



NC Capital Area Metropolitan Planning Organization

# Technical Coordinating Committee Meeting

April 3, 2025

10:00 AM

*Audio for the livestream will begin when the Chair calls the meeting to order.*

# 1. Welcome and Introductions

## 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 6, 2025

#### Requested Action:

**Approve the March 6, 2025 Meeting Minutes.**

## 5. Regular Business

1. ITS Roadmap Update
2. CAMPO Blueprint for Safety – Safety Performance Measure Target Setting
3. Amendment #8 to the FY 2024-2033 Transportation Improvement Program
4. Amendment #9 to the FY 2024-2033 Transportation Improvement Program
5. 2035 Wake Transit Plan Progress Report
6. Triangle Transportation Choices/Transportation Demand Management (TDM) Program Update
7. Public Engagement on Tolling Options for U.S. 1 North

## 5.1 ITS Roadmap Update



# Triangle Region ITS Deployment Roadmap

Matt Day, AICP CTP

Transportation Director, Central Pines Regional Council

April 2025





# What is ITS?

- ITS stands for “Intelligent Transportation Systems”
- Blanket term for a variety of activities that use advanced technologies and strategies to enhance transportation safety, efficiency, and productivity
- ITS is often incorporated as part of a broader Transportation Systems Management and Operations (TSMO) strategy or program
- Examples of ITS include:
  - Traffic signal system interconnection/coordination
  - In-vehicle traveler information (connected vehicles)
  - Emergency vehicle and/or transit vehicle signal pre-emption

# Triangle Region Intelligent Transportation Systems (ITS) Work Group



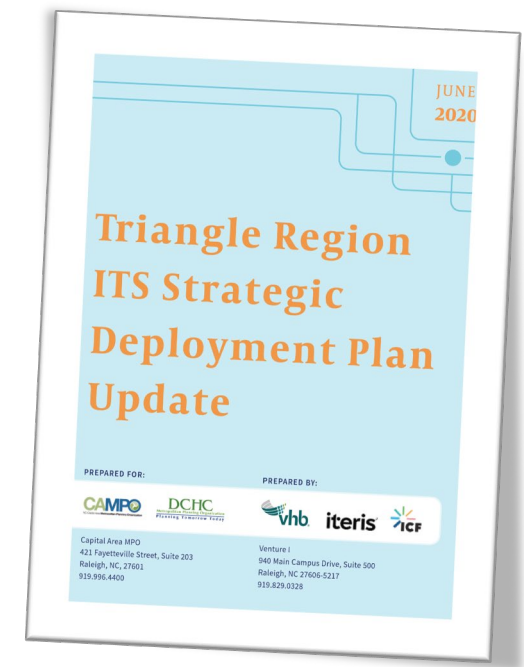
- Central Pines Regional Council convenes a workgroup on a quarterly basis to discuss ITS-related projects and work toward implementation of the region's *ITS Strategic Deployment Plan* (adopted in 2020) – this work is funded through CAMPO and Triangle West TPO
- Includes representatives from:
  - Various NCDOT units
  - Local governments
  - MPOs
- Responsibilities include:
  - Implementation of the *Triangle Region ITS Strategic Deployment Plan*
  - Championing projects and strategies for continued progress
  - Regularly sharing updates on ITS projects in the region
  - Guiding plan updates as needed





# Triangle Region ITS Strategic Deployment Plan

- This plan, adopted in 2020, provides a framework for the near-term, mid-term, and long-term deployment of ITS technologies in the region
- The plan covers both CAMPO and Triangle West
- Provides high-level outline of proposed projects, for example:
  - Transit Signal Priority/Bus Rapid Transit
  - Unified Transit Farebox System
  - Traffic Signal System Upgrades in Multiple Municipalities
  - Integrated Corridor Management
  - Expand Travel Information Coverage
  - Managed Motorways
  - Adaptive Traffic Signal Systems





# Why Create the *ITS Deployment Roadmap*?

- There was recognition among the work group members that a bit more strategic thinking was needed in the short term in order to identify and move forward with manageable implementation of the 2020 ITS plan
- This led us to hire Exult Engineering to work with the group and identify actionable steps for moving forward strategically, which we are calling the ITS Deployment Roadmap
- Organized the Roadmap document around six overarching TSMO strategies:
  - Regional Planning
  - Freeway Operations
  - Arterial Operations
  - Technology/Pilot Implementation
  - Operations & Maintenance
  - Data Management



# Going From This...

LOW = (\$) UP TO \$3M, MEDIUM = (\$\$) \$3M TO 10M, HIGH = (\$\$\$) OVER \$10M

PROJECT TYPE	NEAR-TERM (0-5 YEARS)	MID-TERM (5-10 YEARS)	LONG-TERM (10+ YEARS)
Transit Signal Priority/Bus Rapid Transit	\$\$		
Unified Transit Farebox System	\$		
Implement AVL technology for Transit	\$\$		
New Municipal Traffic Signal System - Fuquay-Varina (U-6022)	\$\$		
New Municipal Traffic Signal System - Knightdale (U-6026)	\$		
New Municipal Traffic Signal System - Morrisville (U-5967)	\$		
New Municipal Traffic Signal System - Wake Forest (U-6023)	\$\$		
New Municipal Traffic Signal System - Clayton (U-5943) <sup>5</sup>	\$		
Upgrade Municipal Traffic Signal System - Apex (U-6117)		\$	
New Municipal Traffic Signal System - Garner (U-6194)		\$	
Upgrade Municipal Traffic Signal System- Raleigh (U-6119)		\$\$	
New Municipal Traffic Signal System - Holly Springs			\$\$
Traffic Signal System Upgrade City of Durham (U-5968)	\$\$\$		
Traffic Signal System Upgrade - Town of Cary		\$\$	
Complete Regional Fiber Network - NCDOT <sup>6</sup>			\$\$
Consolidate Municipal Signal Systems Management <sup>4</sup>			\$
Establish Agreements for System Consolidation and Management	\$		
Assess New Sub-Regional TMC		\$	
Centralize Data Warehousing and Distribution		\$	
Coordinated Corridor Traffic Signal Timing	\$\$		
Establish software and hardware platforms to serve connected vehicles and automated vehicles	\$		
Regional standards for software, hardware, and communication platforms	\$		
Inventory current deployments	\$\$		
Replace/upgrade outdated devices	\$		
Integrated Corridor Management <sup>4</sup>			\$\$
Managed Motorways	\$\$\$		
Training for Incident Response	\$		
Emergency Pre-emption	\$		
Adaptive Traffic Signal Systems		\$\$	
Occupancy Detection in Parking Decks		\$	
Staff Training for Operation and Maintenance of ITS Equipment	\$		
Expand Travel Information Coverage	\$		

- Strategic Deployment Plan provides high-level list and descriptions of projects



# To This...



- Will serve as roadmap for guiding the work group's activities/priorities
- Identifies necessary tasks/strategies, strategy champions, general timelines (near, mid, long-term)
- Lays out action items for the work group to pursue/implement over the next several years



# Regional ITS Deployment Roadmap Examples

OPERATIONS & MAINTENANCE STRATEGY						
Timing & Order	Project & Champion	Description	SDP Alignment (A) Predecessor (P) Program or Project Grouping (G)	Related STIP & Constr. Yr.	Cost	Grant Eligibility
N.18	Address Signal O&M Funding Gap Champ: CPRC	Establish regional plan for addressing signal O&M funding gap based on outcomes of NCDOT Signal Management Plan.	A: N/A P: C.4 G: Program	—	\$ \$	
N.19	Western Wake SS Agreements Champ: CAMPO	Establish Agreements among Western Wake Signal System Partners Establish agreements to support signal system integration.	A: SDP #16,17 P: C.4 G: Program	—	\$	
N.20	Eval IAM, IWOM, and NMS Champ: NCDOT	Evaluate asset management, work order management and network monitoring platforms Evaluate potential regional ITS/fiber asset management/Work order/Network monitoring platform for the region.	A: SDP #17, 19, 23, 24, 31 P: N/A G: Program	—	\$	



# Highlighted Regional Planning Strategies

Currently Underway	Near-Term	Mid-to-Long Term
<ul style="list-style-type: none"><li>• TSMO Deployment Guide (NCDOT)</li><li>• Middle Mile Broadband Strategy (NCDOT)</li><li>• Statewide ITS Communications Plan (NCDOT)</li><li>• Signal Management Plan (NCDOT)</li></ul>	<ul style="list-style-type: none"><li>• <b>Fiber &amp; Technology Deployment Master Plan</b> (CPRC &amp; Work Group)</li><li>• TSMO Technology Standardization Workshops (CPRC &amp; Work Group)</li><li>• TSMO Technology Pilot Approach (CPRC &amp; Work Group)</li></ul>	<ul style="list-style-type: none"><li>• Regional ITS Strategic Deployment Plan Update (should happen every 5-10 years; last occurred in 2020)</li></ul>





# Questions or Feedback?

Matt Day, AICP CTP  
Transportation Director  
Central Pines Regional Council  
[mday@centralpinesnc.gov](mailto:mday@centralpinesnc.gov)  
(919) 558-9397

## 5.1 ITS Roadmap Update

Requested Action:

Receive as information

## 5.2 CAMPO Blueprint for Safety – Safety Performance Measure Target Setting

# Before we start...



**BLUEPRINT  
FOR SAFETY**  
CAMPD Regional Transportation Safety Action Plan

## SAVE THE DATE

**WHAT:** Blueprint for Safety Updates and Review

**DATE:** Wednesday, May 14, 2025

**TIME:** 8:30 A.M. Networking

9:00 A.M. Summit Begins

11:00 A.M. Summit Adjourns

**LOCATION:** Wake County Commons Building  
4011 Cary Dr, Raleigh, NC 27610

**REGISTRATION:** CAMPD Safety Summit #2 Registration

**DEADLINE TO REGISTER: MAY 5TH**

Agenda Details Coming Soon!



NC Capital Area Metropolitan Planning Organization

## Register for the May 14th Safety Summit



We value your important stakeholder input and hope to see you May 14th.

# Thoughts from March 6 TCC Meeting

- ❖ A more realistic approach would be to set a percentage reduction by a certain year; and, if we want to be more realistic, we need to focus more on moving the curve downwards than on where the curve ends
- ❖ The end goal is still how to get to zero
- ❖ Scenario D, with a time-specific goal tied to the MTP year, is the most honest scenario, but it should also layout the expected progress to be made in the interim
- ❖ We could use such metrics to program projects, see if we are meeting the expected goals, and what we can do if we are not meeting those goals.
- ❖ The goals would be meant to be aspirational.
- ❖ We need to determine the areas where we can make large impacts and move the needle.



# Scenario D from March 6 TCC Meeting

## Specific Scenario D goal statement

The goal in this scenario is a **50% reduction in fatalities and serious injuries by 2055, moving towards zero.**

- To reach this goal, there are small increases in fatalities and serious injuries over the next 5 years as the Blueprint for Safety is implemented.
- Over time, as the CAMPO region implements strategies and actions in the plan, and aggressively pursues improvements to STIP projects to include a focus on safety, there are gradual decreases in fatality and serious injury trends.
- These decreases continue over time, past the 2055 MTP, as CAMPO programs and implements more projects that incorporate safety.
- The result may never achieve a “zero” goal, but the region may reach a fatal and crash rate that is managed by safety interventions, despite continued population and employment growth.



# PROPOSED SAFETY GOAL

**A 50% reduction of fatal and serious injury crashes by 2055 and ultimately moving toward zero fatal and serious injury crashes.**

# PROPOSED SAFETY GOAL (cont'd)

*MPO would use the short-term, mid-term, and long-term goals to set annual FHWA safety targets*

**Short-Term (2025-2035):** To achieve the ultimate long term goal, an interim goal for the 2025-2035 horizon is to reduce serious injury and fatal crashes by 10%.

- This reduction will be influenced by increased implementation of low-cost countermeasures, the launch of education programs addressing key crash types, and installation of safety projects developed by NCDOT HSIP in the region.
- An annual 1% reduction (i.e., a 1% reduction each year based on the preceding year's numbers) will be used to reach this goal and be used by CAMPO to set annual performance measure safety targets.
- CAMPO will re-evaluate progress toward this interim goal every two to three years and adjust the 2035 horizon goal accordingly.



# PROPOSED SAFETY GOAL (cont'd)

*MPO would use the short-term, mid-term, and long-term goals to set annual FHWA safety targets*

**Mid-Term (2036-2045):** During the 2036-2045 horizon, CAMPO's goal will shift to a more aggressive reduction in serious injury and fatal crashes by an additional 15-20%.

- This mid-term goal equates to a 2% annual reduction and potential measure for safety targets, as well as result in a 25-30% reduction from 2024 numbers by 2045.
- A 20% reduction between 2036-2045 will be influenced by safety enhancements made to State Transportation Improvement Program (STIP) and Locally Administered Projects Program (LAPP) projects constructed by 2040.
- This reduction will also be supported by ongoing safety projects implemented by NCDOT HSIP, as well as targeted and sustained enforcement to minimize impaired driving and speeding, as well as unbelted occupants or children not placed in car seat restraints.

# PROPOSED SAFETY GOAL (cont'd)

*MPO would use the short-term, mid-term, and long-term goals to set annual FHWA safety targets*

**Long-Term (2046-2055):** During the 2046-2055 horizon, an ambitious goal will be set to reduce serious injury and fatal crashes by at least an additional 30%.

- This long-term goal equates to a 4% annual reduction and potential measure for safety targets.
- A 30% reduction between 2036-2045 will be influenced by continued work through the NCDOT HSIP, and new local and SPOT projects developed as part of planning studies and safety reviews in earlier horizons.
- These new projects will use data and screening tools created as part of the Blueprint for Safety Plan and feed into the CAMPO 2060 MTP update.
- This step-down approach to setting the long-term goal envisions at least a 50% reduction in fatal and serious injuries between 2024 and 2055.
- CAMPO aspires to eliminate serious injuries and fatalities in the region, approaching a goal of “zero” after the design year for the 2055 MTP.

# Description of Blueprint for Safety Goal

- Three, ten-year horizons with the expected change on an annual basis to achieve the ten-year horizon goals.
- Described in these near-term, mid-term, and long-term ten-year horizons because each horizon is uniquely affected by the schedule and implementation of projects and programs proposed over the next 30 years.

[www.campo-nc.us/programs-studies/blueprint-for-safety](http://www.campo-nc.us/programs-studies/blueprint-for-safety)

## 5.2 CAMPO Blueprint for Safety – Safety Performance Measure Target Setting

### Requested Action:

**Recommend the Executive Board endorse the goals of a 50% reduction of fatal and serious injury crashes by 2055 and ultimately moving toward zero fatal and serious injury crashes by applying the noted short-term, mid-term, and long-term goals to set annual FHWA safety targets.**

.

## 5.3 Amendment #8 to the FY 2024-2033 Transportation Improvement Program

- Amendments to transit projects to adjust schedules, update funding amounts, and add new projects

### TIP Amendment Schedule

- Jan-Feb (Oct – Dec STIP Actions)
- April – May (Jan – March STIP Actions & LAPP)
- June – Aug (April – May STIP Actions)
- Oct – Nov (June – Sept STIP Actions)

## 5.3 Amendment #8 to the FY 2024-2033 Transportation Improvement Program (TIP)

- GoTriangle
  - TA-4818A – Expansion Bus
  - TG-4821B - Routine Capital
- GoCary
  - TG-4935A – Routine Capital
  - TD-5305 – Downtown Cary Multi-Modal Facility
  - TG-4806 – Remove Project
  - TP-5112 – Remove Project

## 5.3 Amendment #8 to the FY 2024-2033 Transportation Improvement Program (TIP)

- GoRaleigh
  - TD-5308 - ADA Facility
  - TL-0020 – Raleigh Union Station Operations
  - TA-5140 – Bus Replacement
  - TG-0013 – Preventative Maintenance
  - TQ-9037 – Capital, Admin, & Operating
  - TG-4792B – ADA Paratransit Service
  - TG-0015 – Capital Projects
  - TP-5100B – Planning Assistance
  - TN-6116 – Wake Coordinated Transit Services Op Asst
  - New Project – Routine Capital

## 5.3 Amendment #8 to the FY 2024-2033 Transportation Improvement Program

### Next Steps:

- Public comment period from March 17 to April 18
- Public Hearing on April 16

### Requested Action:

**Recommend approval of Amendment #8 to the  
FFY 2024-2033 Transportation Improvement Program (TIP).**



## 5.4 Amendment #9 to the FY 2024-2033 Transportation Improvement Program (TIP)

- FFY27 LAPP Project Awards
- NCDOT STIP Amendments January – March 2025
- NC 540 Bonus Allocation Delays – Southern Wake projects

## 5.4 Amendment #9 to the FY 2024-2033 Transportation Improvement Program (TIP)

### Next Steps:

- Public comment period from April 21 to May 20
- Public Hearing on May 21

**Requested Action:**  
**Receive as Information.**

## 5.5 2035 Wake Transit Plan Progress Report





# 2035 Wake Transit Plan Update

April 2025



# Agenda

- 1 Engagement Summary
- 2 Wake Transit Plan Revenue Assumptions
- 3 Proposed Wake Transit Plan Investment Strategy
- 4 Next Steps



# Engagement Summary



1

# WTP Update – Engagement Approach

## Phase 1 (Spring 2024)

### Choices, Trade-Offs and Priorities

- Online survey that let people “Design Your Own Transit System”
- Budget that could spent on different transit projects and programs

## Phase 2 (Winter 2024/2025)

### Focus on Three Questions

1. Confirm that we are postponing Commuter Rail to invest in Regional Rail, at least for the time being.
2. Develop BRT between Raleigh and Durham to meet regional needs
3. Serve more people or serve more places

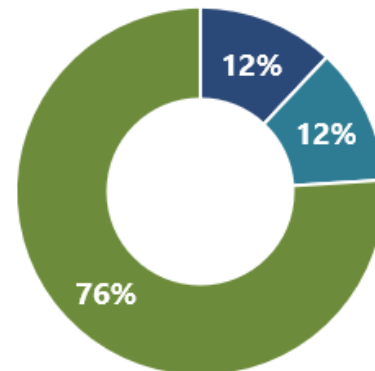
*Both phases provide insights into **preferences and priorities***

# Invest in Regional Rail

- Typically understood the funding constraints of building new rail
- Excited to learn about S-Line
- Supportive of enhancing existing service but concerned about access and reliability

Question 1: Expanding Our Existing Rail Service is a Good Way of Investing in Rail in Wake County?

■ Disagree ■ Unsure ■ Agree

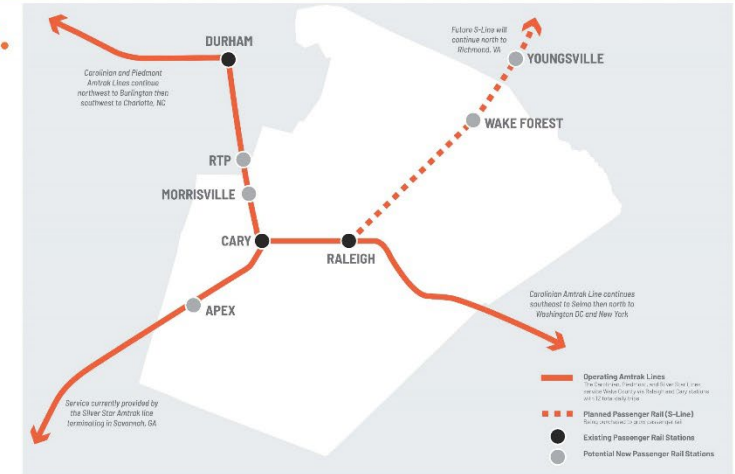


## You told us you would like rail service in Wake County.



### Here's what's happening.

- Amtrak is and will continue to operate passenger rail service in Wake County. These trains provide regional connections with stops in Durham, Cary, and Raleigh.
- There are a lot of rail projects planned in Wake County, including plans to purchase and/or upgrade tracks between:
  - Raleigh and Wake Forest.
  - Raleigh, Cary and RTP.
- The Wake Transit Plan could help improve the existing services or help new projects happen sooner by:
  - Providing funding for additional trains in Wake County.
  - Improving train infrastructure (tracks, stations, etc.).



### What do you think? Is this a good way of building rail service in Wake County?



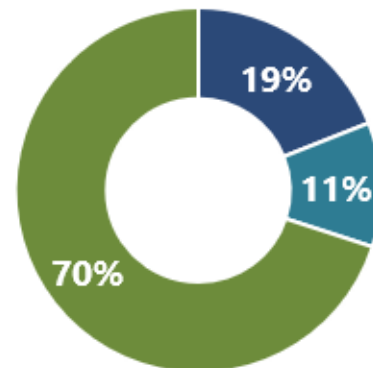


# Connect Raleigh and Durham with BRT

- 70% agreed that BRT between Raleigh and Durham is a good idea.
- Qualitatively:
  - Lack of understanding about BRT (what it is, how it works).*
  - Skeptical that taking a bus would ever be faster than driving.*
  - Travel between Raleigh and Durham was not a priority*

Question 2: BRT Will be a Good Way to Connect Raleigh and Durham

■ Disagree ■ Unsure ■ Agree

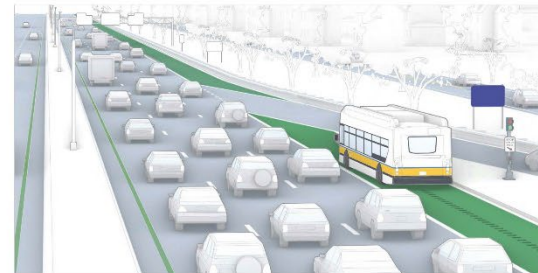


## You told us you want fast, reliable connections between Raleigh and Durham.



### Here's what we can do.

- ▶ The region could build Bus Rapid Transit (BRT) along I-40 to provide fast, frequent, reliable connections between Raleigh and Durham. This service could include:
  - Buses every 15 minutes all day, every day.
  - Widening and improving highway shoulders so buses can travel faster for the full way between Raleigh and Durham.
  - Making it easier and faster for buses to get on and off I-40.
  - Building new transfer points, including an Airport transit hub close to the on/off ramp.



	Time to Get Started	Estimated Travel Time (One-way peak period Raleigh to Durham)	Weekday Service	Weekend Service
Express Bus Service	Expansion starts in 2026 and 2027	60-70 minutes	15 minutes peak 30 minutes evenings	Every 15 minutes
BRT on I-40	5-10 years	50-60 minutes	30 minutes daytime 60 minutes evening	Every 20 minutes

### How often do you travel between Raleigh and Durham?

Every day    Once a week or so    Every month or so    Rarely or Never

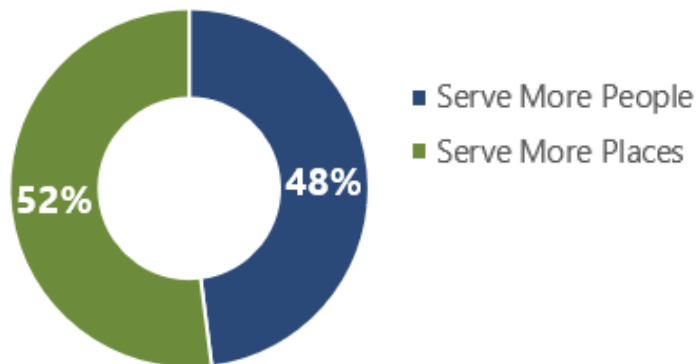
### Do you think BRT will be a good way to connect Raleigh and Durham?



# Serve More People or More Places

- Not everyone liked the trade-off, and preference is to do both
- Desire to expand regional access without transfer in Raleigh
  - *Example: Apex to Chapel Hill*
- Existing bus riders were more interested in serving people first.

Question 3: Which Approach Do You Think We Should Do First, Serve More People or More Places?



## Here's what we can do. Different Ways of Building a Transit Network

### What should we do first?

#### OPTION 1

Expand bus service in Cary and Raleigh, so buses come more often and are available for longer hours and more days.

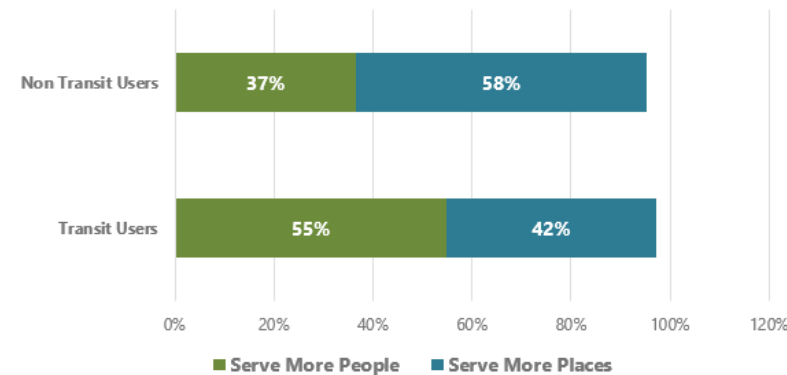
This option would serve more **people**.

#### OPTION 2

Create new bus routes and build new projects like mobility hubs to connect Wake County towns with Cary, Raleigh and other regional destinations.

This option would serve more **places**.

### Which Approach Should We Invest in First?



# Stakeholder Feedback – March 5<sup>th</sup>

- Stronger connections to network in Morrisville
- Frequency over large complicated projects (not universal)
  - Do frequency first
  - Postpone new BRT projects, especially I-40
- Interest in more funding to CFA program, plus bus stops, sidewalks and crosswalks
- Want a network redesign
- Some stakeholders wanted to adjust levels of funding for “rail ready” projects

## Discussion

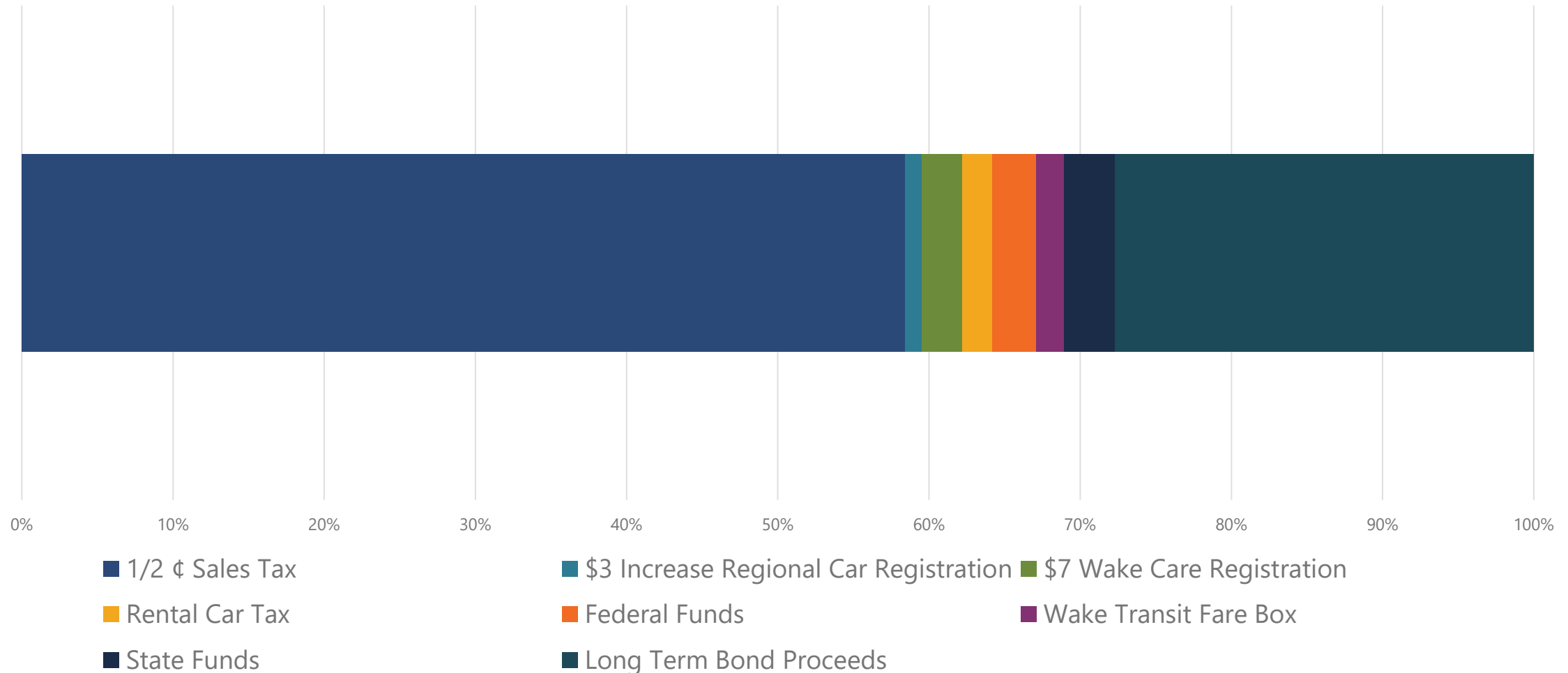
- General agreement/approval of proposed investment strategy
- People liked the balance of the investment strategy
- Most common comments:
  - Invest in Service Frequency
  - Advance CFA and community investments (sidewalks, crosswalks and microtransit)
  - Less focus on new BRT services, especially Harrison Avenue

# Wake Transit Plan Revenue Assumptions



2

# Projected Revenue FY26 - FY35 = \$3.0 billion



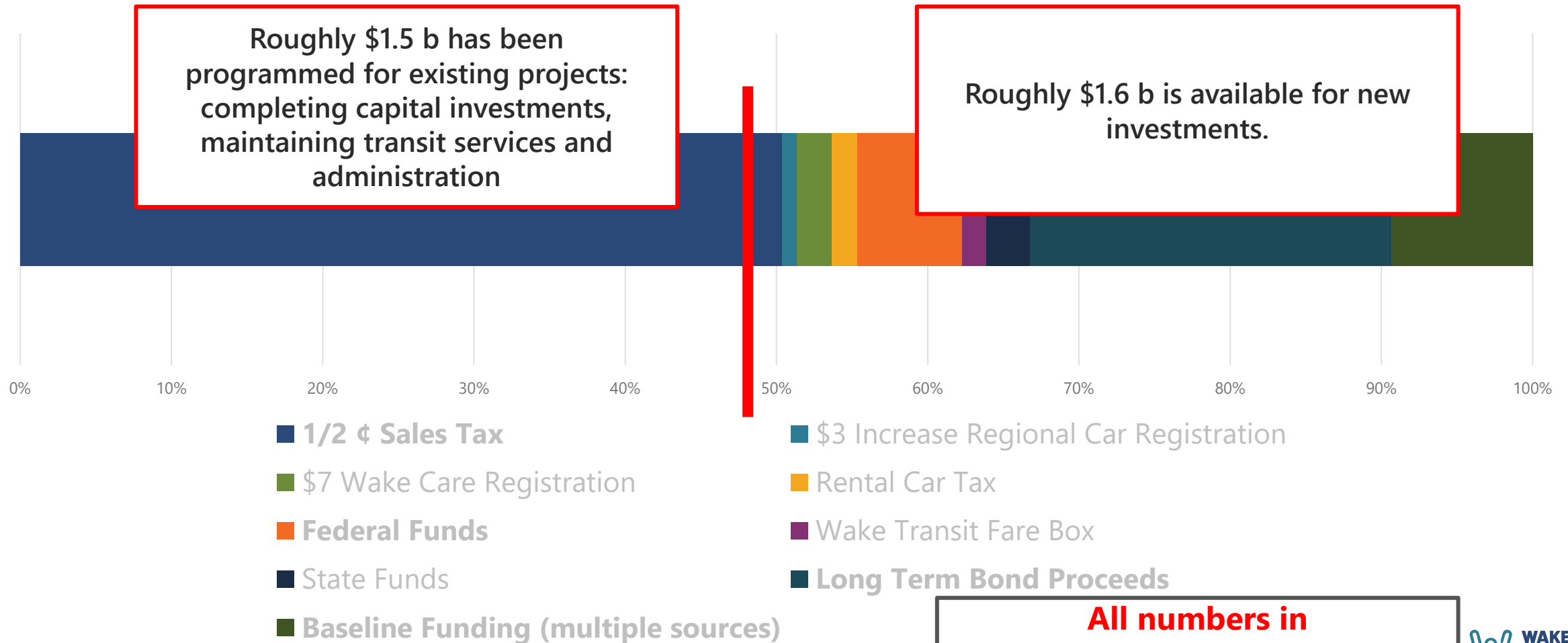
**All numbers in  
presentation are draft.**

# 10-Year Revenue – Overview

- **FY26–FY35 Revenue estimated at \$3.0b**
- **84% of funds are from two sources:**
  1. Sales Tax - 56%
  2. Long Term Bond Proceeds - 28%
- **Remaining 16% of funding equals \$411m (still a lot of funding)**
- **Potential vulnerability with funding assumptions ~ \$112m**
  - Vehicle Rental Tax revenue = \$58m
  - Wake Transit Fare Box revenue = \$54m

**All numbers in  
presentation are draft.**

# Roughly half of estimated revenue has been programmed.



**All numbers in presentation are draft.**

# **Proposed Wake Transit Plan Investment Strategy**



**3**



# Developing the Investment Strategy

1. **Identify Transit Priorities** (community, stakeholders, Wake Transit Plan team)
2. **Use Priorities to Select Projects, Programs and Services**
3. **Estimate Costs and Confirm Revenues**
  - Proposed Investment Strategy = \$3.0b (Revenues = \$2.95b + excess liquidity)
4. **Draft 2035 Investment Strategy**
  - Share projects, programs and services (lists and maps)
  - Investment strategy type of investment (spending breakdown)
5. **Outcomes and Expected Results**

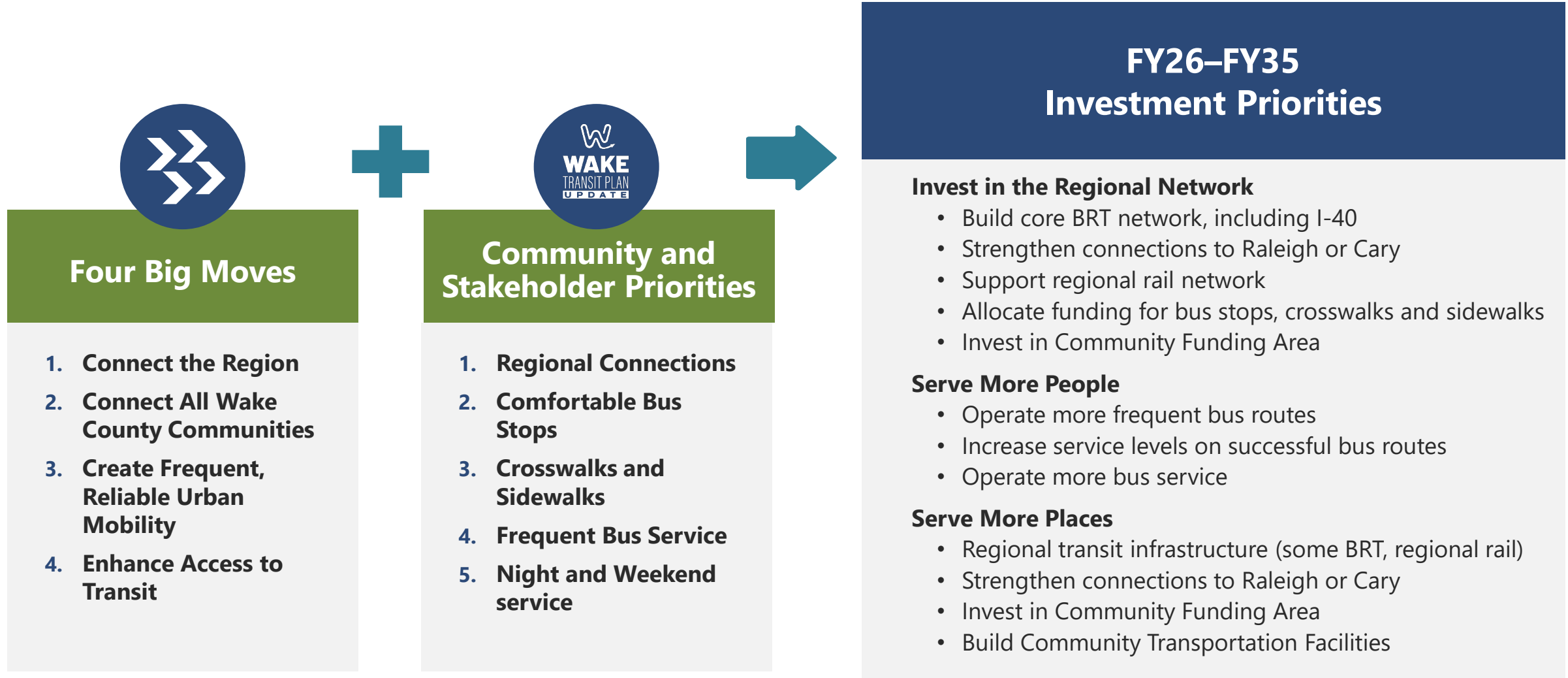
**All numbers in presentation are draft.**

# Wake Transit Plan Investment Strategy

- **Proposed Investment strategy = \$3.275 billion**
- **Estimated revenues = \$3.266 billion (with VRT and Fares)**

**All numbers in presentation are draft.**

# Wake Transit Plan Priorities



# Invest in the Regional Network



## Rail Ready Projects

**\$250m over 10 years**

- **\$50m to start, then ~\$19m per year, each year (funding rolls over)**
- **Regional Rail Implementation Plan will be completed in June 2025**
- **Potential investments may include**
  - Stations
  - Track Improvements
  - Increased Rail Service
  - *Additional study may be needed*



## Implement and Expand BRT Network

**\$1.0b in capital and operating**

- **Core Network** (New Bern, Western, Southern and Northern with 2 endpoints)
- **BRT Extensions** (Cary to RTP and Garner to Clayton)
- **BRT Development** (I-40 Raleigh to TMH)
- **BRT Next Gen** (study 5 to 6 corridors):
  - Harrison Avenue/Kildaire Farm Road (including extension to Apex), Glenwood, Blue Ridge, Davis Drive, Knightdale

# Serve More People



## Expand Frequent Bus Service

- **Increase hours and days of operation for existing bus services**
  - 14 Frequent Routes
  - 16 Local Routes
- **Add 13 New Frequent Routes**
  - Bus routes operating with 30-minute service will become frequent (15 minute) routes



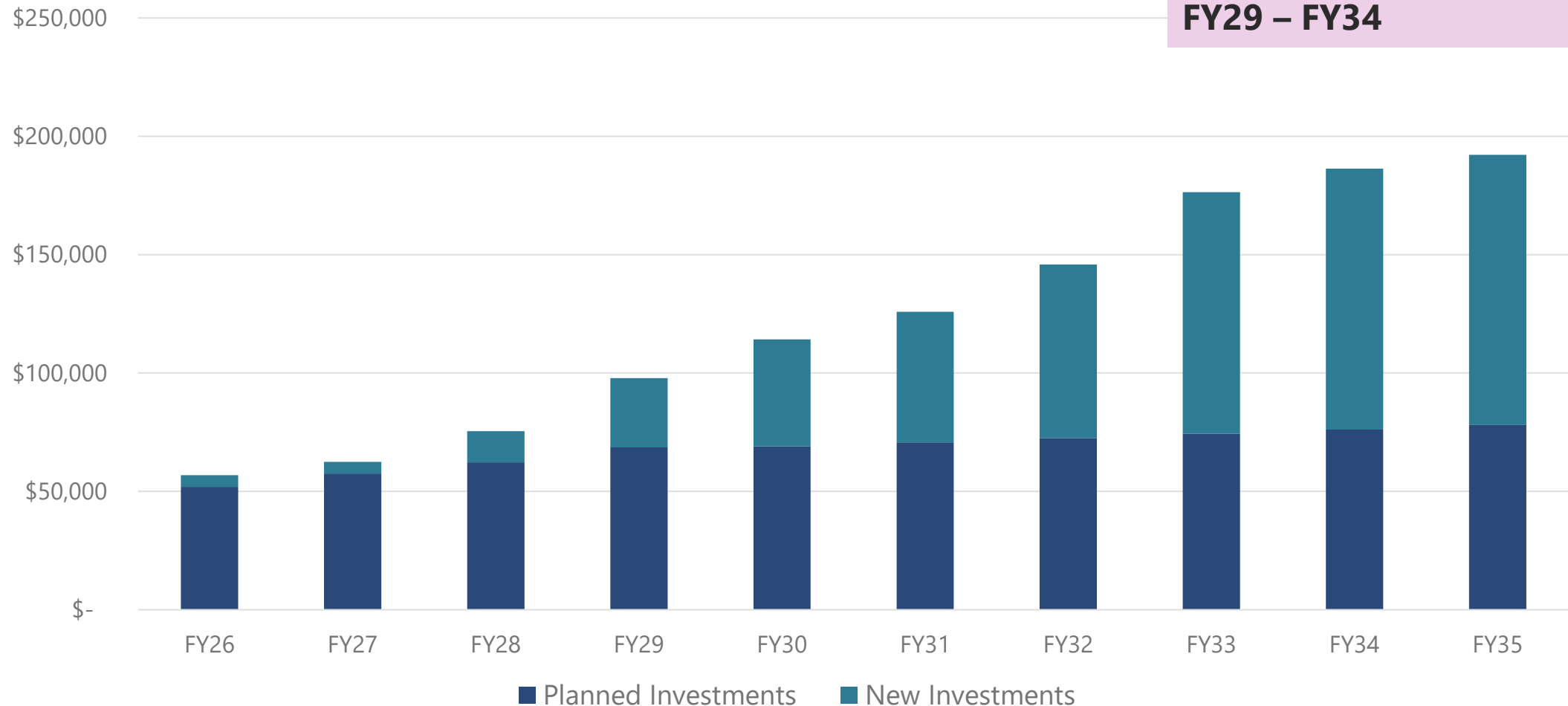
## Support Bus Service Investments

- **5% Contingency for Unanticipated projects**
- **15% for ADA**
- **Expansion Vehicles and Ongoing Replacement Vehicles**
- **Bus Stops, Sidewalks and Crosswalks**
- **10 Connection Points where frequent routes intersect**
- **Maintenance Facility Study**

# Operating Spending by Year

8-10% in planned investments  
(Bus Plan)

Plus major service expansion in  
FY29 – FY34



# Serve More Places



## More Community Connections

- **Increase hours/days of existing regional bus routes (all day, every day)**
- **Add 6 New Regional Routes**
  1. Apex to RTP/TMH via Davis Drive
  2. Apex to Raleigh Express
  3. Triangle Town Center to Durham via Briar Creek and TMH
  4. Fuquay-Varina, Holly Springs, Apex to RTP/TMH
  5. Southern Connector: Tryon Road
  6. Knightdale to Crabtree
- **New Town-to-Town Route**
  - Rolesville to Wake Forest
- **New Commuter Route to Amazon Facility in Garner**



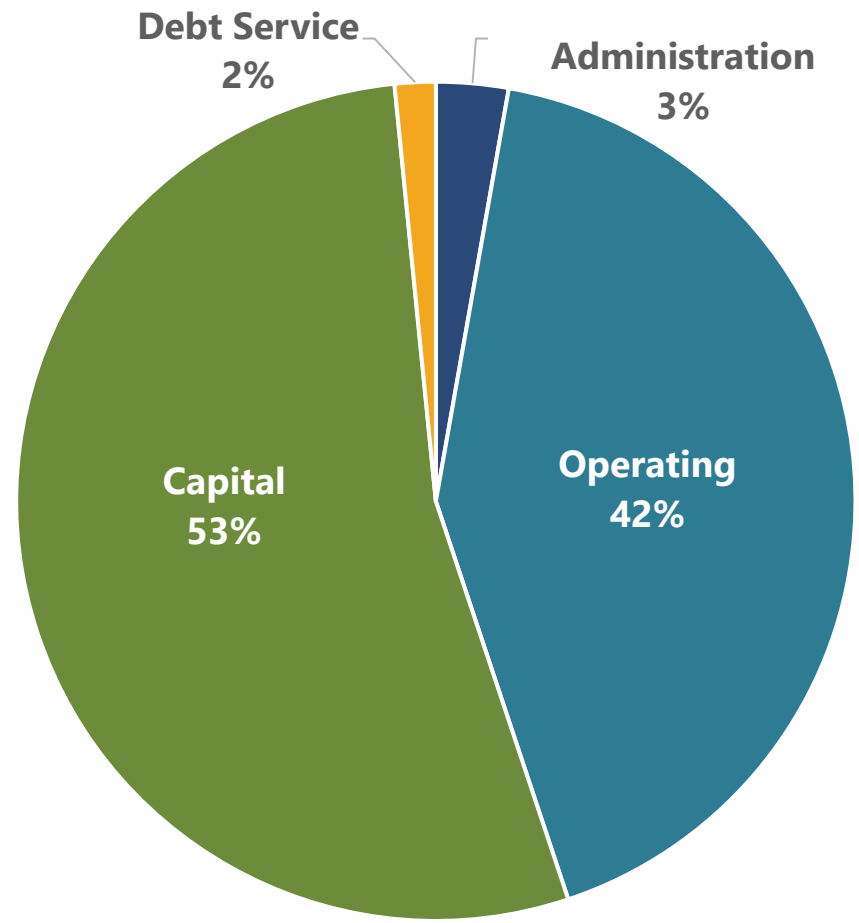
## More Community Facilities

- **Invest in Community Transportation Facilities/Hubs**
- **Increased Investment in Community Funding Area Program**
- **Potential Airport Interchange Facility off I-40**

# Breakdown of Spending by Type

## PROPOSED INVESTMENTS FY26–FY35

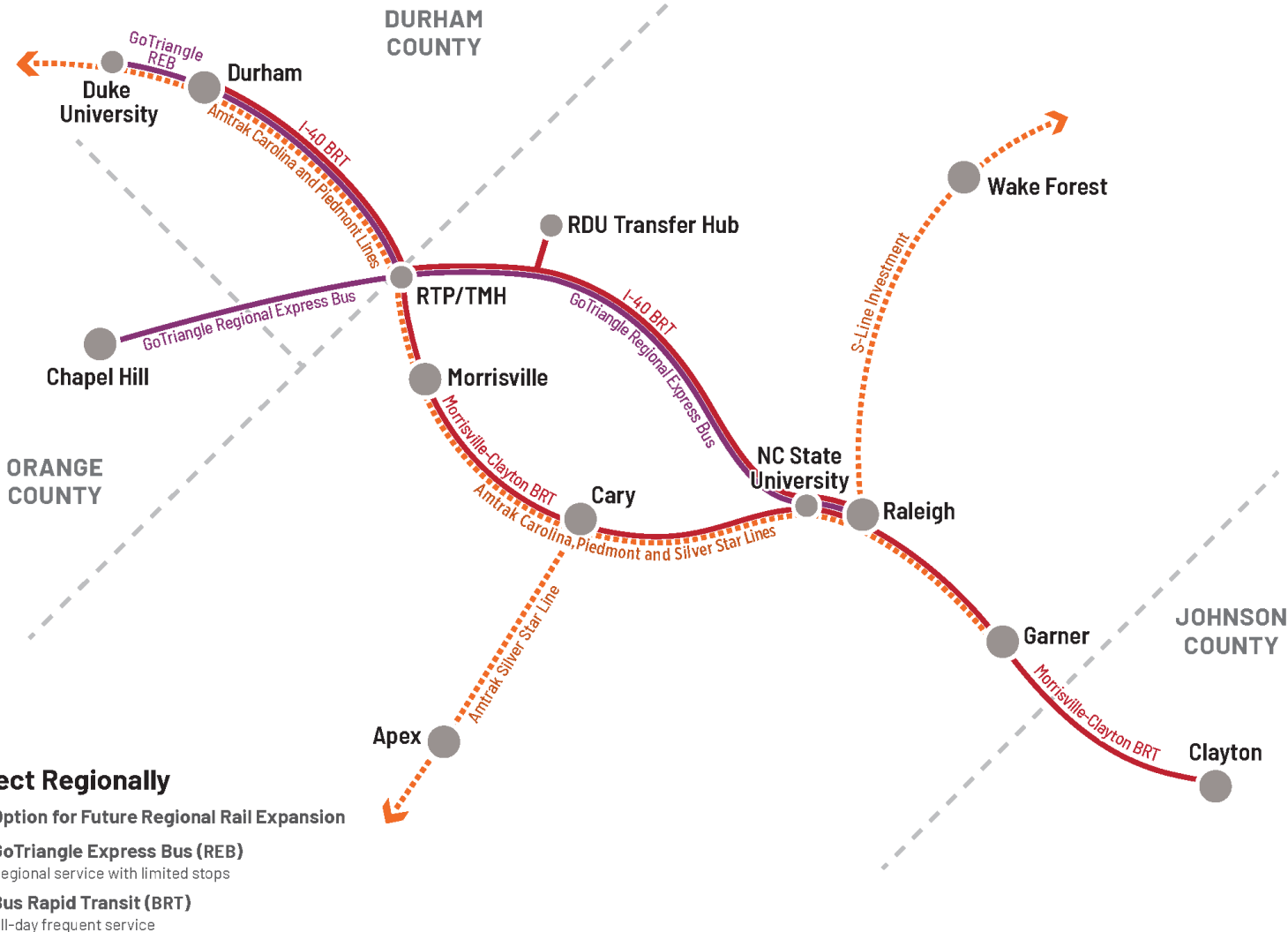
FY26-FY35	
Capital	\$1.66b
Operating	\$1.31b
Administration	\$87m
Debt Service	\$49m



**All numbers in presentation  
are draft.**



# Connect Regionally



**Maps are draft.**

**Wake Transit Plan will continue to invest in projects and services that make it easy to travel regionally.**

## Proposed Investments

- BRT on I-40 to connect Raleigh with RTP and RDU
- Regional express connect regional hubs with bus service every 30-minutes every day
- Ongoing investment in regional rail

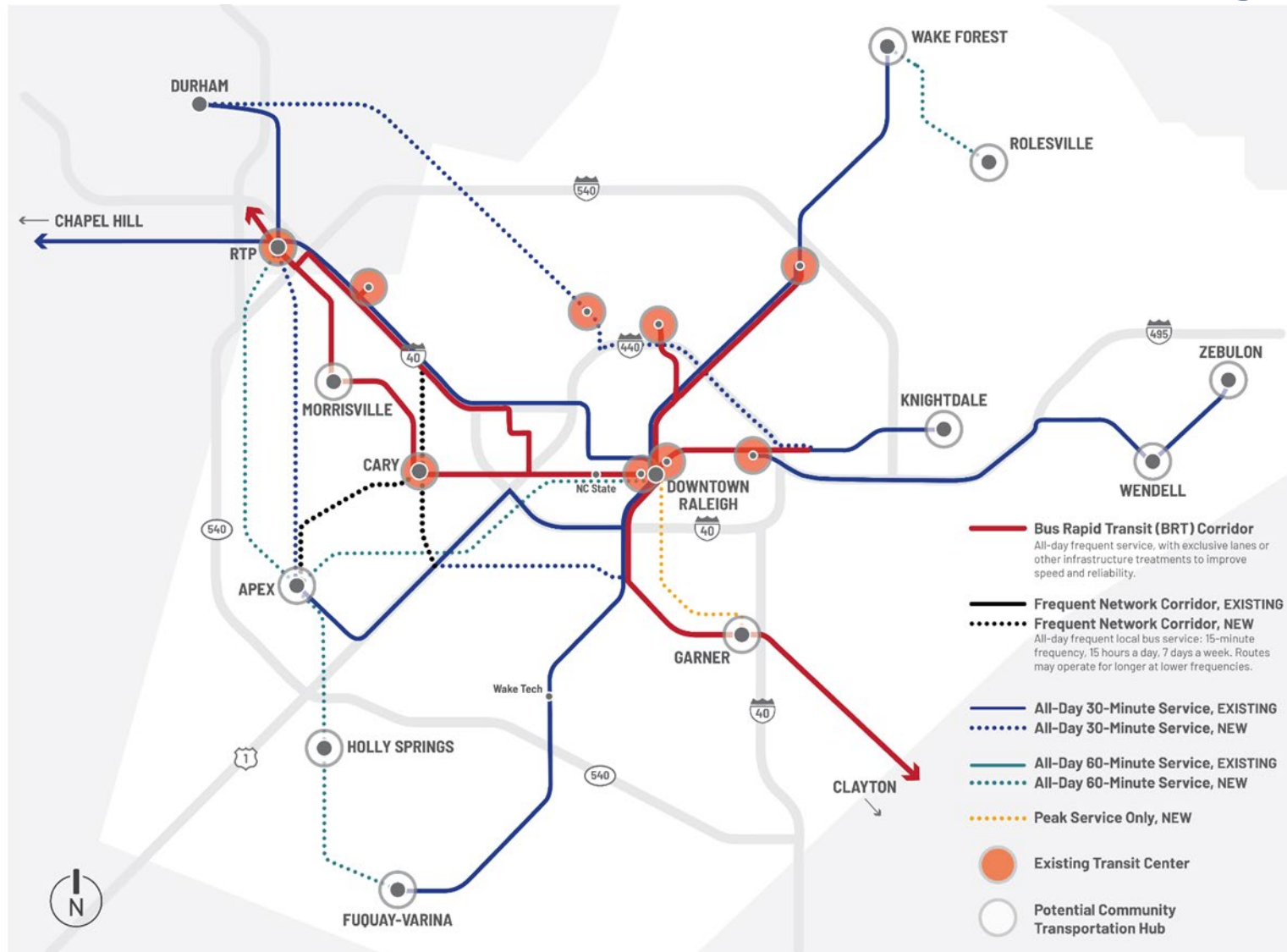
## Transit Plan Updates

- Operate BRT extensions (Garner to Clayton and Cary to RTP) by 2035
- Full network of regional transit hubs is available

## Key Benefits

- BRT and Express Bus will connect regional destinations with service all day everyday
- BRT creates benefits faster than commuter rail.
- Continued investment in rail projects

# Connect All Wake County Communities



Maps are draft.

## More Community Connections

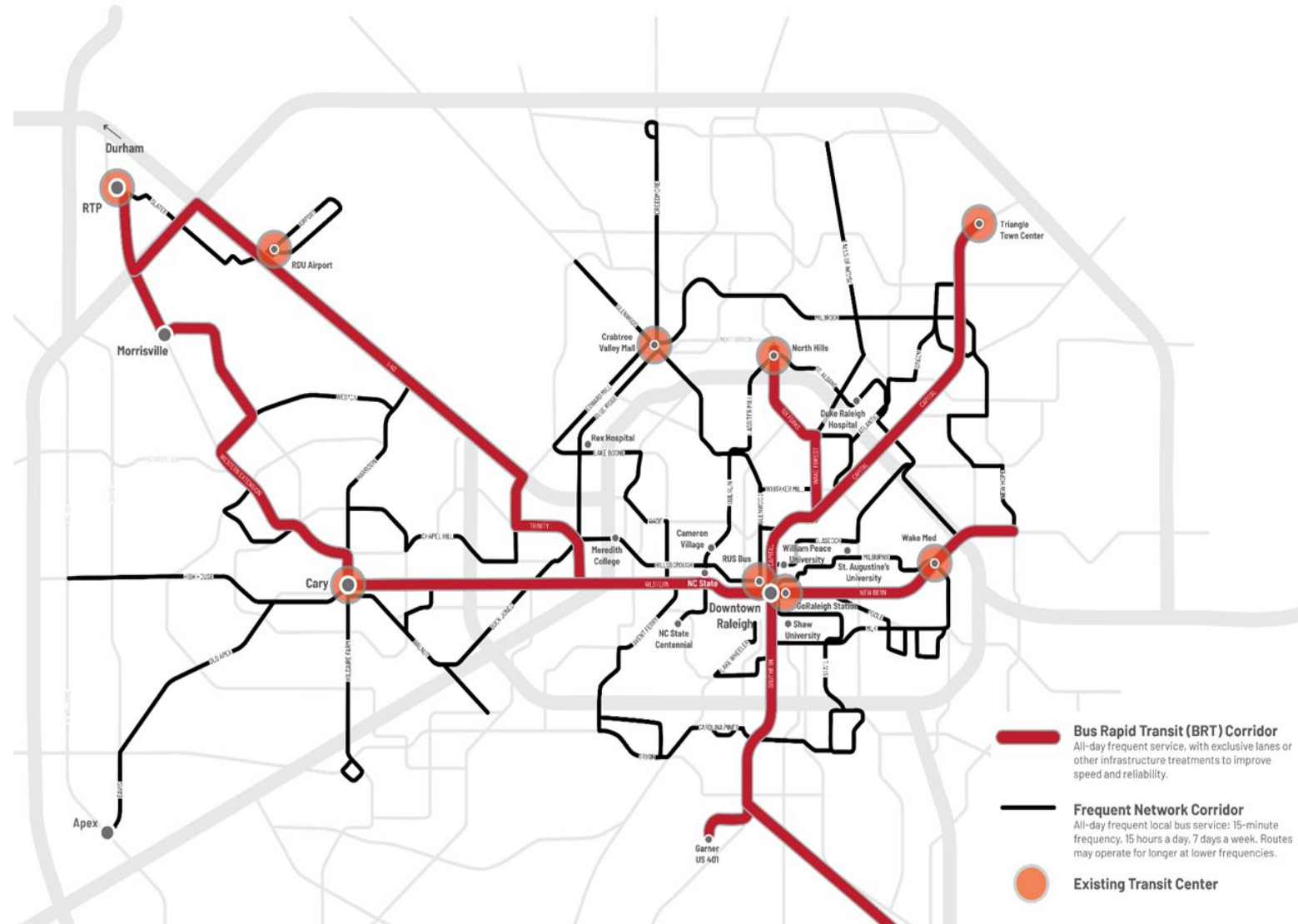
- Faster, more reliable, more available connections between more places, including to Cary and Raleigh and between towns.

## More Community Transit Facilities

- Wake Transit Plan will invest in multiple community transportation centers around Wake County.



# Frequent Reliable Urban Network



Maps are draft.

## Proposed Investments

- Invest in existing frequent bus network so there are more hours and days (weekends) of frequent bus service.
- Expand frequent network from 12 to 31 routes.
- Increase miles of frequent bus route to 330.7 (up from 101).

## Transit Plan Updates

- Frequent bus network will expand by 19 routes, making it more convenient and easier to travel more places.
- Capital investments include new transfer / connection points where bus routes meet.

## Key Benefits

- Faster, more reliable bus service
- Increase ridership
- Support increased development and more dense development.
- [Wake Transit Plan Update](#)

# Next Steps



4

# Schedule

## JANUARY–JUNE





Thank you!

## 5.5 2035 Wake Transit Plan Progress Report

**Requested Action:**  
**Receive as information.**

## 5.6 Triangle Transportation Choices/Transportation Demand Management (TDM)





# Triangle Transportation Choices FY24 Annual Impact Report

Jenna Kolling, Senior Program Analyst  
Central Pines Regional Council  
April 2025

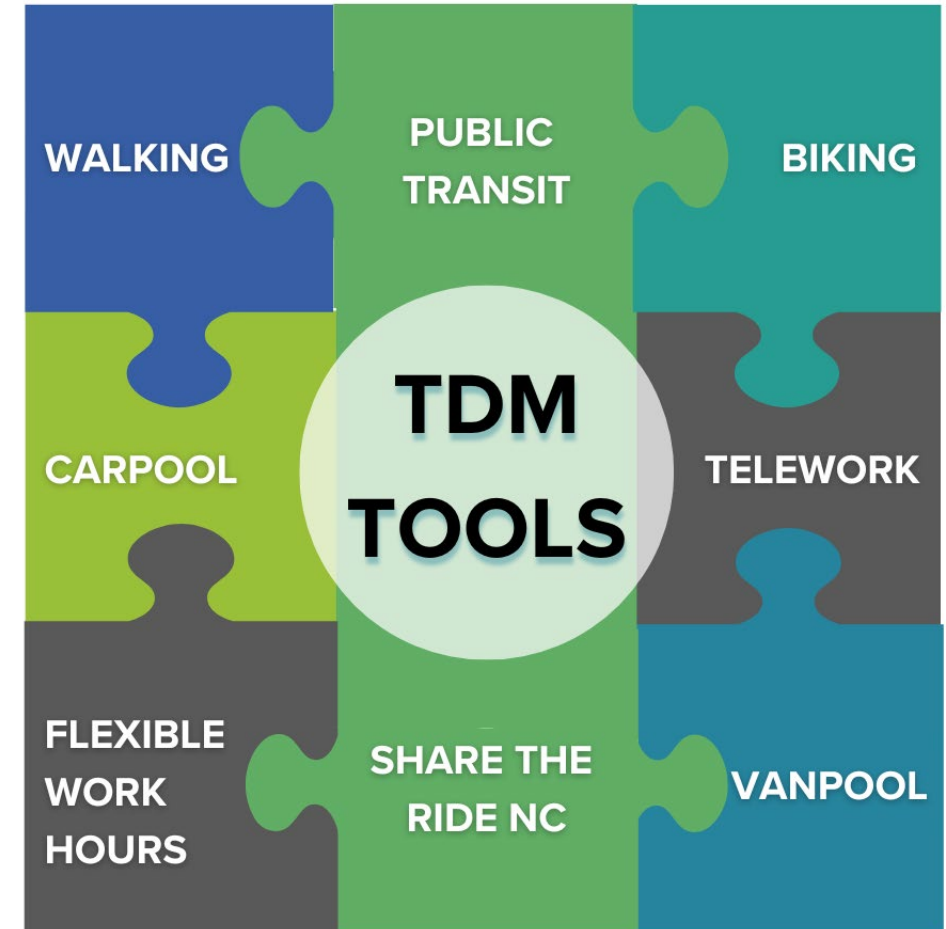


TRIANGLE  
TRANSPORTATION  
CHOICES

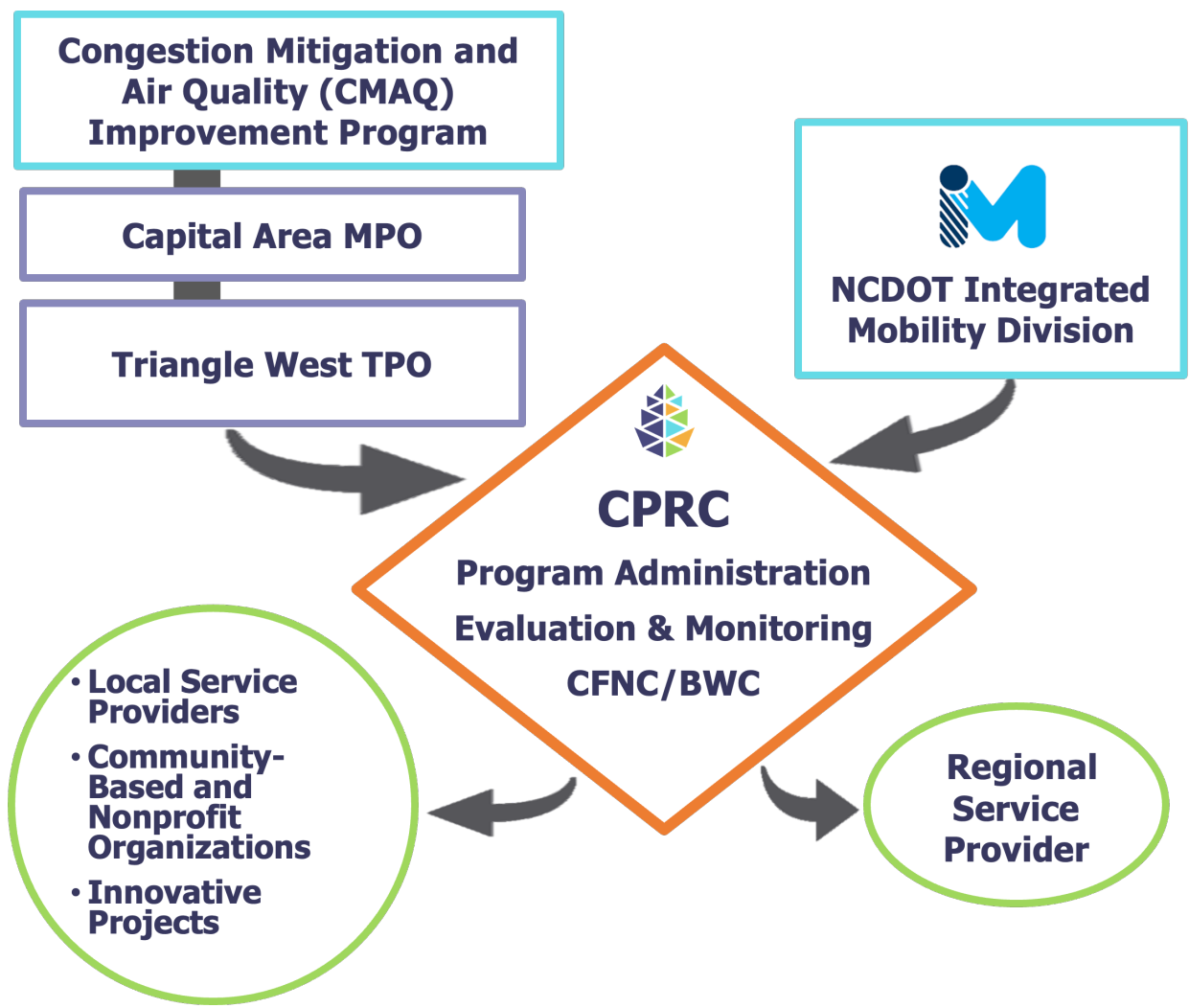


# Program Background

- The Triangle Transportation Choices program provides funding for **Transportation Demand Management (TDM)** initiatives across the Triangle region.
- The program funds **marketing campaigns, digital outreach, in-person engagement, and promotional events** to encourage residents and workers to choose alternative transportation modes such as carpooling, vanpooling, public transit, biking, walking, and telework.



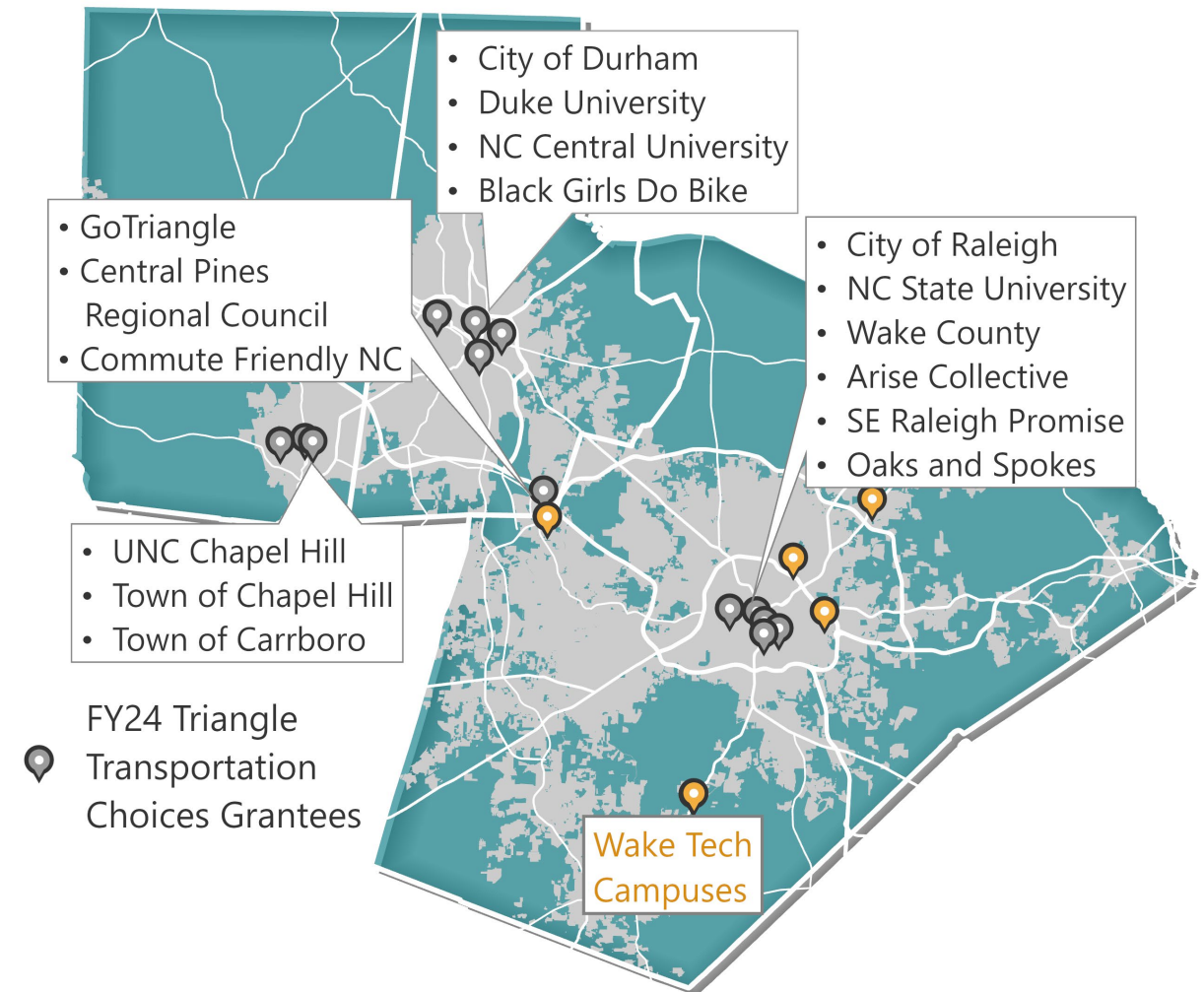
# Program Administration and Funding





# FY24 Funding and Grant Recipients

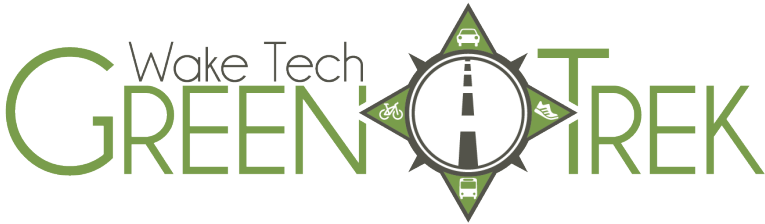
- July 1, 2023 – June 30, 2024
- Total funding awarded: \$1.84 million
- 18 grants awarded



# FY24 TDM Programs Funded in the CAMPO Region

COMMUTE  
SMART  
RALEIGH

---





# FY24 Education and Outreach Events



TRIANGLE  
TRANSPORTATION  
CHOICES

During FY24, Triangle Transportation Choices Program grantees promoted alternative transportation modes at **198** education and outreach events across the region, directly interacting with **over 17,000 people**.

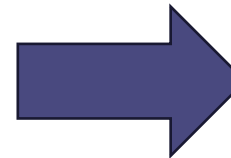




# Data Collection for Annual Impacts

At the end of each quarter, grant recipients submit **participation data** for their marketing and outreach efforts, including:

- Transit ridership
- Park & Ride usage
- Website views
- Engagements on social media
- Membership in commuter benefits programs
- STRNC carpoolers and Commute with Enterprise vanpoolers
- Participation in commute challenges, webinars, and other outreach events.

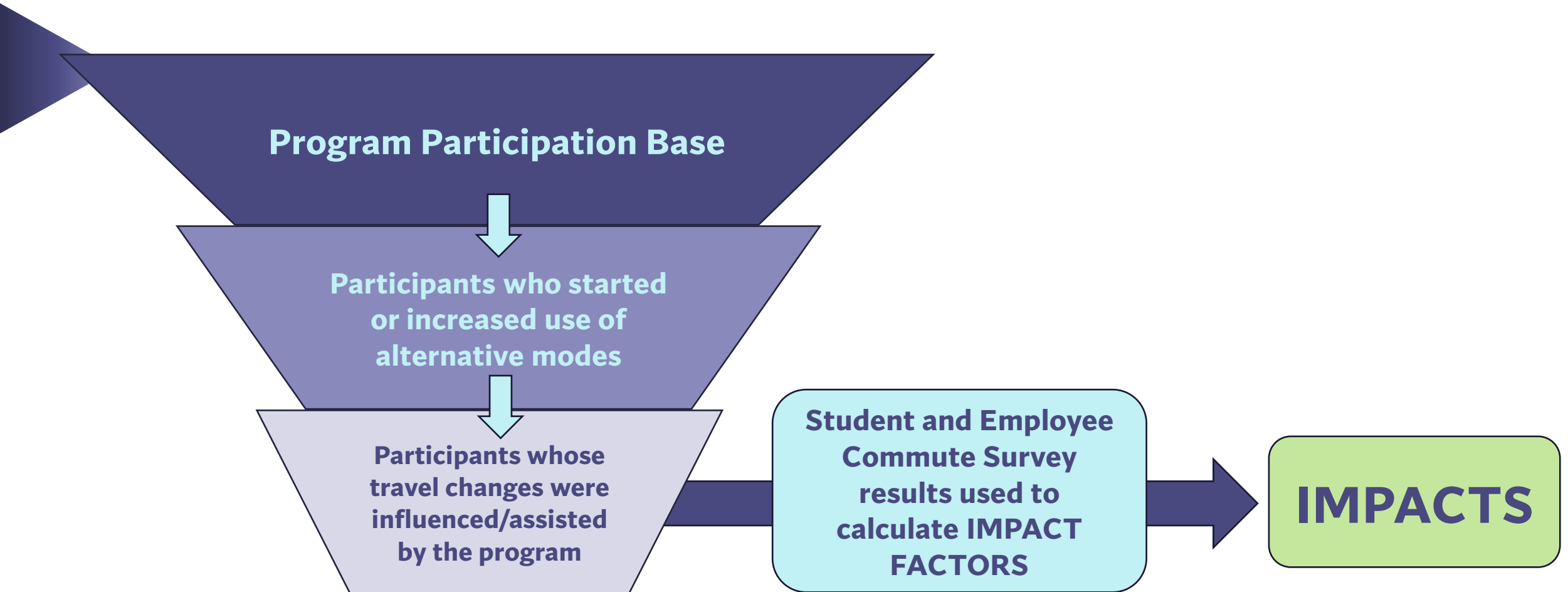


**FY24 Program  
Participation Base =**

**The total number of  
people who may have  
started using or increased  
their use of alternative  
transportation modes.**



# Annual Impact Calculation Steps















# FY24 Program-Wide Impacts



TRIANGLE  
TRANSPORTATION  
CHOICES

## TRAVEL BEHAVIOR AND EMISSIONS IMPACTS

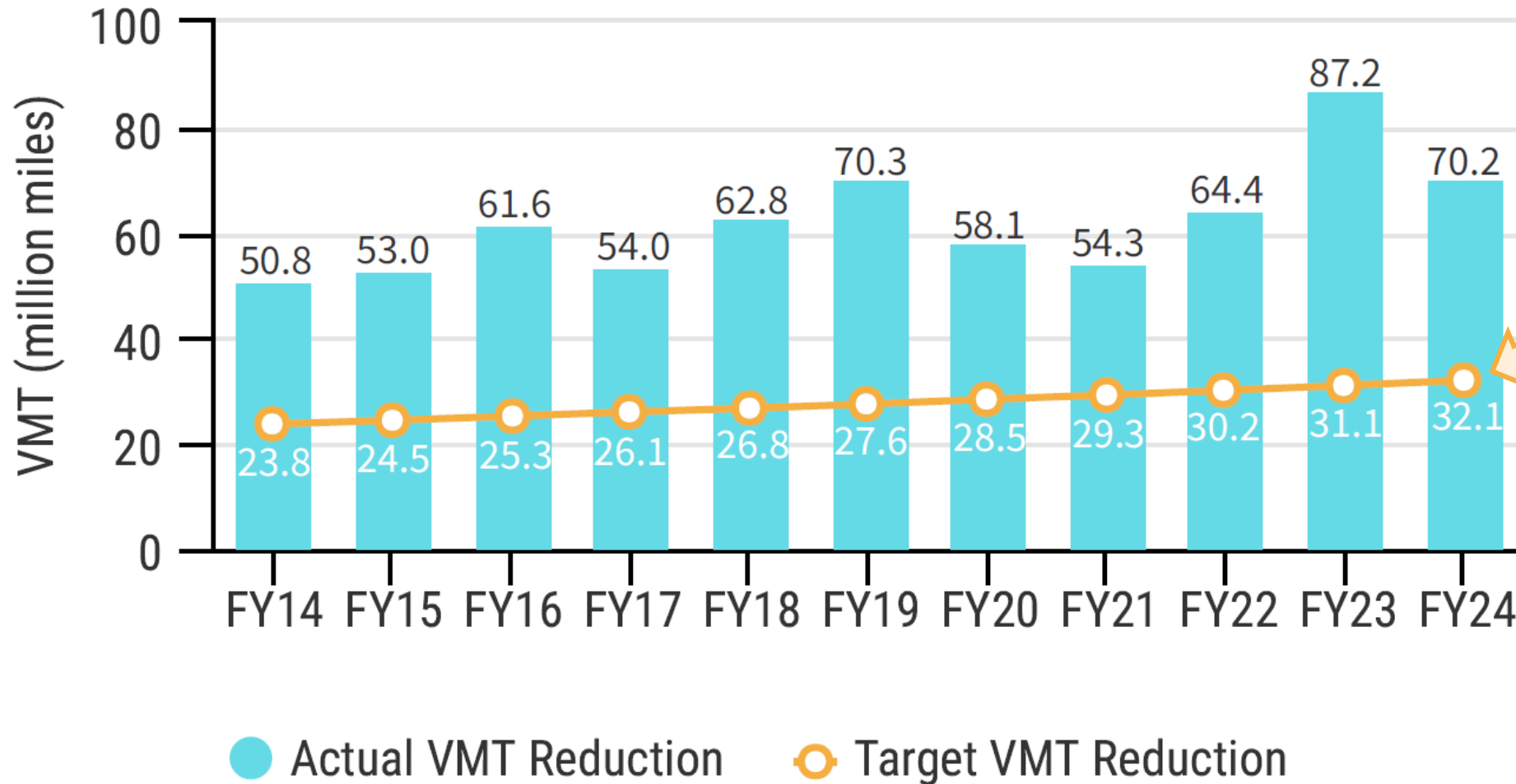
	<b>4.9 million</b> vehicle trips avoided	Based on average commute times, that's over <b>85,000 days (or 234 years)</b> not spent driving a car	
	<b>2.8 million</b> gallons of gas saved	It would take <b>333 tanker trucks</b> to hold that much gas	
	<b>70 million</b> commute miles reduced	That's equivalent to driving from San Francisco to New York City <b>more than 24,000 times</b>	
	<b>24,000</b> alternative transportation users supported	If they all drove alone, their cars would span <b>68 miles</b> bumper-to-bumper	
	<b>53 million</b> pounds of Carbon dioxide (CO2) release prevented	That's the same as over <b>5,000 homes</b> not using electricity for a year	



# Program-Wide VMT Reductions FY14-24



TRIANGLE  
TRANSPORTATION  
CHOICES








**Annual VMT Reduction Target**  
= 25% of  
estimated annual  
growth in regional  
commute VMT

# Societal Benefits of TDM in FY24



TRIANGLE  
TRANSPORTATION  
CHOICES

	Air pollution emissions reductions (NOx and VOCs)	=	\$23,000 saved
	Global climate change mitigation (CO2)	=	\$936,000 saved
	Noise pollution reduction	=	\$1,566,000 saved
	Reduction in fuel consumption	=	\$9,494,000 saved
	Reduction in traffic congestion	=	\$1,415,000 saved
	Deferral of new road construction	=	\$267,000 saved
	Reduced vehicle crashes	=	\$1,133,000 saved
	Active transportation health	=	\$13,963,000 saved

**Total estimated savings  
in FY24 due to the  
societal benefits of TDM  
services provided by the  
Triangle Transportation  
Choices Program**



  
**\$28.8 Million**



# Questions?



TRIANGLE  
TRANSPORTATION  
CHOICES

Central Pines Regional Council

## 5.6 Triangle Transportation Choices/Transportation Demand Management (TDM)

**Requested Action:**  
**Receive as information.**

## 5.7 Public Engagement on Tolling Options for U.S. 1 (Capital Blvd.) North

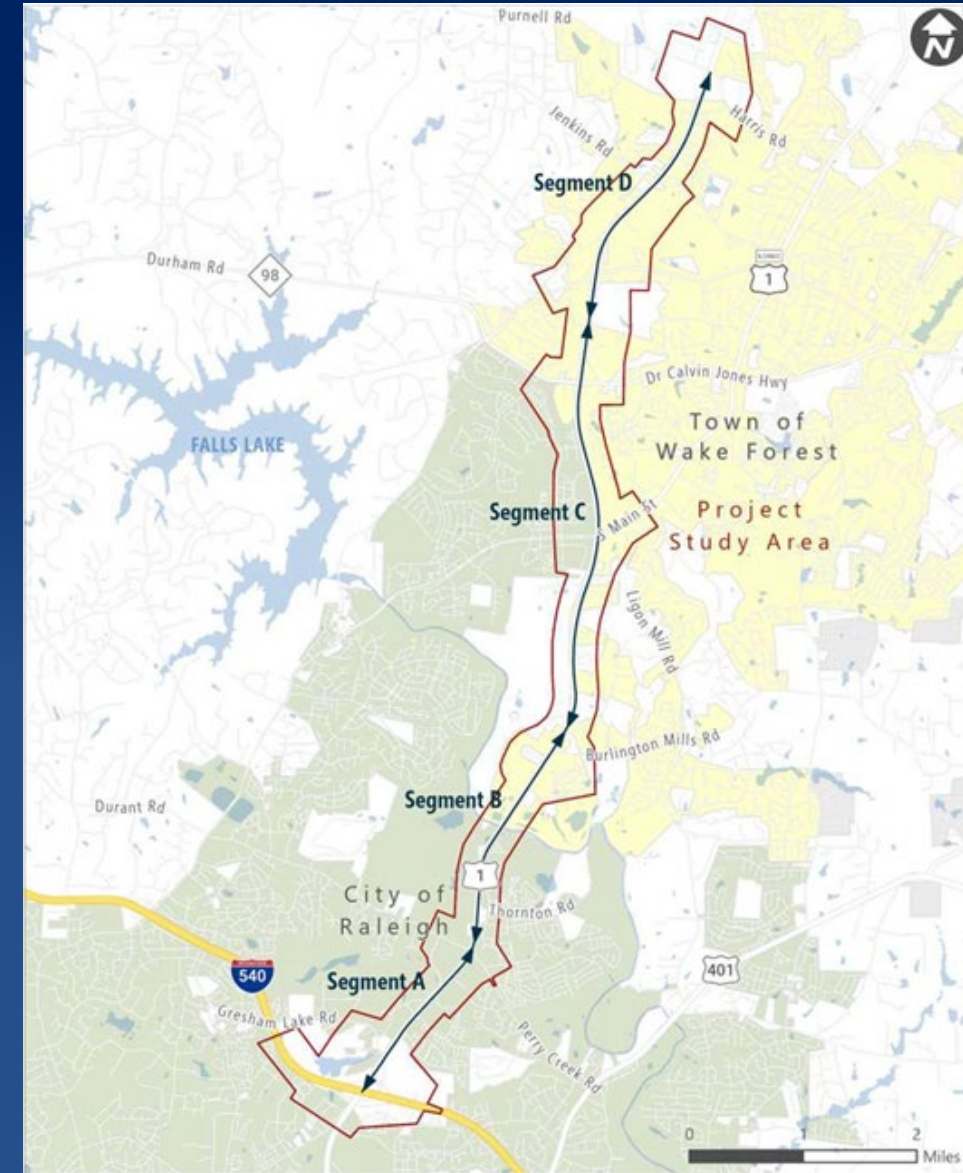
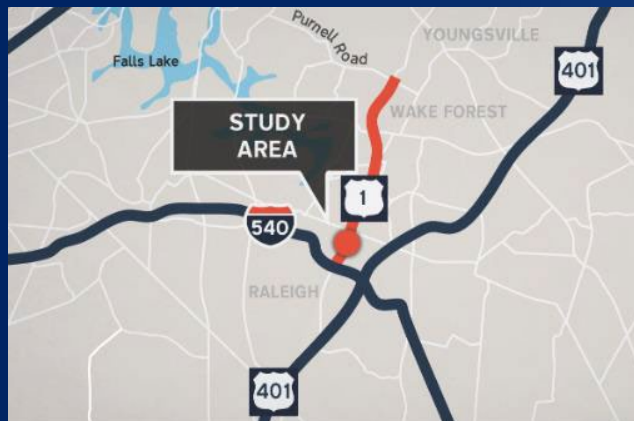


# Background: U.S. 1 Capital Boulevard **North** Project (U-5307):

Converts Capital Boulevard (US 1) into a controlled-access highway in Wake County between I-540 and Purnell/Harris roads in Wake Forest.

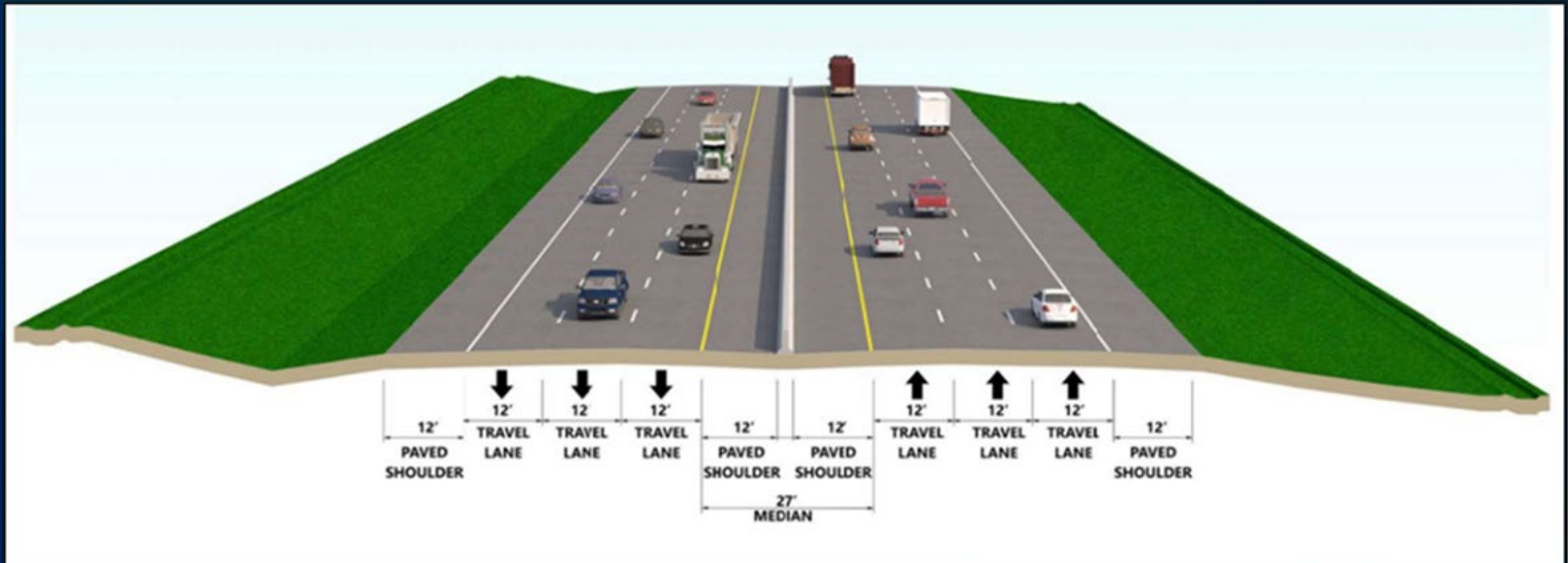
For funding purposes, the Project is divided into the following four(4) segments:

- Segment A: I-540 to Durant Road / Perry Creek Road
- Segment B: Durant Road / Perry Creek Road to Burlington Mills Road
- Segment C: Burlington Mills Road to N.C. 98 Biz (Durham Road)
- Segment D: N.C. 98 (Durham Road) to Purnell Road / Harris Road



# Background: U.S. 1 Capital Boulevard North Project:

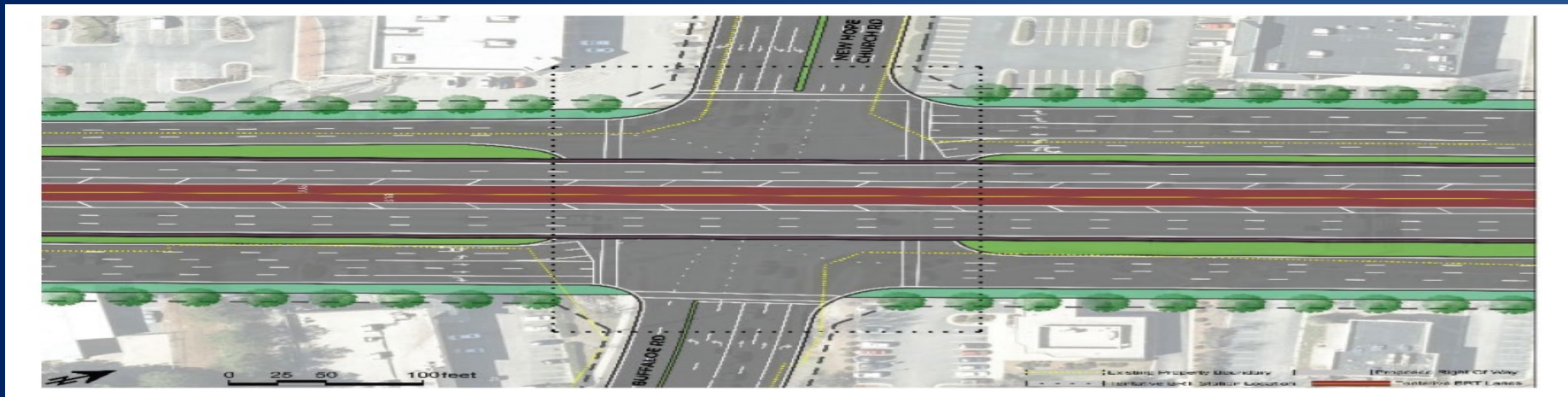
Converts Capital Boulevard (US 1) into a controlled-access highway between I-540 and Purnell/Harris roads in Wake Forest.





# Background: U.S. 1 Capital Boulevard **South** of I-540:

Planned improvements convert Capital Boulevard (US 1) into a multiway boulevard between I-540 and I-440.



# U-5307 US 1 North Project

## STIP History

STIP	Projected Start Year	Projected End Year	Projected Cost (2025 \$)
2012 TIP/STIP	2018	2023*	\$93 Million
2016 TIP/STIP	2021	2024*	\$269 Million
2018 TIP/STIP	2021	2025	\$469 Million (ABC) \$581 Million (ABCD)
2020 TIP/STIP	2025	2032	\$452 Million (ABC) \$565 Million (ABCD)
2024 TIP/STIP	2026	After 2034	\$627 Million (ABC) \$772 Million (ABCD)
DRAFT 2026 STIP	2031	After 2035	\$1.07 Billion (ABC) \$1.34 Billion (ABCD)

*\*Some portions unfunded*

Time is money...

# Background: **Options to Move Forward**

## **Option 1 – Stay the Course:**

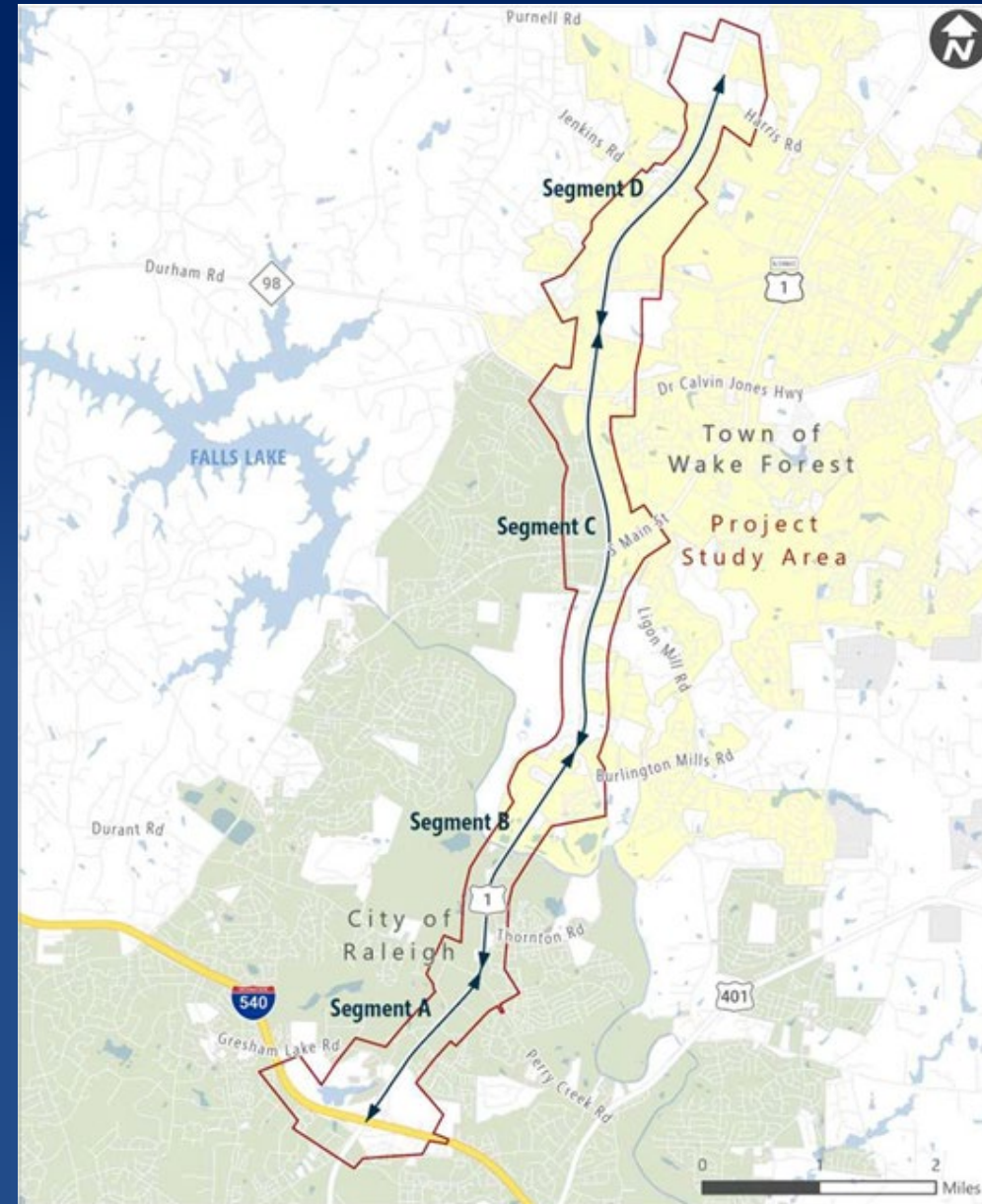
Wait for B,C, and D segments to compete and be programmed through normal TIP/STIP process

## **Option 2 – Non-freeway option:**

Study options to improve the corridor with non-freeway improvements (e.g. RCI/ Superstreet, operational improvements, some interchanges, etc.)

## **Option 3 – Convert the Corridor to a Toll Project:**

Complete tolled Expressway  
Express toll lane(s) in each direction



# Background

- February 2024: CAMPO Executive Board requested NCTA conduct a toll study for the US 1 North project corridor due to the impact of the reprogramming changes in the STIP/TIP.
- March 2025: Tolling analysis results are included in the following slides.

# Request to Assess Tolling Alternatives

## Analysis Request

- In February 2024, CAMPO requested NCDOT and NCTA to study tolling as a potential way to accelerate delivery of the proposed Capital Boulevard upgrades
- CAMPO & NCDOT signed an agreement in March 2024 to share costs of a Traffic and Revenue Study to evaluate tolling on U-5307
- CDM Smith developed planning level (level 2) traffic and revenue forecasts for both Expressway and Express Lane models that served as a basis for the analysis
- NCTA analyzed four (4) scenarios for financial viability:
  - **Scenario 1: All-tolled Expressway; Standalone**
  - **Scenario 2: All-tolled Expressway; added to the Triangle Expressway System**
  - **Scenario 3: One Express Lane in each direction; Standalone**
  - **Scenario 4: One Express Lane in each direction; added to the Triangle Expressway System**





# Types of Road Pricing

## Expressway (Scenarios 1 & 2)

- All users of facility pay
  - Drivers can choose to use alternative route instead
- Toll rates are generally a fixed rate per mile
  - Rates based on vehicles' axles
- Examples: Triangle Expressway and Monroe Expressway



## Express Lanes (Scenarios 3 & 4)

- Only express lane users pay
  - Drivers can choose to use general purpose lanes instead
- Dynamic pricing
  - Rates vary depending on traffic demand
  - Express Lanes must maintain 45 mph speed
- Intended to manage congestion and provide drivers with reliable travel times
- Examples: I-77 North Express Lanes and future I-485 Express Lanes



# Financial Analysis

Financing Highlights	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Roadway Type	Expressway	Expressway	Express Lanes	Express Lanes
Triangle Expressway System Expansion	No	Yes	No	Yes
Contract Award & Financial Close <sup>1</sup>	Spring 2027	Spring 2027	Fall 2030	Fall 2027
Projected Opening <sup>1</sup>	Spring 2033	Spring 2033	Fall 2036	Fall 2033
Capital Cost Estimate <sup>2</sup> (\$YOE)	~\$1.65B	~\$1.65B	~\$1.90B	~\$1.80B
Financing Capacity <sup>3</sup>	~\$800M	~\$1.40B	<\$100M	~\$600M
State Funding <sup>4</sup> (all or portion of)	Segments A/B	Segment A	Segments A/B/C/D	Segments A/B/C

<sup>1</sup>Schedule assumes CAMPO action and any necessary legislative changes by 7/1/2025 followed by 9-15 month environmental reevaluation process depending on scenario. Also assumes availability of funding to advance early work efforts consistent with C540 projects

<sup>2</sup>Cost estimates for express lanes scenarios do not reflect complete engineer's estimate; based on current estimates plus factor for additional work

<sup>3</sup>Based on planning level (level 2) T&R forecasts; bonding capacity less issuance costs, including capitalized interested and required reserves

<sup>4</sup>Based on draft 2026-2035 STIP released 1/31/2025

# Key Considerations

Key Considerations	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Roadway Type	Expressway	Expressway	Express Lanes	Express Lanes
Triangle Expressway System Expansion	No	Yes	No	Yes
Toll Rate Structure	Fixed	Fixed	Dynamic	Dynamic
NEPA Reevaluation	Lower Schedule Risk	Lower Schedule Risk	Higher Schedule Risk	Higher Schedule Risk
Diversion Impacts <sup>1</sup>	Some	Some	Negligible	Negligible
Toll Revenue Roadway Maintenance Funding	All Lanes	All Lanes	Express Lanes Only	Express Lanes Only
Bonus Allocation	\$100M	\$100M	<\$50M	\$100M
Legislative Needs <sup>2</sup>	Conversion of non-tolled highways	Conversion of non-tolled highways Allowable use of revenues	None	Allowable use of revenues

<sup>1</sup>When compared against project being delivered as non-tolled

<sup>2</sup>NCGS 136-89.187; NCGS 136-89.188(a)



Falls of Neuse

Time Period	AM (7 – 9A)		PM (3:30-6:30P)	
Direction	Southbound		Northbound	
Value	Travel Time (min)	Average Speed	Travel Time (min)	Average Speed
Distance (mi)	7.41			
No Build	12.9	34	13.1	34
Build Toll Free	11.6	38	11.7	38
Build Tolloed	12.5	36	12.6	35

US 1

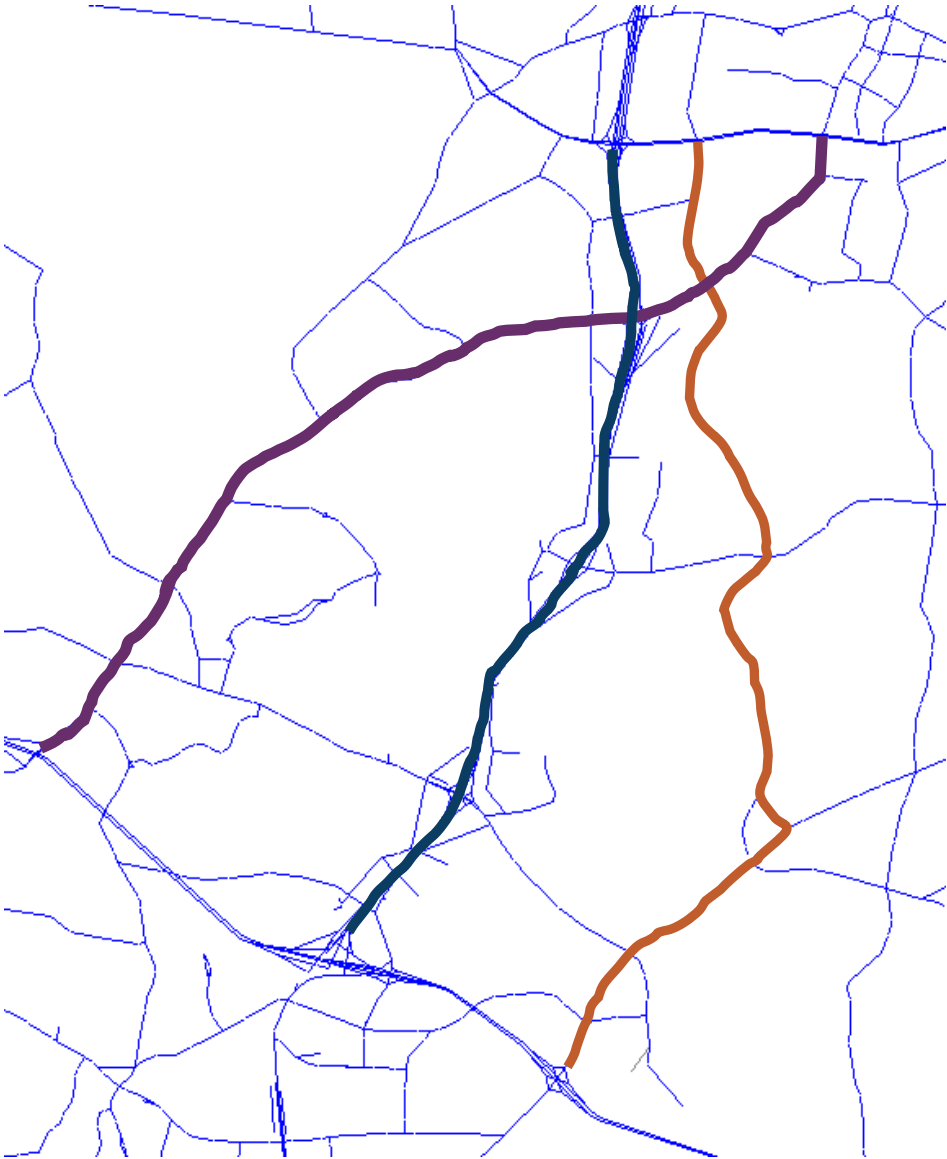
Time Period	AM (7 – 9A)		PM (3:30-6:30P)	
Direction	Southbound		Northbound	
Value	Travel Time (min)	Average Speed	Travel Time (min)	Average Speed
Distance (mi)	6.20			
No Build	9.8	38	9.7	38
Build Toll Free	5.6	66	5.6	66
Build Tolloed	5.5	67	5.6	67

US 401-Ligon Mill

Time Period	AM (7 – 9A)		PM (3:30-6:30P)	
Direction	Southbound		Northbound	
Value	Travel Time (min)	Average Speed	Travel Time (min)	Average Speed
Distance (mi)	7.43			
No Build	11.6	38	12	37
Build Toll Free	11.3	39	11.5	39
Build Tolloed	11.7	38	12.2	37

Note: The No Build condition in 2040 assumes no improvements are made to US 1 related to U-5307

Diversion Analysis - 2040



## Summary

- NCDOT and NCTA are not advocating for a particular path forward
- Four toll scenarios analyzed at the request of CAMPO, including both expressway and express lane scenarios
- Three of the four scenarios analyzed could likely provide some level of financial flexibility and an accelerated delivery schedule<sup>1</sup>
- Three of the four scenarios would likely require legislative changes if CAMPO were to choose to pursue them
- NCDOT and NCTA will continue to provide support as CAMPO evaluates the scenarios and determines the best path forward for the region



<sup>1</sup>When compared against non-tolled project schedule included in draft 2026-2035 STIP released 1/31/2025

# Public Engagement Strategy - Overview

## Objective:

- ❖ Exec. Board request for public feedback to inform a May 21 (anticipated) decision on path forward options, which include
  - Stay the course
  - Convert to toll project for US 1 (Capital Blvd) Corridor north of I-540
  - Preference for Express lanes or Expressway?

# Public Engagement Strategy (cont.)

## Public engagement activities from **April 7 – May 14**

- Public Comment Period
- Informational website
- Online Survey
- NCDOT, NCTA involved as resource for info
- In-person Public Information Sessions (2) Late April/Early May
- Tabling (popups) at local events

### Promotion:

- Targeted to local area, Paid advertising
- Emails to prior public participants with NCDOT project development
- Media Release, Info flyers, etc.
- Toolkit provided for partners, member jurisdictions

**We need YOU! Member jurisdiction support will be critical (identify events, locations for outreach, spread the word, etc.)**

## 5.7 Public Engagement on Tolling Options for U.S. 1 North

### Next Steps:

Public engagement synthesis presented at May 21<sup>st</sup> Exec. Board Meeting

**Requested Action:**  
**Receive as information.**

## 6. Informational Items: Budget

1. Operating Budget FY2025
2. Member's Shares FY2025

**Requested Action:**  
**Receive as information.**

## 7. Informational Items: Project Updates

1. Informational Item: Project Updates
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 Division 8
- NCDOT Rail Division
- NC Turnpike Authority
- NCDOT Integrated Mobility Division
- TCC Members



# ADJOURN

## Upcoming Meetings

Date	Event
April 16 4:00 p.m.	Executive Board
May 1 10 a.m.	Technical Coordinating Committee Meeting
May 21 4:00 p.m.	Executive Board
June 5 10:00 a.m.	Technical Coordinating Committee Meeting



**BLUEPRINT  
FOR SAFETY**  
CAMPO Regional Transportation Safety Action Plan

### SAVE THE DATE

**WHAT:** Blueprint for Safety Updates and Review  
**DATE:** Wednesday, May 14, 2025  
**TIME:** 8:30 A.M. Networking  
9:00 A.M. Summit Begins  
11:00 A.M. Summit Adjourns  
**LOCATION:** Wake County Commons Building  
4011 Cary Dr, Raleigh, NC 27610  
**REGISTRATION:** CAMPO Safety Summit #2 Registration  
**DEADLINE TO REGISTER: MAY 5TH**  
Agenda Details Coming Soon!



We value your important stakeholder input and hope to see you May 14th.