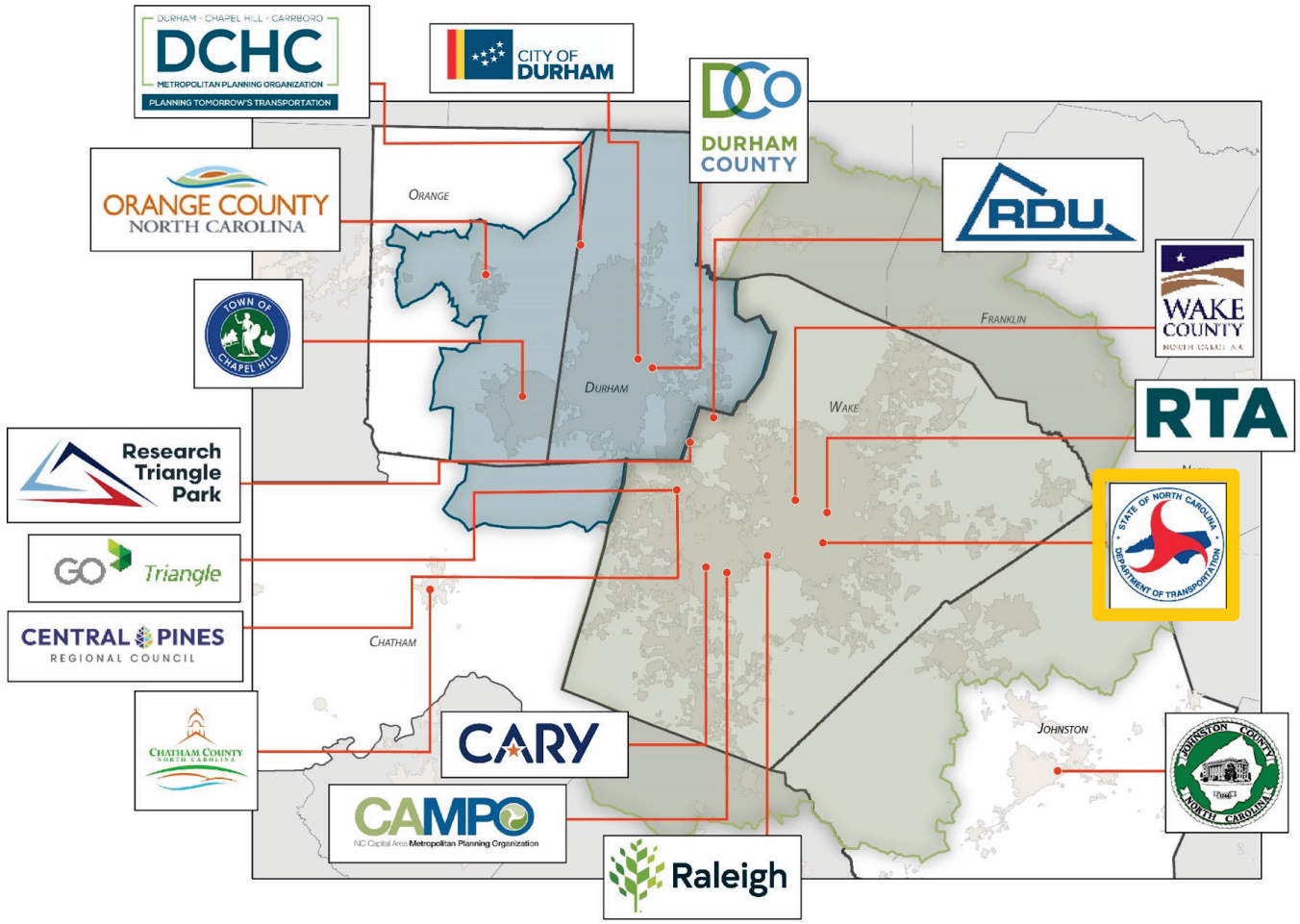
FAST 2.0

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.

Stakeholders



NCDOT Units

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

NCDOT Roles

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

Vision

- **Enhance Quality of Life**
- **Ensure Safe and Reliable Transit**
- **Boost Bus Mobility and Access**
- **Offer Competitive Transit Options**
- **Meet Diverse Needs**
- **Address Local and Regional Connectivity**
- **Prioritize Buses and BRT**

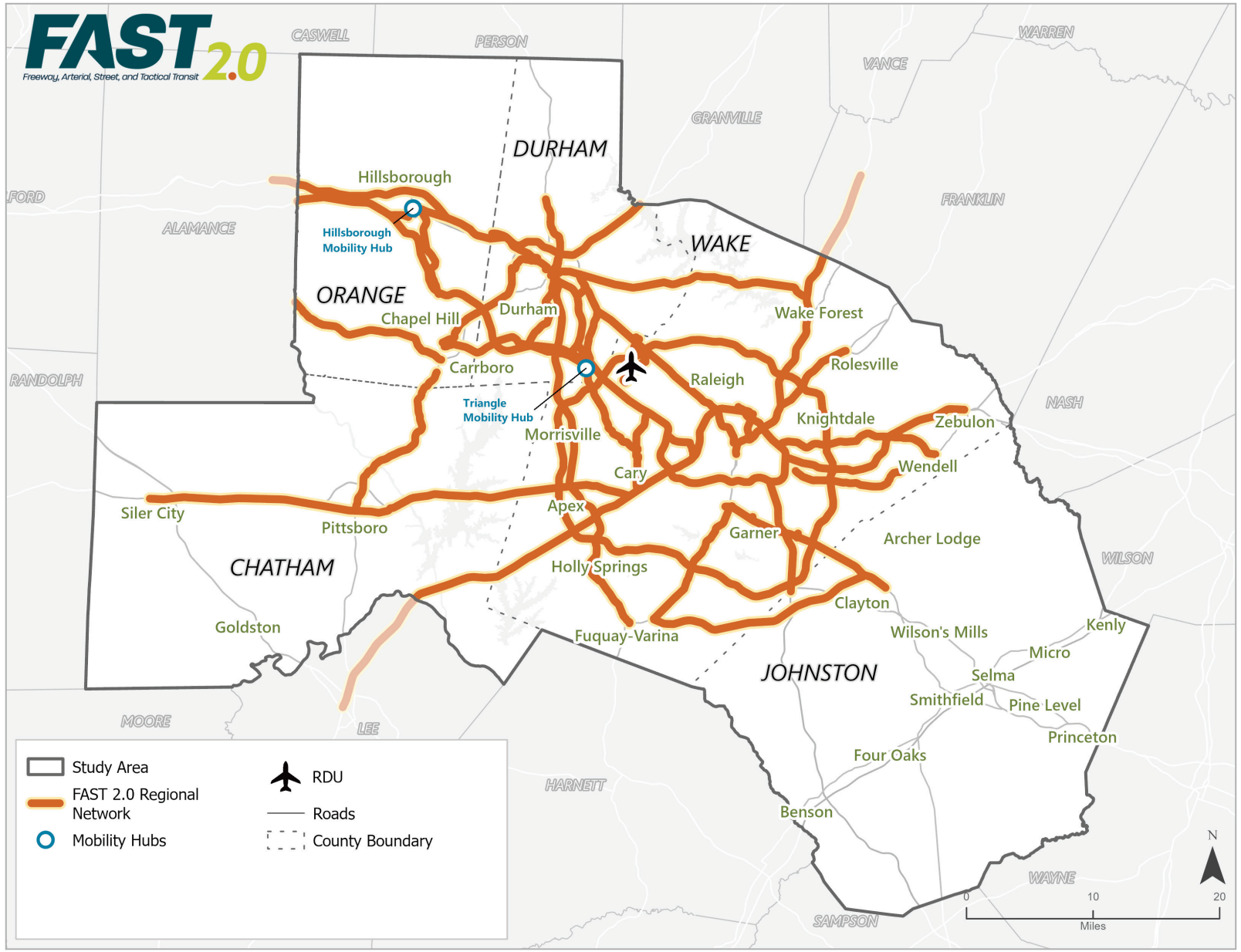
Goals

- Coordinate Regional Transit Projects
- Conduct Equity and Needs Assessment
- Assess Transportation Network
- Develop Direct BRT Linkages
- Identify Freeway and Arterial Corridors for Transit Priority
- Evaluate Transit Priority Improvements
- Recommend Transit Infrastructure Projects
- Recommend Institutional Practice Changes
- Regional Transit Working Group

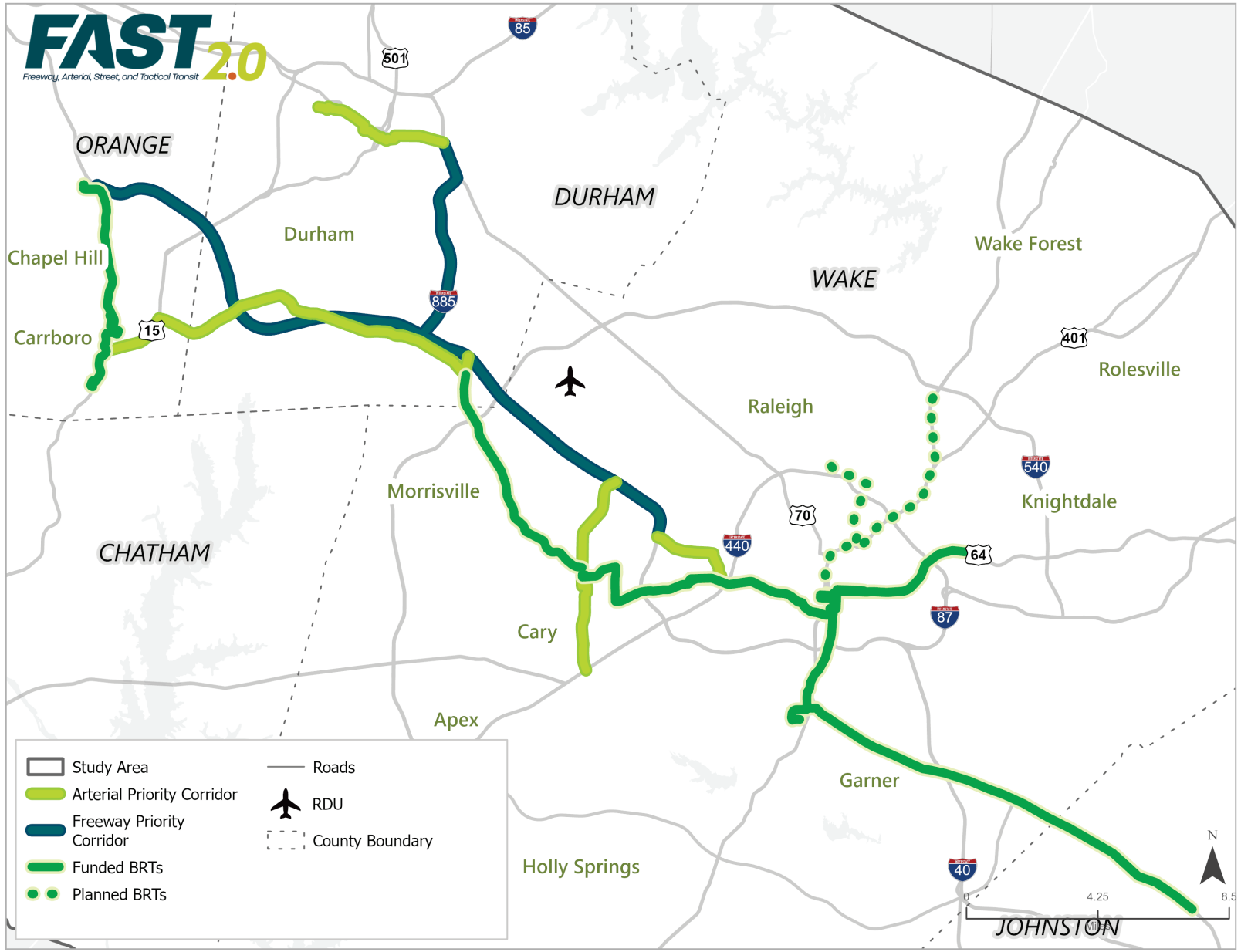
Corridors – Stakeholder Identified

- **US 70**
  - Between Durham and Raleigh
  - Between Durham and Orange Counties
- **Chapel Hill to RTP**
- **US 15-501 Corridor**
  - Chapel Hill to Durham
  - Chapel Hill to Chatham County
- **Fayetteville Road Corridor in Durham**
- **NC 98 Corridor: Between Durham and Wake County**
- **VinFast Site in Chatham County**
- **NC 54**
  - Chapel Hill to Durham
  - Within Durham, through RTP
- **I-40 I-540**
- **Capital Boulevard**
- **US 64**
  - Raleigh west to Pittsboro
- **US 1**
  - Raleigh/Cary to Holly Springs/Fuquay Varina
  - Long term US 1 to towards Sanford and Pinehurst
- **S-Line Rail Corridor**
  - For multimodal connections

Regional Network



Priority Corridors



FAST Transit Priority Infrastructure Toolbox

- Expand toolbox
- Review regional technology standardization for seamless TSP/SMART/MAAS/AVL/CAD
- Develop NCDOT transit infrastructure standards

Table 5. Transit Advantage Matrix

Timeframe : short/medium/long

$ Cost: low/medium/high

	Transit Advantage	Implementation Time	Cost	Where to Use	Outcome	Common Lead Agency
Bus On Shoulder System (BOSS)	2/5	🕒🕒	$	Arterial-Freeway	Speed + Reliability	State
Express or Transit Priority Lanes	4/5	🕒🕒🕒	$$$	Freeway	Speed + Reliability	State
Transit Signal Priority	3/5	🕒	$$	Arterial	Speed + Reliability	Transit Agency/ City
Queue Jump Lanes	2/5	🕒🕒	$$	Arterial	Speed + Reliability	City
Direct Access Stations	3/5	🕒🕒🕒	$$$	Arterial-Freeway	Access	Transit Agency/ State
Direct Access Ramps	3/5	🕒🕒🕒	$$$	Arterial-Freeway	Access	State
RED Bus Lanes	2/5	🕒	$	Arterial	Speed + Reliability	State/City
Level and Near-Level Boarding	1/5	🕒🕒	$$	FAST Stations and Buses	Enhanced Experience	Transit Agency
Floating Bus Stops	2/5	🕒🕒	$$	Arterial	Speed + Reliability	Transit Agency/ City
Enhanced Bus Stop	1/5	🕒🕒	$$	FAST Stations	Enhanced Experience	Transit Agency

Schedule

	Dec		Jan		Feb		Mar		Apr		May		Jun		Jul	
Task C. Public and Stakeholder Engagement																
Steering Committee Meetings																
Task D. Needs Assessment/Analysis & Primary Corridor Identification																
High-level Needs Assessment Memorandum																
Existing Plans Memorandum																
High-level Regional Network and Primary Corridor Identification Memorandum																
High-level Project Equity Plan																
Task E. Project/Improvement Evaluation & Recommendations																
Summary of Feasibility of Potential Treatments Memorandum																
Recommended Infrastructure Improvements Memorandum																
Recommended High-level Design Concepts																
Express Design Packages																
Overall Regional Network Recommendations with BRT Memorandum																
Task F. Implementation Plan & Prioritized Recommendations																
Task G. Final Report																

FAST 2.0

Questions?

Thank you for Participating

MTP Project Website: www.destination2055nc.com