

Metropolitan Transportation Plan Training for the NC Capital Area Metropolitan Planning Organization (CAMPO)

March 12, 2025

Logistics

- Presentation with Q&A breaks
- Online Attendees: Raise hand or post questions in the Chat
- Meeting Recorded

Today's Presentation Team

Chris Lukasina, CAMPO Executive Director
Shelby Powell, CAMPO Deputy Director
Alex Rickard, CAMPO Deputy Director
Bonnie Parker, CAMPO Public Engagement Planner



Welcome!

- Introductions in Room
- Introductions online

Please tell us your name, organization, and what you hope to learn today...



Expectations for MTP 101

Understanding of:

- Metropolitan Transportation Plan in general (What)
- MTP Development Partners (Who)
- MTP Development Milestones (How)
- Relevance to you and your community's role



What is an MPO?

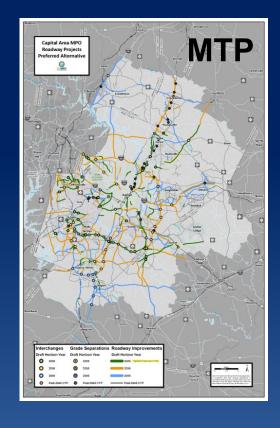
An MPO is:

- Federally mandated and funded
- Transportation policy-making organization
- Made up of representatives from local governments and governmental transportation authorities
- Conducts the 3-C planning process in the region (<u>Continuing</u>, <u>Cooperative and Comprehensive</u>)

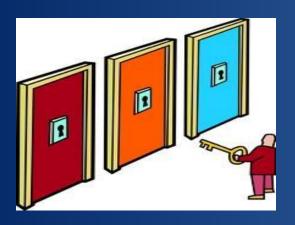


MPO Functions

- 1. Establish a fair & impartial setting
- 2. Evaluate transportation alternatives
- 3. Maintain a Metropolitan Transportation Plan (MTP)
- 4. Develop a Transportation Improvement Program (TIP)
- 5. Involve the public residents + key affected sub-groups









MPO Primary Responsibilities

(MTP) Metropolitan Transportation Plan

(formerly Long-Range Transportation Plan - LRTP)

- Must cover 20+ years, updated every 4 years
- MTP Revenues and Costs <u>must balance</u>

(TIP) Transportation Improvement Program

- Determines regional transportation priorities, in cooperation with NCDOT
- Identifies State, Federal and local funding
- Must be consistent with MTP

(NAAQS) National Ambient Air Quality Standards

- MTP and TIP must meet AQ emissions regulations
- Federal funding withheld if Plans not "conforming"
- AQ Modeling for TWTPO and CAMPO



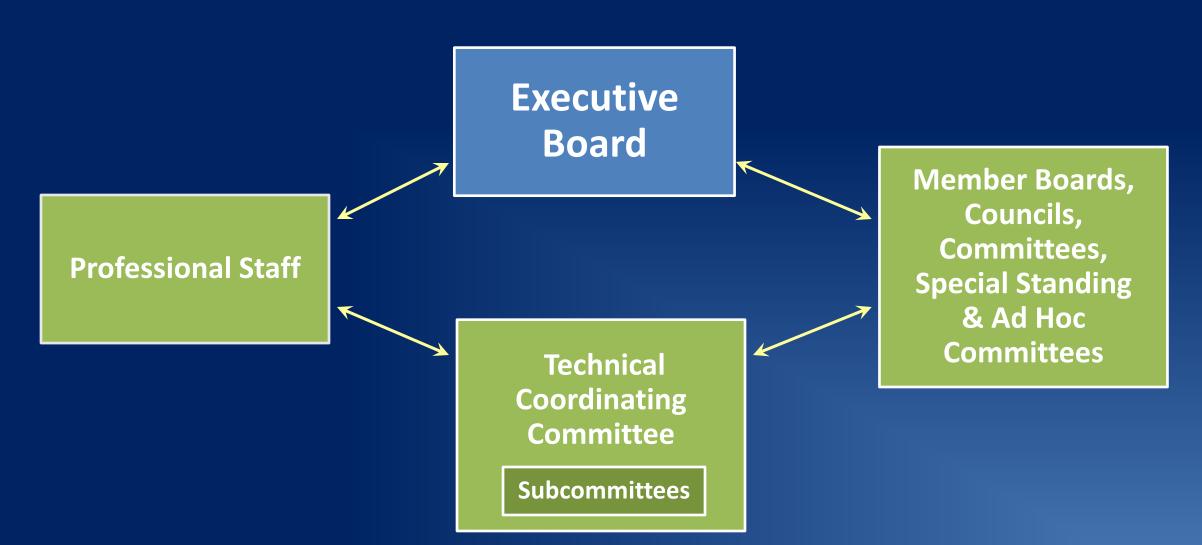
Carrboro

CAMPO

- Elected officials and staff representing 6 counties and 21 municipal jurisdictions
- All of Wake and parts of Chatham, Franklin, Granville, Harnett, & Johnston Counties
- Combined 2023 population of almost 1.5 million (13% of NC)



Our MPO Structure



What is the Metropolitan Transportation Plan (MTP)?



Metropolitan Transportation Plan (MTP)

- Long-range guide for major transportation investments in CAMPO region
- Recommends major transportation projects, systems, policies and strategies
- Emphasis on maintaining our existing systems and serving the region's future mobility needs
- Our MTP is integrated with land use and air quality strategies and goals for the urban area.
- Federally Mandated
- Plans for all modes of transportation
- Extensive public involvement

Metropolitan Transportation Plan (MTP)

- Planning horizon of at least 20 years (25 preferred)
- Updated every 4 years
- Fiscally constrained; not a wish list
- Projects must be consistent with MTP if
 - > Funded with federal funds
 - > Regionally significant
- Our Plan
 - Joint plan with TWTPO
 - 2050 Adopted by Executive Board in February 2022
 - 2055 underway

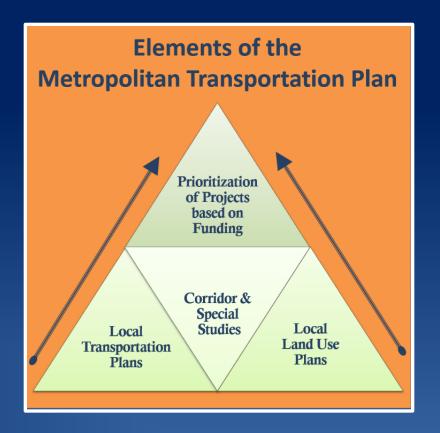




Planning Activities that feed into the MTP

- Large Area Studies
- Corridor Studies
- Hot Spot Studies
- Other Special Studies (modal studies)
- Local Land Use and Transportation Plans
- Transit Plans (WTP)





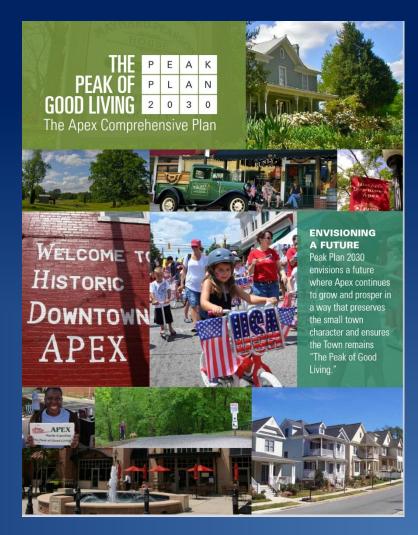
MTP: Every four years



Example: Apex Comprehensive Plan

- Provides basis for land use assumptions for Regional CommunityViz model and future socioeconomic (SE) forecasts
- Provides local transportation recommendations and priorities

 Will help inform which projects to prioritize, by decade, during the development of the 2055 MTP





Example: Commuter Corridors Study

- Programmed in FY 2019 UPWP
- Technical analysis of some of the region's major commuter corridors
- Worked to forecast what the outcomes could be if **certain**, **purposely drastic** and hypothetical, improvements or adjustments were made to the region's network. Each scenario was modelled in isolation to gain a fuller understanding of what the potential impact could be.
- Will help inform which projects to prioritize, by decade, during the development of the 2055 MTP





ental benefit of a scenario – see the table. More detailed information for each

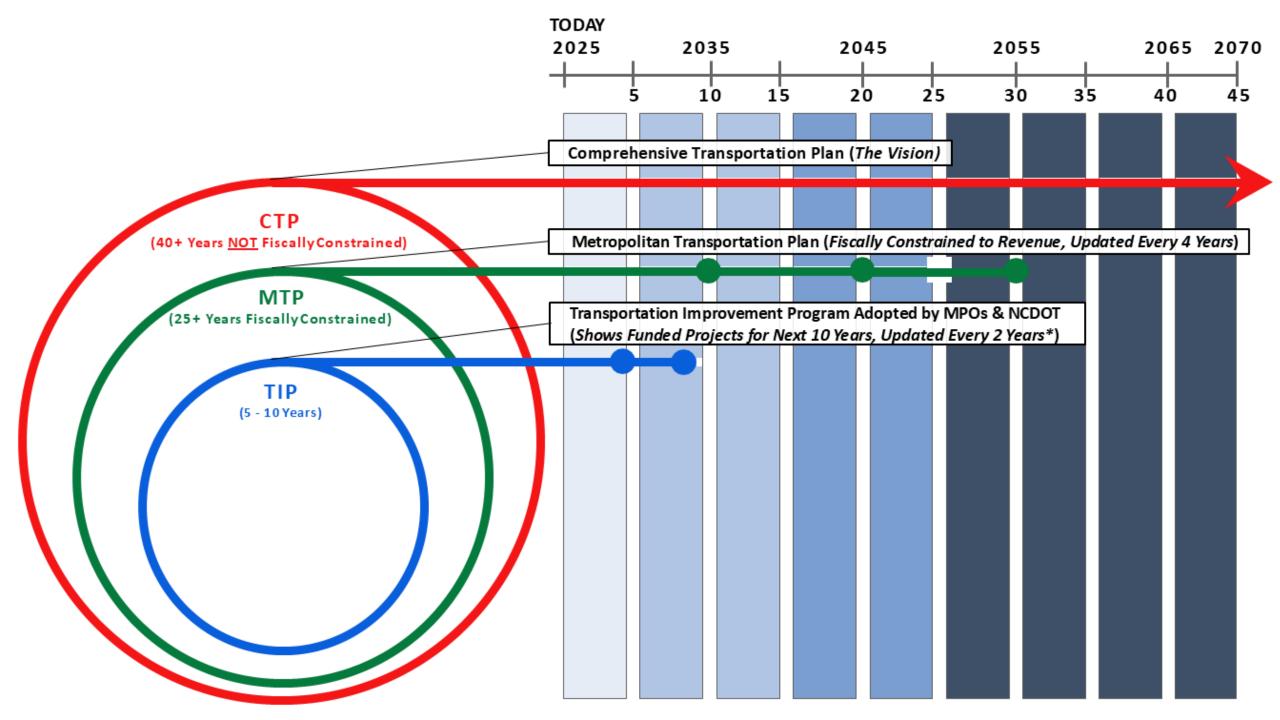
Comprehensive Transportation Plan (CTP)

A Multi-modal long-range vision plan that defines an organization's philosophy towards decisions related to the integration of transportation and land use

- > Highway Plan
- Public Transit and Rail Plan
- Bicycle/Pedestrian Plan
- Depicts transportation infrastructure needed to handle the area's projected traffic for a minimum 30-50 year planning horizon – planning beyond the MTP horizon years
- CAMPO CTP = unfunded portion of our MTP



Vision



MPO Products

Metropolitan
Transportation
Improvement
Plan (CTP/MTP)

Transportation
Improvement
Program (TIP)

Unified Planning
Work Program
(UPWP)

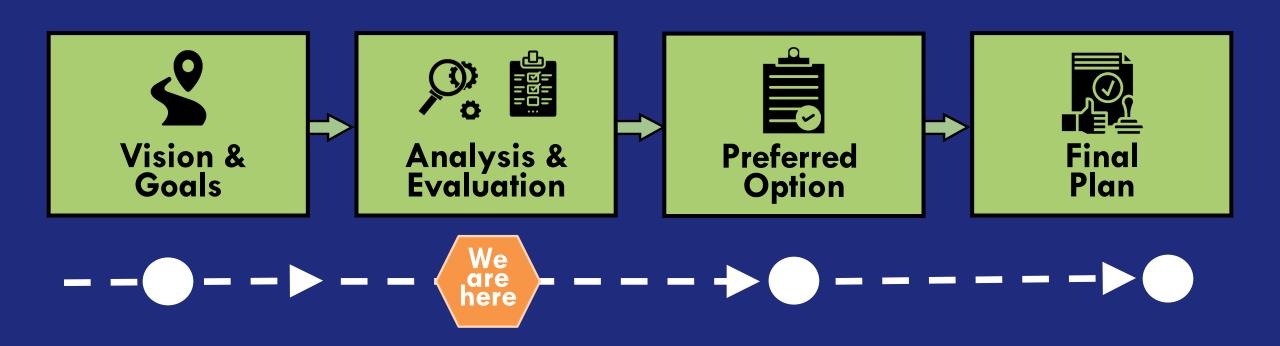
- Updated every 4 years
- Must cover 20+ years
- Revenues & Costs must balance
- CTP is unfunded element of MTP

- Updated every 2 years (mostly)
- Determines regional transportation priorities in coordination with NCDOT
- Identifies state, federal & local funding
- Must be consistent with MTP

- Updated annually
- Outlines annual planning and programming tasks for MPO staff
- Transit planning funding included
- Funded through 20% local match 80% federal funds

MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2055 MTP.



Performance-Based Planning Approach

Goals and Objectives

Performance Measures

Targets

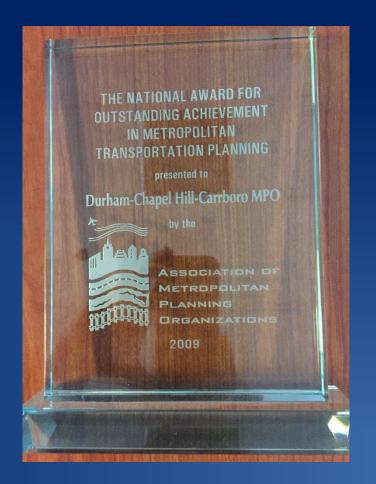
Monitoring

MTP Development Partners



Our region has been recognized as a leader in collaborative regional planning





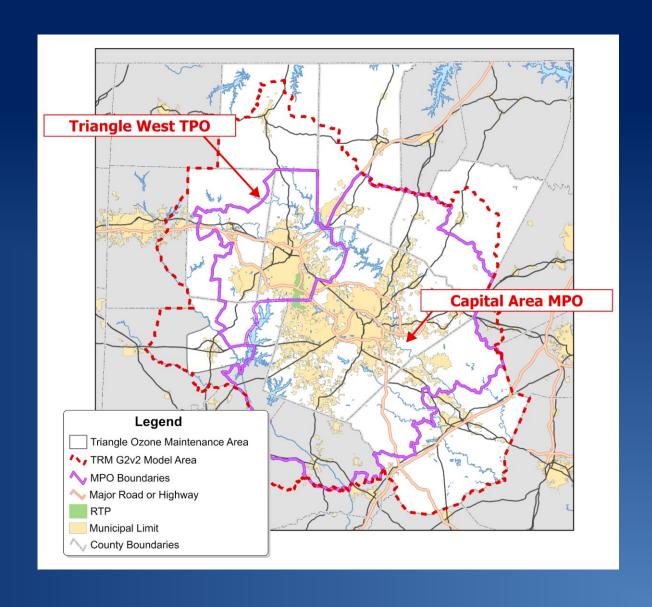


Joint MTP Development

- Capital Area MPO and DCHC MPO (now TWTPO) first synchronized their LRTP update processes beginning in 2002.
- CAMPO and DCHC MPO adopted joint 2035 LRTP in 2009.

Winner: National Award for Outstanding Achievement in Metropolitan Transportation Planning (AMPO)

- 2045 MTP adopted February 2018
- 2050 MTP adopted February 2022
- 2055 MTP development underway

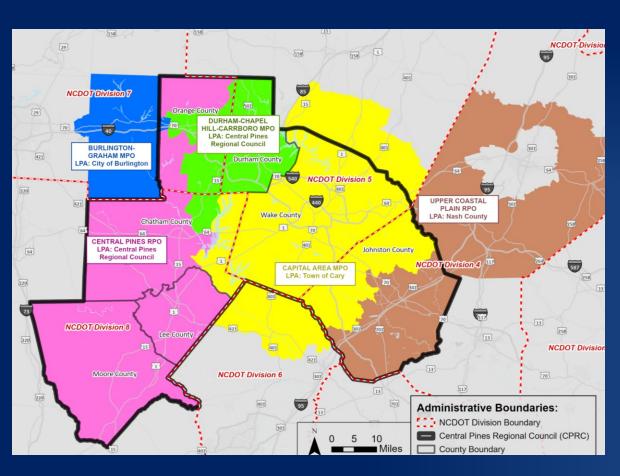


2055 MTP Elements Developed Together

- ✓ Goals, Objectives & Performance Measures
- √ Transportation Regional Model (TRM G2)
- ✓ Population and Job Forecasts and CommunityViz Growth Allocation Tool
- ✓ Consistent Financial Plan and assumptions
- √ 2055 MTP scenarios and major milestones (Learning Scenarios, Deficiencies & Needs, Alternatives Analysis, etc.)
- ✓ Title VI (Civil Rights Act) methods and analysis
- ✓ Projects and programs that span MPO boundaries (e.g. I-40, Passenger Rail, US 70, NC 98, Transportation Demand Management)
- ✓ 2055 MTP Final Report



Our Partners: Central Pines Regional Council (CPRC)



- Regional coordination
- Assist with MTP development
- Administers Regional Transportation
 Demand Management (TDM) Program
- Coordination between other regional issues (housing, land use, water quality, etc.) and transportation



2055 MTP Development CAMPO Liaison

Cara	Crystal	Daniel	Kenneth
Johnston County	Chatham County	Harnett County	Franklin County
Town of Archer Lodge	Town of Apex	Town of Angier	Town of Bunn
Town of Clayton	Town of Morrisville	Town of Coats	Town of Franklinton
Town of Fuquay-Varina		Town of Lillington	Town of Youngsville
Town of Holly Springs	Evan	Town of Cary	Granville County
	Wake County	Town of Garner	Town of Butner
	Town of Knightdale	City of Raleigh	City of Creedmoor
	Town of Wendell		Town of Rolesville
	Town of Zebulon		Town of Wake Forest





Our Partners: YOU!

- The local governments and agencies ARE the MPO
- Stakeholder groups and the public also help inform the MTP





Before we go into Process...

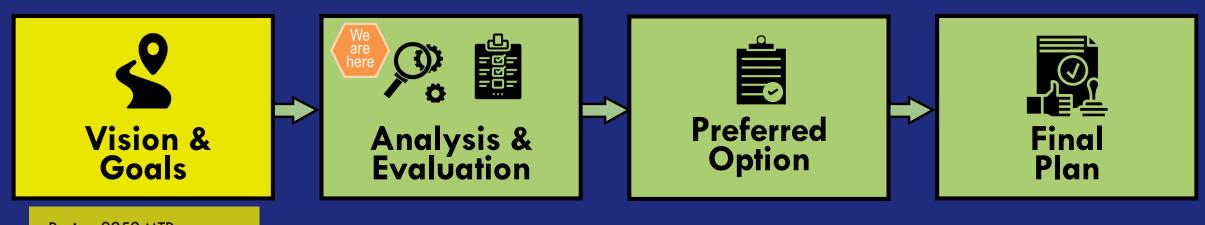
Questions?

Raise Hand or Use Chat Box



MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2055 MTP.



Review 2050 MTP

Update Goals, Objectives, and Performance Measures



Goals, Objectives and Performance Measures

- Process >>> Development of DRAFT:
- Review of existing Goals, Objectives, Measures
 - Data analysis
 - Current planning principles in our region
- Result = Updated Goals and associated
 Objectives
 - Performance Measures and any Targets follow later in overall MTP development





Goals in Comparison – Local Plans



Goals in Comparison – CAMPO Studies 2021-2024



NEAS

THE POLICY CONTEXT IMPACTS EVERY **GUIDING PRINCIPLE** (at right) IN THE NORTHEAST AREA STUDY (NEAS).





REINVESTING IN OUR INFRASTRUCTURE: With continued funding limitations, we must be strategic in how we preserve key corridors and enhance mobility through improving and repurposing existing infrastructure.

CONNECTIVITY: We must work with our leadership and the development community to support continued efforts for enhanced connectivity for streets and trail network that relies less on our major corridors for our mobility

needs. PRESERVING & ENHANCING OUR OPEN SPACE: Protecting sensitive areas and the beautiful lands that are critical to our community and enhancing active and passive investment in our parks is essential to creating a healthy environment.

BALANCED COMMUNITIES: We strive to build our communities to create a balance of live, work, and play. Placemaking and urban design enhance opportunities for balance.



Triangle Bikeway Study

TRANSPORTATION CHOICE

CONNECT TO IOBS

PROIECT GOALS



FEASIBILITY



REGIONAL COLLABORATION





IDENTITY





PUBLIC BENEFIT + SUPPORT



RESILIENCY

BRT Extensions Study

The study also identified four (4) goals for the proposed rapid bus service:

Provide access to local or regional destinations and major activity centers

Create productive and sustainable service

Align safety and compatibility with the surrounding environment

Provide access to transit services

S-Line TOD Study

KEY OUTCOMES OF TRANSIT-ORIENTED DEVELOPMENT (TOD)



Improve Mobility & Access: Maintain or improve multimodal access and infrastructure within the study area.



Increase and diversify housing: Provide for a variety of housing typologies based on the local context and market within each community,



Support downtown vibrancy: Support or create vibrant, walkable station areas that enhance local business opportunities, especially in downtown environments.



Create workforce opportunities: Support development scenarios that support new ess opportunities in study areas.



Maintain equitable access to opportunities: Consider how existing communities will be able to access new development and employment opportunities created by the S-Line.



Support opportunities for upward mobility: Develop scenarios that support access to employment and minimize involuntary displacement.

Community Feedback on Goals

Goals of Public Engagement

- Awareness of MTP Update Process
- Involve community re: Goals for the region's transportation future

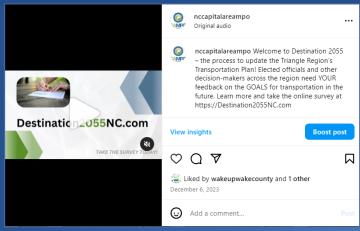
Engagement Activities

- Joint TWTPO and CAMPO survey
- Public Comment Period before Goals
 Approved by Exec. Board





Pop-up at the Boxyard (RTP)



Instagram with Promo Video



https://Destination2055NC.com

Goals Approved for use in MTP Development

- Based on community input, staff from both MPOs updated recommendation for Goals & Objectives
- ✓ Approved by CAMPO Exec. Board in November 2024
- ✓ Survey results and policy priorities continuously reviewed for influence on next steps (scenario planning)



CAPITAL AREA MPO GOALS



PROTECT THE HUMAN & NATURAL ENVIRONMENT AND MINIMIZE CLIMATE CHANGE

CONNECT
PEOPLE & PLACES







MANAGE CONGESTION & SYSTEM RELIABILITY





IMPROVE INFRASTRUCTURE CONDITION & RESILIENCE

ENSURE EQUITY AND PARTICIPATION





PROMOTE SAFETY, HEALTH AND WELL-BEING

STIMULATE ECONOMIC
VITALITY AND OPPORTUNITY



DESTINATION2055NC.COM

2055 Goals & Objectives - Approved

GOAL: Protect the Human and Natural Environment and Minimize Climate Change



Obj. A: Reduce mobile source emissions, GHG, and energy consumption

Obj. B: Reduce negative impacts on natural and cultural environments

Obj. C: Connect transportation and land use

GOAL: Connect People & Places

Obj. A: Connect people to jobs, education and other important destinations using all modes



Obj. B: Ensure transportation needs are met for all populations especially the aging and youth, economically disadvantaged, mobility impaired, minorities)

2055 Goals & Objectives - Approved

GOAL: Promote + Expand Multimodal & Affordable Transportation Choices

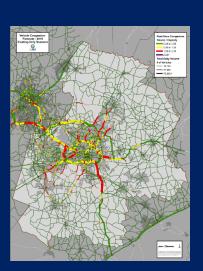


Obj. A: Enhance transit services, amenities and facilities

Obj. B: Improve bicycle and pedestrian facilities

Obj. C: Increase utilization of affordable non-auto travel modes

Goal: Manage Congestion & System Reliability



Obj. A: Allow people and goods to move with minimal congestion, time delay, and greater reliability

Obj. B: Promote Travel Demand Management (TDM), such as carpool, vanpool and park-and-ride)

Obj. C: Enhance Intelligent Transportation Systems (ITS, such as ramp metering, dynamic signal phasing and vehicle detection systems)

2055 Goals & Objectives - Approved



GOAL: Improve Infrastructure Condition & Resilience

Obj. A: Increase proportion of highways and highway assets in 'Good' condition

Obj. B: Maintain transit vehicles, facilities and amenities in the best operating condition.

Obj. C: Improve the condition of bicycle and pedestrian facilities and amenities

Obj. D: Promote resilience planning and practices.

GOAL: Ensure Equity & Participation

Obj. A: Ensure that transportation investments do not create a disproportionate burden for any community

Obj. B: Promote equitable public participation among all communities



2055 Goals & Objectives - Approved

GOAL: Promote Safety, Health and Well-being

Obj. A: Increase safety of travelers and residents

Obj. B: Promote public health through transport choices



GOAL: Stimulate Economic Vitality and Opportunity

Obj. A: Improve freight movement

Obj. B: Coordinate land use and transportation

Obj. C: Improve project delivery for all modes

Obj. D: Target funding to the most cost-effective solutions



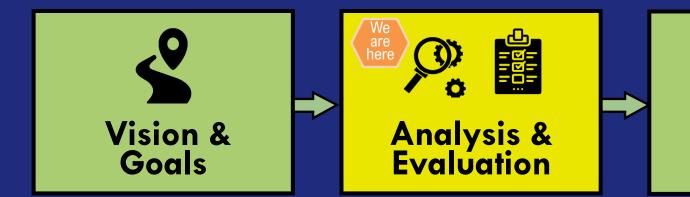
Questions?

- Do you need any clarity on
- Goals and Objectives development?

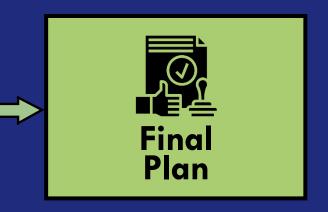


MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2055 MTP.



Preferred Option



Review 2045 MTP

Update Goals, Objectives, and Performance Measures



Examine Data on Existing Conditions

Forecast Future Problems (Deficiencies)

Develop & Evaluate
Alternative Scenarios



Public Engagement: Consult

Socio-Economic Data & the Triangle Regional Model

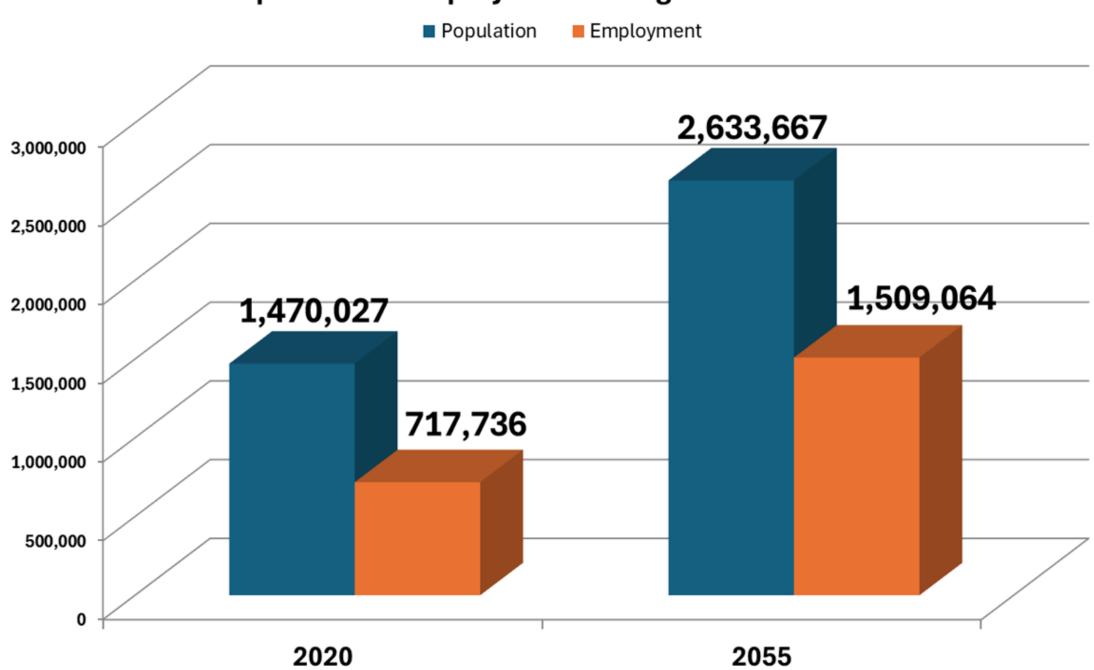
- An initial, critical step in developing any MTP = to forecast the amount, type and location of population and jobs for the time frame of the plan, known as Socio-Economic (SE) Guide Totals.
- Based on an understanding of community plans and data from local jurisdictions, the Office of State Planning, the US Census Bureau and independent forecasters, estimates of "base year" (2020) and "plan year" (2055) population and jobs were developed by local planners for each of the small zones (called Traffic Analysis Zones or TAZs) that make up the area covered by our region's transportation model.
- The <u>SE Guide Totals</u> are broken into
 - 1) Population Guide Totals
 - 2) Employment Guide Totals



Process >>> Community Review:

Before approval by the Executive Board, the SE Guide totals are released for **public comment** (for 2055, this occurred with the public comment period on Goals).

Population & Employment Change 2020-2055



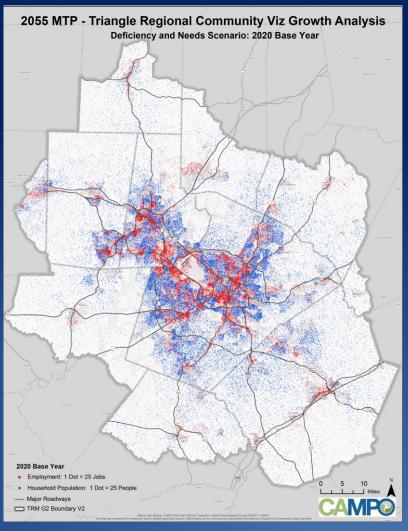
How: Beginning With The End In Mind

During 2025

- Creating different future growth scenarios
- Allocating growth based on the scenarios
 - Population
 - Jobs
- Evaluating the differing impacts among scenarios

Late 2025 or Early 2026

2055 MTP adopted by CAMPO and TWTPO

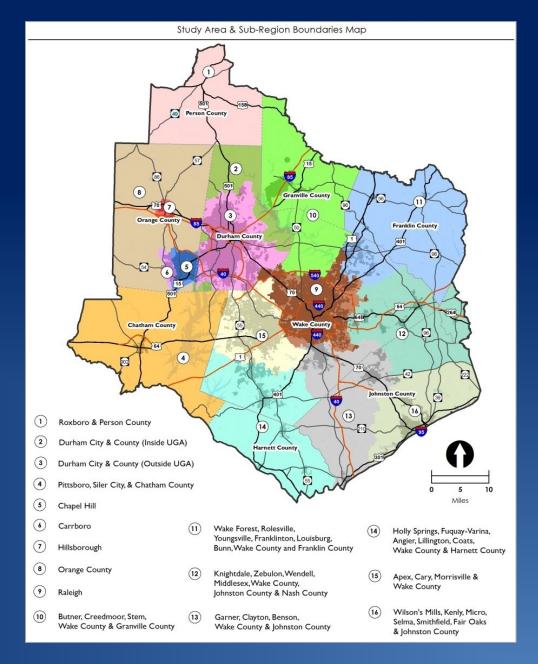


2055 MTP results: each dot is 50 jobs or people

How: the CommunityViz Growth Tool

Bringing Consistency to a Complex Situation

- CommunityViz is a tool to understand growth capacities and allocate future growth
- It can be used to create future development scenarios and help understand their relative impacts
- It needs 5 basic inputs



What Community Viz Needs To Create a Scenario



The location of <u>features that constrain development</u>, such as water bodies, wetlands and stream buffers



The type of place each parcel will become (and the intensity of each place type for each jurisdiction)



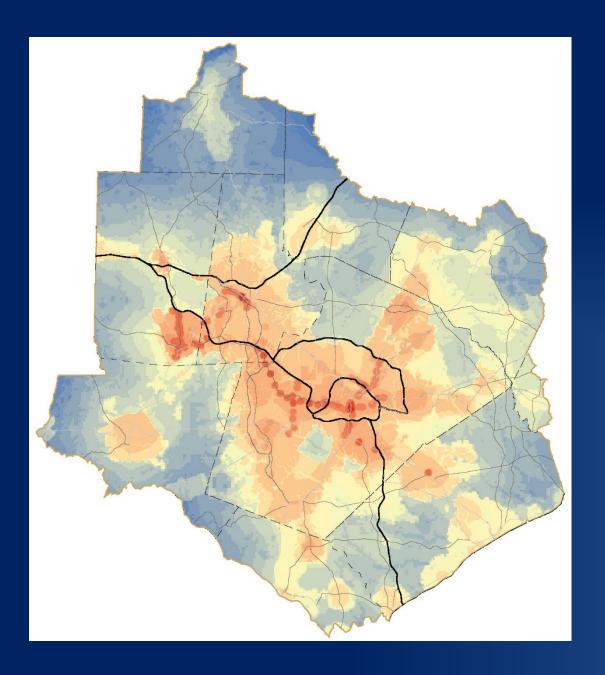
The current <u>development status</u> of each parcel relative to its future use



The factors that will influence how attractive each parcel is for development, termed <u>land suitability</u>



The <u>types and amounts of growth</u> that will be allocated, termed "growth targets"



The Growth Framework

Darker red indicates higher suitability = more likely a site will be attractive for Development due to:

- Proximity to transportation investments
- Availability of sewer service
- Proximity to major activity centers
- Location within local government planned growth areas

CommunityViz Local Guide Books & Look-Up Tables



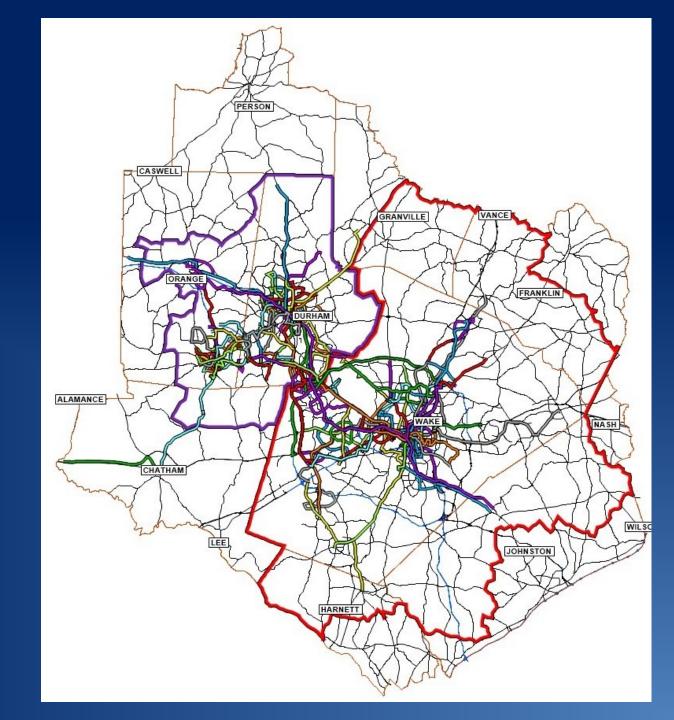
Triangle Regional Model (TRM)



- Is a joint project of CAMPO, TWTPO,
 NCDOT and GoTriangle
- Is a travel demand forecasting tool for the Triangle Region
- Is a trip-based model typical four step model
- Represents travel in the Triangle Area
- Includes all travel modes, all major road facilities, and all transit systems and routes

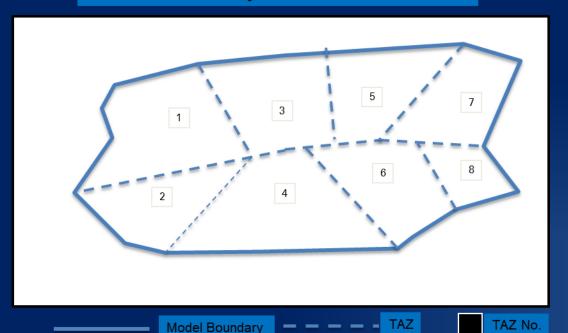
Model Study Area

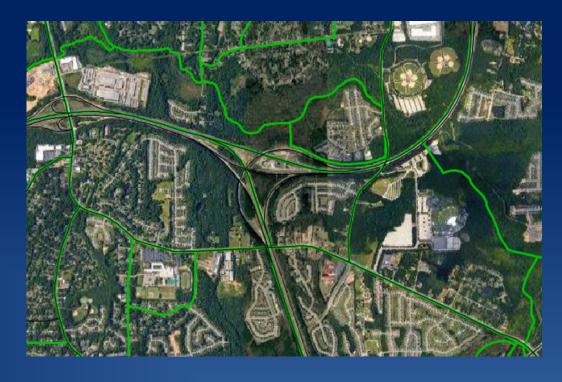
- 3 MPOs
- 4 RPOs
- Local Governments Involved
 - 11 counties
 - 40 cities & towns
- 3,533 square miles
- 2,965 TAZs
- 16,368 miles of roadway
- 121 transit routes operated by
 10 transit systems



Key Concept - TAZ

Schematic Representation of TAZ





- TAZ = Traffic Analysis Zone
- A commonsense subdivision of the study area
- Typically created along census boundaries (census block, group & tract)
- Contains similar land-use
- Why TAZs? To simplify the modeling process made



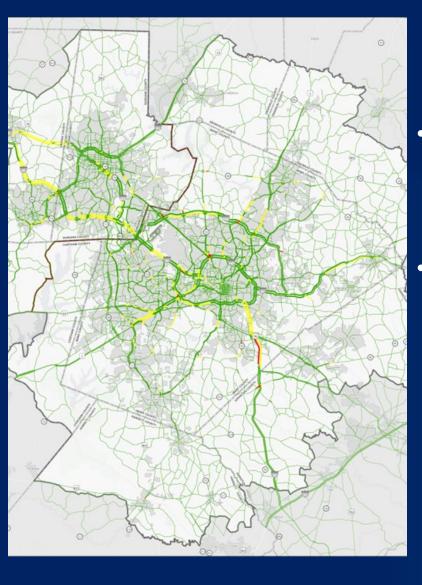
Model Application

- Forecasting future year network performance
- Understanding impacts of land use on highway traffic, transit ridership
- Testing transportation infrastructure investment strategies
 - Highways
 - Transit
 - Non-motorized
 - Air Quality Analysis (off model)
 - Cost Benefit/Pay Back Analysis (off model)



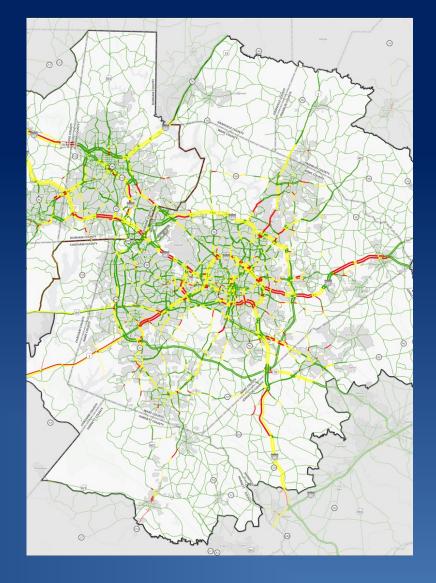
MTP Deficiency Analysis





Deficiency Analysis

- Measuring the Worst-Case Scenario
 - Can currently committed projects handle long-term growth?
- Uses the Triangle Regional Model (TRM)
 - Socio-economic forecast:
 - Future plan year (e.g. 2055)
 - Transportation Networks:
 - Includes "committed" transportation investments through 2030



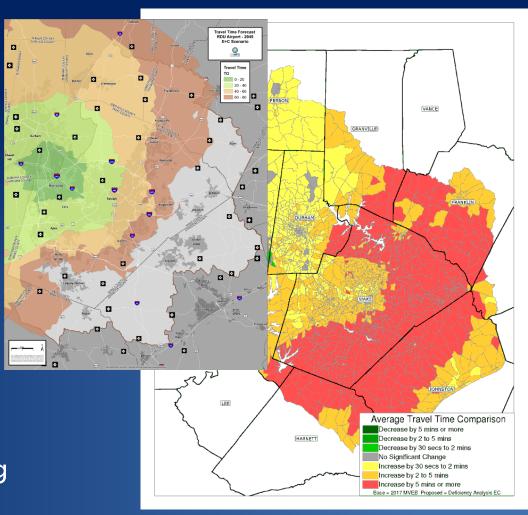
Deficiency Analysis

Unrealistic Scenario...

- Funding will continue past the current TIP/STIP
- Growth and behavior patterns would shift

But Useful

- Sets a baseline for all other alternatives
- Helps us determine where to spend those future dollars
- Illustrates the failure of our committed transportation improvements to meet forecasted growth in travel demand during the useful life of these investments.





Alternatives Analysis & Scenario Planning

Scenario planning and alternatives analysis are used to explore alternatives for growth, development, and transportation investments in the region, as well as measure against regional goals and community values.

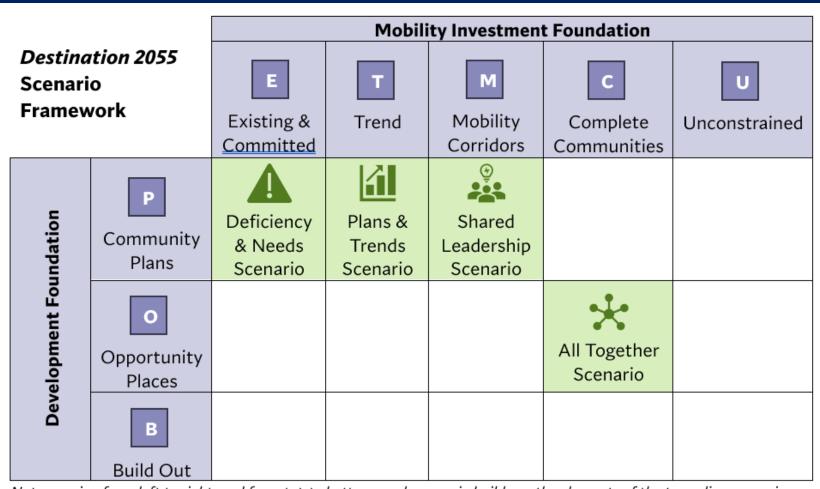


Scenario Framework

"Prediction is very difficult, especially if it's about the future."

-- Nils Bohr, Nobel laureate in Physics

Four scenarios that match a development foundation with a mobility foundation:



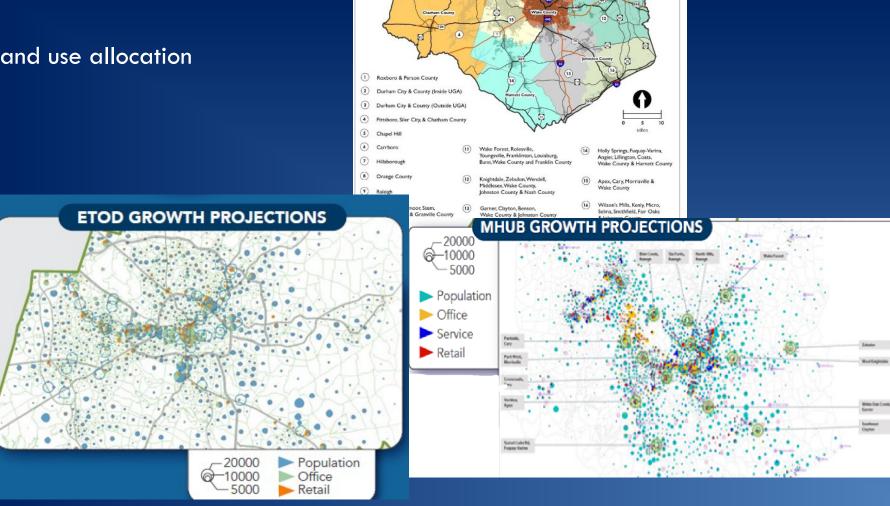
Note: moving from left to right, and from top to bottom, each scenario builds on the elements of the preceding scenarios.

Development Foundation (Land Use)

☐ Community VIZ

- Integrated with CommunityViz for households& employment
- Develop different land use allocation scenarios to model





Study Area & Sub-Region Boundaries Map

The Development Foundation

-- a focus on important trip origins and destinations --

Key Hubs

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 CBDs Major Universities 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			

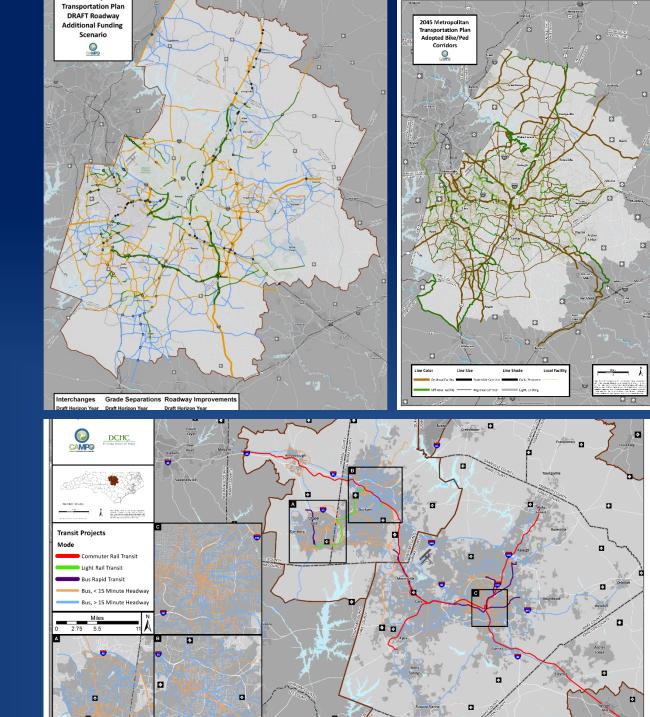
• REINVEST Neighborhoods – equity centered places

RE	Race/Ethnicity – the degree to which a neighborhood is home to people who are Black, Indigenous or People of Color (BIPOC).
IN	Income – the degree to which people in the neighborhood live in households with lower annual incomes.
VE	Vehicles – the degree to which households in the neighborhood report having no vehicles available
ST	Status — the degree to which a neighborhood has a specific characteristic, e.g. the # of legally-binding, affordability-restricted (LBAR) housing units

Mobility Investment Foundation (Transportation)

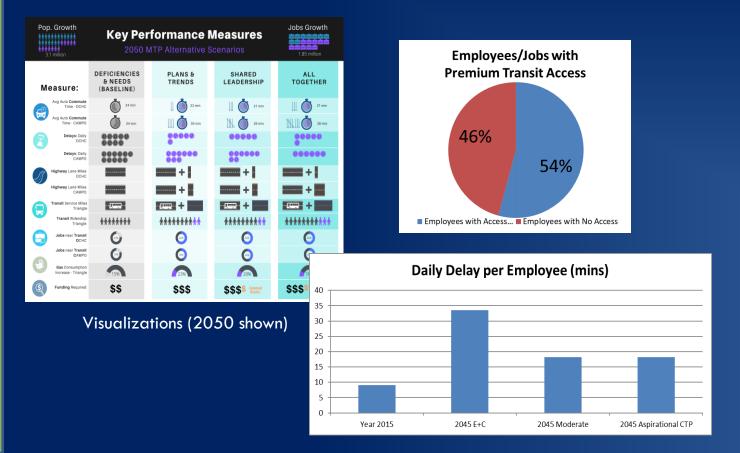
Future Transportation Network

- Existing Facilities
- "Universe of Projects":
 - Programmed projects
 - Recommendations from local plans, special studies, modal studies
 - Deficiency analysis
- Develop different transportation networks scenarios to model



Analyze Alternatives

- Review model results
- Compare across alternatives
- Measure performance of outcomes



Goal/Objective	Source	Performance Measures	Data	Desired	Actual	Trend
and Minimize Climate Change A. Reduce mobile source	Who did What? Wei used TRM V6 and MOVES 2014 to generate county level data for moderate, aspirational and E+C scenarios.	Total and per capita transportation GHG (CD2), conee (NOx), CO, and particulate matter emissions (in kilograms; August) 2013 NOx: 11,106 2045 NOx: 2,116		-	•	-52%
emissions, GHG, and energy consumption	Andy used August data from aspirational scenario to compute totals and per capita data and reasted method to generate		2013 CO: 86,903 2045 CO: 39,891			
	totals and per capita data, and created method to generate gasoline consumption and CO data. Available from last MTP cycle?		2013 PM: 268 2045 PM: 100			
	Detailed notes, workbooks and Wei's technical memorandum.		Por Capita (Abassas			-70%
	Update now? Do for 2050 MTP? Yes, update if new TRM data available. Yes, keep for 2050 MTP.		Per Capita (three-county area inside TRM) 2013 CO2: 15.1 2045 GHG: 8.8	•	•	70%
	Easy for public to understand. Complex calculations but data and method are available.		2013 NOx: 0.024 2045 NOx: 0.003 2013 CO: 0.19 2045 CO: 0.06			
		Total and per capita mobile	2013 PM: 0.0006 2045 PM: 0.0001 <u>Total</u> (three-county area inside TRM)			-9%
		energy consumption (daily gallons of auto gasoline)	2016: 737,096 2045: 668,031 Per Capita (three-county area inside TRM)	1	1	-42%
Goal I	Who did What?	Proportion of planned	TRM) 2016: 1.6 2045: 0.9 2040 MTP 2045 MTP			14%
B. Reduce the negative impacts on the natural and cultural environment	wno gid what? Andy used final financial data and highway table to calculate.	Proportion or planned investment in existing highways	DCHC 81% 91%			
	Available from last MTP cycle? Workbooks and notes					
	Update now? Do for 2050 MTP? Can't update until new 2050 MTP. Yes, keep for 2050 MTP if need PM for Objective I.B. Relatively simple calculations and data is easily available. However, this PM is not highly indicative of how the MPDs' reduce the negative impacts on the natural and cultural environment."					
Goal II — Connect People	the natural and cultural environment." Who did What?	Percentage of work and non- work trips by auto less than 30	2013 Work: 81% 2045 Work: 69%	•		-15% Work
Connect people to jobs, education and other important	Wei did calculation for region for base, E+C, aspirational and moderate (but did not do by MPO).	work trips by auto less than 30 minutes (use 20 or 25 minutes?)	2013 NonWork: 98% 2045 NonWork: 93% Note: this is regional data			- 4% Nonwork
destinations using all modes	Available from last MTP cycle? Workbook presenting detailed results. Copy of Wei's detailed method (e.g., file and field selection formulas).					
	Update now? Do for 2050 MTP? No, don't update because we already show the forecast. Yes, keep for 2050 MTP because this PM is relatively simple to complete and easy to understand.	Percentage of work and non- work trips by transit less than 45 minutes	2013 Work: 63% 2045 Work: 67%	1		+ 7% Work
		(use 40 minutes?)	2013 NonWork: 59% 2045 67% Note: this is regional data			+13%Nonw ork
	Who did What?	Percentage of urbanized area within ¼ mile of pedestrian facilities	2016: 38%	1		(Compare in 2018)
	Paul did calculation for region (minus Hillsborough)		Note: this is regional data			
	Available from last MTP cycle? Nothing.					
	Update now? Do for 2050 MTP? No, don't update. Maybe do for 2050 MTP. This calculation is a lot of work, if the exact same methodology and input files are not used the result will vary greatly.					
	Who did What?	Percentage of jobs within 1/4 mile of frequent bus transit service (15min) or 1/2 mile of fixed guideway transit service	2013: 33% 2045: 50%	1	1	161%
	Ben Bearden did calculation by MPO.					
	Available from last MTP cycle? Short note on the method and maps of the buffers.					
	<u>Update now?</u> Do for 2050 MTP? No, don't update because already have forecast. Yes, do for 2050 MTP because takes moderate effort and the public can understand it.					

Required Performance Measures

- Infrastructure condition: state of good repair
- Congestion reduction: reduce congestion on NHS
- Safety: reduce fatalities and serious injuries on public roads
- System Reliability: improve efficiency of travel
- Freight Movement and Economic Vitality: improve freight networks, rural access, regional economic development
- Environmental Sustainability: protect, enhance the environment
- Project Delivery: reduce delays in development and delivery
- **TARGETS** are determined by MPOs and states





Process >>> Community Feedback on Alternative Scenarios

Goals of Engagement

- 1. Understanding of journey so far
 - High level understanding of process and outcomes from data collection, forecasting
 - Goals engagement impact on scenarios being evaluated (policy priorities)



2. <u>Consult</u> re: Alternative Scenarios – Differences and Preferences between scenarios



Your help will be needed in April/May 2025 - Planning underway now

Engagement Activities

- Joint TWTPO and CAMPO survey
- Stakeholder Meetings
- Detailed webpage
- Online open house

Survey Content

- Tradeoffs among "variables" used to create
 Alternative scenarios to inform Preferred
 Scenario
- Interactive maps of scenarios

Questions about Deficiency & Needs or Alternative Scenarios?



MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2055 MTP.



Review 2045 MTP

Update Goals, Objectives, and Performance Measures





Examine Data on Existing Conditions

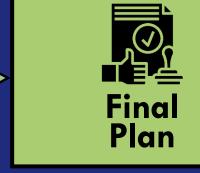
Forecast Future Problems (Deficiencies)

Develop & Evaluate
Alternative Scenarios



Public Engagement: Consult





Select Preferred Option
Analyze Fiscal Feasibility

Confirm Preferred Option

Evaluation Strategies:

Transportation, Land Use, Access, Investment and Funding



Public Engagement: Consult

The Preferred Alternative

Sorting the Projects by Horizon Year

- Initial fiscal constraint application
- Project Prioritization Tool Scores projects based on their performance on the following measures
 - Congestion, Connectivity, Equity, Cost Benefit
 - Economic and Environmental impacts
 - Safety, Reliability, Multi-Modal, Bridge Conditions
- Adjustments and fine tuning (critical step)*
 - Local Priority
 - Project Impacts (positive/negative)
 - Community feedback from Alternatives Analysis



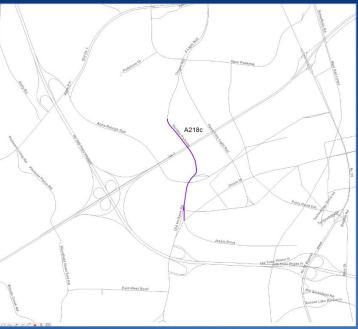
^{*}Project elements are analyzed before and during development of the MTP (e.g. special studies, local plan development).

Project Prioritization Tool

- Robust project prioritization tool incorporating national best practices designed to evaluate projects across multiple measures of effectiveness that represent CAMPO's strategic transportation goals and constituent priorities
- Replaces the 'Payback Period' method that relied heavily on travel time savings and cost of the project for rankings.

Project ID	Overall	Safety	Connectivity	Congestion	Economic	Multimodal	Equity	Environmental	Condition	Cost Benefit
A49a	46.40%	64.41%	0.00%	64.96%	42.11%	38.59%	28.80%	72.07%	0.00%	88%
A125a1	43.27%	62.62%	0.00%	76.06%	52.16%	52.07%	34.99%	25.61%	0.00%	60%
A401b	43.22%	64.24%	0.00%	42.67%	41.37%	22.07%	40.19%	68.19%	0.00%	100%
A130b	43.11%	57.77%	0.00%	57.13%	43.26%	42.54%	72.04%	68.57%	0.00%	32%
A117	43.05%	63.43%	0.00%	66.78%	49.46%	17.30%	49.70%	70.78%	0.00%	48%
A816	43.00%	70.67%	32.58%	26.95%	17.82%	0.00%	49.27%	67.60%	0.00%	100%
A530	42.87%	63.35%	0.00%	57.41%	45.61%	25.46%	15.92%	68.93%	0.00%	92%
A94	42.74%	60.57%	0.00%	72.50%	53.10%	12.69%	15.92%	69.83%	0.00%	76%
A137c	42.71%	57.99%	0.00%	40.06%	39.58%	52.49%	83.25%	67.04%	0.00%	38%
A407b1	42.64%	63.60%	0.00%	43.13%	29.27%	28.41%	62.65%	65.61%	0.00%	80%
A228a	42.54%	58.68%	0.00%	73.57%	53.83%	36.16%	40.19%	70.47%	0.00%	26%
A480a4	42.50%	62.53%	0.00%	70.34%	58.91%	43.12%	44.12%	50.51%	0.00%	29%
A809	42.47%	87.34%	0.00%	26.94%	25.69%	58.75%	26.18%	66.65%	0.00%	76%
A218c	42.41%	64.94%	0.00%	57.41%	45.44%	58.12%	10.54%	54.32%	0.00%	72%
A401c	41.77%	57.72%	0.00%	42.13%	61.34%	41.67%	22.21%	67.19%	0.00%	76%







Ex...Calculating Multimodal Effectiveness

- The Multi-modal score uses the walk and bike score from Walkscore.com and projected land use to estimate the need for improved pedestrian or bike infrastructure and the extent to which each project will address the need
- Any project with existing transit route(s) will have the project travel time savings multiplied by the number of transit routes along the project and will be scored as a benefit to transit riders.

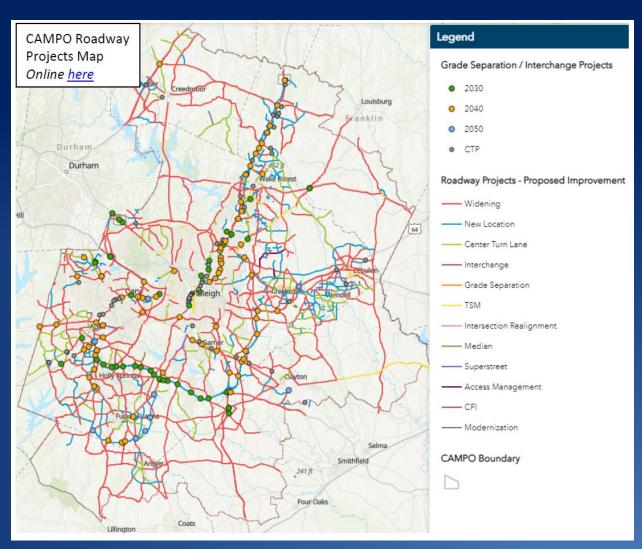
		Multimodal						
		33.3%	33.3%			33.3%	10.0%	
PROJID	Problem Statement	Walk Score	Bike Score	Saved Delay	Number of Routes	Access to Transit	Score	
A218c	The Metropolitan Transportati	87.57%	86.77%	0.00%	0.00%	0.00%	58.12%	
A49a	Poole Rd is proposed to be a 4	72.14%	27.19%	56.92%	28.89%	16.44%	38.59%	



Horizon Years

• Ten year "buckets" used in the MTP. (Represented by different colors on the map)

 Each decade includes all of the existing transportation facilities, plus the new facilities that will be built and in use during that timeframe



Process >>> Community Feedback on Preferred Alternative

Goals of Engagement

- 1. Understanding of journey so far
 - High level understanding of process and outcomes from forecasting and scenarios reviewed
 - Alternatives engagement impact on selection of a preferred alternative
- Consult re: Preferred Scenario –
 Projects & designated horizon decade;
 Potential funding gaps and revenue increases



Engagement Activities – anticipated

- Ask public to review elements of Preferred, list of major transportation projects & provide feedback
- Possibly ask about support for alternative revenue sources

Tactics - anticipated

- Interactive map of preferred scenario with comment option
- Detailed webpage
- Online Q&A session



You will be needed in June-August!

Fiscal Constraint & Financial Planning

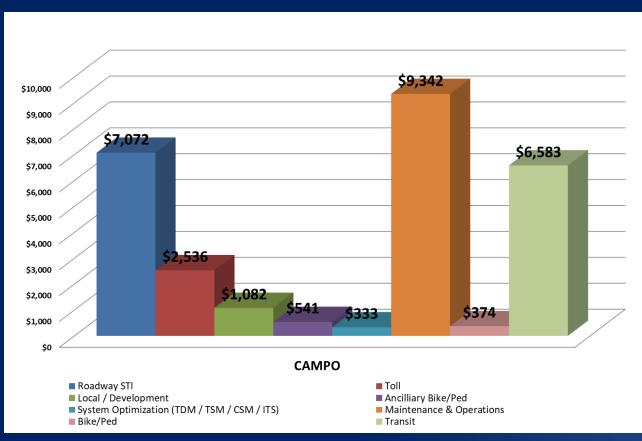


Building the MTP Financial Forecast & Fiscal Constraint





MTP Funding Categories



2045 MTP Funding Categories

- Some funding categories are limited in use (e.g. toll funding, STI funding, Wake Transit funding)
- Some funding categories are accounted for prior to selecting project expenditures (e.g. maintenance & operations, system optimization)
- Some funding is already decided (e.g. TIP/STIP)
- Some funding categories are dependent on development activity

MTP Revenue & Expenditure Assumptions

Revenue Assumptions

Roadway Projects:

- NCDOT model for gas taxes and fees
- Annual inflation factor (cost and revenue)
- Toll projects estimates based on latest NCTA forecast (tolls, bonds, and gap funding if needed
- Local and private funding

Transit Projects:

- Computed trend for each transit system for:
 - Federal/State/Local funding
 - Capital/Operations & Maintenance
 - Farebox recovery
- Local Option Funding (Wake Transit Funding)

Project Expenditures

Roadway Projects:

- NCDOT/Project Development cost estimates
- Cost calculator tool
- Annual inflation factor (cost and revenue)
- Toll projects estimates based on latest NCTA forecast (tolls, bonds, and gap funding if needed)

Transit Projects:

- Project Sponsor cost estimates
- Cost calculator tool (WTP model)
- Capital/Operations & Maintenance



MTP Revenue Forecast

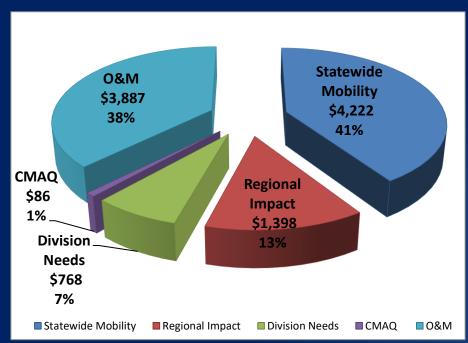
Our Revenue Forecast is derived from:

- 1st Decade:
 - Draft TIP/STIP (10 yr Work Program)
- 2nd & 3rd Decades:
 - "Traditional" Federal & State Funds
 - MPO portion based NCDOT Financial Forecast
- Transit Funds
 - Wake Transit Plan Forecast (modified/extended)
- Local Revenue
 - Based on Local CIPs / Development Activity
- Potential New Revenue Assumptions



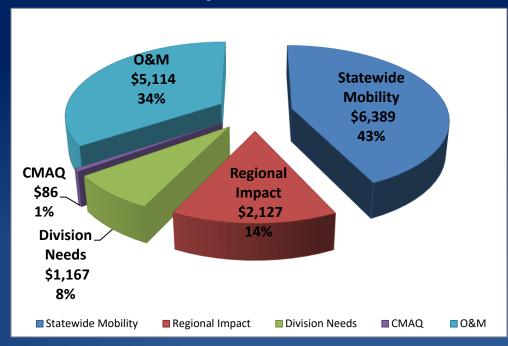
2050 Preliminary Financial Forecast (Traditional Funding)

Moderate



- Federal Revenues grow based on FASTAct growth
- Regular adjustments for the gas tax rate (CPI based)

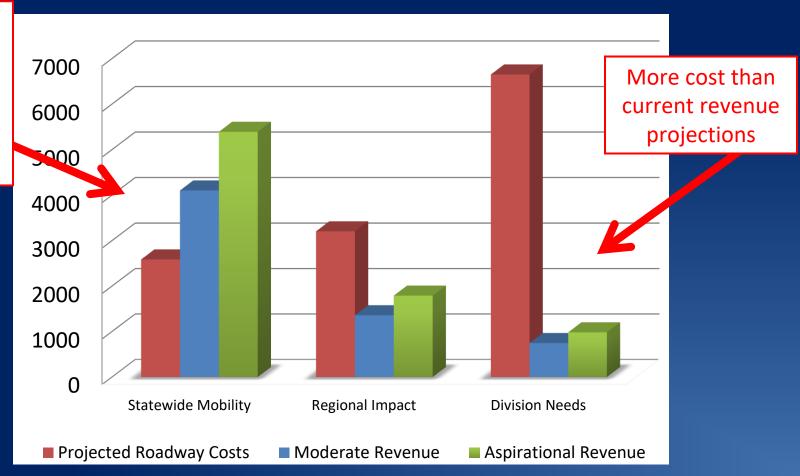
Aspirational



- Builds off of the Moderate revenue assumptions
- State/federal revenues increase to extend final
 STIP programming levels and maintained through
 2045
- Potential New Revenue Assumptions

Comparing Revenue vs. Project Costs (Roadway)

is a statewide competition and not guaranteed





New/Additional Revenue Assumptions

- Replacement of current gas tax-based system
- Revenue source in addition to gas tax
- What we have looked at in the past:
 - Sale tax based
 - VMT based
 - Property tax based
 - Other user fee based
 - Funding levels and rules
- Any new/additional assumed revenue must meet regulatory requirements to be included in the MTP (federal reasonableness check).



2050 MTP New Revenue Assumptions

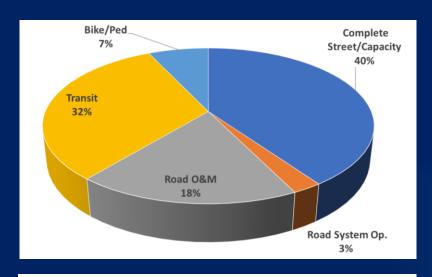
- Local and regional revenue options
- Prior MTPs have made similar assumptions
 - Driven by modal investment mix
 - 2045 MTP used overall MTP investment mix
 - Multimodal in nature
 - Roadway investments targeted at secondary roads
 - In addition to existing ½ cent Wake Transit revenue (sales tax, reg. fee)

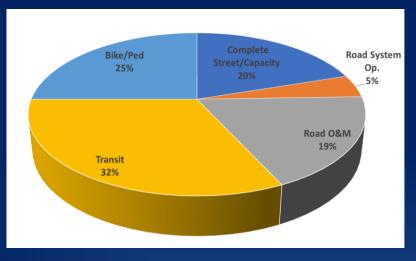
• Examples of prior assumptions include:

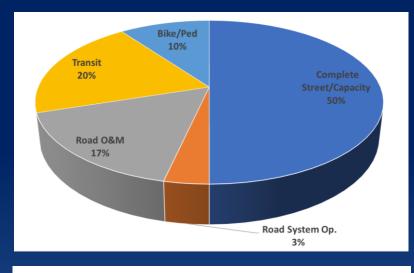
- ½ cent sales transit sales tax (Wake, Durham, Orange)
- ½ cent sales tax equivalent (2035, 2040, 2045 plans)
- ¼ cent sales tax equivalent (2045 MTP for Franklin, Granville, Harnett, Johnston)
- VMT based revenue
- Property tax based revenue
- New local/regional bond programs (e.g. Pennies for Progress)



New Regional/Local Revenue Assumptions







Alternative 1 (currently in use)

- Similar modal breakdown to traditional funds
- Resources for ITS/TDM and O&M
- Additional Transit resources beyond current WTP (frequent network)
- 2031-2050 total: \$3.021 Billion

Alternative 2

- Additional resources for Bicycle/Pedestrian investments
- Similar additional Transit resources beyond current WTP
- Additional resources for ITS/TDM and O&M
- 2031-2050 total: \$3.021 Billion
 - Would require reduction of 20 secondary road projects

Alternative 3

- Additional resources for Complete
 Streets/Local Roadway Capacity
- Lowest additional Transit resources (beyond WTP).
- Lower resource level for O&M and ITS/TDM
- 2031-2050 total: \$3.021 Billion
 - Would add 10 secondary road projects

What has changed for 2055 MTP?

- At the federal level (IIJA/BIL)
 - Funding levels and rules
 - Performance based approach has matured
- At the state level (STI)
 - Project eligibility vs. funding availability
 - Modal & functional funding rules
- At the regional/local level
 - Updated and adopted Wake Transit Plan
 - Local funding



CONTINUED CHALLENGES

The gap between the region's transportation needs and available funding presents several challenges that we must soon address:

- Short and long term non-traditional funding sources
- Local and regional revenue options
- Advancement of MTP projects to implementation consistent with the air quality conformity project implementation schedule.
- Monitoring regional growth to ensure the Plan stays abreast of the region's needs



MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2055 MTP.



Vision & Goals

Review 2045 MTP

Update Goals, Objectives, and Performance Measures



Public Engagement: Involve





Analysis & Evaluation

Examine Data on Existing Conditions

Forecast Future Problems (Deficiencies)

Develop & Evaluate
Alternative Scenarios



Public Engagement: Consult



Preferred Option

Select Preferred Option

Analyze Fiscal Feasibility

Confirm Preferred Option

Evaluation Strategies:

Transportation, Land Use, Access, Investment and Funding



Public Engagement: Consult



Finalizing Fiscal Constraint

Air Quality Conformity

Adoption

Implementation Strategy:

Phasing, Financing Responsibilities, Institutional Structures



Public Review

MTP Adoption

Approval pending AQ

- Initial approval of the MTP by CAMPO Executive Board
- Projects and programs then undergo Air Quality Conformity process



Air Quality Conformity Process:

- MTP must comply with federal air quality regulations
- Conformity analysis demonstrates that the total ozone-causing pollution expected from all planned transportation projects are within limits established in the State Implementation Plan

Final Adoption

 Final action by CAMPO Executive Board to incorporate the Air Quality Conformity Determination of the MTP



Process >>> Community Feedback – Final Plan

Goals of Engagement

- 1. Understanding of journey overall
 - All phases of engagement & community influence
 - Changes made to preferred alternative

2. Public Review of Final Plan

 Seek review and comments on final projects list and final report narratives before approved by Executive Board





Engagement Activities – anticipated

- Solicitation of review & feedback
- Detailed webpage & maps
- Public comment period & public hearing

Tactics - anticipated

- Interactive map of updated, final preferred alternative
- Posting of final report



Changes to the MTP

Technical Corrections

- Update/revision that includes minor changes to:
 - Project/project phase costs,
 - Minor changes to funding sources of previously-included projects
 - Minor changes to project/project phase initiation dates.
- Does not require:
 - Public review and comment
 - Re-demonstration of fiscal constraint
 - AQ conformity determination (in nonattainment and maintenance areas).

Amendments

- Major change to a project, including:
 - Addition or deletion of a project
 - Major change in project cost,
 - Major change to project/project phase initiation dates
 - Major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes).
- DOES require:
 - Public review and comment
 - Redemonstration of fiscal constraint
 - AQ conformity determination when applicable.



Recent & Future 2055 MTP Milestones

Item	Anticipated Schedule	
Deficiency Analysis	January – March 2025	
Alternatives Analysis Review	April – June 2025	
Revenue Forecast Updates	April - Aug. 2025	
Preliminary Draft Financial Plan	Summer 2025	
"Final" Draft Plan	Late Summer 2025	
Public Hearing	Fall 2025	
Adopt 2055 Plan	Fall 2025	
Air Quality Conformity	Fall – Winter 2026	
Final Plan Adoption Deadline	February 2026	



...and that's the Overview of the Process!

Questions about Preferred Scenario or Draft to Final Plan?



Key Takeaways

- One vision for the region
- Coordination across jurisdictions
- Your continued, active participation
- Project funding
- Regional significance
- Continued challenges





Recipe for Your MTP Success



- Stay plugged in
- Stay involved
- Work with your CAMPO staff Liaison
- Have an active conduit to the process
- Share your community's data, policies, priorities
- Encourage your community's participation



2055 MTP Development CAMPO Liaison

Cara	Crystal	Daniel	Kenneth
Johnston County	Chatham County	Harnett County	Franklin County
Town of Archer Lodge	Town of Apex	Town of Angier	Town of Bunn
Town of Clayton	Town of Morrisville	Town of Coats	Town of Franklinton
Town of Fuquay-Varina		Town of Lillington	Town of Youngsville
Town of Holly Springs	Evan	Town of Cary	Granville County
	Wake County	Town of Garner	Town of Butner
	Town of Knightdale	City of Raleigh	City of Creedmoor
	Town of Wendell		Town of Rolesville
	Town of Zebulon		Town of Wake Forest





Be Thinking About...

- The next 25-30 years will be very different from the last. Our transportation systems will need to be more robust to serve the diverse and growing needs of our region.
- What important transportation priorities should be part of one or more scenarios?

 What else should we be mindful of as we consider long term investments for mobility within the Triangle?



Wind Down...

- Follow up materials will be sent via email
 - Link to slides PDF
 - Link to recording posted to YouTube
- Post-webinar survey please complete it!

- We are here for you! Send questions, thoughts, ideas...
 - https://www.campo-nc.us/about-us/staff



Want more?

Stay Tuned for Dates/Registration for...

- 1) MPO 101
- 2) Triangle Regional Model



The End



