



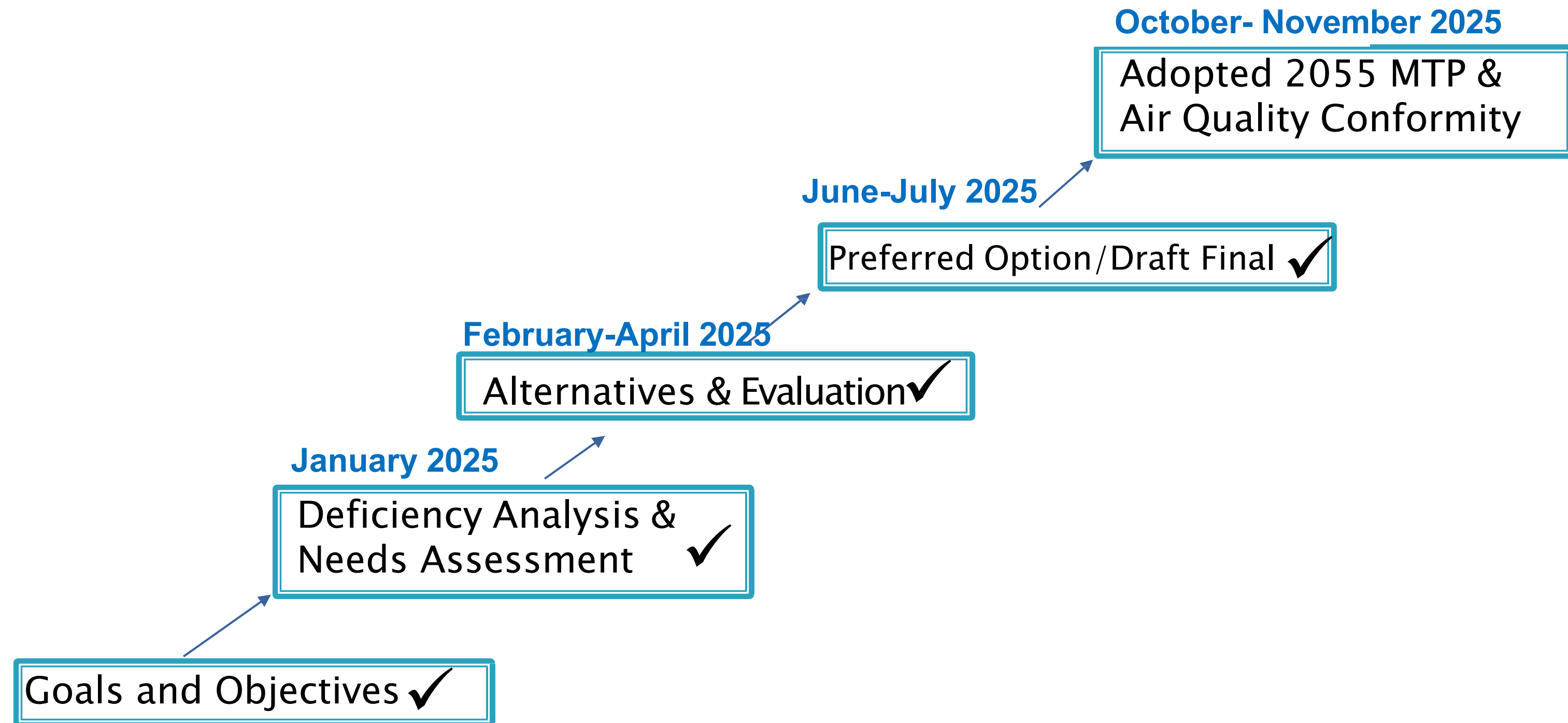
TRIANGLE WEST
Transportation Planning Organization

2055 Metropolitan Transportation Plan – Preferred Option

























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MILESTONES/SCHEDULE



Scenario Summary

	Deficiencies & Needs (Base)	Plans & Trends	Shared Leadership	All Together
Development Density				
Available Funding	\$	\$\$	\$\$\$	\$\$\$\$
Highway Investment				
Rail Investment				
BRT Investment				
Bus Investment				
Bike & Ped Investment				

The number of signs indicates a relative level—more signs suggest higher values and fewer suggest lower values. However, this scale is not linear; for example, two-dollar signs do not necessarily represent twice the investment of one-dollar sign.

Creation of the Preferred Option

01

Draft Preferred: Selecting and refining elements from three alternatives, based on the results of the alternatives analysis in relation to the MTP goals and objectives.

02

Obtaining the suggestions/comments from the TC & Board meetings and Staff members from Member Agencies.

03

Revising and finalizing the Preferred Option by performing the model runs & comparing results.

Mobility Investment Foundation - Technology & ITS Project

Intelligent Transportation System (ITS) Project *

❖ Multi-Modal Integrated Corridor Management (ICM):

- NC147 & I-885 from Briggs Ave via EEC to I-40
- US 15-501 North from US15 Business Road/South Square via Patterson Place, Eastgate and NC 54 to S Columbia St
- NC 54/Raleigh Rd from US15-501

❖ Managed Freeway:

- I-40 East from I-540 to US 15-501. It may include ramp meter, dynamic shoulder & so on (but no general-purpose lane addition)

*Projects are newly added to the 2055 MTP and its locations are shown on the roadway project map

Mobility Investment Foundation - Roadway

Roadway Project ([Map Link](#))

❖ 2050 MTP Highway Projects

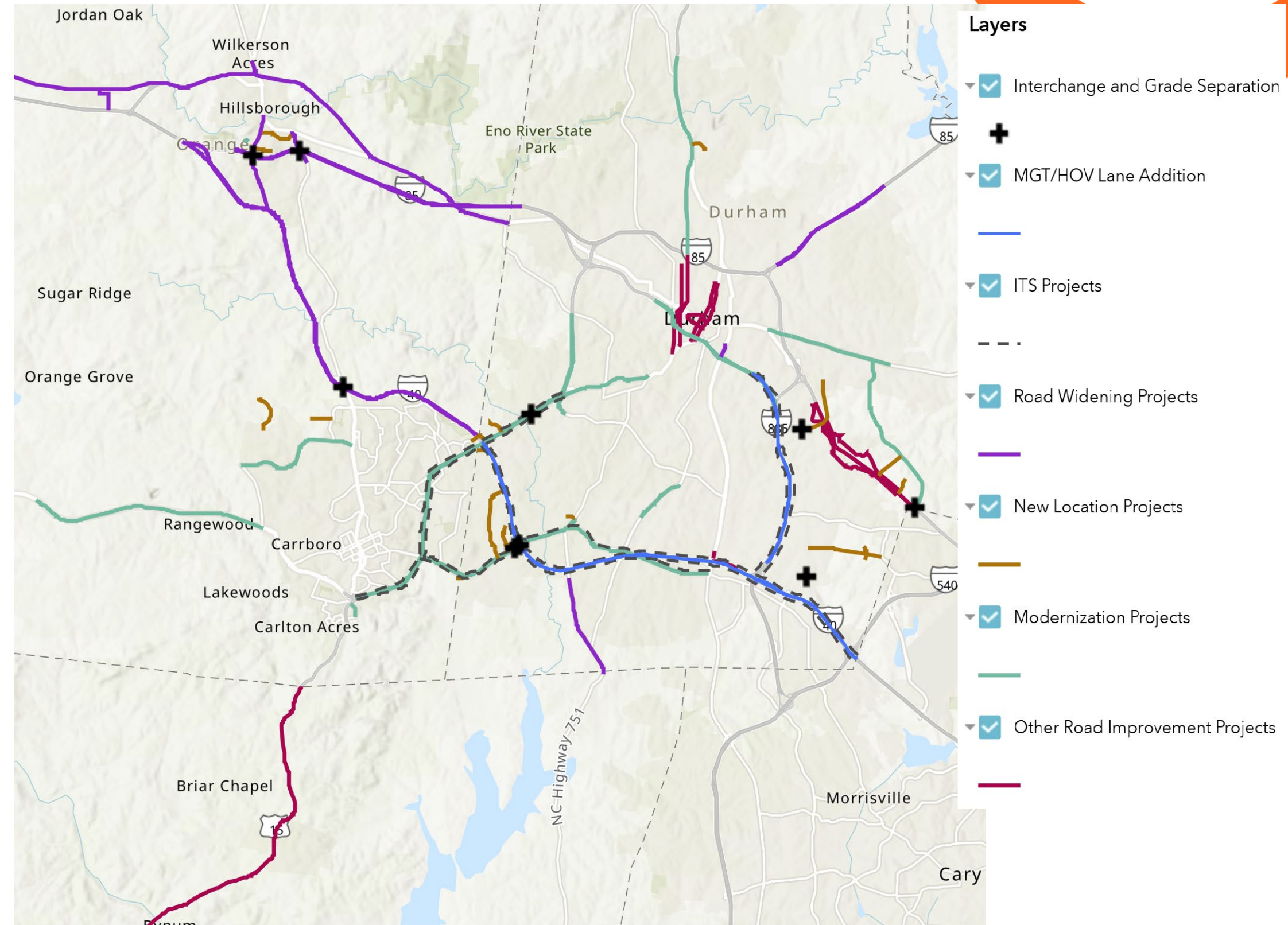
Adjustments:

- Removal of all completed projects (e.g., EEC, S Elliott Road Ext., etc.)
- Other

❖ New Projects/Adjustments:

- US-70 East: Boulevard conversion w/ parallel collectors
- US-70 West: Widening & multimodal Improvement
- I-85: Widening, I-885 to Red Mill Rd
- Transit Advantage – HOV* Lane addition
 - NC 147/I-885: from Briggs Ave via EEC to I-40
 - I-40: I-540 via I-885 to US 15-501

* HOV Lane: High Occupancy Vehicle Lane



Mobility Investment Foundation - Transit

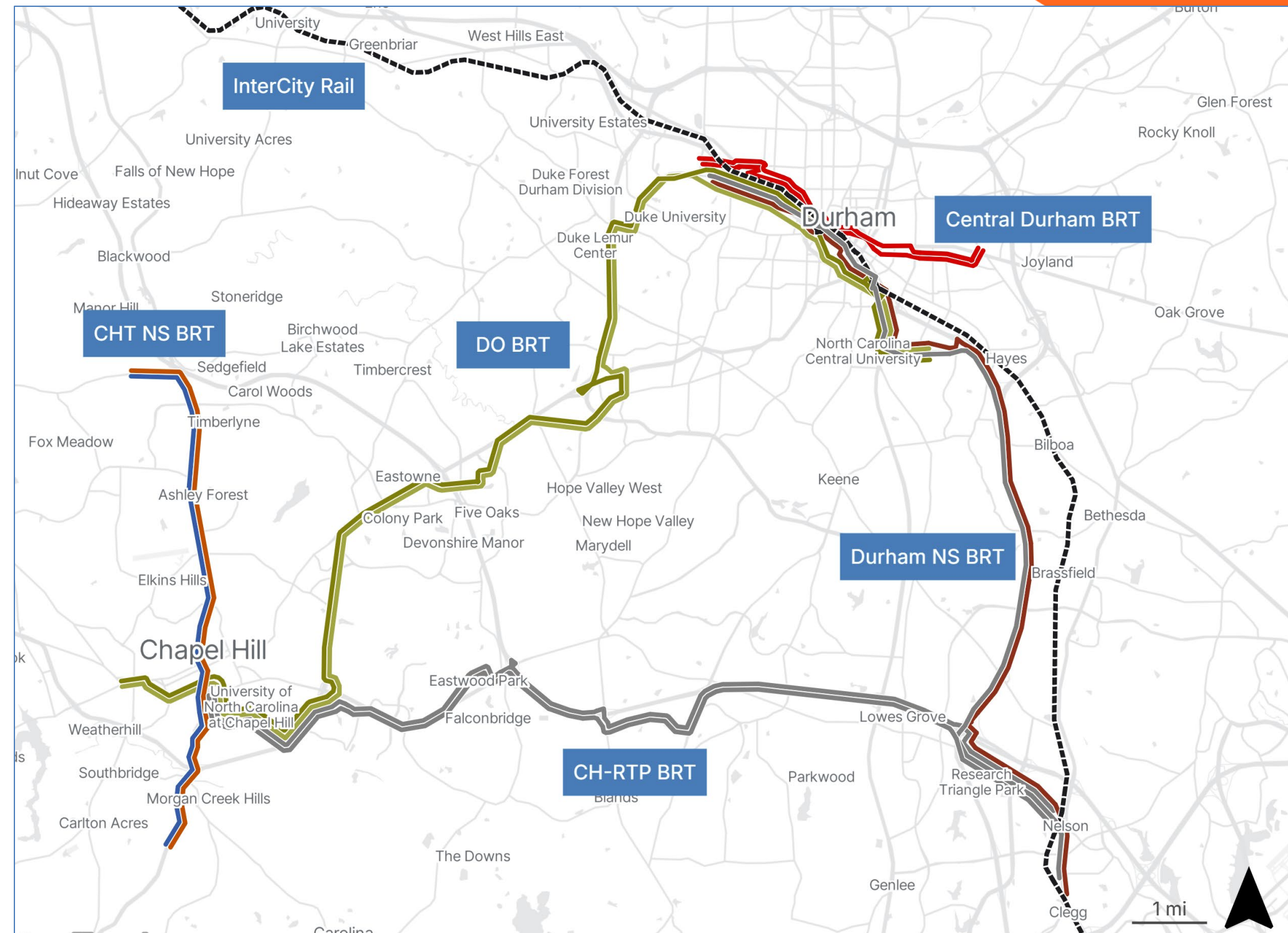
Fixed Guideway Transit ([Map Link](#))

- Intercity Passenger Rail Stations at RTP, Durham, Hillsborough w/ Transit Centers
- Chapel Hill North-South (NS) BRT Line
- Central Durham BRT Line
- Durham-Orange (DO) BRT Line, extended to Carrboro
- Duke-Durham Station-RTP BRT Line
- Chapel Hill - South Point – RTP BRT Line

Bus Lines([Map Link](#))

- Short-Range Plans (Funded Projects)
- County Transit Plans (Funded Projects)
- Bus Line Alignment adjustment
- New Bus Lines (to extend the converge)
- Service Frequency & Hour Changes adjustments

Fixed Guideway Transit Map



Mobility Investment – Bike and Pedestrian

Bike and Pedestrian

The level of bicycle and pedestrian facility investment is based on a compilation of the TPO's local government plans, including:

- 175 miles of sidewalk per decade
- 70 miles of shared use paths per decade
- 80 miles of protected bike lanes per decade
- 20 miles of bicycle boulevards per decade

Socioeconomic Data

County Control Total - Jobs

County	2020	2055	2020-2055	Change (%)
Chatham*	12,272	25,964	13,692	112%
Durham	235,002	447,009	212,007	90%
Orange	74,721	123,501	48,780	65%
Total	321,995	596,474	274,479	85%

Fast growth, especially Durham and Chatham counties.

County Control Total - Household Population

County	2020	2055	2020-2055	Change (%)
Chatham*	51,616	99,178	47,562	92%
Durham	310,609	461,765	151,156	49%
Orange	137,348	186,631	49,283	36%
Total	499,573	747,574	248,001	50%

Employment growth outpaces population growth.

* Only includes portion of Chatham County in the Triangle Region model (TRM) area.

Performance Measures – Region/TPO

2055 Transportation Supply	Deficiency - Base	All Together	Increase (%) to Base	Preferred Option	Increase (%) to Base
Roadway Lane Miles					
Freeway (Incl. HOV)	500	509	2%	550	10%
Arterial & Above	911	1,322	45%	1,322	48%
Transit Service Hours					
GoTriangle*	30,127	74,680	148%	84,852	182%
CHT, GoDurham & Others	26,071	46,554	79%	34,837	34%

Vehicle Miles Traveled (VMT)
Vehicle Hours Traveled (VHT)
Passenger Miles Traveled (PMT)

*Gotriangle Service Area Covers Wake County

Increased Transit Service Mile leads to higher PMT and lower VMT and VHT

Increased roadway investment leads to higher VMT and lower VHT

2055 Performance Measure	Deficiency-Base	All Together	Increase (%) to Base	Preferred Option	Increase (%) to Base
VMT - WeekDay	19,430,923	19,215,989	-1.1%	19,480,831	0.26%
VHT - WeekDay	459,585	441,758	-3.9%	441,140	-4.01%
PMT - WeekDay	385,041	988,070	156.6%	990592	157.27%

Corridor Performance Measure

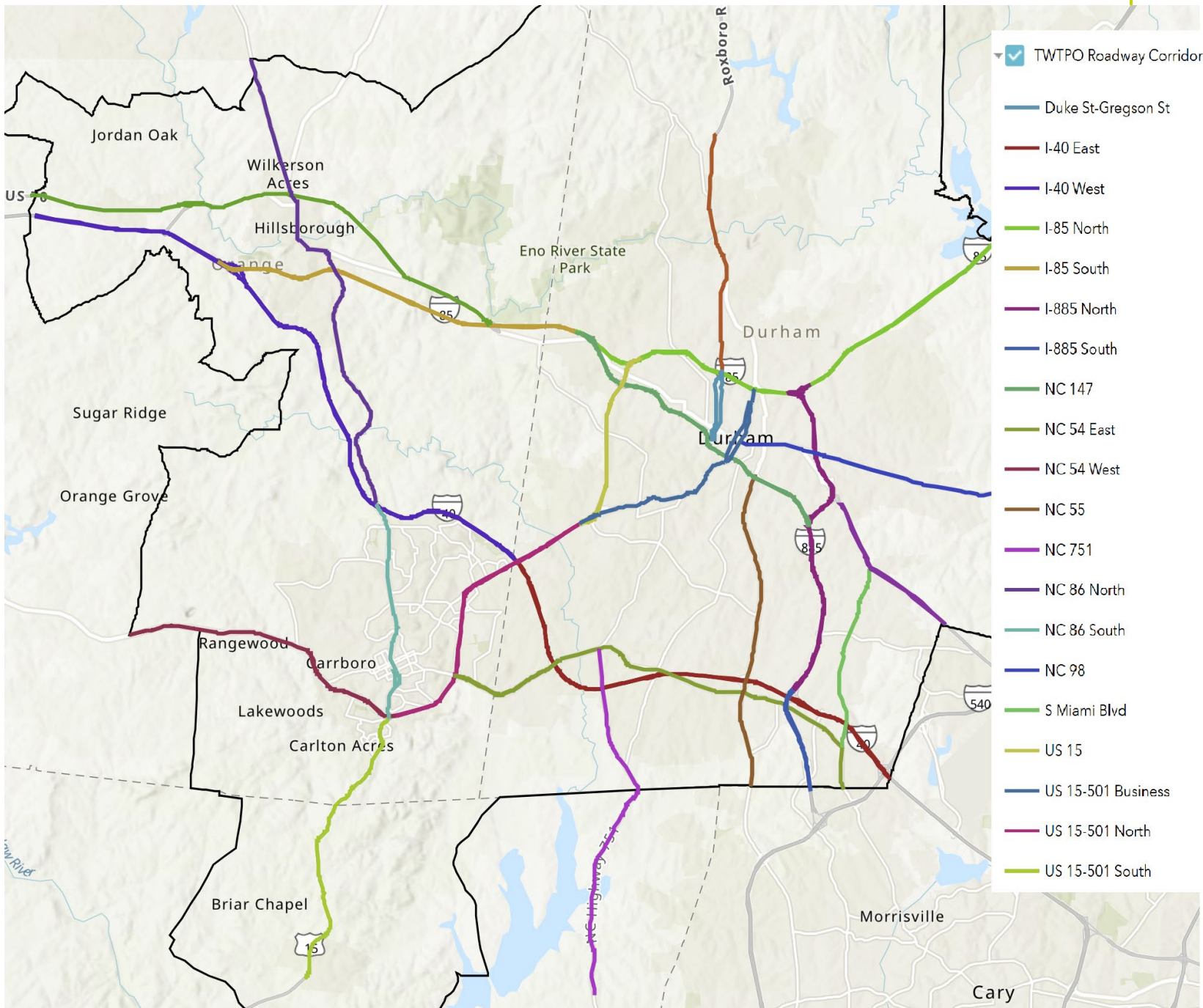
Maximum Travel Time Index (TTI) /%Extra Time (ET) By Time of Day

Travel Time Index is the average travel time divided by the free-flow travel time, and $\%ET = TTI - 1$, a measure of peak traffic congestion

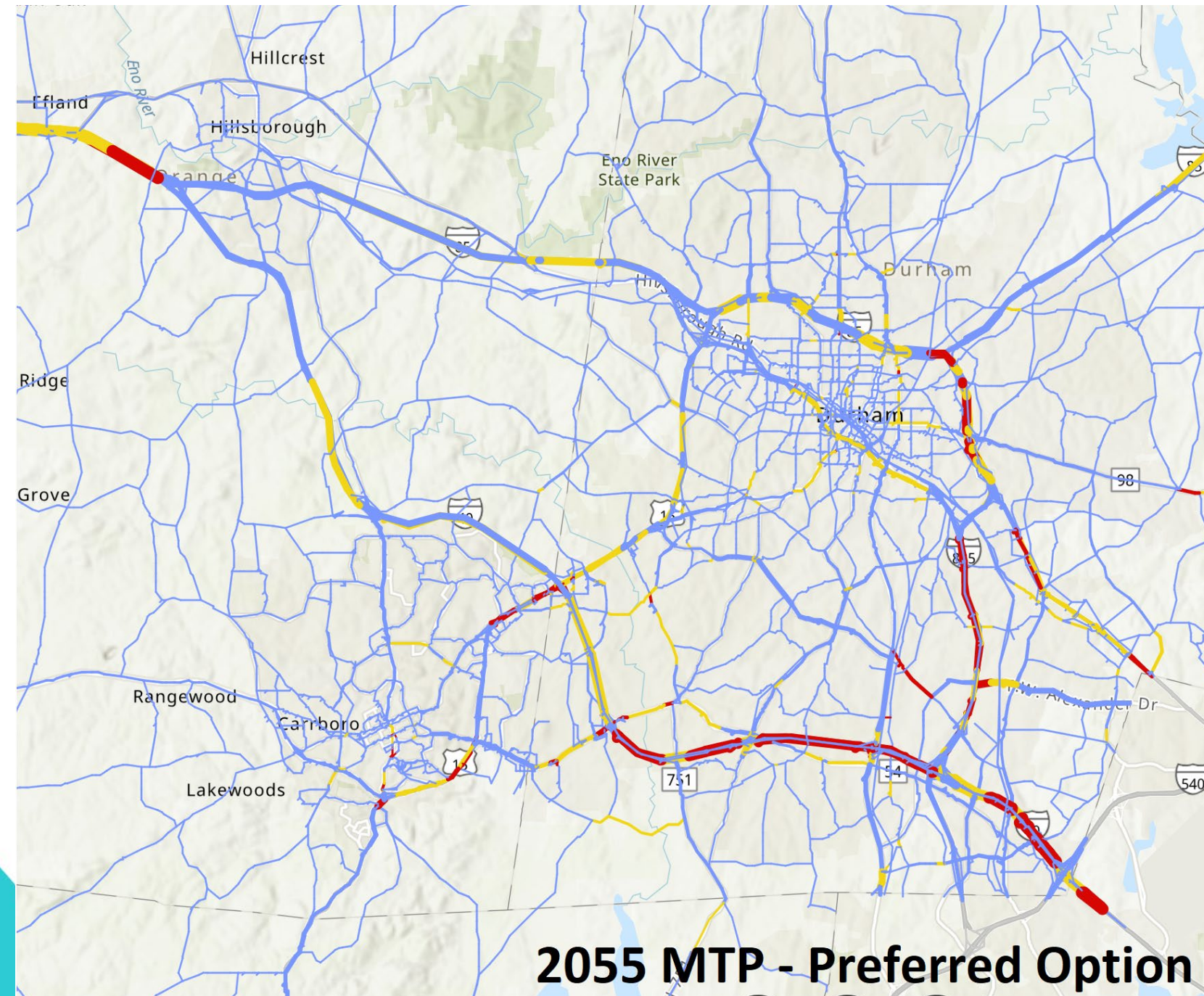
$\%ET \geq 50\%$ ($TTI \geq 1.5$): moderate to severe congestion

2055 (E+C) - Base		2055 Preferred Option	
Top 10 TTI/%Extra Time		TOP 10 TTI/%Extra Time	
Corridor Name	%Extra Time	Name	% Extra Time
US 70 East	84%	US 15-501 North	51%
I-85 South	71%	US 70 East	50%
I-40 East	57%	I-40 West	42%
I-40 West	55%	I-40 East	34%
US 15-501 North	52%	NC 98	32%
NC 751	46%	I-885 North	31%
US 70 West	43%	NC 86 South	24%
I-885 North	38%	NC 751	23%
NC 54 East	35%	I-85 South	22%
NC 98	34%	NC 54 East	20%

TW TPO Roadway Corridor ([Map](#))



Network Measure – Daily Traffic Volume/Capacity

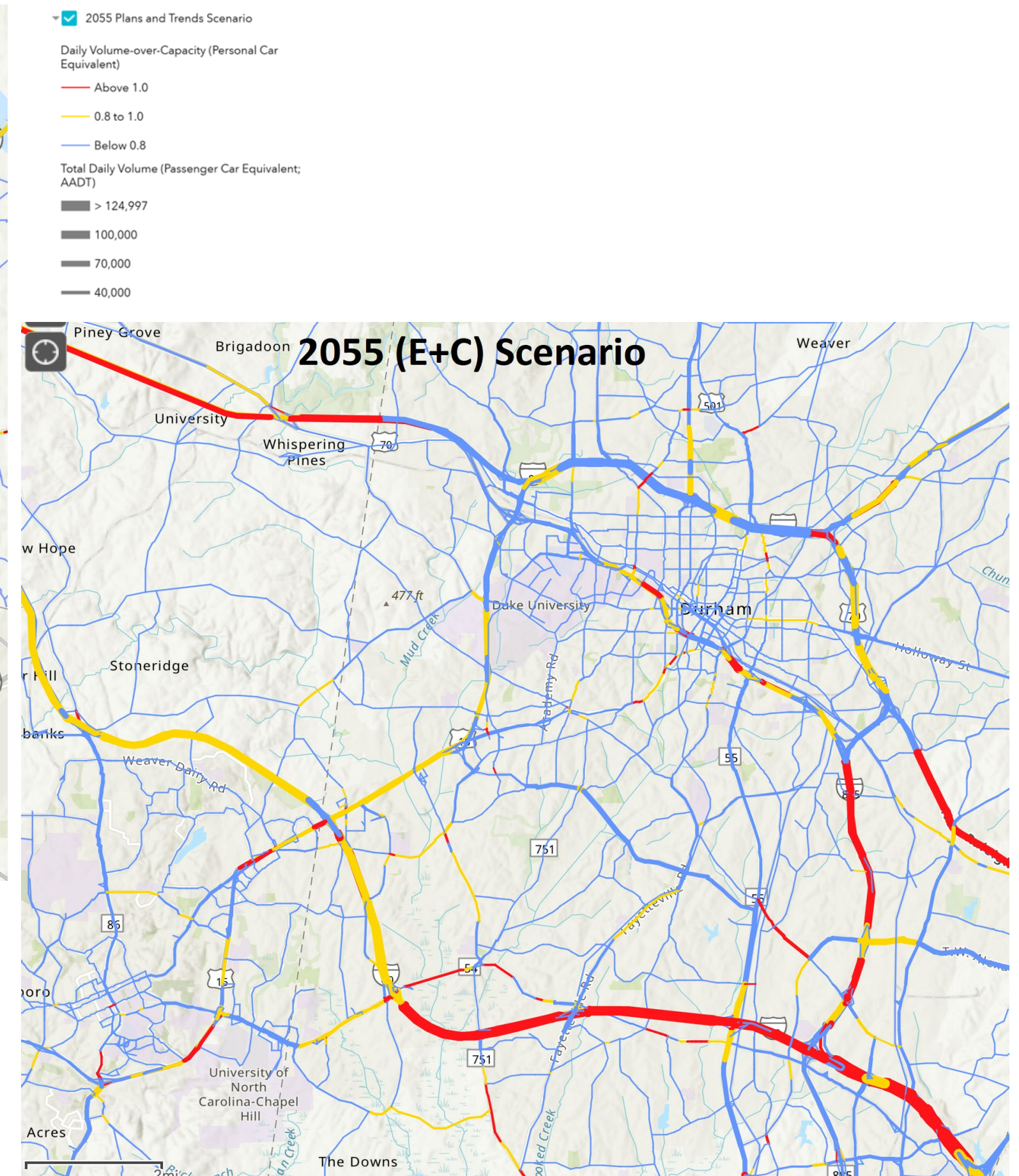


V/C ≥ 1 (Red) : traffic exceeds the roadway capacity, Highly Congested
1 > V/C ≥ 0.8 (Yellow) : some congestions.

2055 (E + C) Scenario: Existing plus Committed Condition for Deficiency and Needs Analysis. It is a base scenario.

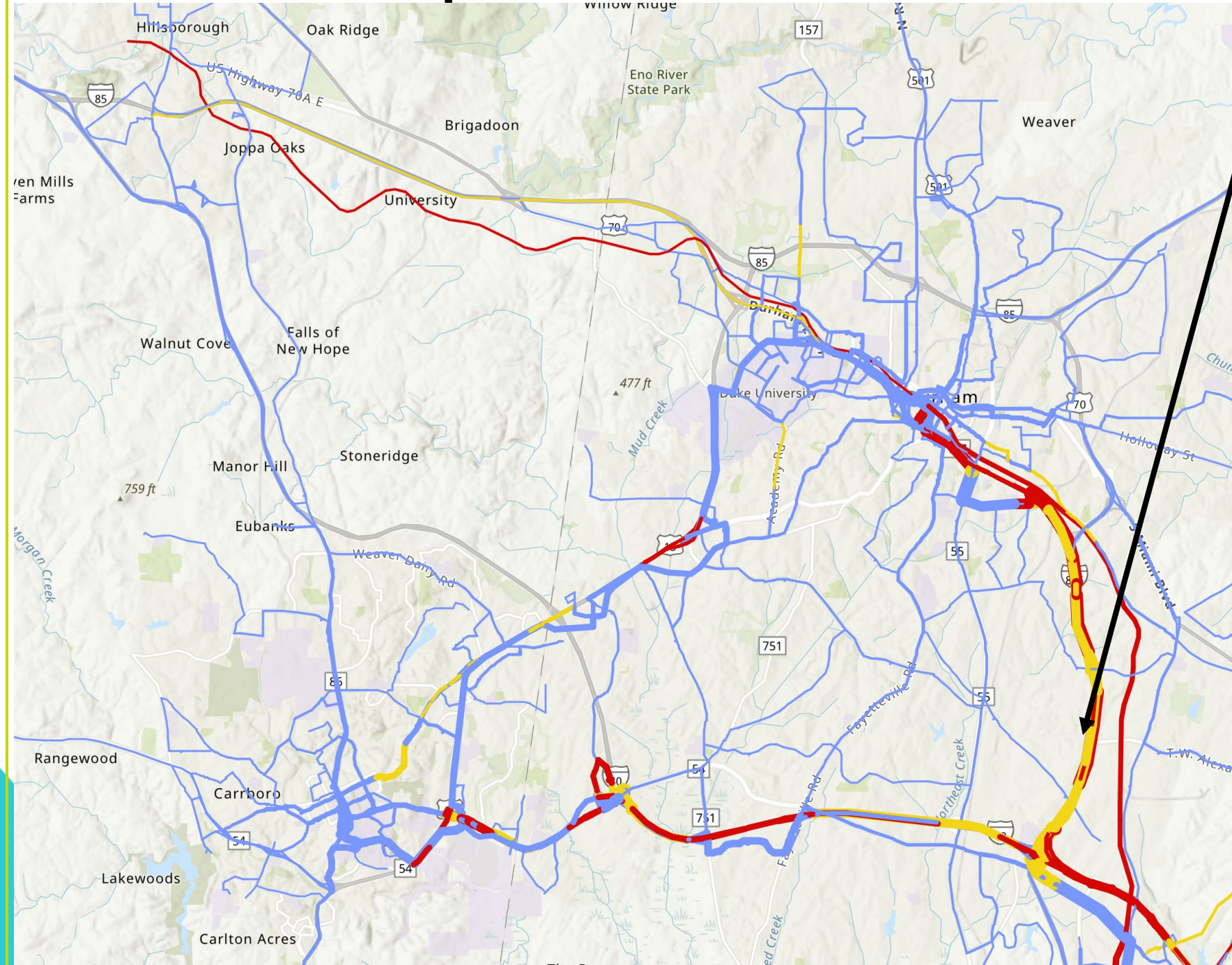
[Link to 2055 \(E+C\) Map](#)

[Link to 2055 Preferred Option](#)



Network Measure – Daily Transit V/C Maps

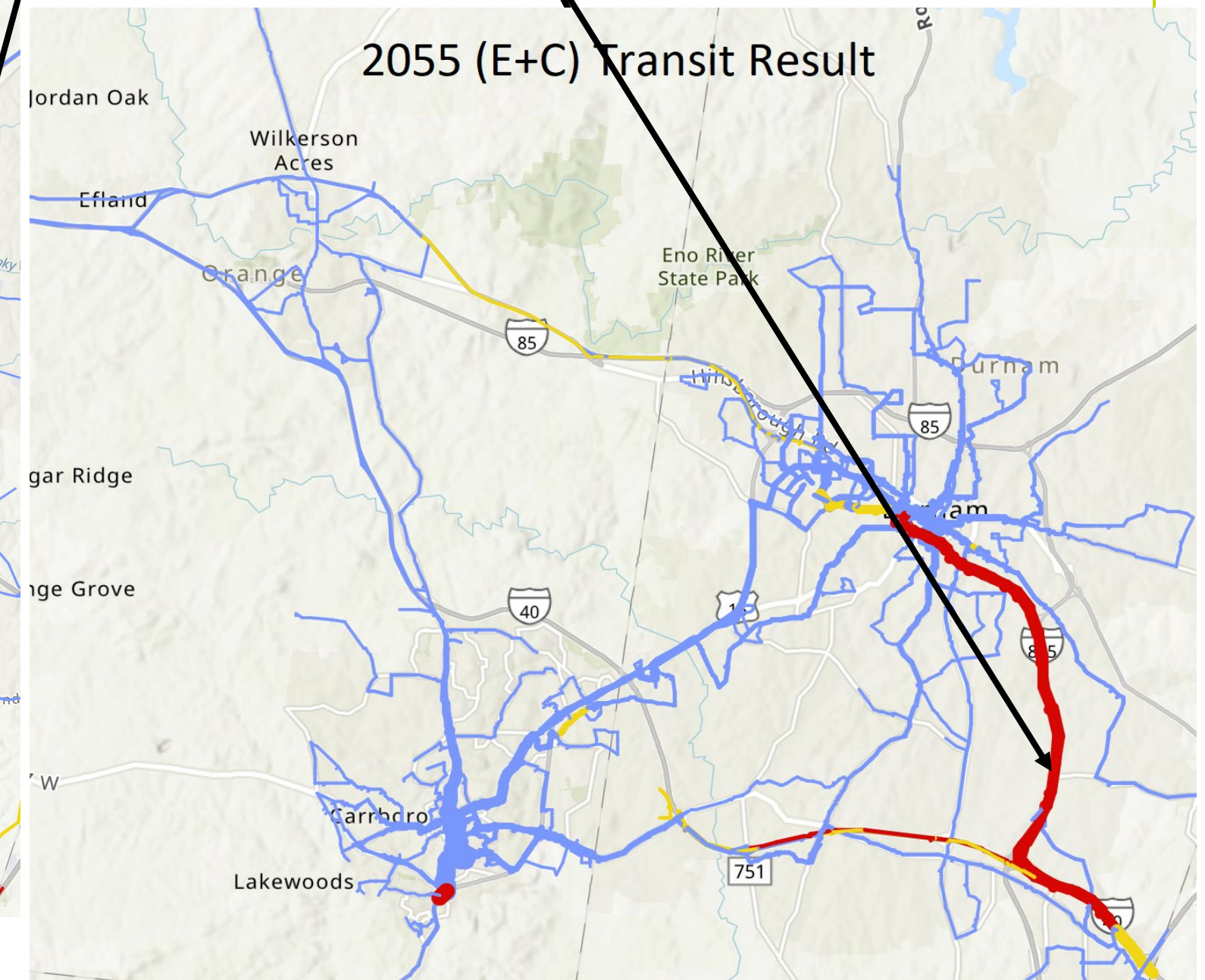
2055 Preferred Option



$V/C \geq 1.5$ (Red): Passenger volume exceeds 150% of seated capacity, indicating severe overcrowding and high congestion on buses.

$1.0 \leq V/C < 1.5$ (Yellow): Passenger volume exceeds seated capacity, suggesting moderate congestion with standing passengers on buses.

Overcrowding buses on Durham Frwy looks better after adding BRT in Preferred Option



[Link to 2055 \(E+C\) Map](#)
[Link to 2055 Preferred Option](#)

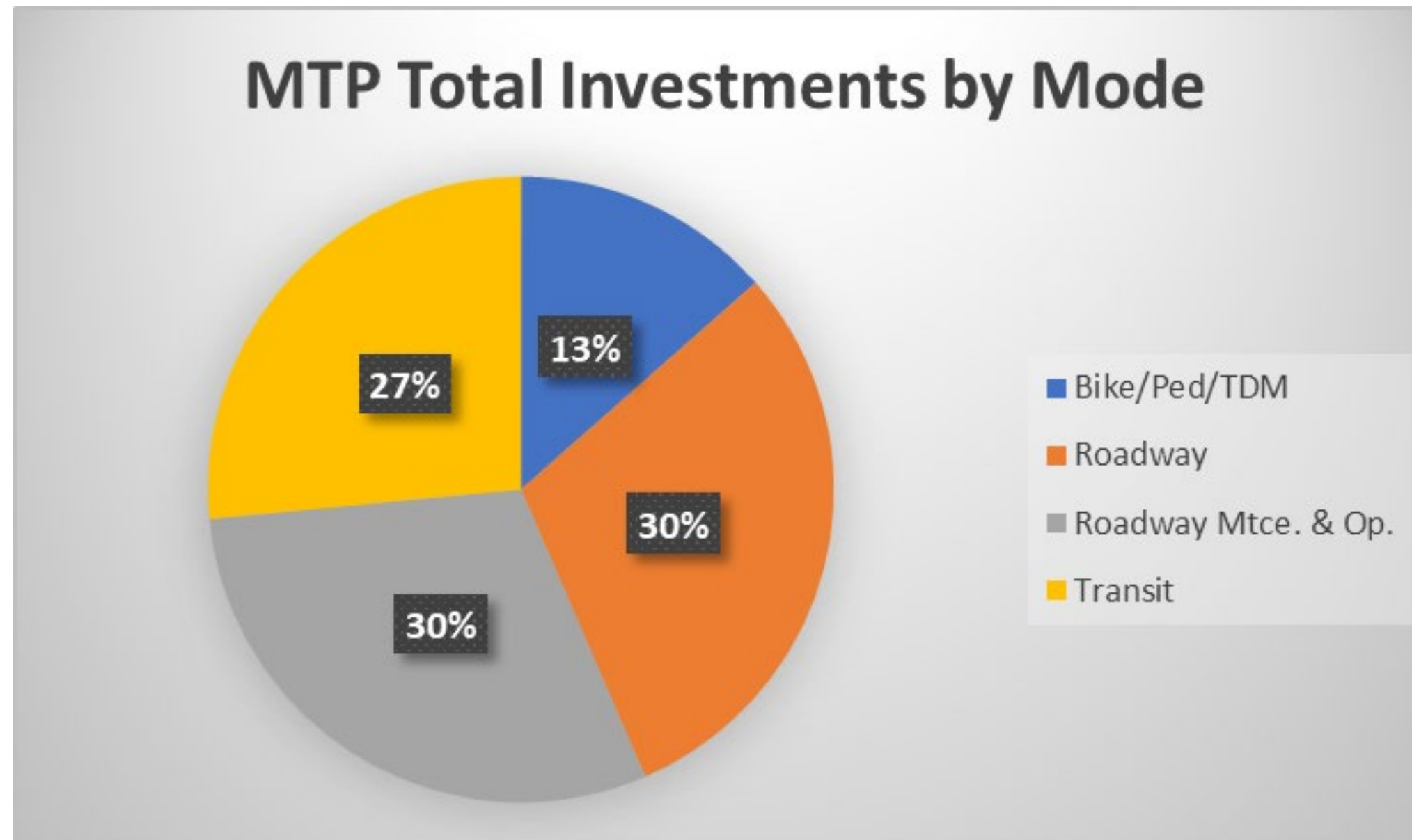
Revenue Projections

Revenue Forecasts in Constant (2026) Dollars:

Fund Sources	2026 Dollars
STI	6,569,326,027.53
Highway Fund (M&O)	3,701,490,867.98
Transit Local + Federal	4,752,894,580.39
NC FIRST Commission	3,662,454,389.75
Additional Local Tax/Fee	4,422,227,961.47
CMAQ, HSIP, & CRP	207,370,433.18
Fed Bridge	97,391,023.39
Total(All)	23,413,155,283.69

Investment – Preferred Option

MTP Investment	(\$ in billions)	% of Total
Bike/Ped/TDM	2.7	14%
Roadway	6.0	30%
Roadway Mtce. & Op.	6.0	30%
Transit	5.3	27%
Total	20.0	100%



Today's Action

Authorize staff to release the Preferred Option and results for a 45 - day public comment period



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THANK YOU!