



NC Capital Area **Metropolitan Planning Organization**

2055 MTP

Alternatives Analysis Workshop

Welcome to MTP Training on Alternatives Analysis

Quick Introductions:

- 1) In the room
- 2) Online

Logistics

- Presentation with Q&A breaks
- Attendees can raise hand or post questions in the Chat
- Meeting Recorded

Today's Presentation Team

Chris Lukasina, CAMPO Executive Director

Mike Bruff, CAMPO Transportation Modeling Engineer

Bonnie Parker, CAMPO Public Engagement Planner

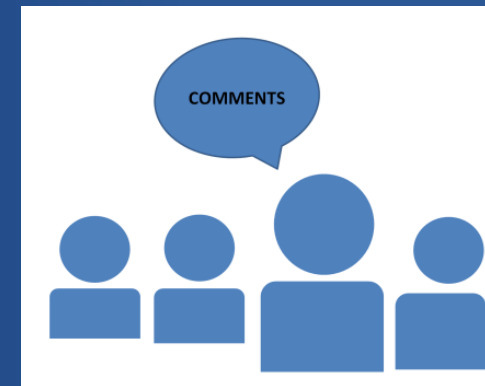
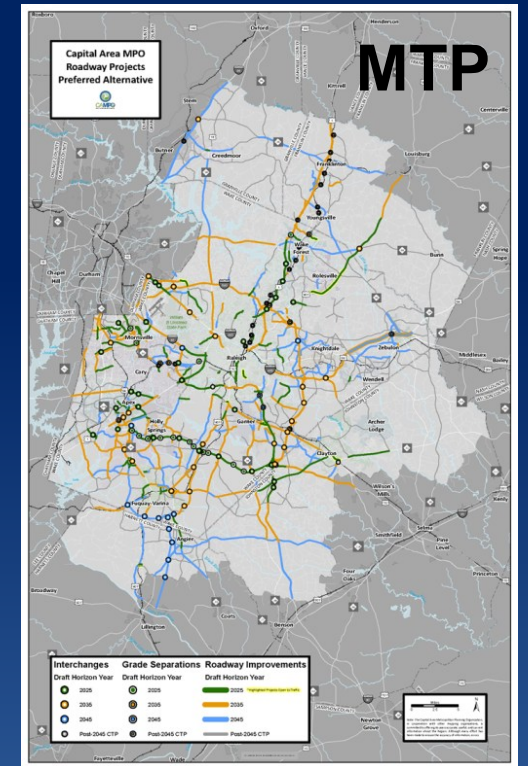
Expectations for this Session

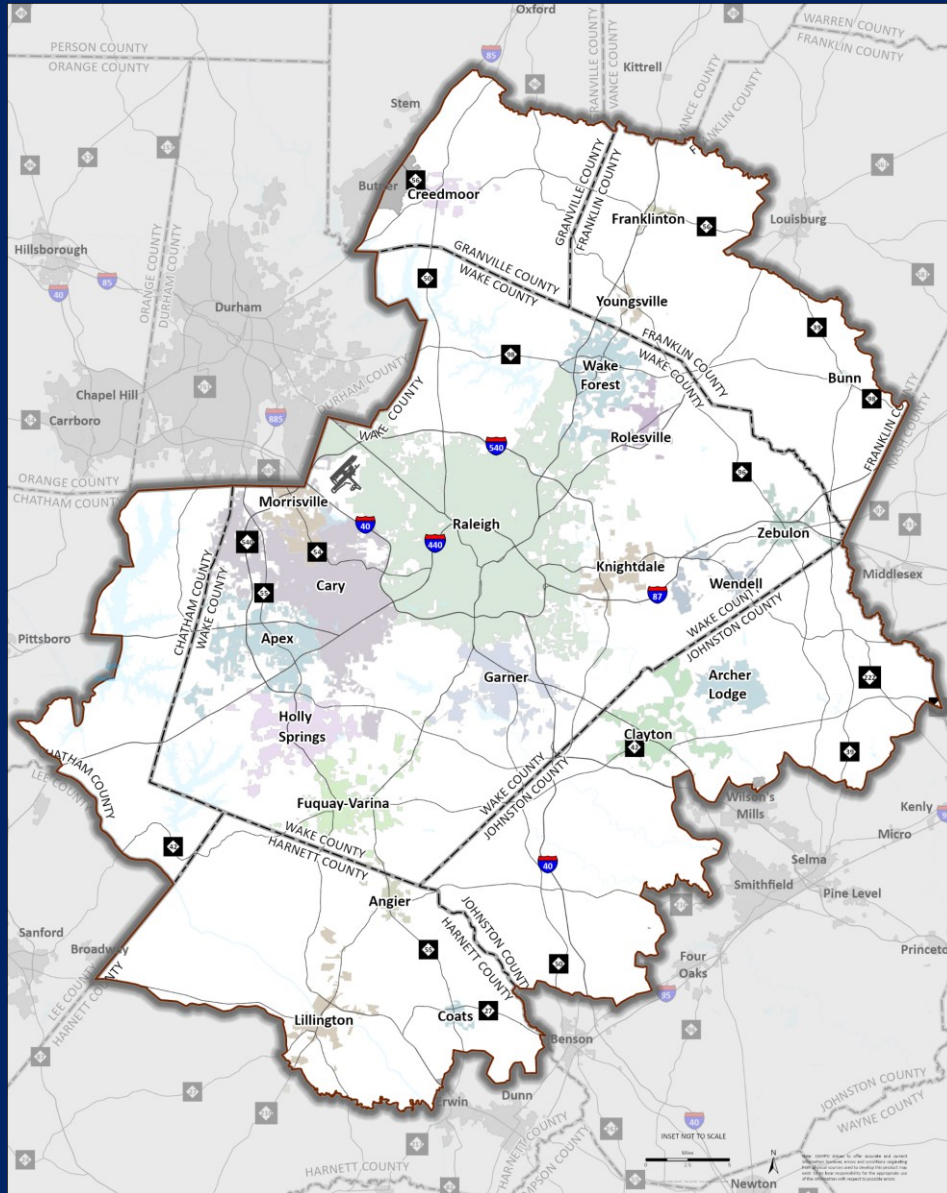
Understanding of:

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

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





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)



www.campo-nc.us

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

more...

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



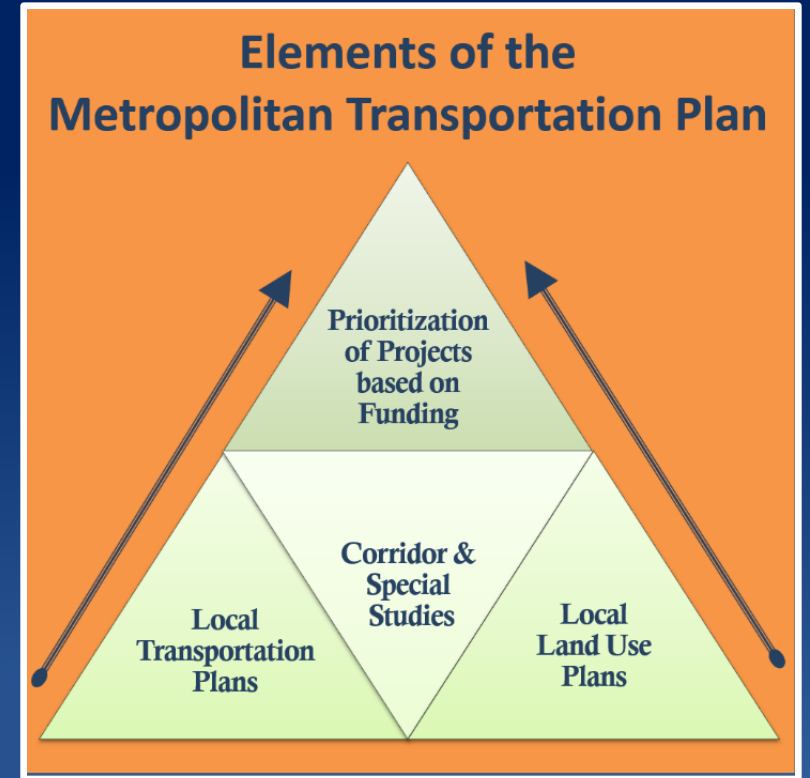
<https://www.campo-nc.us/transportation-plan>

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)

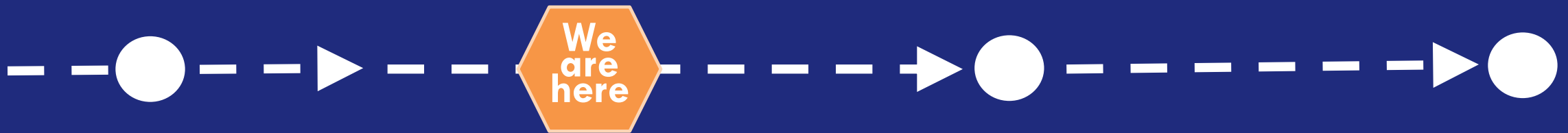
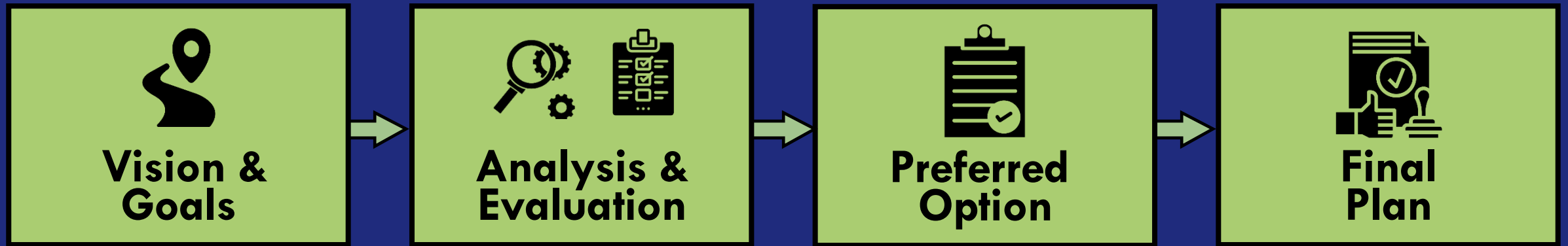


MTP: Every four years



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.



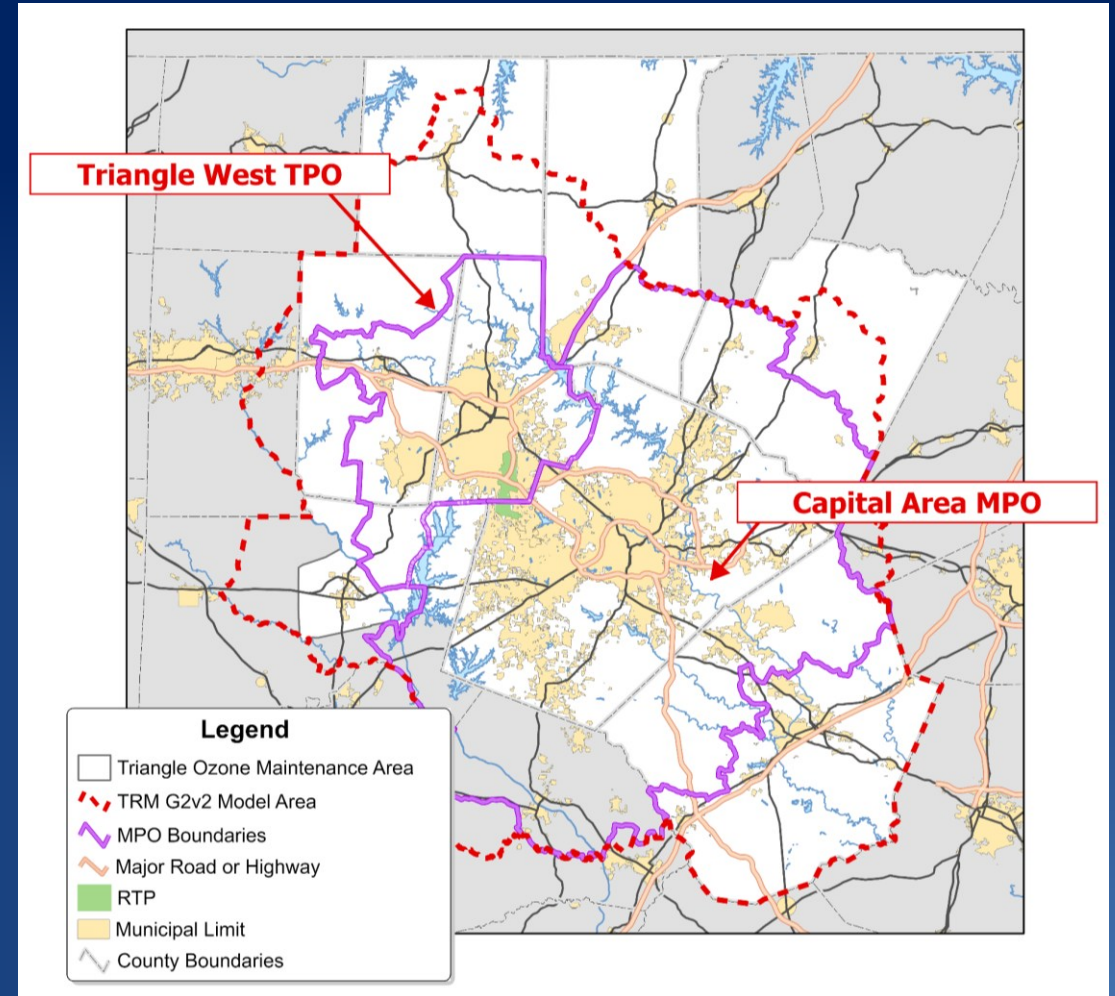
MTP Development Partners

Joint MTP Development

- Capital Area MPO and DCHC MPO 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)*

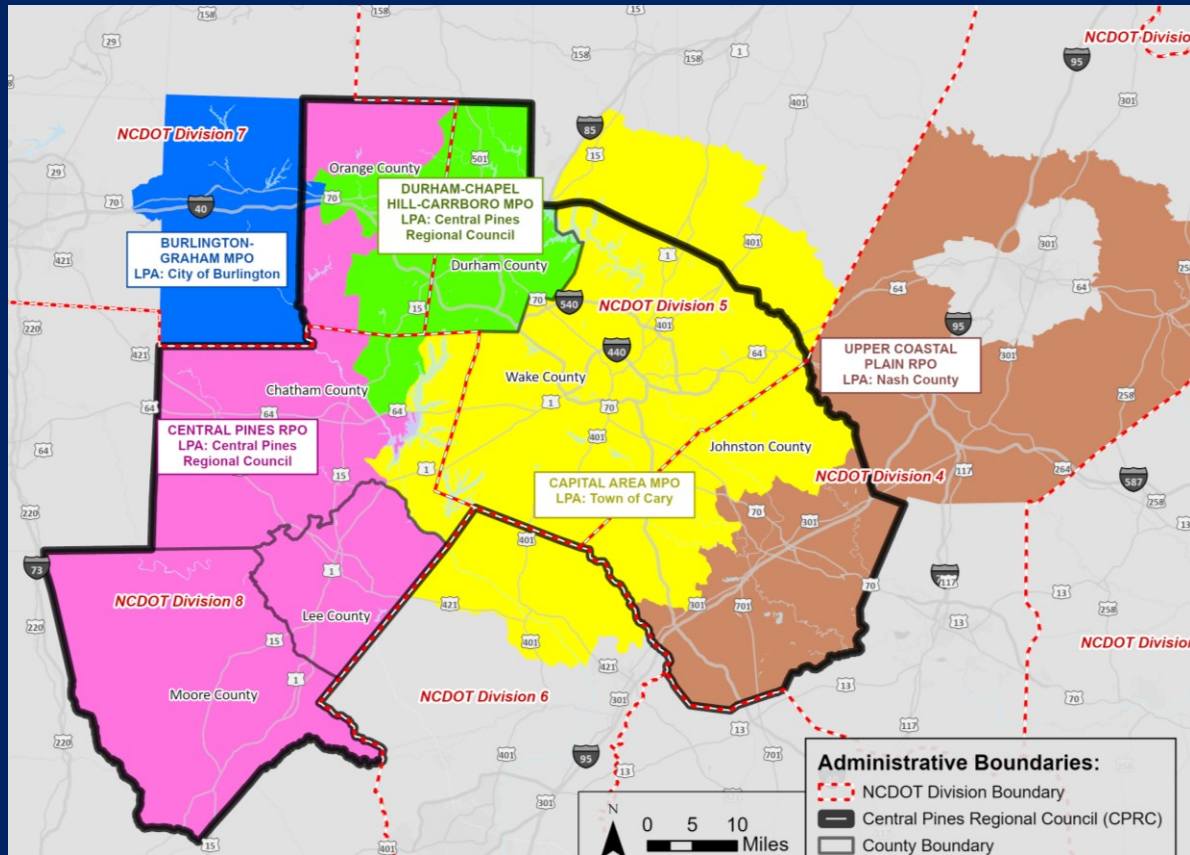
- 2045 MTP adopted February 2018
- 2050 MTP adopted February 2022
- 2055 MTP development underway



2050 MTP Elements Developed Together

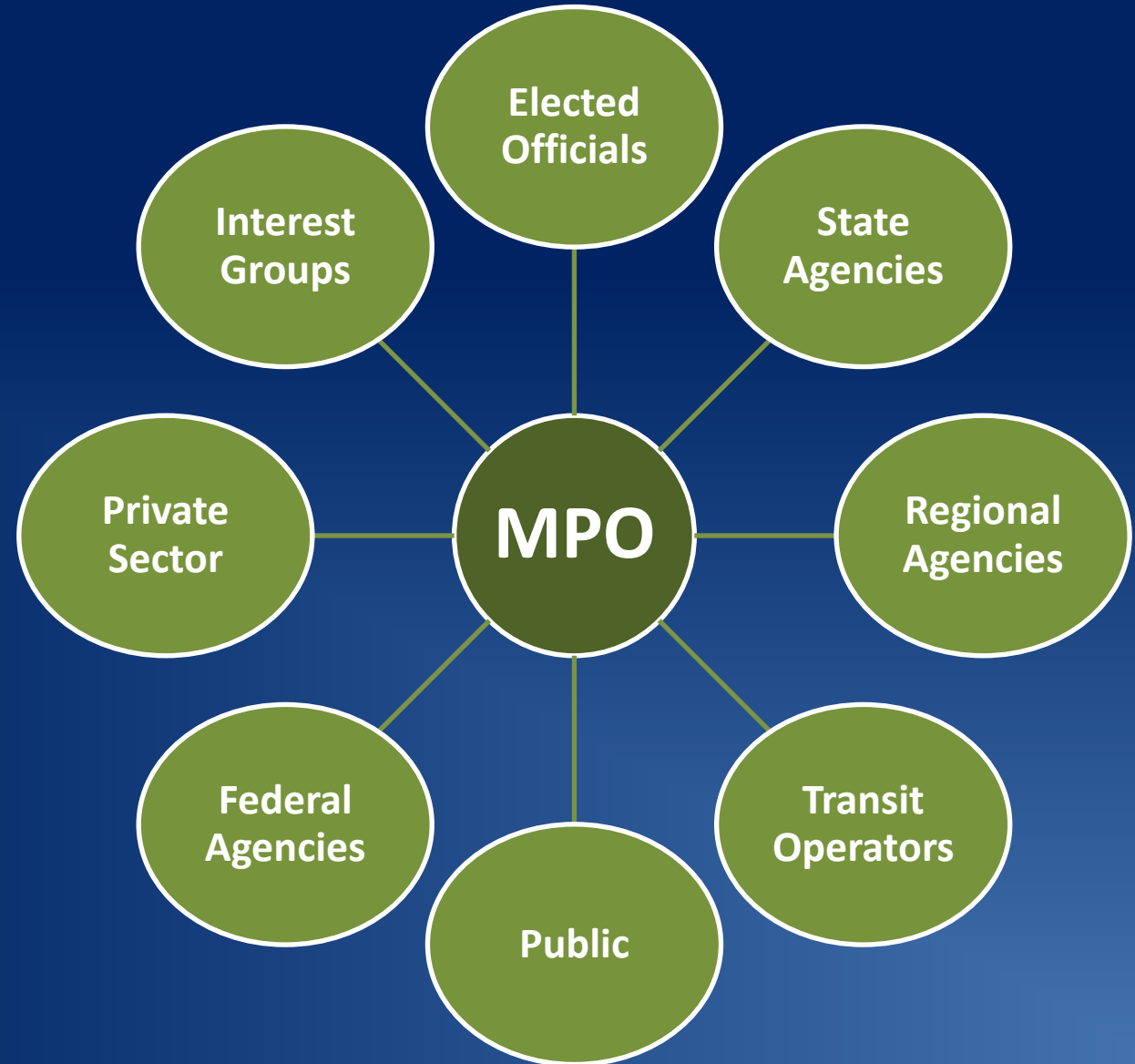
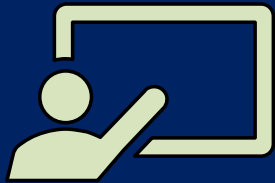
- ✓ Goals, Objectives & Performance Measures
- ✓ Regional Transportation Model (version 6)
- ✓ Population and Job Forecasts and CommunityViz Growth Allocation Tool
- ✓ Consistent Financial Plan and assumptions
- ✓ 2050 MTP scenarios and major milestones (Deficiencies & Needs, Alternatives Analysis, etc.)
- ✓ Environmental Justice methods and analysis
- ✓ Projects and programs that span MPO boundaries (e.g. I-40, Commuter Rail, US 70, NC 98, Transportation Demand Management)
- ✓ 2050 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

Who else is involved?



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



<https://www.campo-nc.us/about-us/staff>



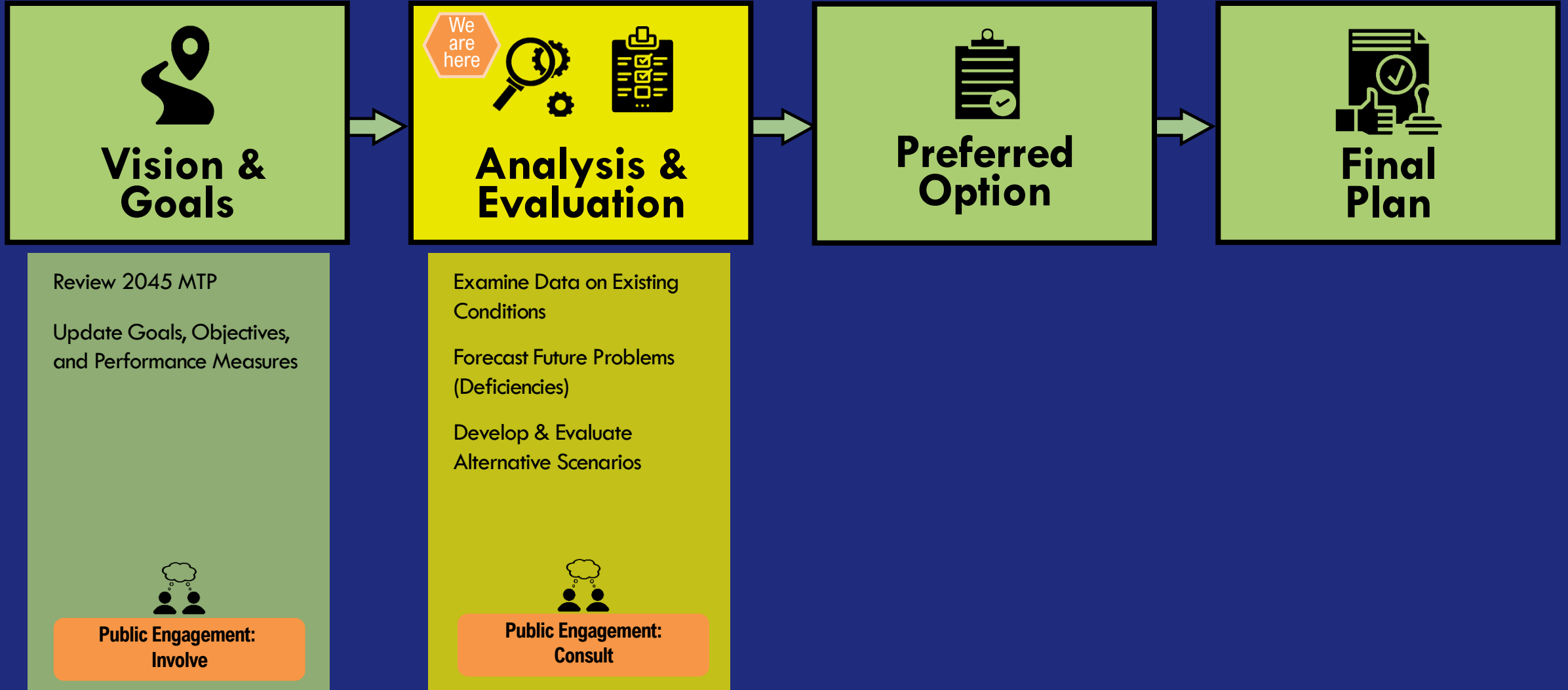
Our Partners: **YOU!**

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



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.



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 SE Guide Totals are broken into**
 - 1) **Population Guide Totals**
 - 2) **Employment Guide Totals**

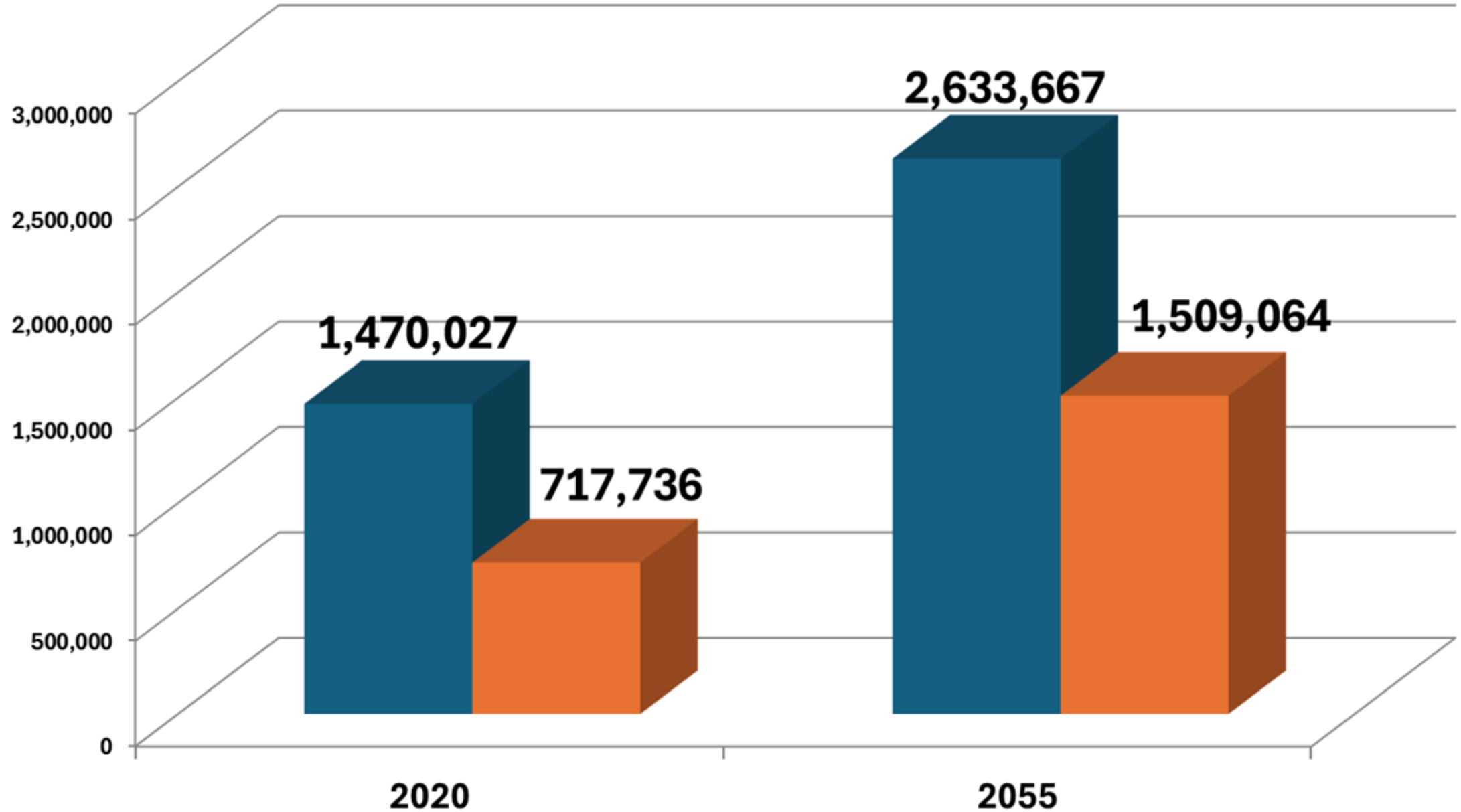


Process >>>>> **Community Review:**

Before approval by the Executive Board, the SE Guide totals are released for **public comment**.

Population & Employment Change 2020-2055

■ Population ■ Employment



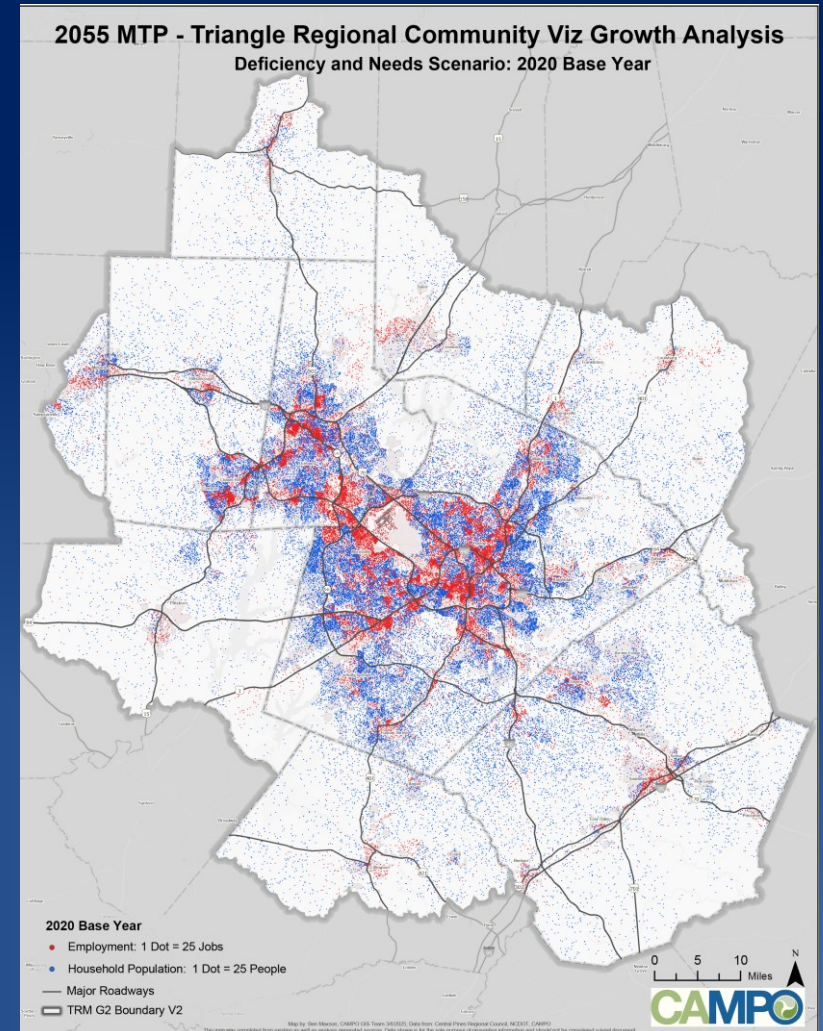
How: Beginning With The End In Mind

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

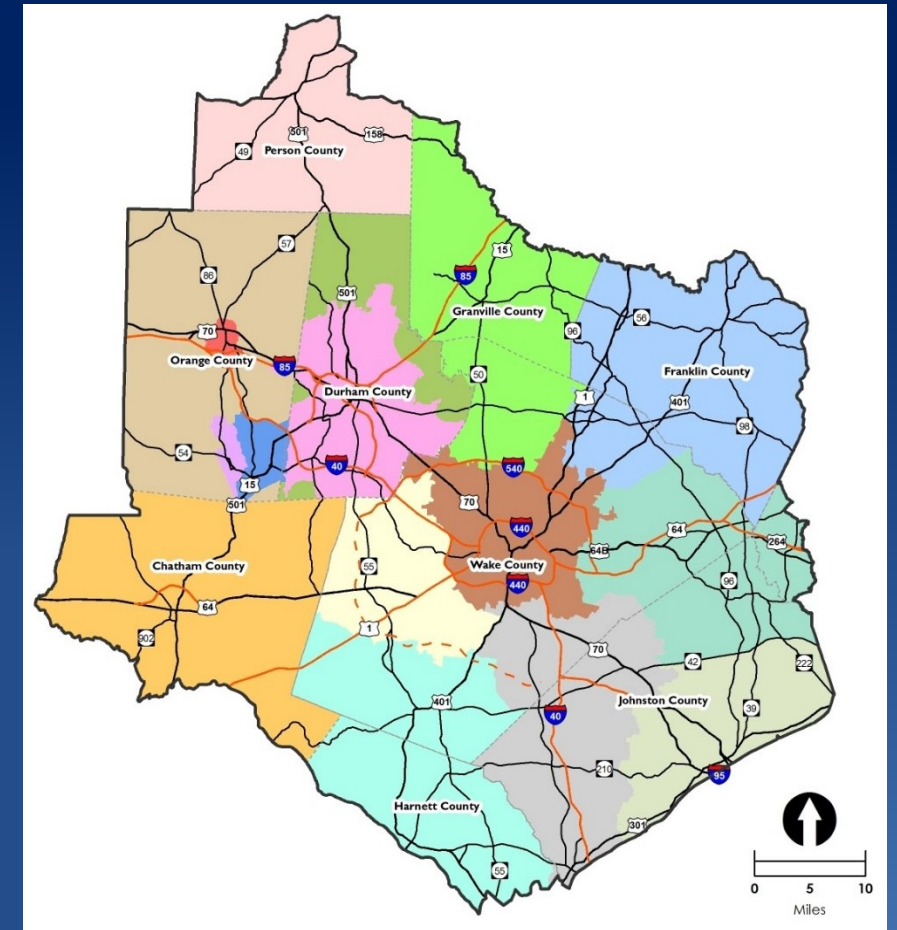


2055 MTP results: each dot is 50 jobs or people

CommunityViz

Bringing Consistency to a Complex Situations

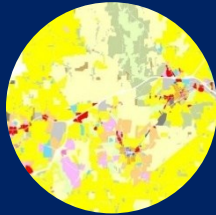
- CommunityViz is a tool to understand growth capacities and allocate future growth
- It can be used to create future development scenarios and help understand their relative impacts
- It needs 5 basic inputs



What CommunityViz Needs To Create a Scenario



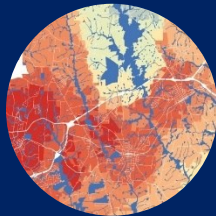
The location of features that constrain development, such as water bodies, wetlands and stream buffers



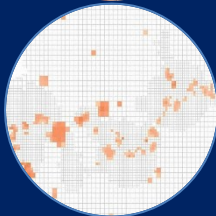
The type of place each parcel **will become** (and the intensity of each place type for each jurisdiction)



The current development status of each parcel relative to its future use



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

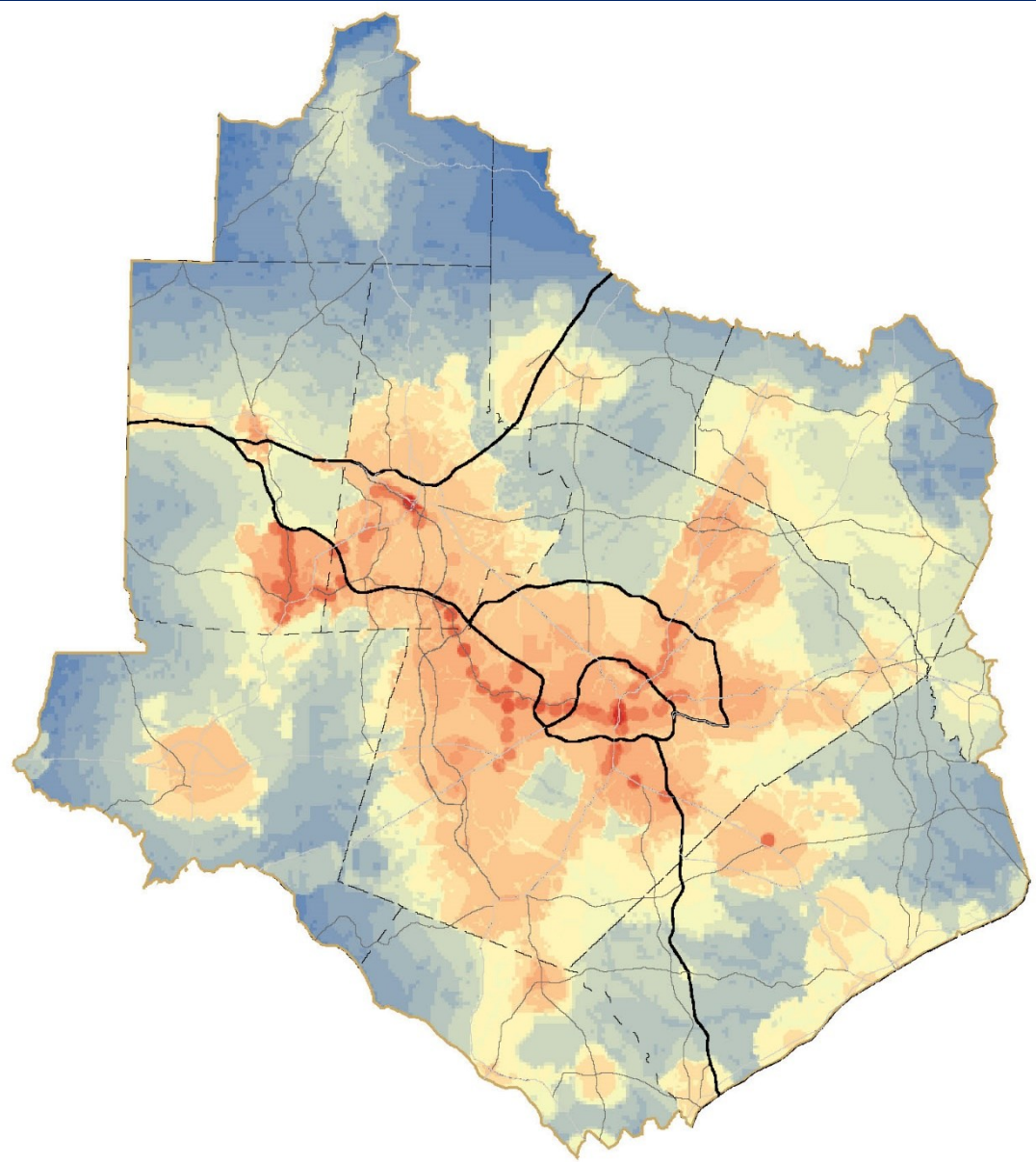


The types and amounts of growth that will be allocated, termed "growth targets"

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



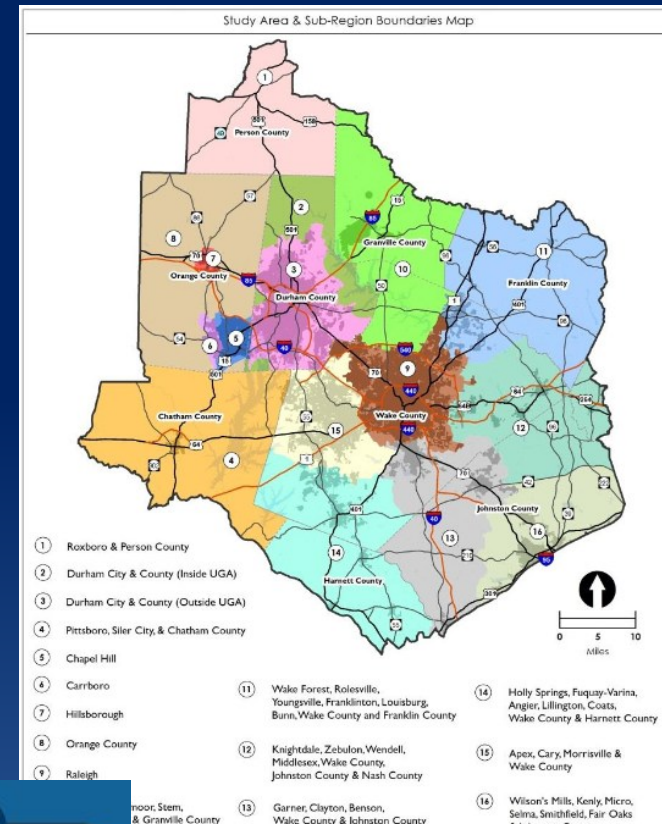
www.centralpinesnc.gov/mobility-transportation/urban-mobility

[scroll down to CommunityViz]

Development Foundation (Land Use)

Community VIZ

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



PERFORMANCE MEASURES FOR FUTURE SCENARIOS¹

FUTURE SCENARIO	NET BENEFIT (Millions of 2019 US Dollar per Year)	TRAFFIC CONGESTION	TRAVEL SPEED	MODE SPLIT	TRANSIT RIDERSHIP	TRAVEL TIME & RELIABILITY	SAFETY, PHYSICAL ACTIVITY & ACCESSIBILITY
TOLL3	-123.3	🚗	🚗	🚗	🚗	🚗	🚗
ETOD	45.5	🚗	🚗	🚗	🚗	🚗	🚗
GIG	97.2	🚗	🚗	🚗	🚗	🚗	🚗
MHUB	-16.3	🚗	🚗	🚗	🚗	🚗	🚗
RESY	-85.1	🚗	🚗	🚗	🚗	🚗	🚗

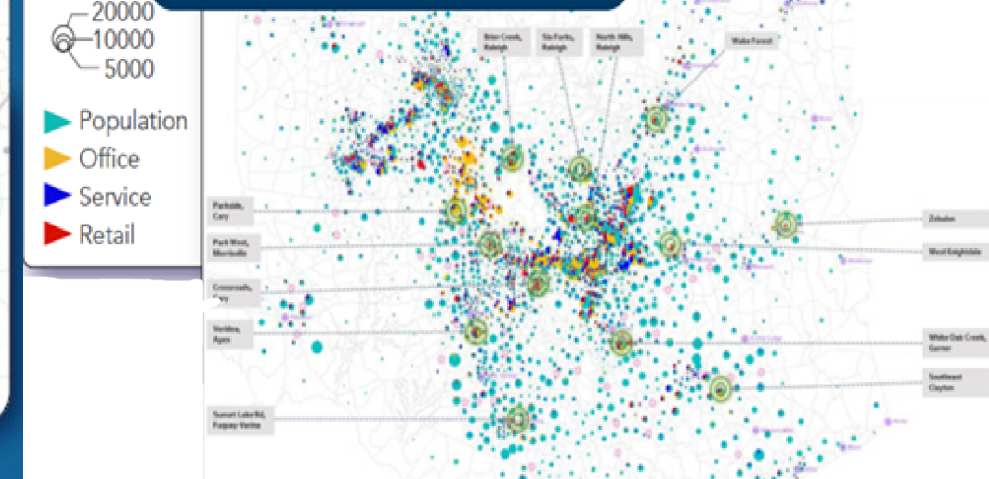
● POSITIVE CHANGE
 ● NEGATIVE CHANGE
 ● NEUTRAL/MIXED CHANGE

¹Changes in performance measures are reported based on comparison to the 2045 Adopted MTP

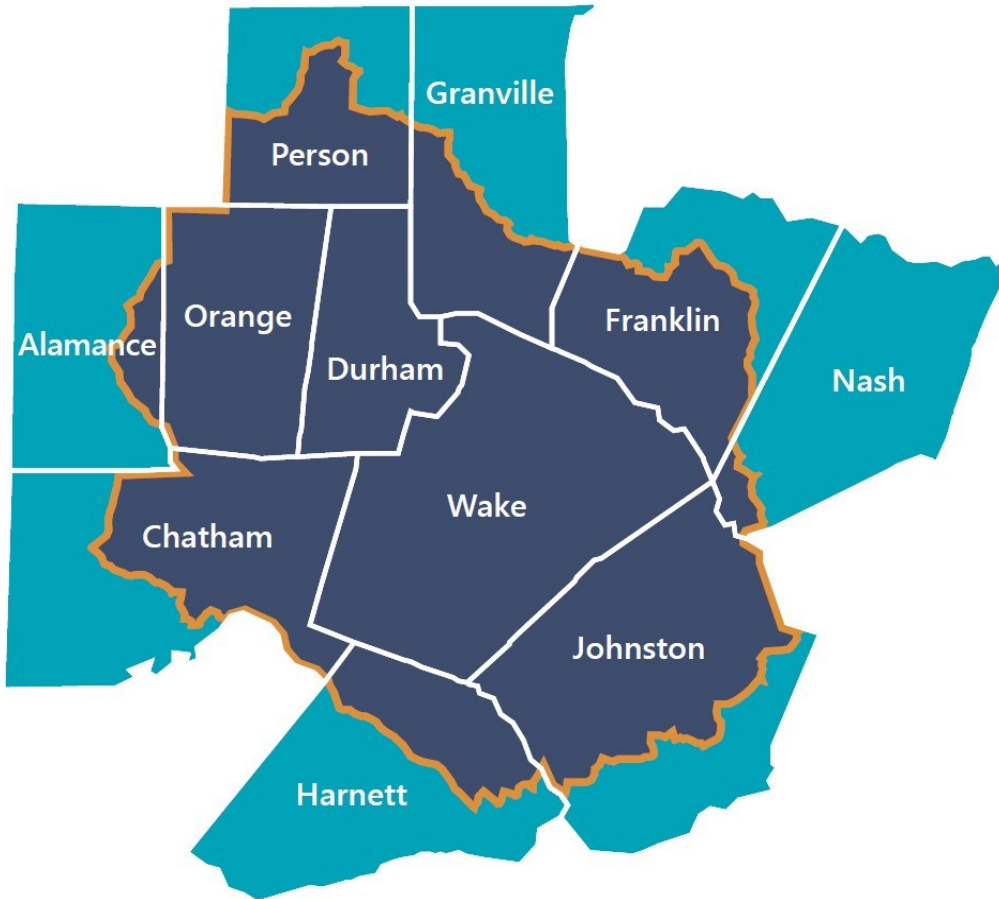
ETOD GROWTH PROJECTIONS



MHUB GROWTH PROJECTIONS



Triangle Regional Model (TRM)

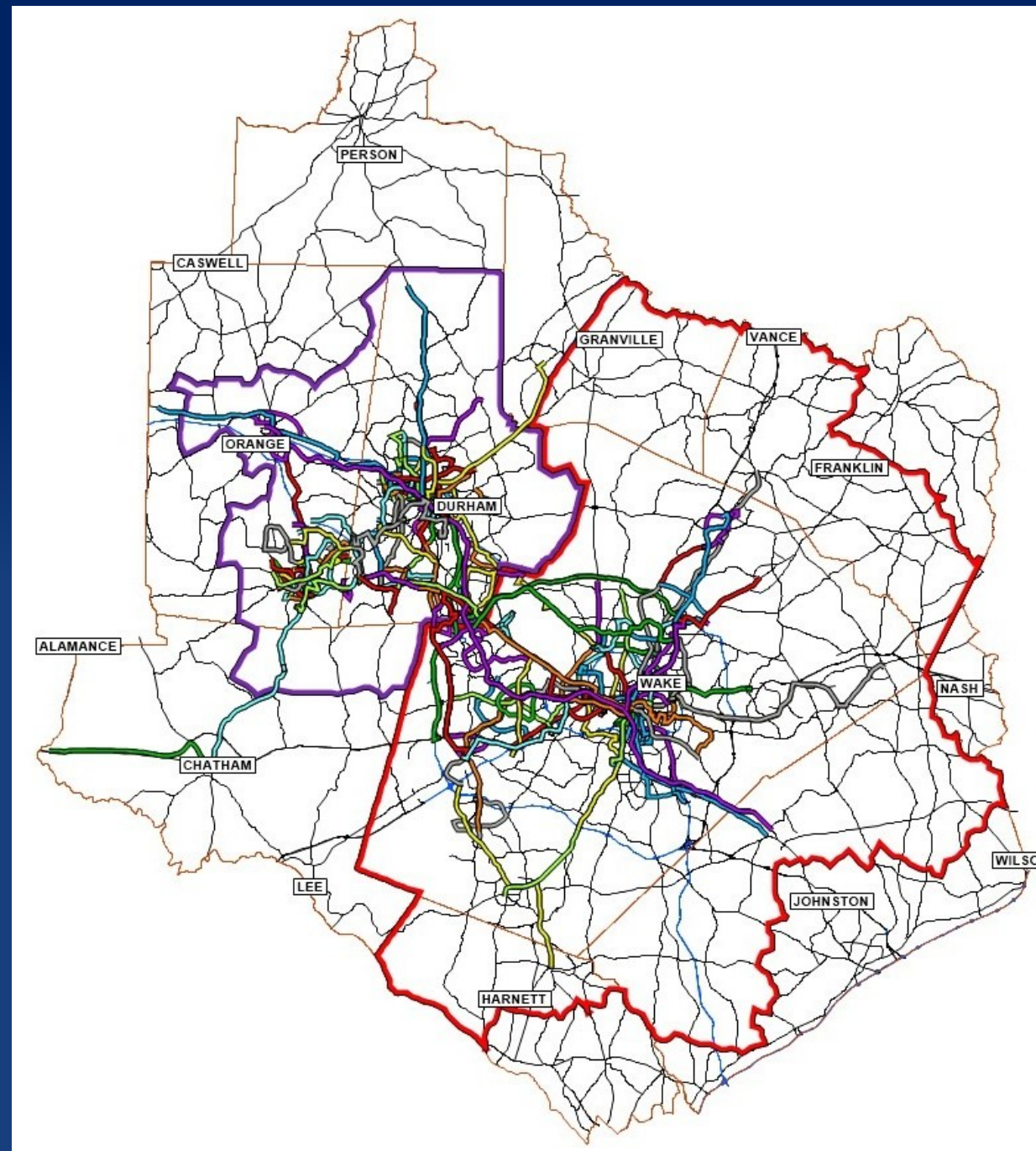


- Is a joint project of CAMPO, TWTPO, NCDOT and GoTriangle
- Is a travel demand forecasting tool for the Triangle Region
- Is a trip-based model – typical four step model
- Represents travel in the Triangle Area
- Includes all travel modes, all major road facilities, and all transit systems and routes



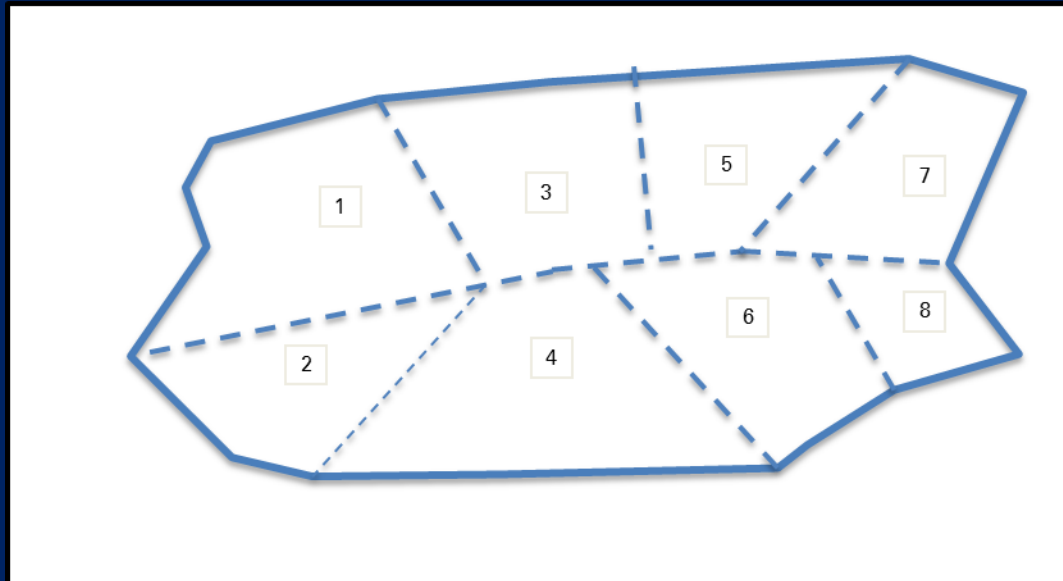
Model Study Area

- 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

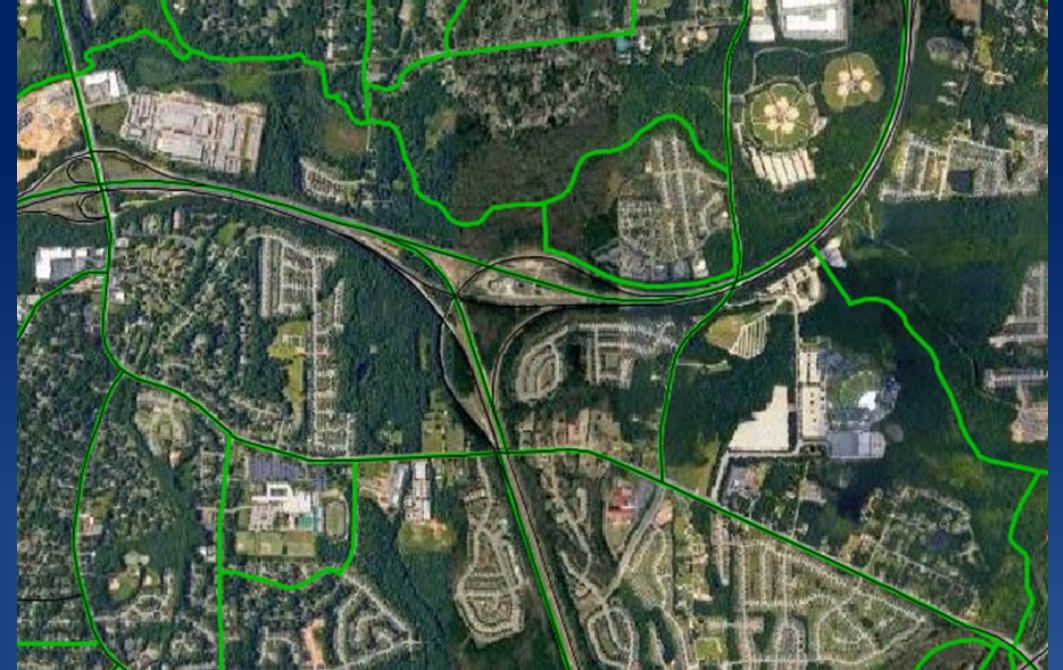


Key Concept - TAZ

Schematic Representation of TAZ



————— Model Boundary - - - - - TAZ ■ TAZ No.



- 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

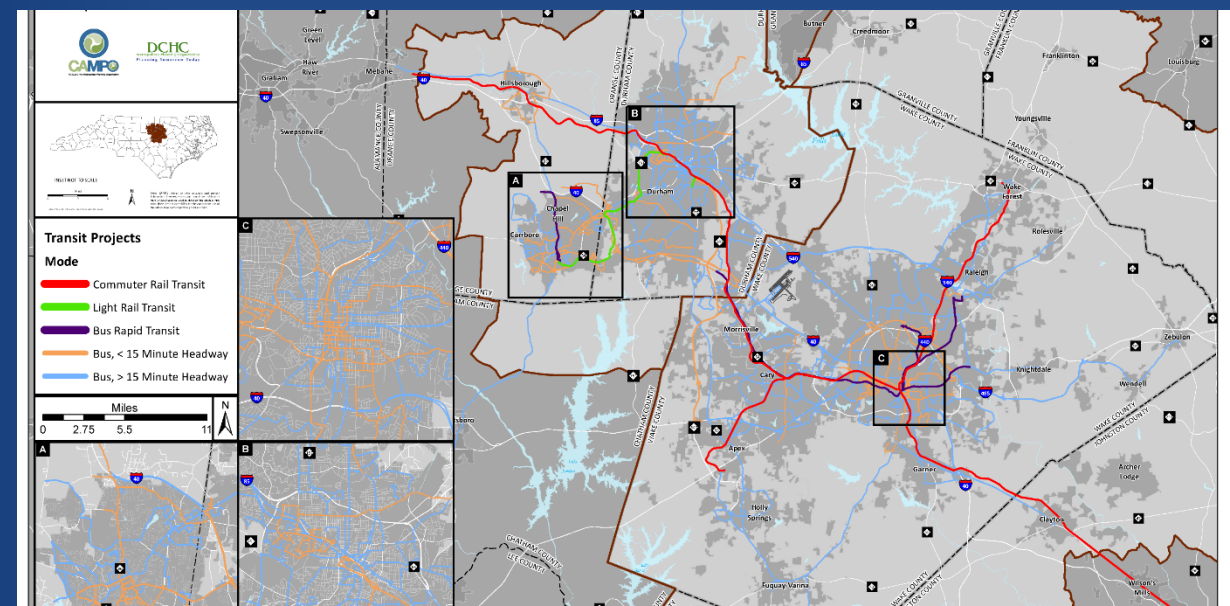
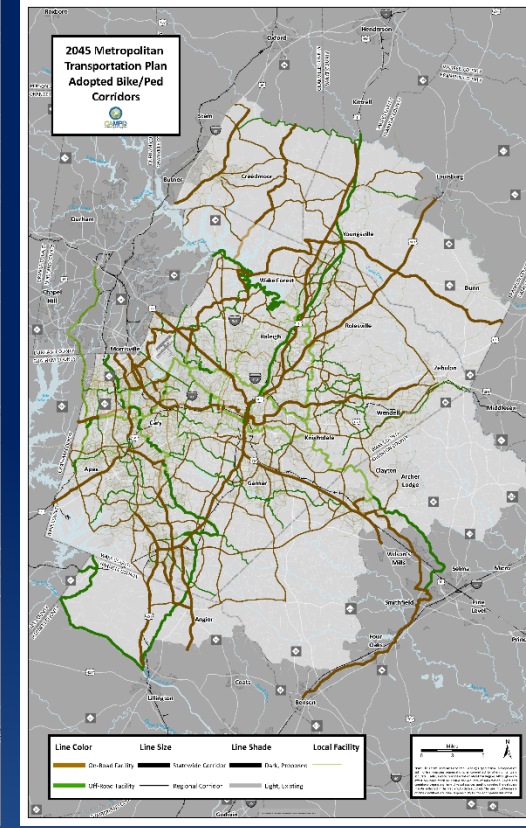
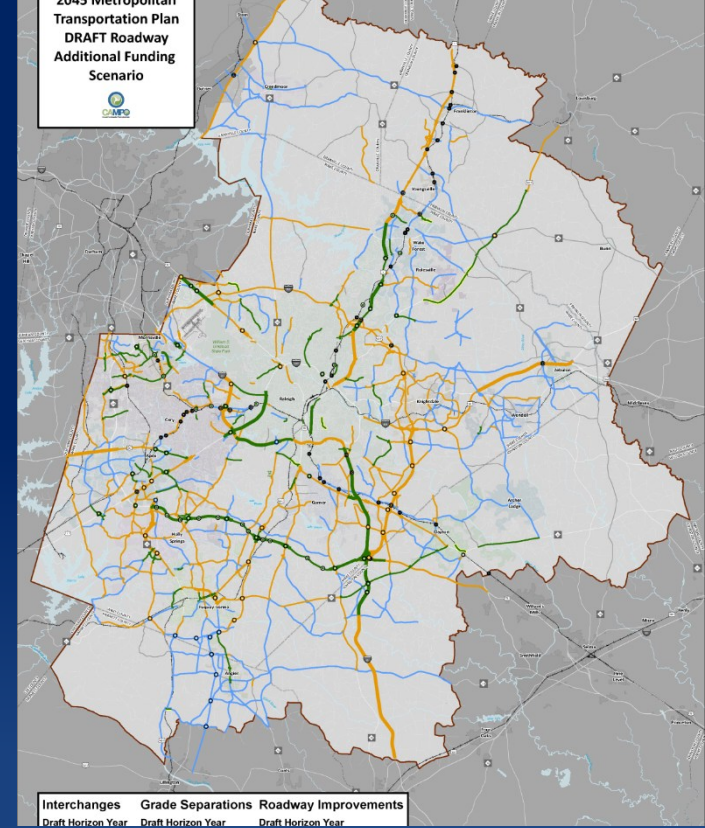
Mobility Investment Foundation (Transportation)

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



Scenario Framework

Four scenarios that match a development foundation with a

<i>Destination 2055</i> Scenario Framework		Mobility Investment Foundation				
		E Existing & Committed	T Trend	M Mobility Corridors	C Complete Communities	U Unconstrained
Development Foundation	P Community Plans	 Deficiency & Needs Scenario	 Plans & Trends Scenario	 Shared Leadership Scenario		
	O Opportunity Places				 All Together Scenario	
	B Build Out					

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

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.

Key Concepts

Travel Choice Neighborhoods (TCNs)

Key locations along development corridors with both roadway and high-quality transit service investments implemented

REINVEST Neighborhoods

TAZs identified based on characteristics influential in determining who is most likely to use and benefit from alternative transportation options.



Mobility Hubs

Mixed-use regional activity centers along existing major transportation corridors.

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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Many mid-sized town and city centers • Some suburban centers, often along major transportation corridors

- *REINVEST Neighborhoods – equity centered places*

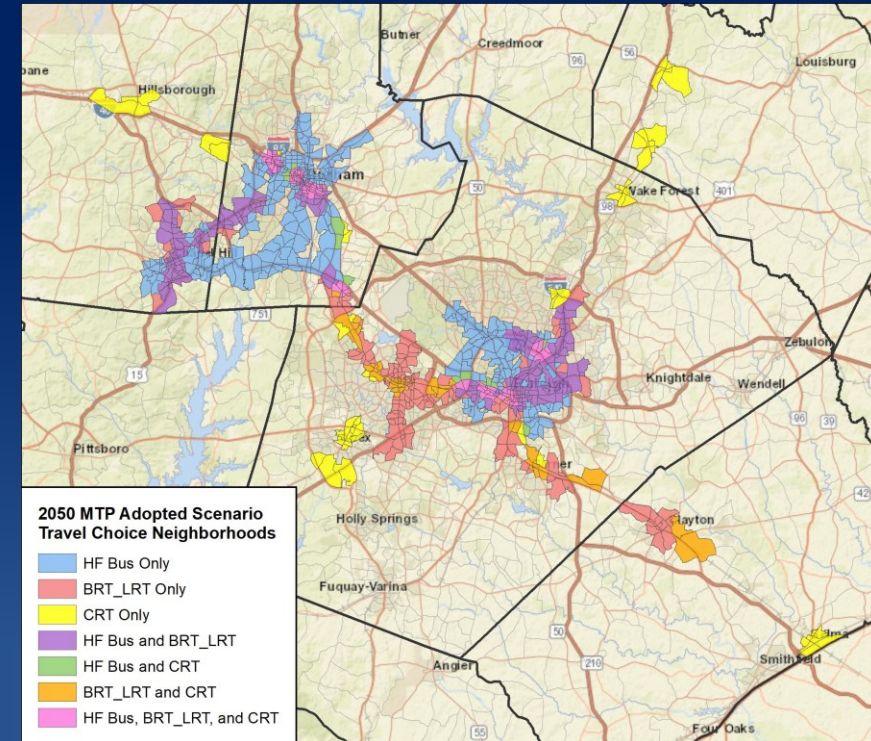
RE	Race/Ethnicity – the degree to which a neighborhood is home to people who are Black, Indigenous or People of Color (BIPOC).
IN	Income – the degree to which people in the neighborhood live in households with lower annual incomes.
VE	Vehicles – the degree to which households in the neighborhood report 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

Travel Choice Neighborhoods (TCN)

Places where both roadway investments and high-quality transit service would be available under different future development and mobility scenarios.

Travel Choice Neighborhoods (TCNs) are a way to understand the relative significance of focused land use and transportation infrastructure among scenarios, and how policies might affect these neighborhoods.

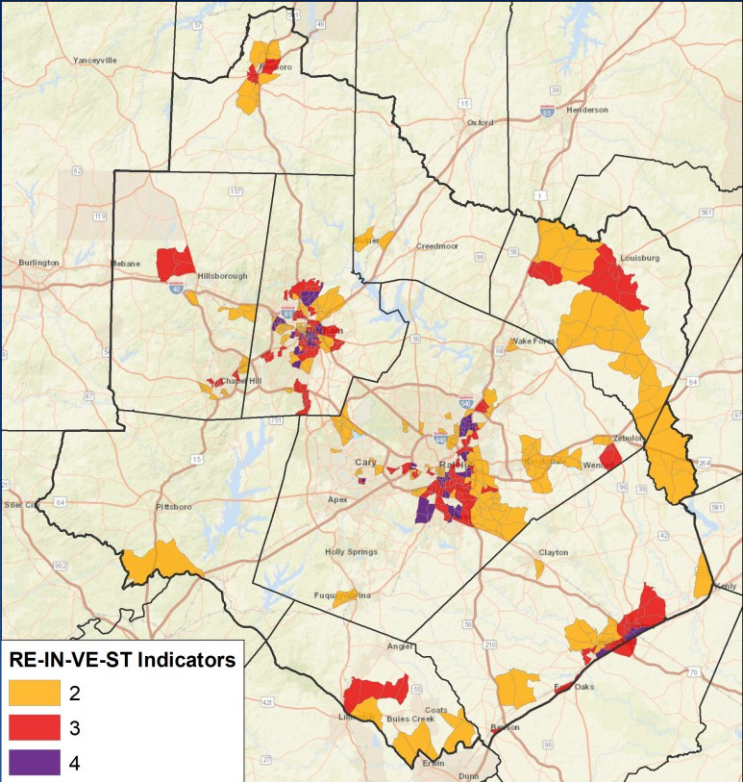
About 745 REINVEST Neighborhood TAZs in the TRM G2 model area.



REINVEST Neighborhoods

REINVEST Neighborhoods are defined as TAZs that overlapped with block groups that met at least two of the four indicator thresholds by at least 50% of the total TAZ area (acres).

In total, there were 735 REINVEST Neighborhood TAZs identified in the TRM v6.2 model area, and 745 REINVEST Neighborhood TAZs in the TRM G2 model area.



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.
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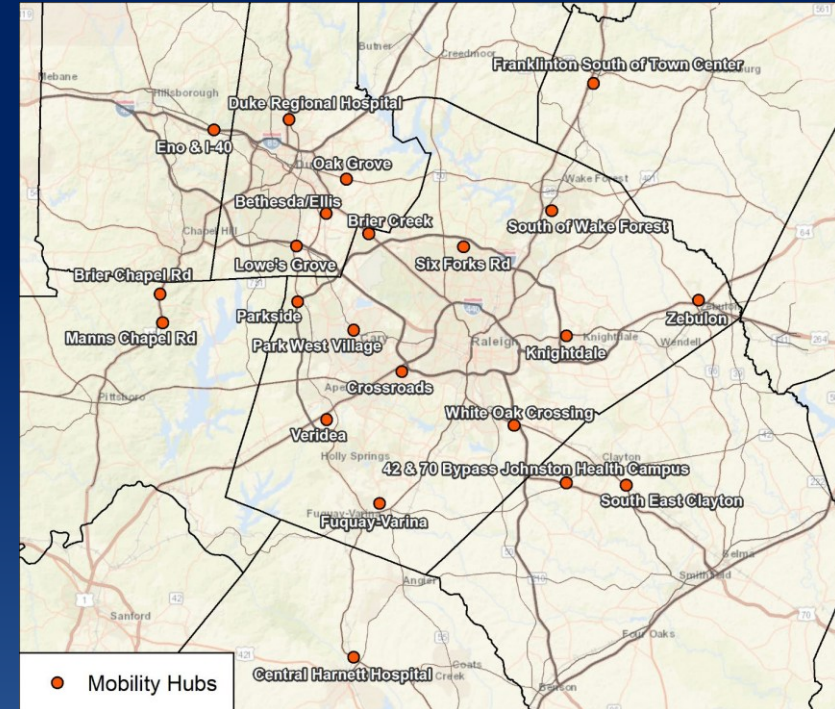


Mobility HUBS

The concept of Mobility Hubs was developed as part of the “Opportunity Places” land development foundation for the Connect 2050 MTP.

Once the 22 mobility hub locations were identified based on the criteria below, they were given a suitability weight so that additional growth would be allocated to these areas compared to the Community Plans development foundation, which was based on input from local planners according to their future land use plans.

1. Location along an existing major transportation corridor.
2. Preference for locations near existing medical facilities.
3. At least 200 acres of developable or redevelopable land.
4. A mixed-use intensity that is supportive of frequent transit service.
5. A minimum 50% increase in capacity for jobs compared to Community Plans.



Deficiencies & Needs Scenario

Development Foundation:

P | Community Plans

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

Mobility Investment Foundation:

E | Existing + Committed

- Only includes existing infrastructure, plus those projects that are underway or committed for funding within the next 4-5 years (current TIP period)
- Unreasonable as a 2055 scenario, but useful as a baseline for comparison

Plans & Trends Scenario

Development Foundation:

P | Community Plans

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

Mobility Investment Foundation:

T | Trend Investment

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

Alternatives Analysis

Plans & Trends Scenario

Major Roadway Investments

- Completion of Outer Loop
- Widening/Improving I-40, I-440, US 401, US 1, US 64, US 70, NC 42, NC 50, NC 54, NC 55, NC 98
- Smaller level of secondary roadway investments in 2nd two decade

Major Transit Investments

- Partnership for additional intercity rail stops (a few) and services (maybe 1 or 2 additional)
- BRT Infrastructure and Service in Capital, New Bern, Wilmington, and Western/Chatham/NC 54 corridors
- BRT Infrastructure and Service in Harrison/Kildare Farm Rd. corridor
- BRT Infrastructure and Service to Midtown
- Continuation of WTP frequent bus network
- Community Funding Areas

Shared Leadership Scenario

Development Foundation:

P | Community Plans

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

Mobility Investment Foundation:

M | Mobility Corridors

- Take the base of investments from the Trend Scenario, *PLUS*:
 - Additional state funding based on NC First Commission recommendations, starting in second decade
 - Growth of federal funding to keep pace with inflation, rather than remaining at current levels

Alternatives Analysis

Shared Leadership Scenario

Major Roadway Investments





- Completion of Outer Loop
- Widening/Improving I-40, I-440, US 401, US 1, US 64, US 70, NC 42, NC 50, NC 54, NC 55, NC 98
- Smaller level of secondary roadway investments in 2nd two decades

Major Transit Investments

- Rail investment: Trend, plus "regional rail" in Wake Co., with additional stops and service
- BRT Infrastructure and Service in Capital, New Bern, Wilmington, and Western/Chatham/NC 54 corridors
- Freeway based BRT in I-40 corridor
- BRT Infrastructure and Service to Midtown
- Continuation of WTP frequent bus network
- Community Funding Areas

Scenario Framework

Four scenarios that match a development foundation with a mobility foundation

<i>Destination 2055</i> Scenario Framework		Mobility Investment Foundation				
		E Existing & Committed	T Trend	M Mobility Corridors	C Complete Communities	U Unconstrained
Development Foundation	P Community Plans	 Deficiency & Needs Scenario	 Plans & Trends Scenario	 Shared Leadership Scenario		
	O Opportunity Places				 All Together Scenario	
	B Build Out					

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

All Together Scenario

Development Foundation:

O | Opportunity Places

- Built on same base assumptions as Community Plans, but with additional focus on:
 - **Anchor Institutions** (universities) – assert increase in job growth
 - **Mobility Hubs** (major activity centers) – increase densities in these areas to allow transit-supportive development
 - **Affordable Housing** – identify publicly-owned property near frequent transit services and assert added affordable housing units
 - **Equitable TOD** – increase densities in areas within ½ mile of high-quality transit stops/stations to allow transit-supportive development

Mobility Investment Foundation:

C | Complete Communities

- Take the base of investments from the Mobility Corridors Scenario, *PLUS*:
 - Additional funding, likely based on local option revenue streams, starting in second decade
 - 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)

The Opportunity Places Development Foundation

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

Opportunity Places Development Foundation

Mechanically derived – 4 main elements

Community Plans is the starting point. Modified as follows:

1. Anchor institutions – increased asserted development
2. Mobility hubs – more intense, mixed use development in ~2 dozen places; largely at previously identified “activity centers” in CommunityViz
3. Frequent transit corridors (Travel Choice Neighborhoods) – TOD development on developable parcels
4. Affordable housing opportunity sites – asserted “LIHTC-like” projects on undeveloped public land through GIS-based criteria

*This Development Foundation will be used for the
All Together scenarios*

Alternatives Analysis

All Together Scenario

Major Roadway Investments

- Completion of Outer Loop
- Widening/Improving I-40, I-440, US 401, US 1, US 64, US 70, NC 42, NC 50, NC 54, NC 55, NC 98
- **Higher** level of secondary roadway investments in 2nd two decades
**Requires additional revenue assumptions*

Major Transit Investments

- Rail investment: Shared Leadership, plus expansion of "regional rail" in DCHC and outside Wake Co.
- BRT Infrastructure and Service in western Wake Co. corridor
- BRT Infrastructure and Service in Capital, New Bern, Wilmington, and Western/Chatham/NC 54 corridors
- BRT Infrastructure and Service in Harrison/Kildare Farm Rd. corridor
- BRT Infrastructure and Service to Midtown
- Continuation of WTP frequent bus network
- Community Funding Areas

Pop. Growth



3.1 million

Key Performance Measures

2050 MTP Alternative Scenarios

Jobs Growth



1.85 million

Measure:



Avg Auto Commute Time - DCHC



24 min



22 min



21 min



21 min



Delays: Daily DCHC



Delays: Daily CAMPO



Highway Lane Miles DCHC



Highway Lane Miles CAMPO



Transit Service Miles Triangle



Transit Ridership Triangle



Jobs near Transit DCHC



Jobs near Transit CAMPO



Gas Consumption Increase - Triangle



Funding Required

\$\$

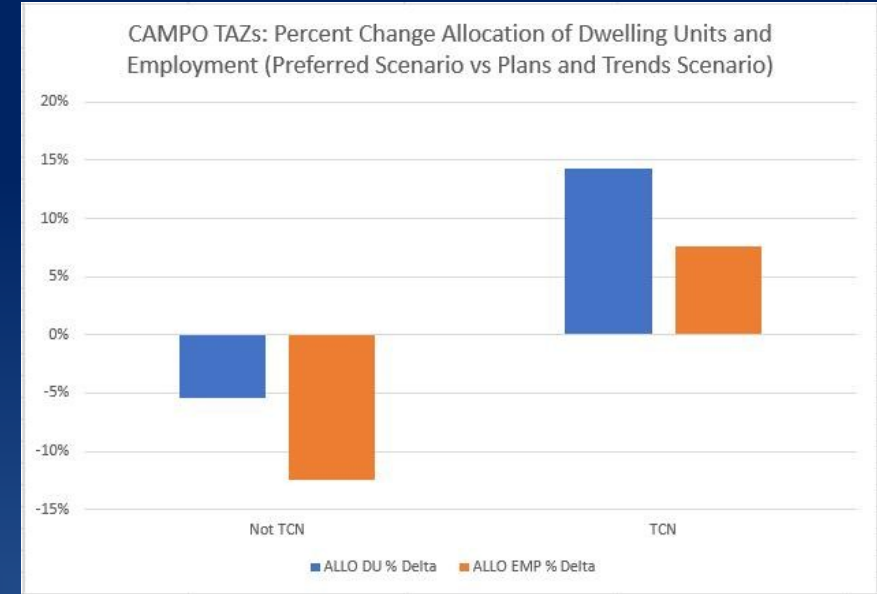
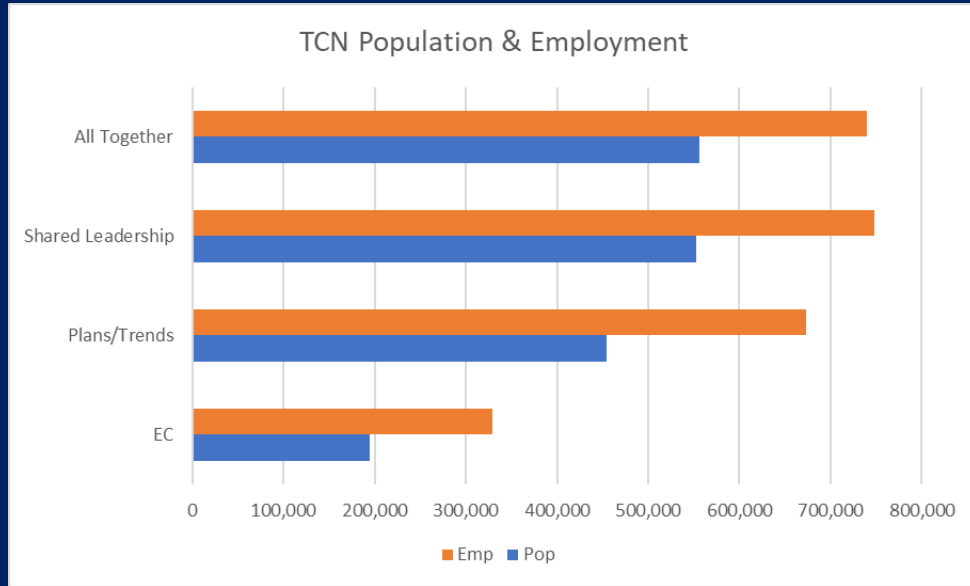
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\$\$\$ (Added State)

\$\$\$ (Added State & Local)

Results and Analysis

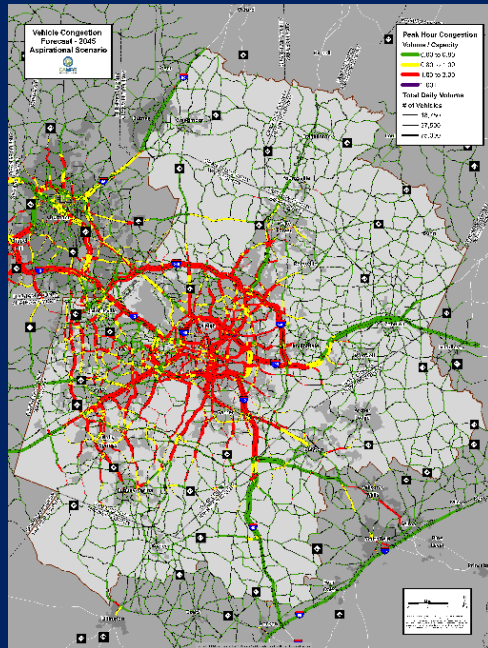
-- a focus on important trip origins and destinations --



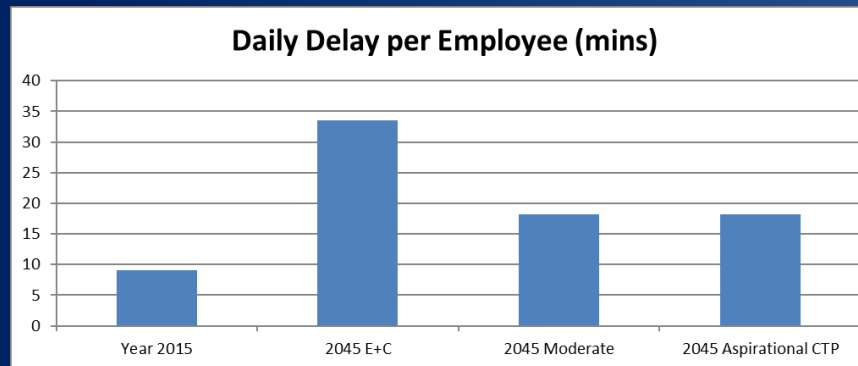
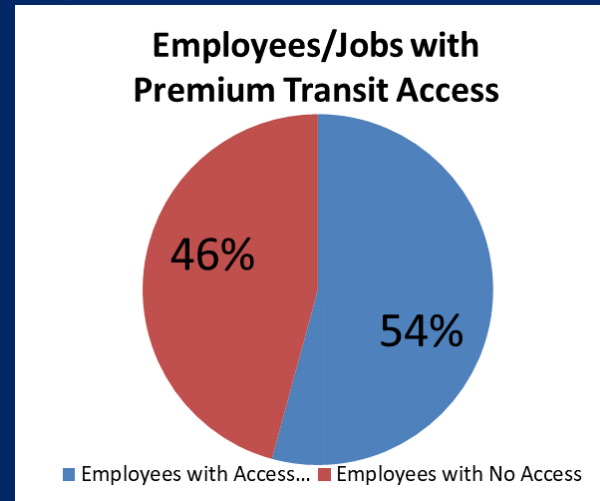
	Deficiency Analysis				Plans/Trends					Shared Leadership					All Together		
	TCN	TOTAL	%		TCN	TOTAL	%			TCN	TOTAL	%			TCN	TOTAL	%
Total VMT	1,600,989	58,064,707	2.8%		1,946,235	62,311,096	3.1%			2,133,448	61,096,303	3.5%			1,698,059	60,855,334	2.8%
Total Delay Hours	34,103	771,813	4.4%		50,028	656,926	7.6%			47,679	580,667	8.2%			39,275	413,924	9.5%
Mode Split																	
Bus	1.9%	1.1%			2.9%	3.7%				1.2%	1.2%				1.2%	0.7%	
Rail	0.0%	0.0%			0.1%	0.1%				0.1%	0.1%				0.2%	0.2%	
HOV	32.7%	41.0%			35.3%	40.1%				36.5%	41.0%				36.7%	42.3%	
SOV	41.3%	47.4%			44.8%	46.1%				46.7%	47.4%				47.1%	48.6%	
Non-Motorized	23.9%	10.4%			16.7%	9.9%				15.2%	10.1%				14.2%	8.1%	
Pop	195,166	2,134,759	9.1%		454,412	2,144,545	21.2%			552,625	2,146,892	25.7%			556,635	2,147,228	25.9%
Emp	329,195	1,263,788	26.0%		673,216	1,264,268	53.2%			748,129	1,267,617	59.0%			739,712	1,266,225	58.4%

Analyze Alternatives

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



Visualizations



Goal/Objective	Source	Performance Measure	Data	Desired	Actual	Trend
Goal I -- Protect Environment and Minimize Climate Change	<p>Who did What? Wei used TRM V6 and MOVES 2014 to generate county level data for moderate, aspirational and E+C scenarios.</p> <p>Andy used August data from aspirational scenario to compute totals and per capita data, and created method to generate gasoline consumption and CO data.</p> <p>Available from last MTP cycle? Detailed notes, workbooks and Wei's technical memorandum.</p> <p>Update now? Do for 2050 MTP? Yes, update if new TRM data available. Yes, keep for 2050 MTP. Easy for public to understand. Complex calculations but data and method are available.</p>	1. Total and per capita transportation GHG (CO ₂), ozone (NO _x), CO, and particulate matter emissions (in kilograms; August)	<p>Total (three-county area inside TRM)</p> <p>2013 CO₂: 7m 2045 CO₂: 6.3m</p> <p>2013 NO_x: 11,106 2045 NO_x: 2,116</p> <p>2013 CO: 86,903 2045 CO: 39,891</p> <p>2013 PM: 268 2045 PM: 100</p>	↓	↓	-52%
		2. Total and per capita mobile energy consumption (daily gallons of auto gasoline)	<p>Per Capita (three-county area inside TRM)</p> <p>2013 CO₂: 15.1 2045 GHG: 8.8</p> <p>2013 NO_x: 0.024 2045 NO_x: 0.003</p> <p>2013 CO: 0.19 2045 CO: 0.06</p> <p>2013 PM: 0.0006 2045 PM: 0.0001</p>	↓	↓	-70%
Goal I	<p>Who did What? Andy used final financial data and highway table to calculate.</p> <p>Available from last MTP cycle? Workbooks and notes.</p> <p>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 MPOs "reduce the negative impacts on the natural and cultural environment."</p>	1. Proportion of planned investment in existing highways	<p>DCHC</p> <p>2040 MTP: 81% 2045 MTP: 91%</p>	↓	↓	-14%
		2. Proportion of work and non-work trips by auto less than 30 minutes (use 20 or 25 minutes?)	<p>2013 Work: 81% 2045 Work: 69%</p> <p>2013 NonWork: 98% 2045 NonWork: 93%</p> <p>Note: this is regional data</p>	↑	↓	-15% Work -4% Nonwork
Goal II -- Connect People	<p>Who did What? Wei did calculation for region for base, E+C, aspirational and moderate (but did not do by MPO).</p> <p>Available from last MTP cycle? Workbook presenting detailed results. Copy of Wei's detailed method (e.g., file and field selection formulas).</p> <p>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.</p>	2. Percentage of work and non-work trips by transit less than 45 minutes (use 40 minutes?)	<p>2013 Work: 63% 2045 Work: 67%</p> <p>2013 NonWork: 59% 2045 67%</p> <p>Note: this is regional data</p>	↑	↑	+7% Work +13% Nonwork
		3. Percentage of urbanized area within ¼ mile of pedestrian facilities	<p>2016: 38%</p> <p>Note: this is regional data</p>	↑	↑	(Compare in 2018)
Goal II -- Connect People	<p>Who did What? Paul did calculation for region (minus Hillsborough)</p> <p>Available from last MTP cycle? Nothing.</p> <p>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.</p>	4. Percentage of jobs within 1/4 mile of frequent bus transit service (15min) or 1/2 mile of fixed guideway transit service	<p>2013: 33% 2045: 50%</p>	↑	↑	+61%
		<p>Who did What? Ben Bearden did calculation by MPO.</p> <p>Available from last MTP cycle? Short note on the method and maps of the buffers.</p> <p>Update now? 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.</p>				

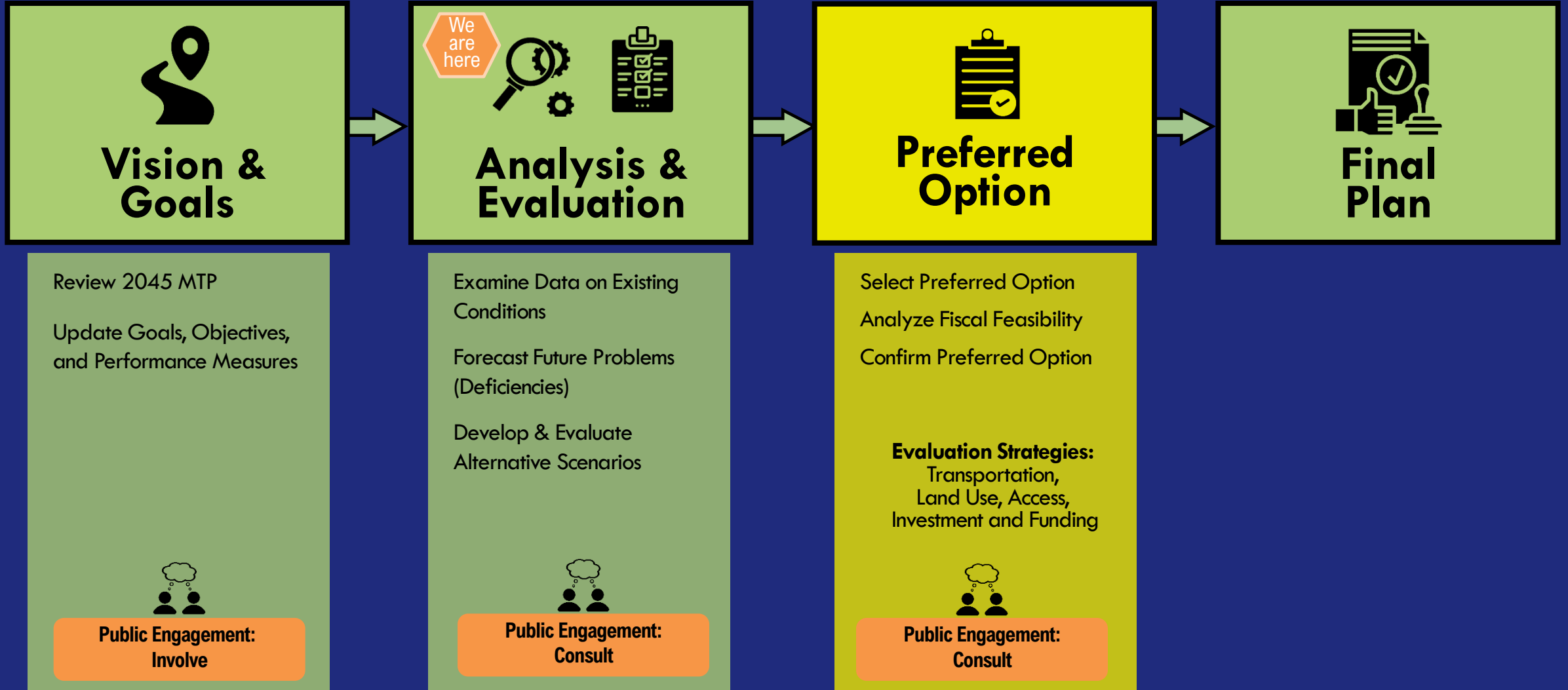
Required Performance Measures

- **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



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.



The Preferred Alternative

Sorting the Projects by Horizon Year

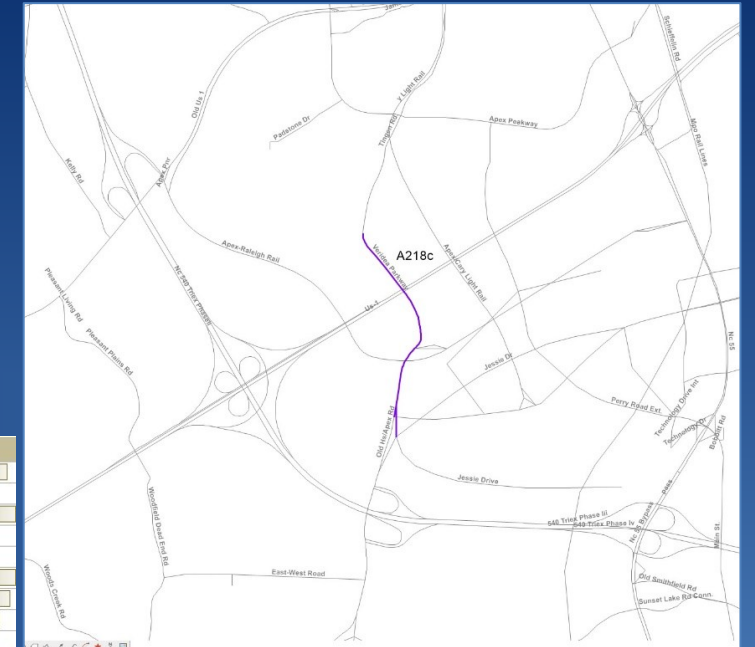
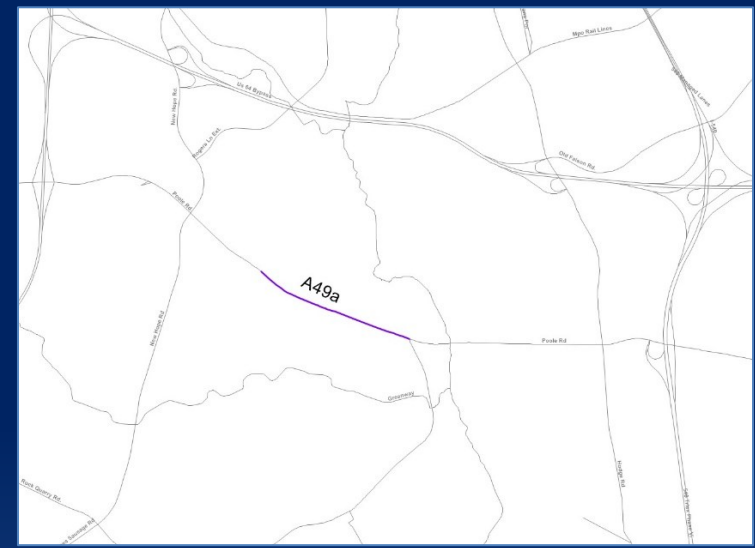
- Initial fiscal constraint application
- Project Prioritization Tool – Scores projects based on their performance on the following measures
 - Congestion, Connectivity, Equity, Cost Benefit
 - Economic and Environmental impacts
 - Safety, Reliability, Multi-Modal, Bridge Conditions
- Adjustments and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



**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%

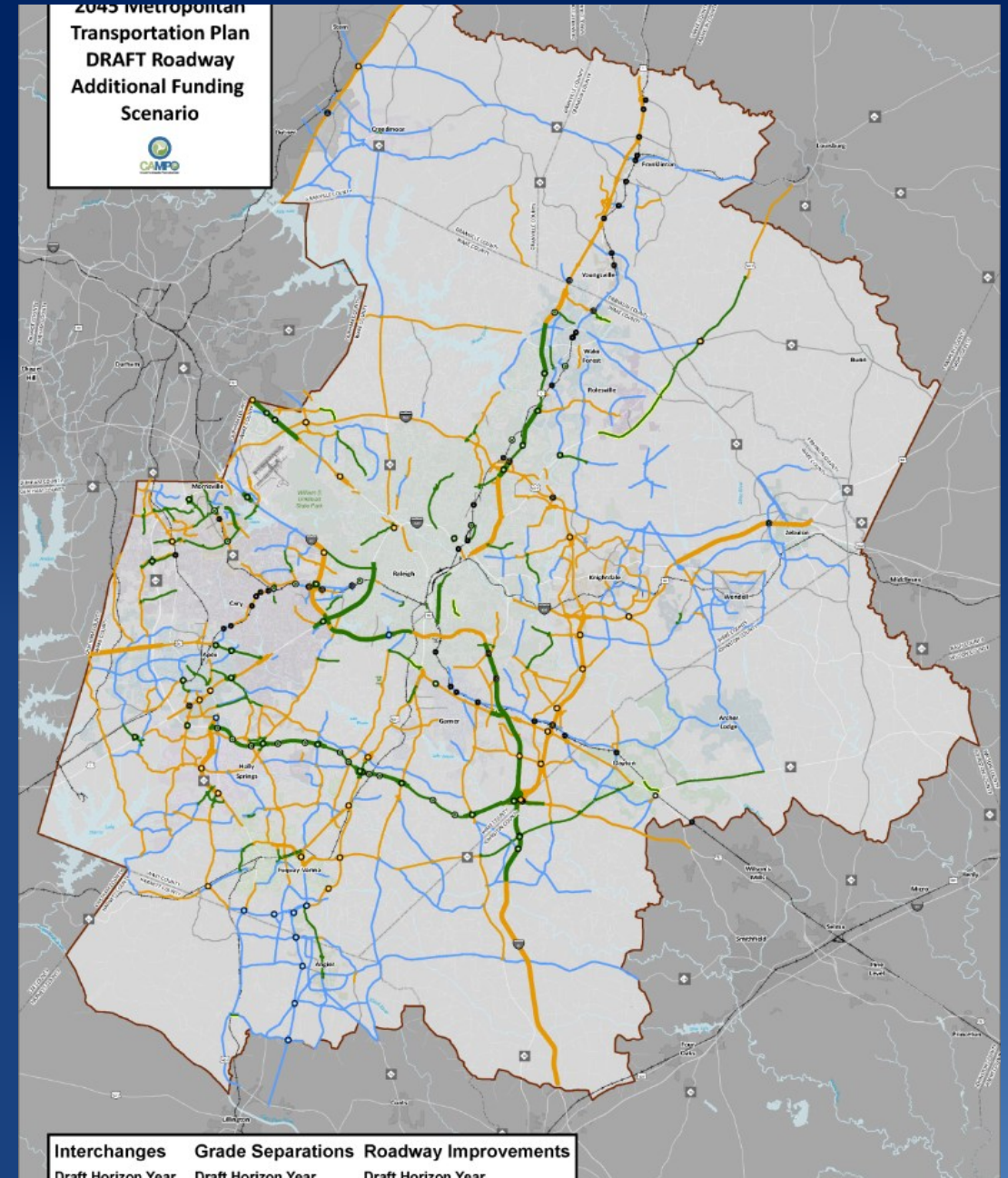
Ex...Calculating Multimodal Effectiveness

- 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 Transportat	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 the existing transportation facilities, plus the new facilities that will be built and in use during that timeframe



Upcoming 2050 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

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



<https://www.campo-nc.us/about-us/staff>



The End

Questions?

Raise Hand or Use Chat Box

