



NC Capital Area **Metropolitan Planning Organization**

Technical Coordinating Committee Meeting

March 5, 2020

10:00 AM

1. Welcome and Introductions

2. Adjustments to the Agenda

3. Public Comments

This is an opportunity for comments by those in attendance. Please limit comments to three minutes for each speaker.

4. Minutes

4.1 TCC Meeting Minutes: February 6, 2020

Requested Action:

Approve the February 6, 2020 Meeting Minutes.

5. Regular Business

5.1 FY2018-2027 Transportation Improvement Program Amendment #11

5.1 FY2018-2027 Transportation Improvement Program Amendment #11

NCDOT's STIP Unit notified the MPO of amendments to the FY2018-2027 State TIP. The MPO should update the TIP to reflect these changes (federal requirement - TIP and STIP must be identical).

Amendments also include the addition of Wake Transit Funding and the addition of the LAPP FFY2021 Investment Program.

Open for public review and comment from February 14-March 15.
Public Hearing scheduled for March 18, 2020 Executive Board meeting.

Changes since Public Comment Opening

Changed funding source on 3 FFY2021 LAPP projects from CMAQ to STBGDA

- EB-6046
- EB-6047
- EB-6048

5.1 FY2018-2027 Transportation Improvement Program Amendment #11

Requested Action:

Recommend approval of Amendment #11 of FY2018-2027
Transportation Improvement Program to the Executive Board.

5.2 LAPP Program and Prior Year LAPP Projects Update

CAMPO Rescission Impacts

Prior Year Project Determination

- FFY2019 projects have until the end of FFY2020 to request funding authorization.
- FFY2018 and prior year projects have until the end of the first quarter of FFY2020 (December 31, 2019) to request funding authorization.
- Projects that do not reach their respective deadlines must have Executive Board approval to request funding authorization; otherwise, the project will be deprogrammed.

Future Funding Implications Contingent On: Prior Year Project Liability, Additional Funding Requests, Future Programming.

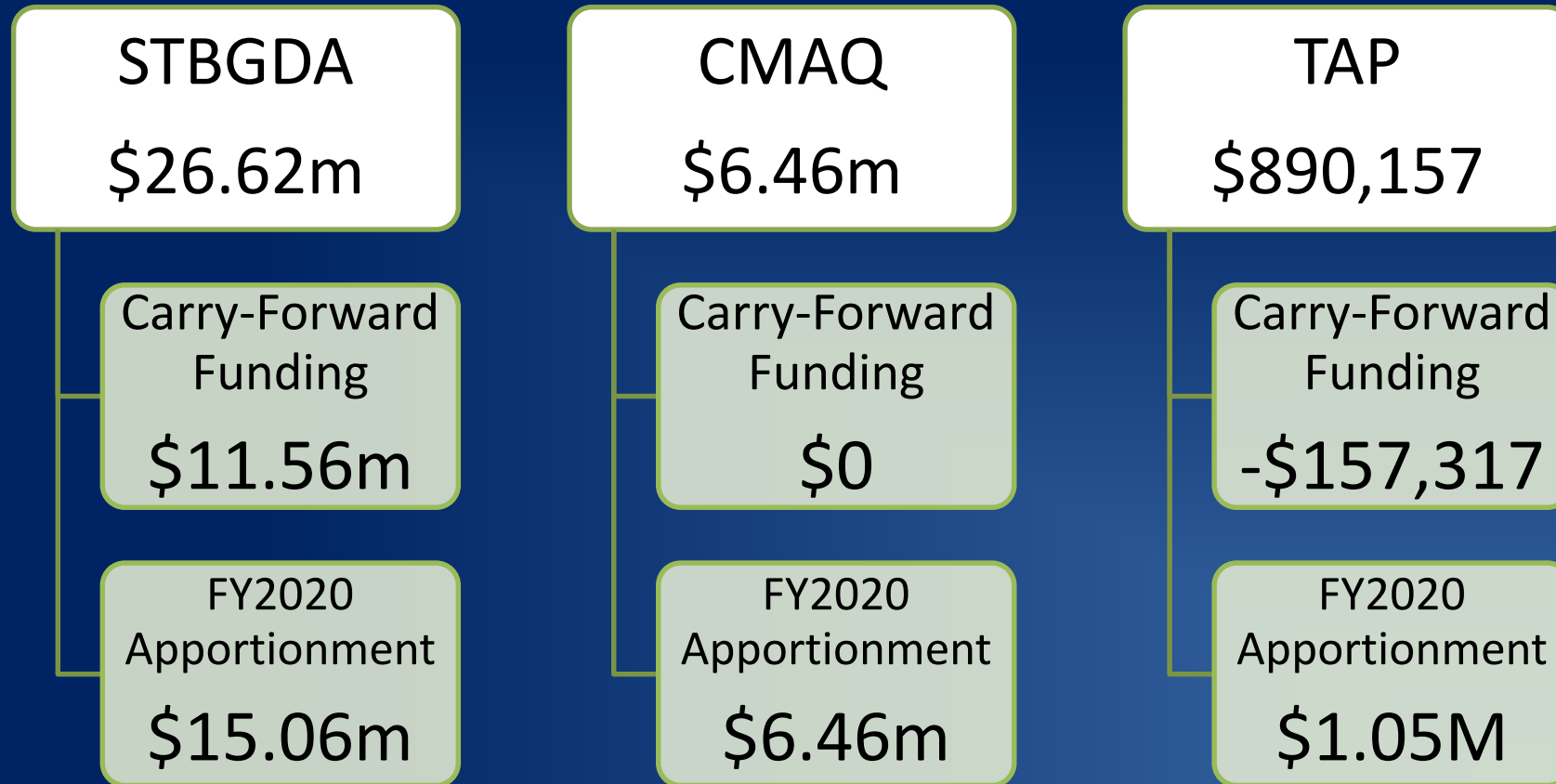
Prior Year Projects at Beginning of FFY2020

TIP ID	Project	Jurisdiction	LAPP Year	Phase(s)	Fund	
U-5537	Lake Pine Drive	Apex	2015	CON	STBGP	\$ 538,153
U-5530OB	Leesville SRTS	Raleigh	2016	CON	STBGP	\$ 442,480
C-5604OD	Crabtree Creek West Greenway	Raleigh	2017	CON	CMAQ	\$ 1,547,000
U-5118BB	Durham Road OI	Wake Forest	2017	ROW	STBGP	\$ -
U-5530PA	NC 210 Sidewalk Connections	Angier	2017	CON	STBGP	\$ 356,680
U-5928	Peakway South Salem Interchange	Apex	2017	CON	STBGP	\$ 2,500,000
U-5118FB	Arendell Ave Access Management	Zebulon	2017	CON	STBGP	\$ 916,000
C-5604JA	Utley Creek Greenway	Holly Springs	2017	ROW, CON	CMAQ	\$ 508,800
C-5604HA	Mingo Creek Greenway	Knightdale	2018	CON	CMAQ	\$ 1,760,000
C-5604OF	Blue Ridge Road Pedestrian Improvements	Raleigh	2019	ROW, CON	CMAQ	\$ 3,598,800
C-5604FA	Beaverdam Creek Greenway	Zebulon	2019	CON	CMAQ	\$ 1,605,196
U-6095	Rock Quarry Road Part A	Raleigh	2019	PE, ROW, CON	STBGP	\$ 9,928,100
C-5604AA	Kelly and Apex Barbecue Pedestrian Improvements	Apex	2019	CON	CMAQ	\$ 647,500
U-6094	Holly Springs Road Widening	Holly Springs	2019	CON	STBGP	\$ 1,216,804
U-6095	New Bern Ave Bottleneck Elimination	Raleigh	2019	ROW, CON	STBGP	\$ 409,600
C-5604ID	Higgins Greenway	Cary	2019	CON	CMAQ	\$ 700,000
U-5530OC	Navaho Drive	Raleigh	2019	CON	TAP	
	Total					\$ 26,675,113

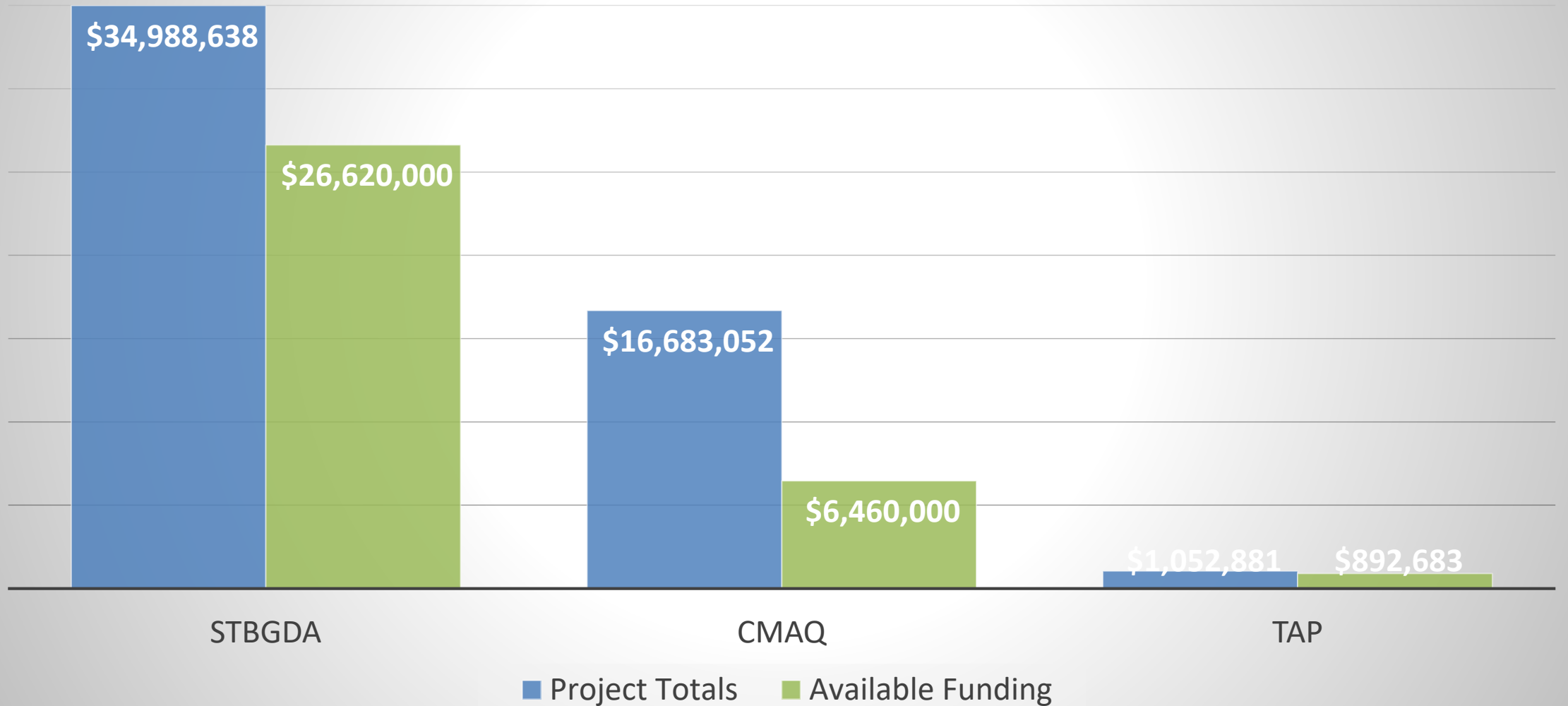
FFY2020 LAPP Projects

Projects	Jurisdiction	Source	Amount
NC 98 at Camp Kanata	Division 5	STBGDA	\$ 1,097,600
42 E Extension	Clayton	STBGDA	\$ 6,735,000
NC 42 Turn Lanes	Division 5	STBGDA	\$ 1,834,750
White Oak, Hebron, Ackerman Roundabout	Garner	STBGDA	\$ 1,616,712
Judd & South Main Intersection Improvements	Fuquay-Varina	CMAQ	\$ 494,610
Carpenter Fire Station Widening	Cary	STBGDA	\$ 2,533,500
Hwy 55 and NE Judd Parkway Intersection Improvements	Fuquay-Varina	CMAQ	\$ 1,516,106
Crabtree Creek Greenway- Bond to High House	Cary	CMAQ	\$ 1,320,000
Jones Street Sidewalk	Fuquay-Varina	CMAQ	\$ 725,040
Laura Duncan Pedestrian Improvements	Apex	STBGDA	\$ 387,800
Crabtree Creek Greenway Connector	Cary	CMAQ	\$ 2,260,000
Junny Road Sidewalk Extension	Angier	STBGDA	\$ 1,426,000
Beaver Creek Greenway Extension	Apex	TAP	\$ 1,052,881
GoRaleigh Bus Stop Sites	GoRaleigh	STBGDA	\$ 2,000,000
Total			\$ 24,999,999

Available Funding Balances at Beginning of FFY2020



Available Funding to Spend Versus Existing Project Totals



Overprogramming

What: CAMPO programs (awards) more funding for projects in a fiscal year than is actually received through allocation.

Why: CAMPO overprograms to help obligate (protect) as much funding as possible in a fiscal year. Overprogramming allows a buffer in case projects fall behind schedule or are cancelled.

How: CAMPO generally overprograms around 20% above anticipated STBGDA and TAP allocations.

* Overprogramming is noted in the LAPP Handbook, and is another reason why projects are encouraged to obligate their funding as early as possible in their awarded fiscal year.

Scenarios Moving Forward

Scenario 1: All prior year and FFY2020 projects obligate in FFY2020

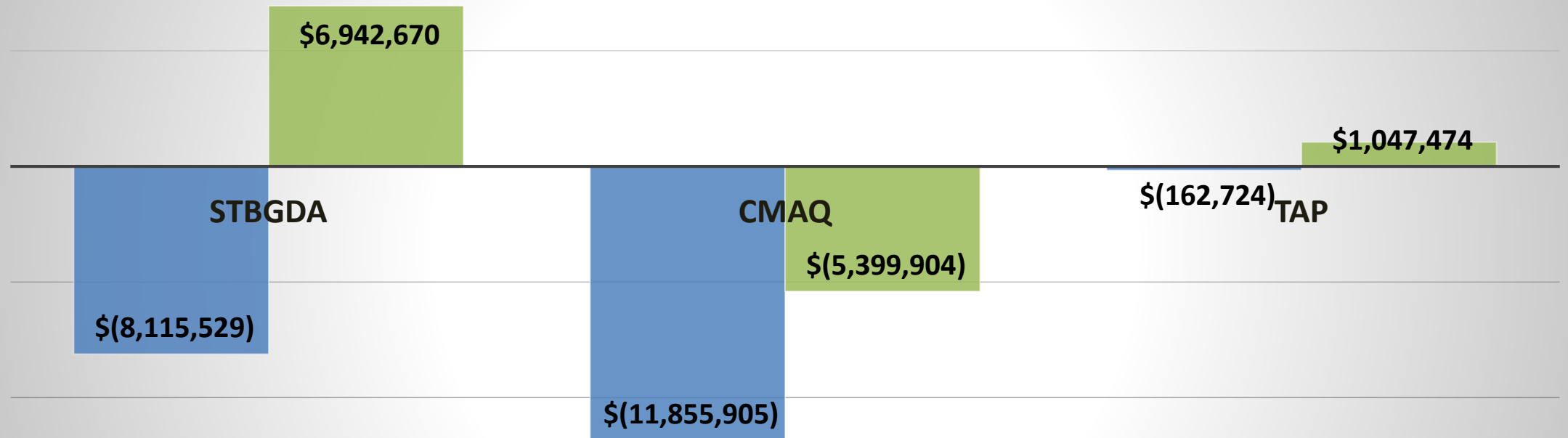
Scenario 2: All prior year projects obligate and 33% of FFY2020 projects obligate in FFY2020

Scenario 3: Prior year projects are cancelled and 33% of FFY2020 projects obligate in FFY2020

* 33% is average obligation rate based on prior year data

Scenario 1: All Prior Year and FFY2020 Projects Obligate in FFY2020

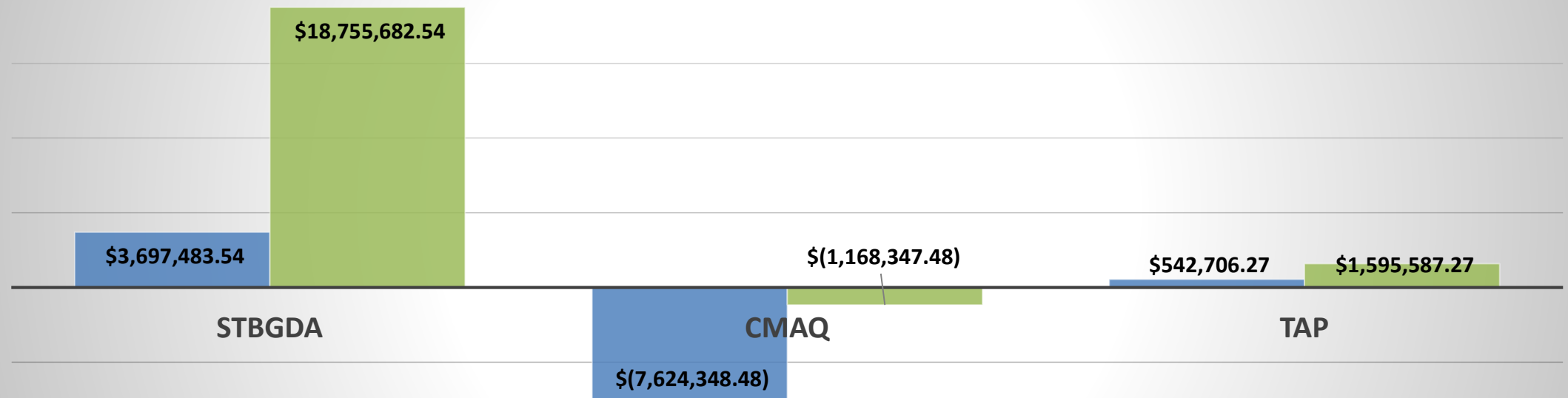
Scenario 1: Available Funding September 30 vs October 1



- Remaining Balance After ALL LAPP Projects Obligate (FY20 and prior)
- Remaining Balance After FFY21 Apportionment

Scenario 2: All Prior Year Projects Obligate at 33% of FFY2020 Funding Obligate in FFY2020

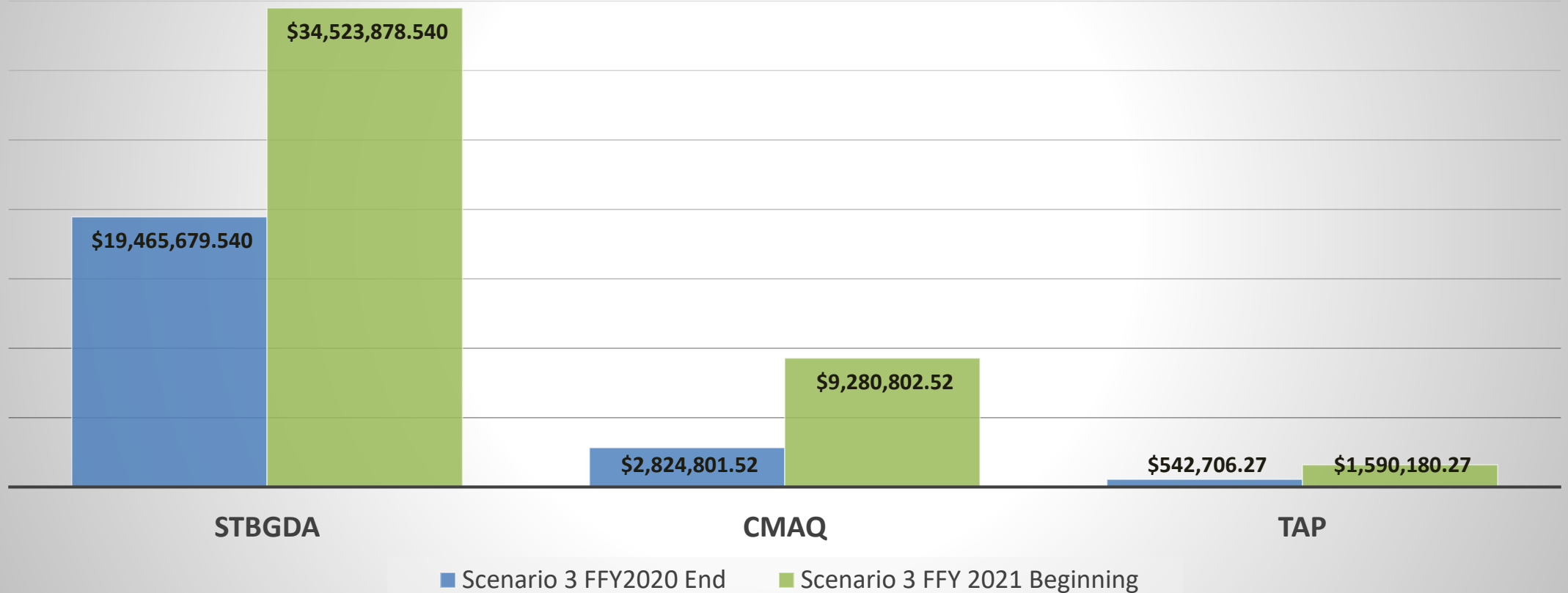
Scenario 2: Available Funding September 30 vs October 1



- Scenario 2 FFY20 End Remaining Balance IF FY20 projects obligate at obligation rate of 33% and all Prior Year Projects Obligate
- Scenario 2 FFY21 Beginning Remaining Balance After FFY21 Apportionment

Scenario 3: Prior Year Projects are Cancelled and 33% of FFY2020 Funding Obligate in FFY2020

Scenario 3: Available Funding September 30 Versus October 1



Potential Options Moving Forward

- Redistribute funding between funding sources
- Cancel some/all Prior Year LAPP projects that do not meet respective grace period deadlines
- Program lower funding amounts in future LAPP Call for Projects
 - Gradual reduction over time
 - Significant reduction in 1 or 2 fiscal years

5.2 LAPP Program and Prior Year LAPP Projects Update

Requested Action:
Receive as information.

5.3 Prioritization 6.0 Modal Candidates Project Lists

2023-2032 TIP/STIP Development

SPOT Actions - MPOs

1. Select Projects to Submit for Scoring

(44 projects per mode)

2. Assign Local Input points

- Regional Impact Points *(2500 pts)*
- Division Needs Points *(2500 pts)*

3. Adopt TIP

Schedule Update

FINAL Prioritization 6.0 Schedule

2019						2020											
Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
BOT approves P6.0 Criteria & Weights		BOT adopts 2020-2029 STIP															
			MPOs, RPOs, & Divisions test, enter, and submit projects into SPOT Online							SPOT Reviews and Calculates Quant. Scores for All Projects (Existing + New)							
Notes: Blue Box = NC BOT Actions Yellow Box = MPO/RPO/Division Input Green Box = NCDOT Work Tasks																	
															Review period of all data & costs to be used for scoring (by MPOs, RPOs, and Divisions)		
																	NCDOT Provides Report to JLTOT

2021												2022					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
SPOT Reviews and Calculates Quant. Scores for All Projects (Cont'd.)												Key Dates: July 2019: BOT approves P6.0 Criteria & Weights October 2019: SPOT Online opens for testing, entering, and submitting projects (closes 5/1/2020) December 20, 2019: Carryover Project Deletions due for receiving extra submittals (one out, one in) Carryover Project Modifications due May 1, 2020: Area-Specific Weights due SPOT Online closes for submitting projects End of February 2021: Quantitative scores for all projects released Draft list of Programmed Statewide Mobility projects released March 1, 2021: Regional Impact Local Input Point window opens for 3 months (closes 5/28/2021) Deadline for Approval of Local Input Point Assignment Methodologies End of July 2021: Draft list of Programmed Regional Impact Projects released August 2, 2021: Division Needs Local Input Point window opens for 3 months (closes 10/29/2021) February 2022: DRAFT 2023-2032 STIP released					
	TIP Unit Programs Statewide Mobility Projects																
		MPOs, RPOs, & Divisions assign Regional Impact Local Input Points (with option to assign Division Needs Local Input Points)															
						SPOT finalizes Regional Impact scores and TIP Unit programs Regional Impact projects											
												MPOs, RPOs, & Divisions assign Division Needs Local Input Points					
												SPOT finalizes Division Needs Scores and TIP Unit programs Division Needs projects					
														NCDOT releases Draft STIP			
												NCDOT Provides Report to JLTOT					BOT adopts 2023-2032 STIP

SPOT Schedule & Next Steps

Public Hearing – April 15th

Executive Board Project List Approval – April 15th

CAMPO Submits Projects in SPOT Online by May 1st

Alternate Criteria Weights due – May 1st

5.3 Prioritization 6.0 Modal Candidates Project Lists

Requested Action
Receive as information.

5.4 NC 540 Bonus Allocation Programming

CAMPO Bonus Allocation

STI law provides Bonus Allocation funding for:

- Local funding participation
 - ½ of local contribution
- Highway Tolling
 - ½ value of toll revenue bonds
 - ½ forecasted revenue for 1st 10 years –operation costs
 - \$100 million maximum
 - Must be programmed within toll county
- Programming Limitations
 - 10 percent Regional/Division Needs
 - Must be obligated within 5 years
 - Use on highway or highway-related projects only

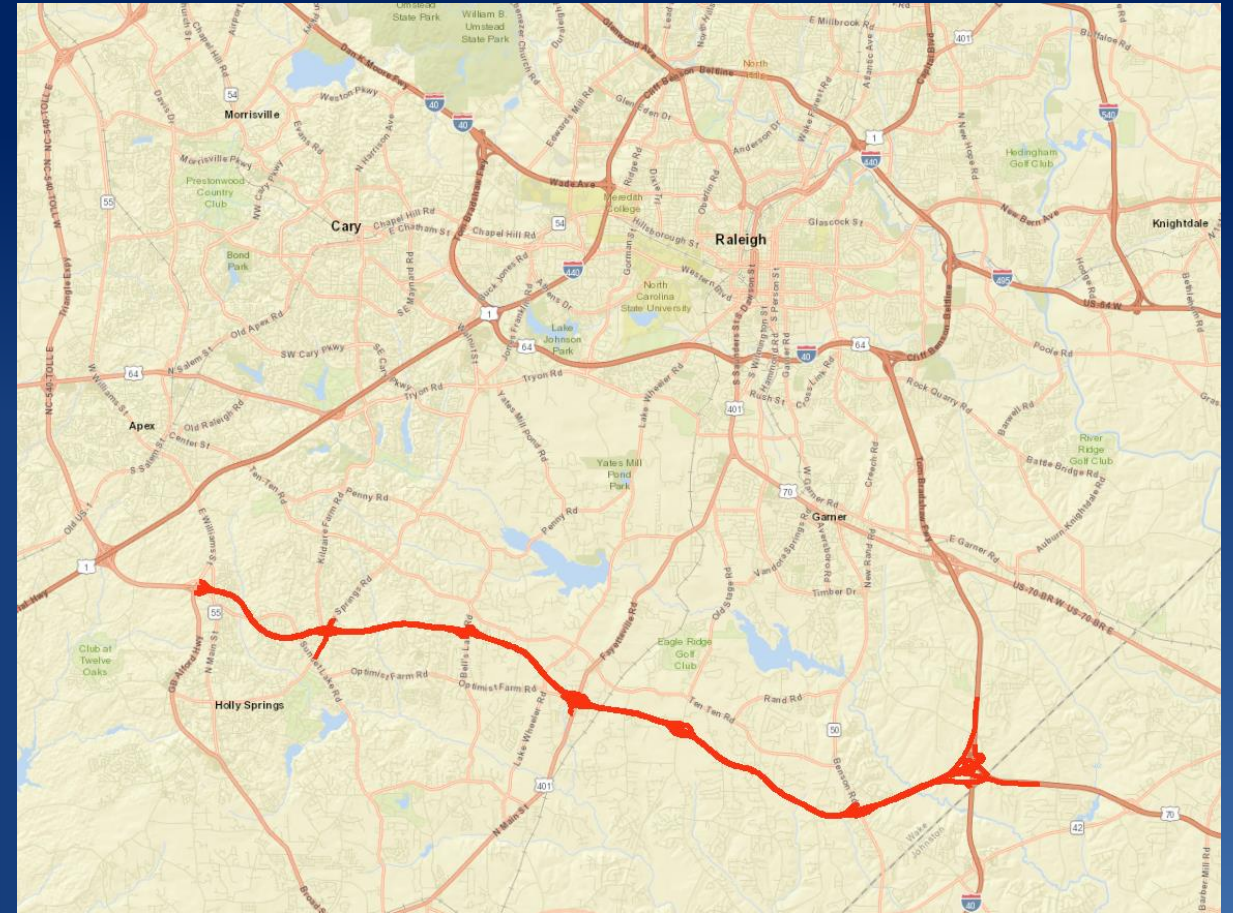
CAMPO Bonus Allocation

NC 540

R-2721: NC 540 fr/ NC 55 to US 401

R-2828: NC 540 fr/ US 401 to I-40

\$100,000,000 Bonus Allocation
Must be programmed 2021-2025

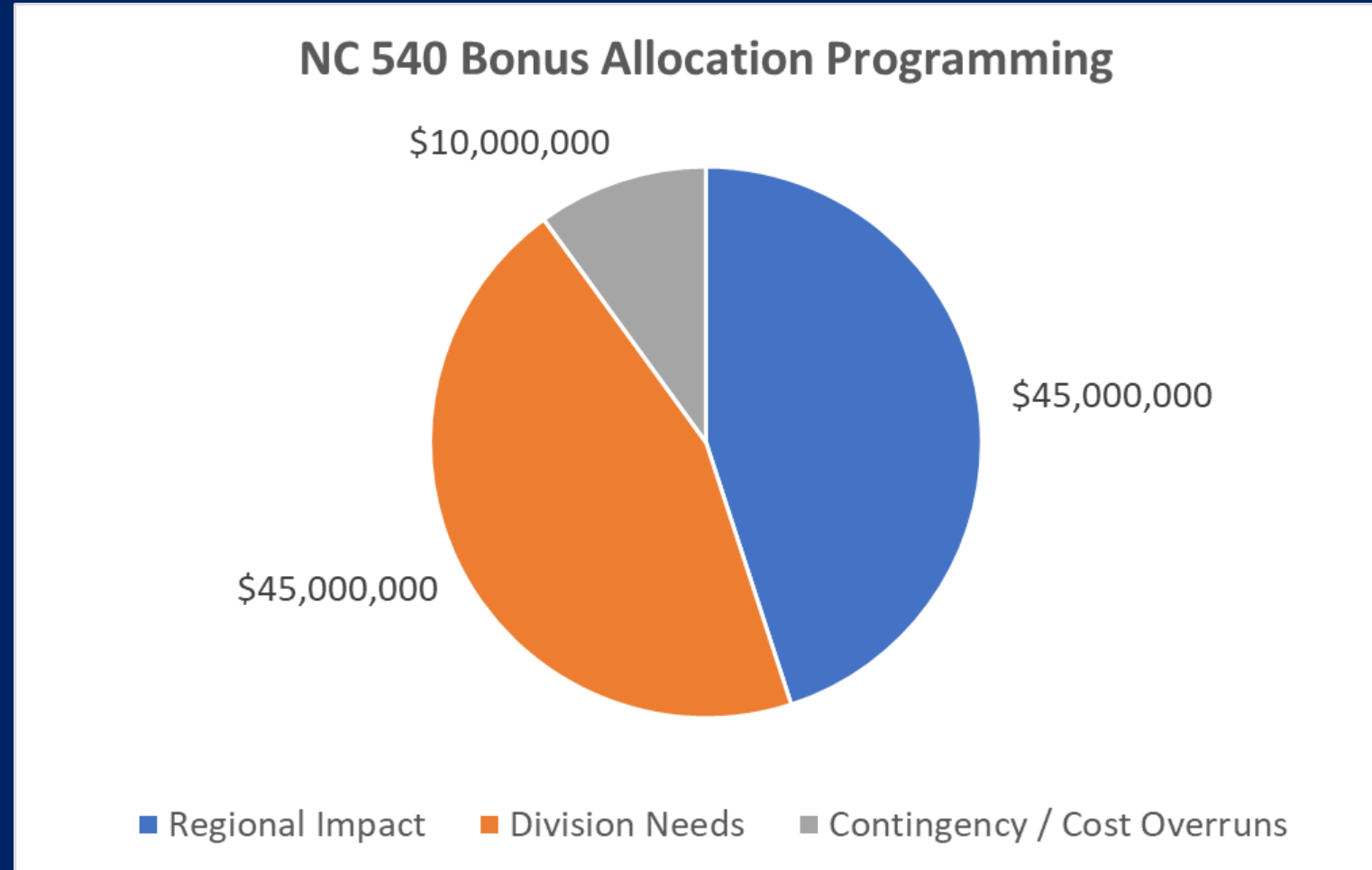


CAMPO Bonus Allocation

Guiding Principles

- Inclusion in the Metropolitan Transportation Plan (MTP)
- Logical Nexus to Generating Source of Bonus Allocation Funds
- Recognition of Funding Challenges with Strategic Transportation Investment law
- Recognition of Funding Opportunities with Strategic Transportation Investment law

5.4 CAMPO Bonus Allocation Methodology



Project	10 Year Travel Time Savings (In Hours)*	Project Rank	Programmin g Amount
US 401 Superstreet (A644 2035) from Lake Wheeler to Hilltop Needmore	5,883,000	1	\$15,000,000
NC 55 & Technology Drive Grade Separation (A98c 2045) (E. Williams Street extended to the intersection of Old Smithfield/Sunset Lake Road	4,901,000	2	\$30,000,000
NC 55 & Holly Springs Road Interchange	1,606,000	3	
NC 55 & Main Street Interchange	226,000	4	
NC 50 Widening and Intersection Improvements from Timber Drive to Rand Road	-349,000	5	

* Travel Time Savings based on future year projected volumes from the Triangle Regional Model (V6) for Horizon Year 2025

Projects Travel Time Savings Calculations are based on NCDOT SPOT Travel Time Savings Methodology

Intersections To Considered for NC 540 Bonus Allocation Funding							Total Crashes		Crash rate		SPOT Online Cost Estimate Basis	Division Cost	Regional Cost
County	Funding Tier	Delay/year (hours @260 days)	CAMPO Final Rank (Delay)	Total Annual (260 days) Delay Cost	Street 1	Street 2	TOTAL CRASHES	Total Crashes (Rank)	Crash Rate	Crash Rate (Rank)			
Wake	Division	91,304	1	\$ 1,635,255	Ten Ten Rd(SR 1010)	Lake Wheeler Rd (SR 1375)	25	8	54.5	16	\$1,430,000 for 2 turn lanes	\$ 1,430,000	
Wake	Division	90,103	2	\$ 1,613,752	Kildaire Farm Rd(SR 1300)	Penny Rd(SR 1379)	34	4	58.0	14	\$715,000 to add 1 turn lane\$14,101,000 to widen Penny	\$ 715,000	
Wake	Division	69,939	4	\$ 1,252,611	Holly Springs Rd(SR 1152)	Sunset Lake Rd(SR 1301)	66	1	141.8	3	\$1,430,000 for 2 turn lanes	\$ 1,430,000	
Wake	Division	56,138	6	\$ 1,005,424	Old Stage Rd(SR 1006)	Ten Ten Rd(SR 1010)	46	2	97.3	6	\$1,430,000 for 2 turn lanes; \$7.354,000 for widening from Old Stage	\$ 8,784,000	
Wake	Division	52,173	7	\$ 934,420	Lake Wheeler Rd (SR 1375)	Hilltop Needmore Rd (SR 1393)	26	6	105.5	5	\$2,860,000 for 4 turn lanes	\$ 2,860,000	
Johnston	Division	49,834	8	\$ 892,535	Cleveland Rd (SR 1010)	Old Drug Store (SR 2981)	15	14	93.2	8	\$2,860,000 for four turn lanes	\$ 2,860,000	
Wake	Division	49,355	9	\$ 883,941	Lake Wheeler Rd(SR 1375),	Simpkins Farm Ln(Local), Simpkins Rd(SR 1379)	32	5	128.9	4	\$2,145,000 for 3 turn lanes	\$ 2,145,000	
Wake	Division	40,182	10	\$ 719,656	Old Stage Rd(SR 1006)	Rock Service Station Rd(SR 2736)	36	3	225.4	2	\$2,214,000 for 1 lane roundabout	\$ 2,214,000	
Wake	Division	26,862	13	\$ 481,104	Ten Ten Rd(SR 1010)	Bells Lake Rd(SR 1386), Graham Newton Rd(SR 1390)	26	6	78.9	10	\$2,860,000 for 4 turn lanes	\$ 2,860,000	
Wake	Division	24,673	15	\$ 441,898	Hilltop Needmore Rd(SR 1390)	Johnson Pond Rd(SR 1404)	18	12	67.6	12	\$1,430,000 for 2 turn lanes	\$ 1,430,000	
Wake	Division	22,716	17	\$ 406,841	Holly Springs Rd(SR 1152)	Arthur Pierce Rd(SR 1305)	5	19	19.7	19	\$9,509,000 for realignment with center turn lanes (?)	\$ 9,509,000	
Wake	Division	22,459	18	\$ 402,239	NC 42	Rock Service Road					\$2,145,000 for 3 turn lanes	\$ 2,145,000	
Wake	Division	21,668	19	\$ 388,073	Ten Ten Rd(SR 1010)	Rand Rd(SR 2728)	14	15	41.5	17	\$1,430,000 for 2 turn lanes	\$ 1,430,000	
Wake	Division	17,034	21	\$ 305,073	SR 1390 (Optimist Farm)	SR 1404 (Johnson Pond Rd)	9	17	54.8	15	Cost: \$2,860,000 for 4 turn lanes	\$ 2,860,000	
Wake	Division	16,212	22	\$ 290,348	Optimist Farm Rd(SR 1390)	Bells Lake Rd(SR 1386)	19	11	79.2	9	\$2,214,000 for 1 lane roundabout	\$ 2,214,000	
Wake	Division	15,352	24	\$ 274,961	Ten Ten Rd(SR 1010)	Johnson Pond Rd(SR 1404), Blaney Farm Rd(SR 1390)	25	8	93.5	7	\$80,000 for two signalized intersections	\$ 80,000	
Wake	Division	11,229	26	\$ 201,105	SR 1390 (Optimist Farm)	SR 1391 (Manns Loop)	7	18	34.9	18	\$715,000 for 1 turn lane	\$ 715,000	
Wake	Division	9,451	27	\$ 169,260	White Oak Rd(SR 2547)	Hillandale Ln(SR 2876)	5	19	10.7	20	\$52,000 for one signalized intersection	\$ 52,000	
Wake	Division	7,641	28	\$ 136,858	Old Stage Rd(SR 1006)	Legend Rd(SR 2717)	1	21	4.9	21	\$715,000 for 1 turn lane	\$ 715,000	
Wake	Division	7,357	29	\$ 131,758	SR 1382 (Olde South Rd)	Penny Rd(SR 1379)	24	10	252.4	1	\$715,000 per turn lane	\$ 715,000	
Wake	Division	6,328	30	\$ 113,332	Old Stage Rd(SR 1006)	Woodland Rd(SR 2715)	18	12	73.9	11	\$715,000 for 1 turn lane	\$ 715,000	
Wake	Division				Johnson Pond Rd(SR 1404)	Whitted Rd(SR 1407)	10	16	64.1	13	\$2,214,000 for 1 lane roundabout	\$ 2,214,000	
												\$ 50,092,000	
County	Funding Tier	Delay/year (hours @260 days)	CAMPO Final Rank (Delay)	Total Annual (260 days) Delay Cost	Street 1	Street 2	TOTAL CRASHES	Total Crashes (Rank)	Crash Rate	Crash Rate (Rank)	SPOT Online Cost Estimate Basis	Division Cost	Regional Cost
Wake	Regional	74,342	3	\$ 1,331,469	NC-50(Benson Rd)	Timber Dr(SR 2812), Timber Drive East	118	1	195.9	1	Extend RTL NB from Timber to New Rand		\$ 141,000
Wake	Regional	67,906	5	\$ 1,216,200	NC-55(Main St)	Holly Springs Rd(SR 1152)	29	5	61.1	7	\$715,000 to add 1 turn lane		\$ 715,000
Wake	Regional	33,082	11	\$ 592,499	NC-50(Benson Rd)	Rand Rd(SR 2728)	16	8	39.9	8	\$553,000 to extend turn lane		\$ 553,000
Wake	Regional	27,438	12	\$ 491,415	NC-42	Hilltop Rd(SR 2751)	12	9	37.1	9	Hot Spot Recommendation \$6m: Relocate Hilltop Rd and Panther Ln		\$ 6,000,000
Wake	Regional	25,318	14	\$ 453,454	NC-42	Old Stage Rd(SR 1006)	21	6	63.4	6	\$1,430,000 for 2 turn lanes		\$ 1,430,000
Wake	Regional	24,365	16	\$ 436,383	NC-42	Johnston Rd(SR 2735)	18	7	69.7	5	\$715,000 for 1 turn lane		\$ 715,000
Wake	Regional	17,533	20	\$ 314,009	NC-50(Benson Rd)	Steven Oaks Dr(SR 5324)/Cleveland School Rd(SR 1390)	70	2	195.7	2	\$715,000 to add 1 turn lane		\$ 715,000
Wake	Regional	16,118	23	\$ 288,681	Ten Ten Rd(SR 1010)	NC-50(Benson Rd)	66	3	186.4	3	\$715,000 to add 1 turn lane		\$ 715,000
Wake	Regional	13,730	25	\$ 245,906	NC-55 (Williams St)	Sunset Lake Rd(SR 1301), Old Smithfield Rd(SR 1390)	48	4	111.9	4	\$715,000 for 1 turn lane		\$ 715,000
												\$ 11,699,000	

5.4 CAMPO Bonus Allocation Methodology

Requested Action:

Recommend the release of the project candidate list for public review and comment to the Executive Board, with a public hearing scheduled on April 15, 2020.

5.5 FY 2020 Wake Transit Work Plan Amendment Request - Commuter Rail Early Project Development

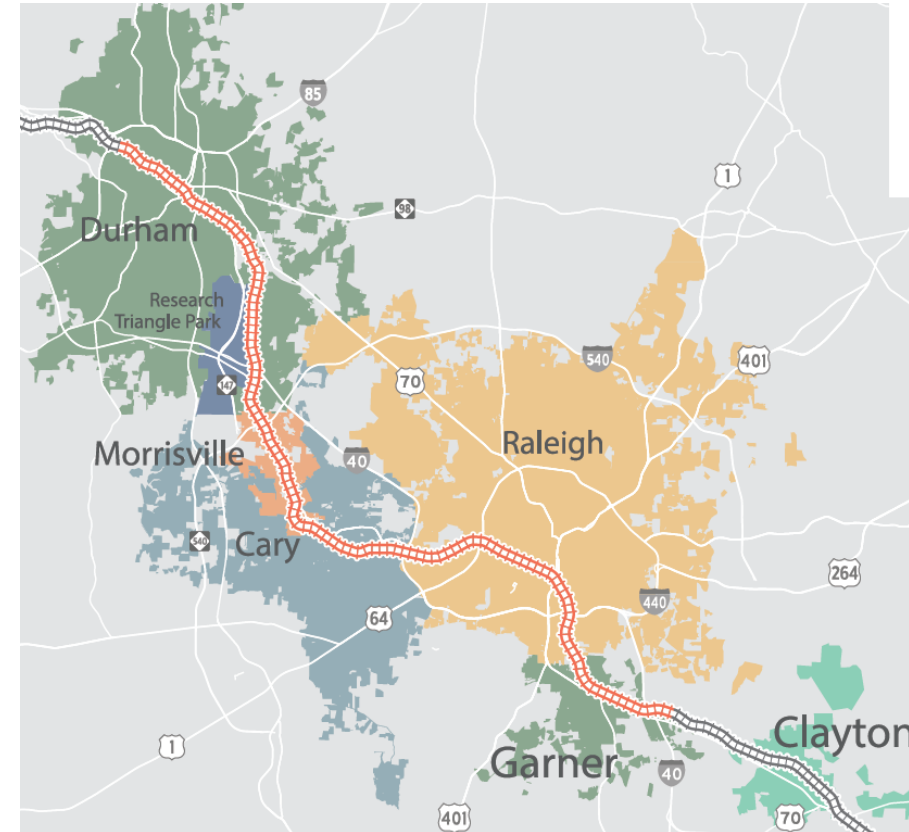
PROPOSED SCOPE OF WORK

- Community Engagement and Impacted Agency Coordination Activities
- NEPA and Constructability Scoping
- Preliminary Engineering in High Risk Areas
- Concurrence Process and Locally Preferred Alternative
- Land Availability for Park-and-Rides, Stations, Maintenance Facilities
- Network Capacity Modeling
- Refine Schedule and Cost Estimates
- Determine Railroad Owner Requirements
- Cost Share for Project Design, Construction, Operation

GREATER TRIANGLE COMMUTER RAIL

Proposed Wake Share For Next Phase of Study:

Funding Source	Budget Amount
Carry-over funds for RTC Study (originally allocated FY19)	\$ 333,333
Allocation of FY18 CRT Reserve funds	\$ 2,303,038
FY20 Budget Amendment from CRT Reserve funds	\$ 3,363,269
Total (Not to Exceed)	\$ 6,000,000



5.5 FY 2020 Wake Transit Work Plan Amendment Request - Commuter Rail Early Project Development

Requested Action:

Recommend approval of the FY20 Wake Transit Work Plan amendment request to fund early project development activities for commuter rail to the Executive Board, with the condition that no funds will be spent until an MOU detailing the cost share is approved by the appropriate Boards.

5.6 Memorandum of Understanding (MOU) in Support of Continued Development of the Greater Triangle Commuter Rail Project

MOU HIGHLIGHTS

Parties:

- DCHC MPO and **CAMPO**
- GoTriangle, NCRR, NCDOT
- Durham County, Wake County, Johnston County

Purpose:

- Roles/Responsibilities of Agencies for Early Project Development
- Tasks to be Completed for Early Project Development
- Tasks to Lay Foundation for Potential Future Implementation
- Cost Share for Early Project Development
- Define Project Concept to Carry Forward (if Viable and Desired)

COMMUTER RAIL UPDATE

CAMPO TCC

March 5

GO FORWARD

A COMMUNITY INVESTMENT IN TRANSIT

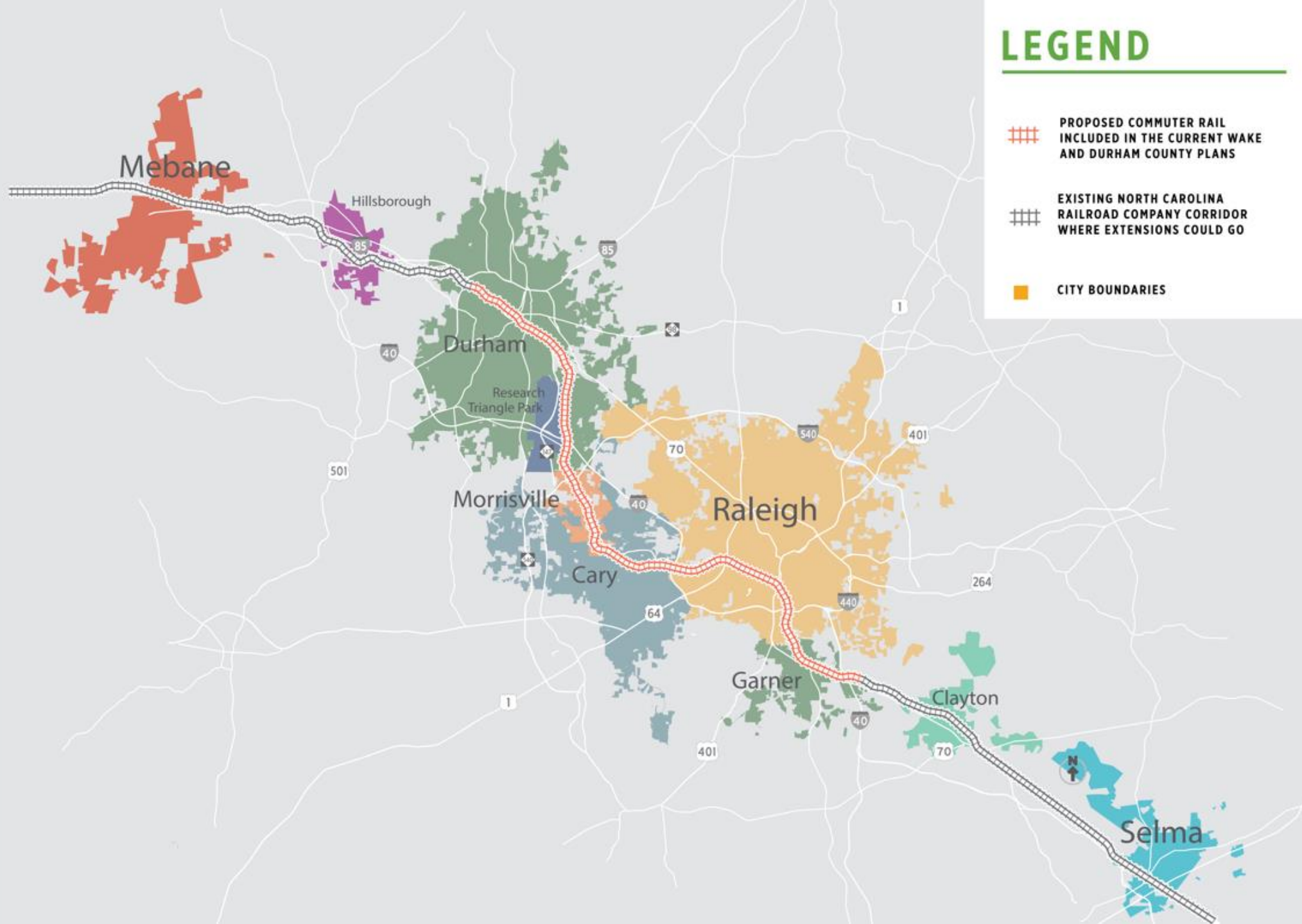


LEGEND

PROPOSED COMMUTER RAIL
INCLUDED IN THE CURRENT WAKE
AND DURHAM COUNTY PLANS

EXISTING NORTH CAROLINA
RAILROAD COMPANY CORRIDOR
WHERE EXTENSIONS COULD GO

CITY BOUNDARIES



STUDY FINDINGS

END POINTS	WEEKDAY ROUND TRIPS	EXPECTED FEDERAL SCORE	RANGE OF CAP. COST* [YOE\$]	O&M COST [2019\$]	RANGE OF RIDERSHIP**
Durham-Garner	20	MEDIUM	\$1.4B – \$1.8B	\$29M	7.5K – 10K
Durham-Garner	12	WEAK MEDIUM***	\$1.4B – \$1.8B	\$20M	5K – 7.5K
Durham-Garner	7	WEAK MEDIUM***	\$1.4B – \$1.7B	\$13M	4.5K – 6K
Mebane-Selma	20	MEDIUM-LOW	\$2.5B – \$3.2B	\$57M	8K – 11.5K
Mebane-Selma	12	MEDIUM-LOW	\$2.5B – \$3.2B	\$40M	6K – 9K
Mebane-Selma	7	MEDIUM-LOW	\$2.3B – \$3.1B	\$26M	5K – 7.5K
Hillsb.-Clayton	20	WEAK MEDIUM***	\$1.8B – \$2.4B	\$44M	8K – 11.5K
Durham-Clayton	20	MEDIUM	\$1.6B – \$2.1B	\$37M	7.5K – 10K

TO BE ELIGIBLE FOR FEDERAL FUNDING, PROJECT MUST SCORE A MEDIUM RATING

*Cost: Year-of-Expenditure Dollars (YOE\$)

**Daily Ridership: Average of Base Year (2018) and Horizon Year Forecast (2040)

***Scenarios rated as “Weak Medium” are projected to score at the bottom of the medium range, meaning that a drop in any single sub-score could cause the project to be ineligible for funding

ADDITIONAL STUDY:

- Proactive and comprehensive community engagement to share information and get feedback from the public needed to update transit plans in all three counties.
- Evaluation of what railroad infrastructure improvements and construction would be needed.
- Further evaluation of potential risks to the project and their potential solutions.



FOCUS ON RISK MANAGEMENT

Requirements Risk:

- Difficulty of succinctly and fully developing project requirements
- Differences in project stakeholder goals

Design Risk:

- Design-related assumptions change
- Situations where unknown factors cause designs to change

Market Risk:

- Open market pricing and/or contract packaging strategies

Construction Risk:

- Site activities
- Coordination of contractors

Coordination with Others:

Build consensus on project responsibilities, cost share and other characteristics of a feasible commuter rail system through coordination among:



- GoTriangle
- Counties
- Railroads
- Municipalities
- Metropolitan Planning Organizations
- North Carolina Department of Transportation
- Institutions
- Community

NEXT PHASE OF STUDY: KEY FOCUS AREAS

Local Engagement: Build a foundation for sustained regional cooperation

Further Refine Project Concept: Define infrastructure and frequency of trains

Metrics: Provide monetary costs, non-monetary costs, and benefits

Railroad Buy-in: Rail network modeling, determine necessary requirements

Capacity Building: Develop management plan and procure consultant support

FTA Funding Eligibility: Ridership modeling and economic development potential

Cost Share: Obtain commitment of 100% of non FTA funds

NEXT PHASE OF STUDY: TIMELINE

• TIMELINE





CRITICAL NEXT STEPS

Memorandum of Understanding for next phase (early project development activities):

- NCRR, NCDOT, GoTriangle, Counties, MPOs

Public board meetings with County boards and MPOs for local decision-making on next steps and funding for additional preliminary effort:

- Wake: \$6,000,000
- Durham: \$2,700,000
- Johnston: \$250,000

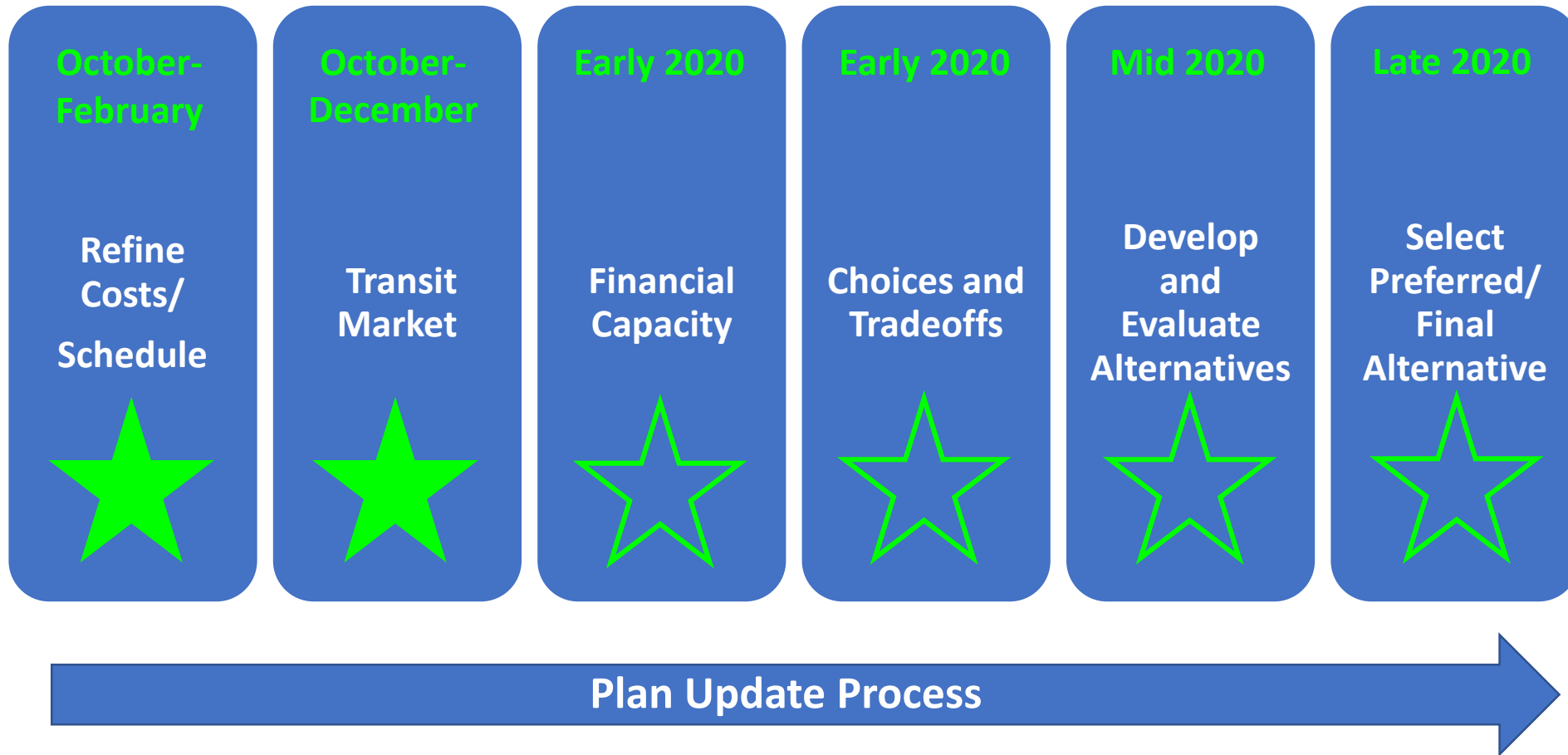
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Requested Action:

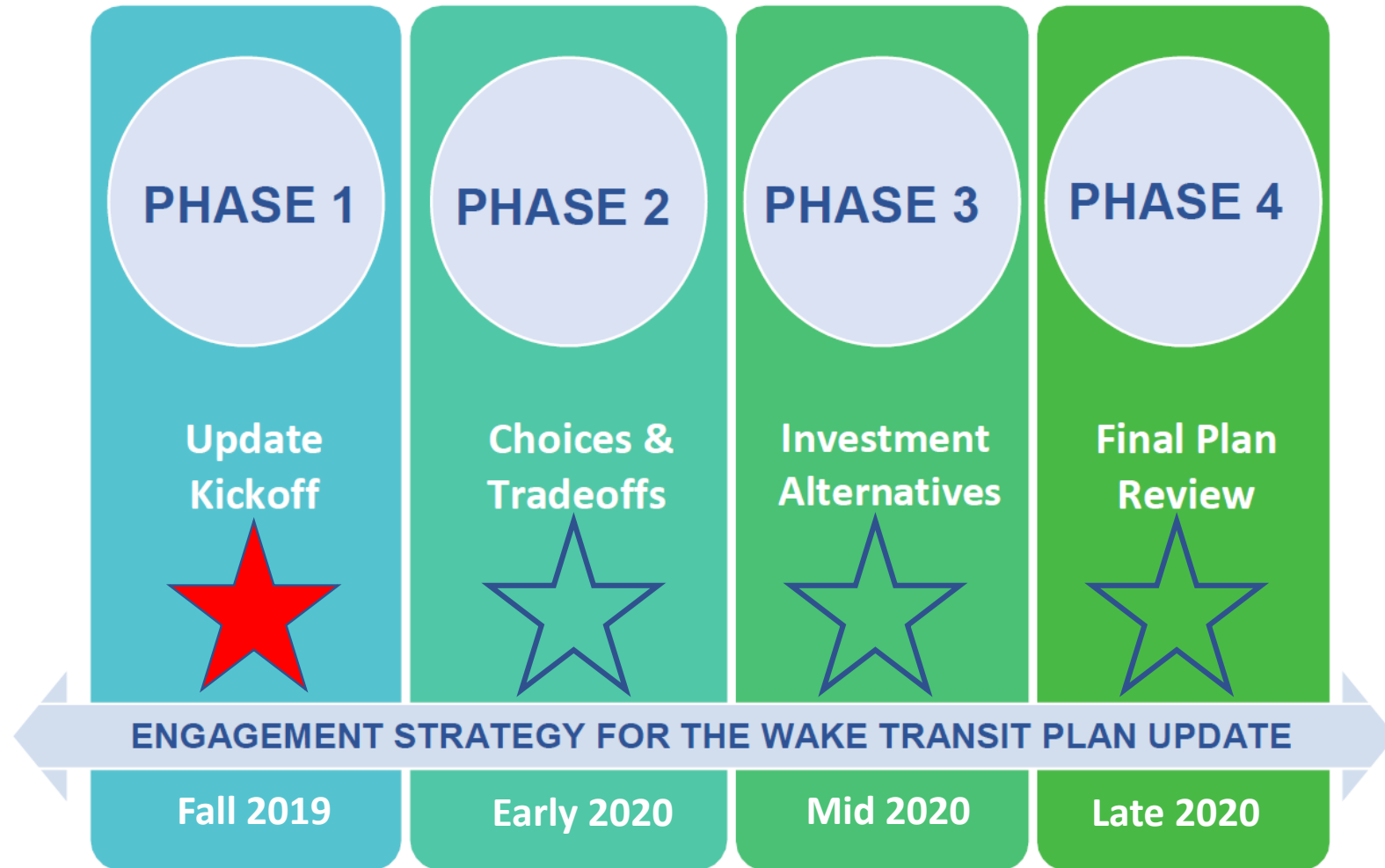
Recommend approval of CAMPO's participation in the MOU in support of continued development of the Greater Triangle Commuter Rail Project to the Executive Board and authorization for the Executive Director to sign the MOU.

5.7 Wake Transit Plan Update Status Report

Plan Update Task Schedule



Updated Engagement Schedule



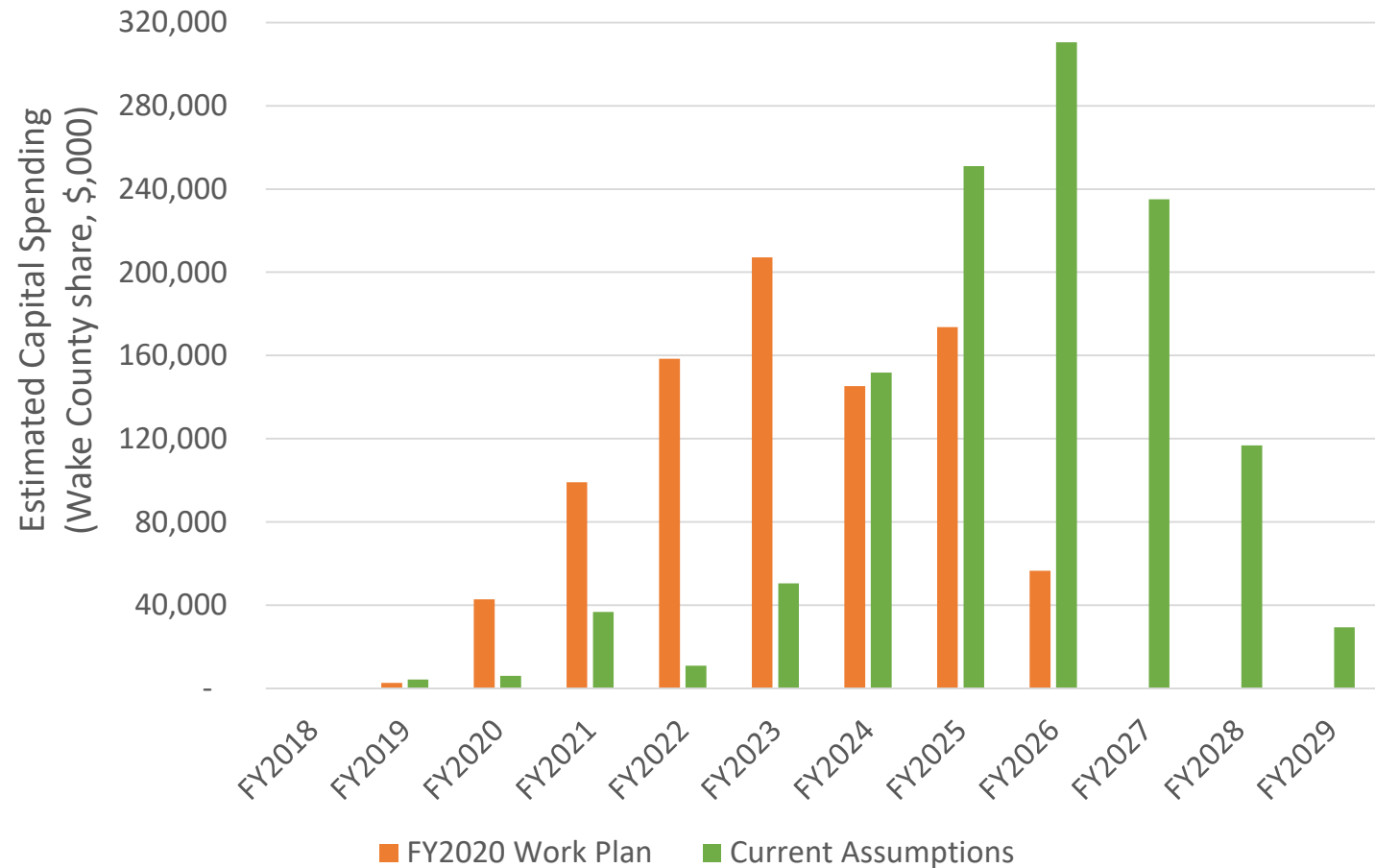
Outlook for March-May

ACTION	DATE
<ul style="list-style-type: none">• Receive Results for Financial Capacity Scenarios	Late March, 2020
<ul style="list-style-type: none">• Determine Scale/Framework for Engagement Based on Financial Capacity	
<ul style="list-style-type: none">• Share/Refine Plan for Engagement	
<ul style="list-style-type: none">• Workshop to Set Engagement Plan Into Motion	Early April, 2020
<ul style="list-style-type: none">• Public and Stakeholder Engagement Period	Late April – Early May, 2020

Updated Cost and Timeline Estimates – Commuter Rail

Updated Assumptions (for Vision Plan Update)

- **\$933 - \$1,202.9 million Wake share (year of expenditure \$'s)**
- **Spent in FY19 to FY29**
- **Assumes service opens in FY29**



Financial Impact

CONVERT EVERYTHING TO FY 2020 DOLLARS TO UNDERSTAND SOURCE OF IMPACTS

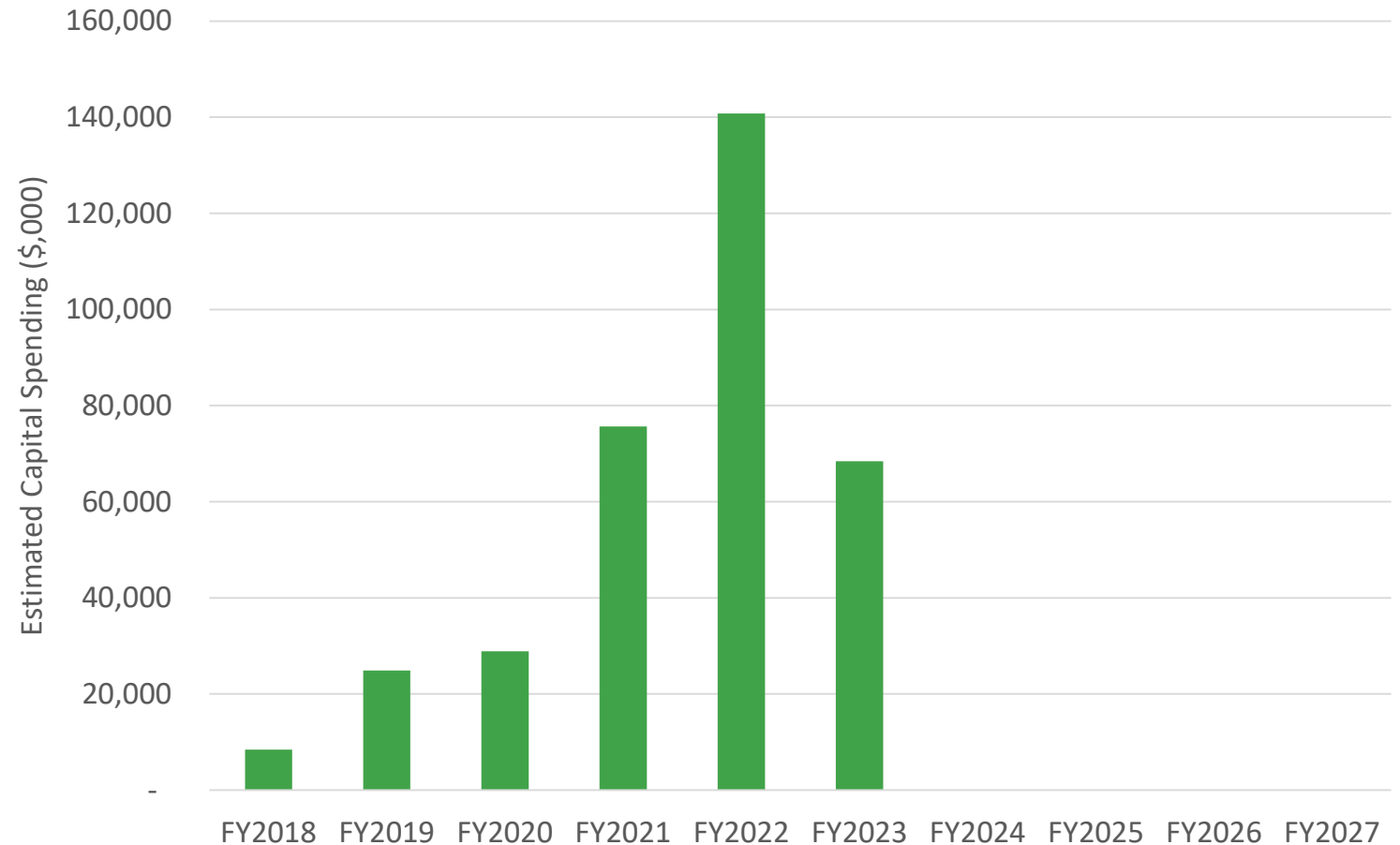
Source of Impact	Lower Limit	Upper Limit
Changes to Project Characteristics or New Cost Estimates for Same Project Characteristics	-\$29,780,000	+\$183,624,000
Changes to Years of Expenditure	+\$48,057,000 (+\$77,837,000 compared to new project assumption)	+\$134,000,000
Total Impact from Both Sources	+\$48,057,000 (+\$77,837,000 compared to new project assumption)	+\$317,624,000

Impacts are compared to original assumptions

Updated Cost and Timeline Estimates – Bus Rapid Transit

Original Wake Transit Plan

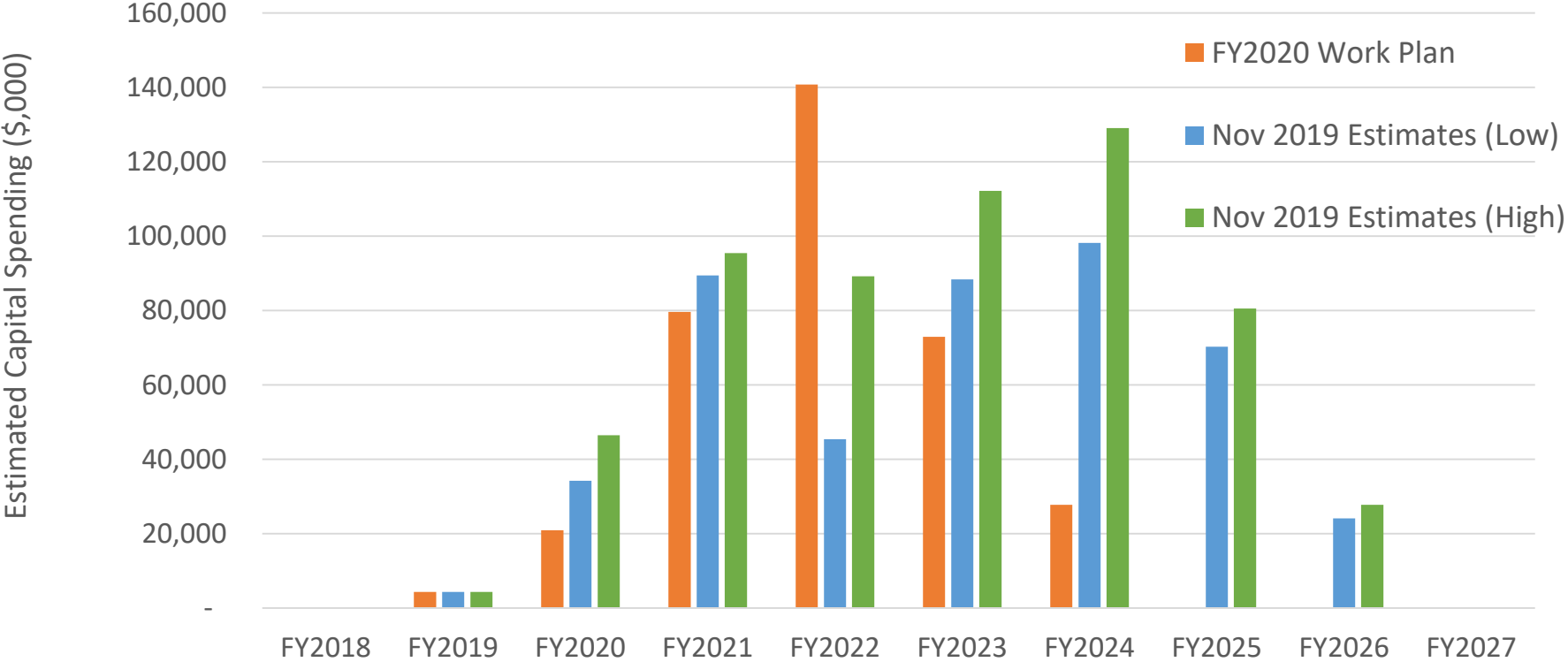
- **\$347 million for all corridors (YOE \$'s)**
- **Spending in FY18 to FY24**
- **Service opens in FY24 on all corridors**
- **Assumed 50% corridors with dedicated runningway**



Updated Cost and Timeline Estimates – Bus Rapid Transit

Current Assumptions

- \$454.1 million to \$584.9 million for all corridors (YOE \$'s)
- Spent in FY19 to FY26
- Service opens in FY23 to FY27 depending on corridor
- Assumes 100% corridors with dedicated runningway



Financial Impact

CONVERT EVERYTHING TO FY 2020 DOLLARS TO UNDERSTAND SOURCE OF IMPACTS

Source of Impact	Lower Limit	Upper Limit
Changes to Project Characteristics or New Cost Estimates for Same Project Characteristics	+\$65,052,000	+\$182,561,000
Changes to Years of Expenditure	+\$45,340,000	+\$60,155,000
Total Impact from Both Sources	+\$110,392,000	+\$242,716,000

Impacts are compared to original assumptions

What Could Change the Assumptions?

- **Decisions on BRT alignment and amount of dedicated runningway**
- **FTA requirements for project sponsors to show they can manage cost and schedule risk**
- **Other similarly large projects have underestimated the time and staffing commitment required to move a project through the process**
- **Cost assumptions for commuter rail may be reduced or increased by findings from Rail Traffic Controller (RTC) modeling that reveal different infrastructure improvements are needed or by changing assumed service frequencies**

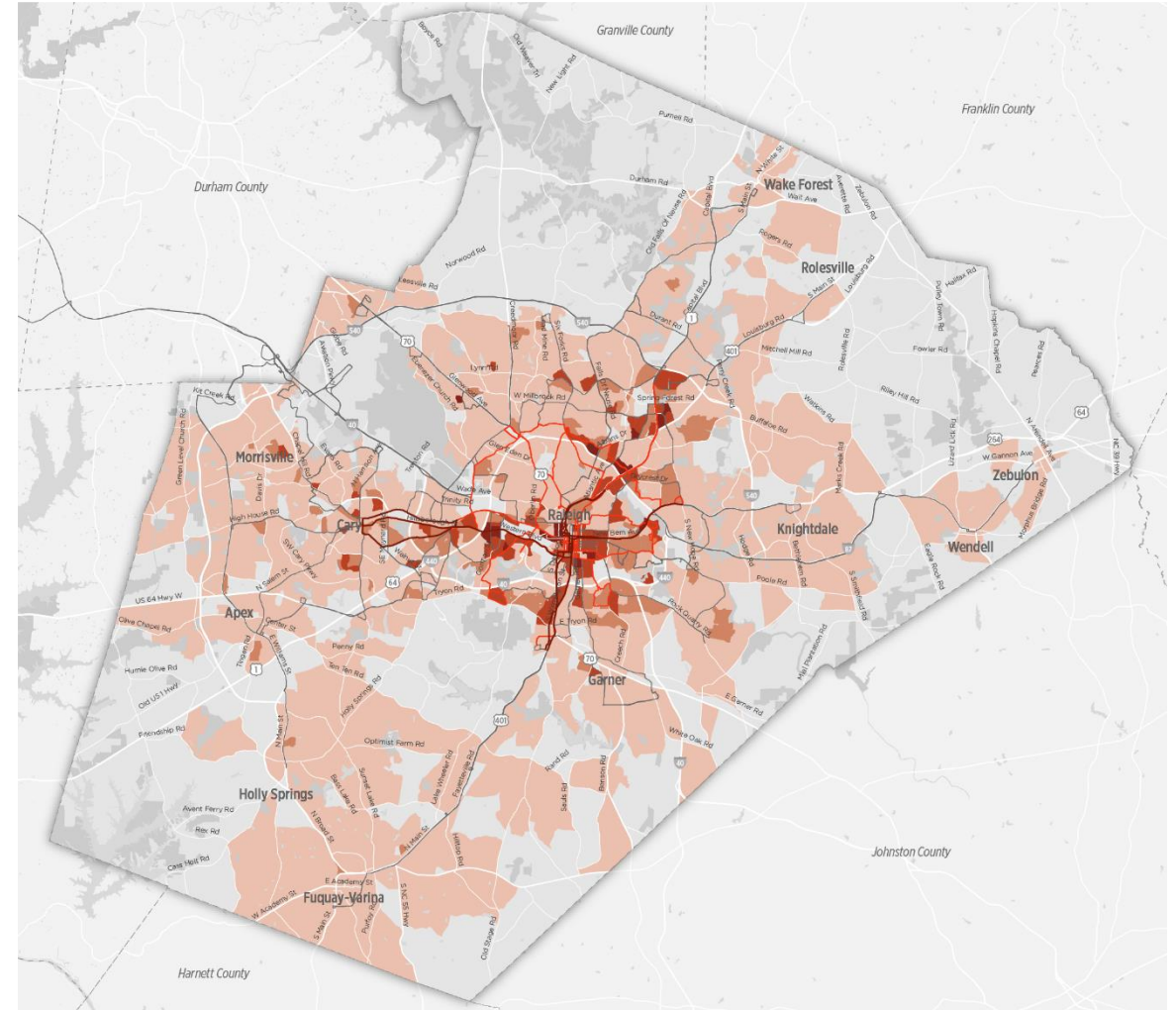
Market Assessment Approach

Purpose:

- Understand where there is demand for transit
- Evaluate the appropriateness of planned services
- Identify new and emerging opportunities for transit investment

Approach:

- Population density – 2010, 2017, and 2035
- Population density adjusted by socioeconomic characteristics – 2010, 2017, and 2035
- Employment density – 2010, 2017, and 2035
- Composite density – 2010, 2017, and 2035
- Major activity centers and points of interest
- Local travel patterns – 2013 and 2035
- Congestion – 2013 and 2035

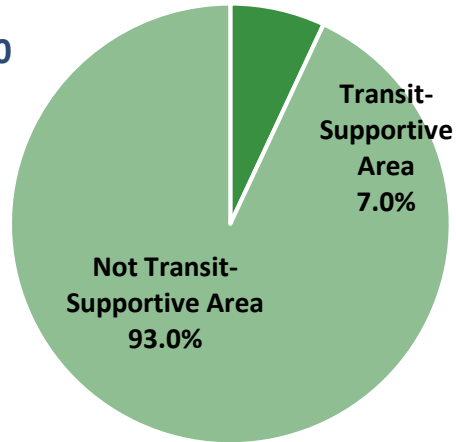


Market Assessment Approach

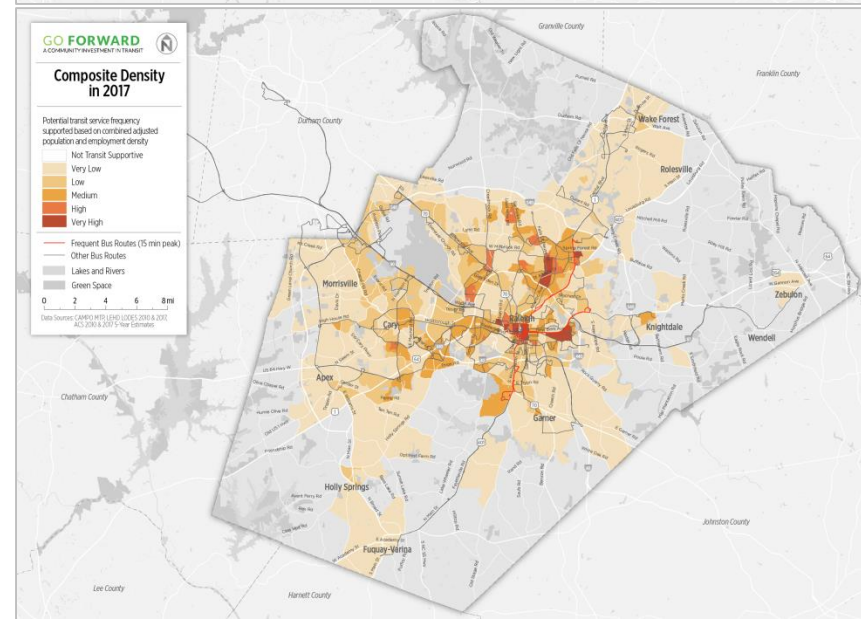
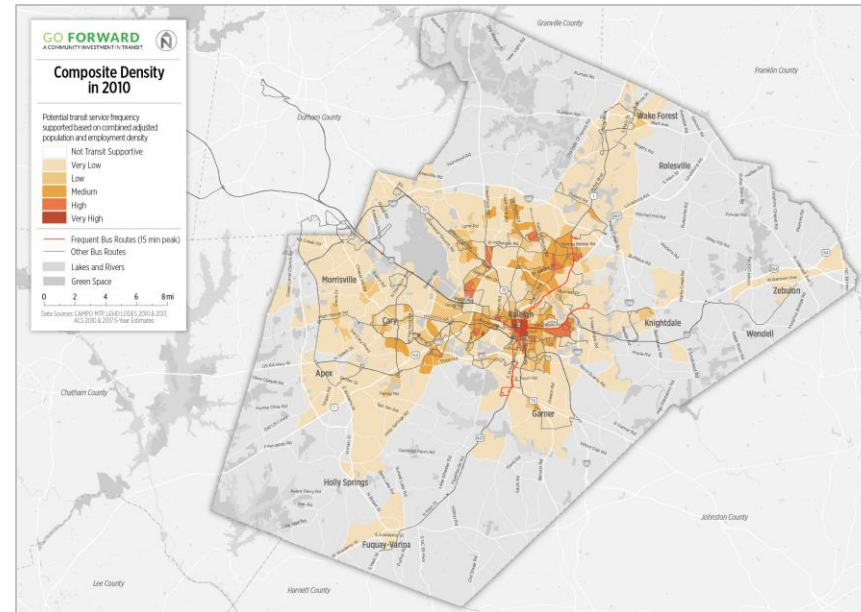
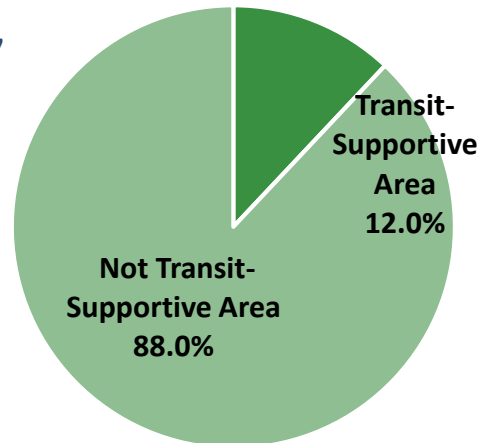
Composite Density

Proportion of county acreage
supportive of fixed-route transit

2010



2017



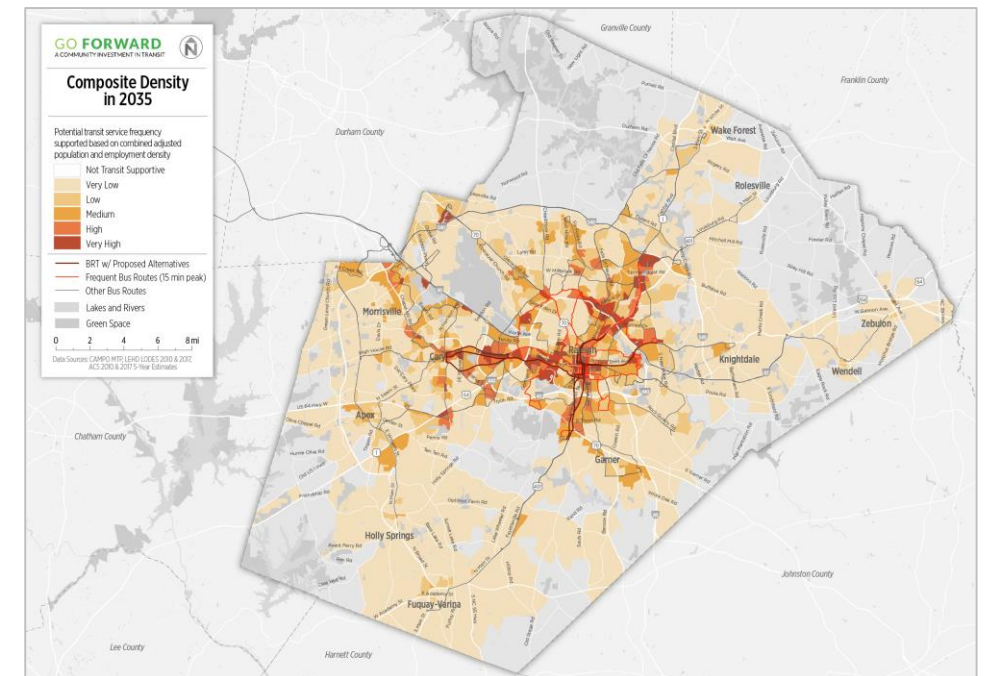
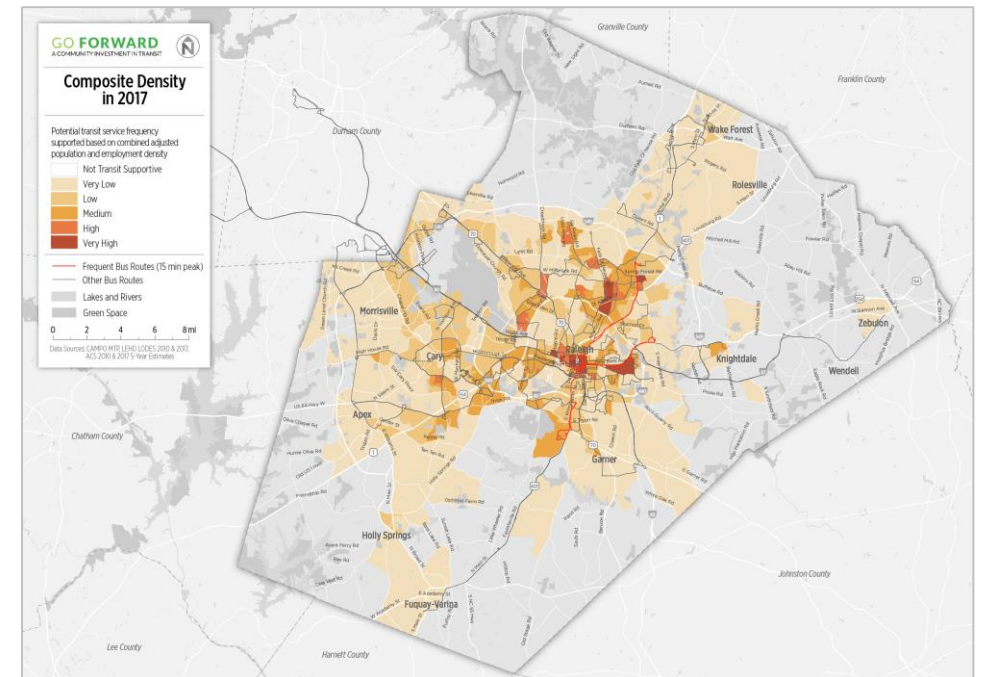
Composite Density

Combined population and employment:

- **Downtown Raleigh and the area immediately surrounding downtown**
- **Northwestern Raleigh along Capital Boulevard**
- **Eastern Raleigh along New Bern Avenue**
- **Southern Raleigh along Wilmington Street**
- **Northern Raleigh along I-440 loop**
- **Between Raleigh and Cary along Western Boulevard**
- **Between Cary and Morrisville/RTP**
- **Parts of Apex, Garner, and far northern Raleigh**

Areas that show increased density, not along MTP High Capacity Transit Corridors:

- **Northern Raleigh and along I-440**
- **Along U.S. Route 1 between Raleigh and Apex**
- **Along I-40 from Raleigh to RTP**
- **North of RDU**



5.7 Wake Transit Plan Update Status Report

Requested Action:
Receive as information.

5.8 S-Line Resolution of Support



NORTH CAROLINA

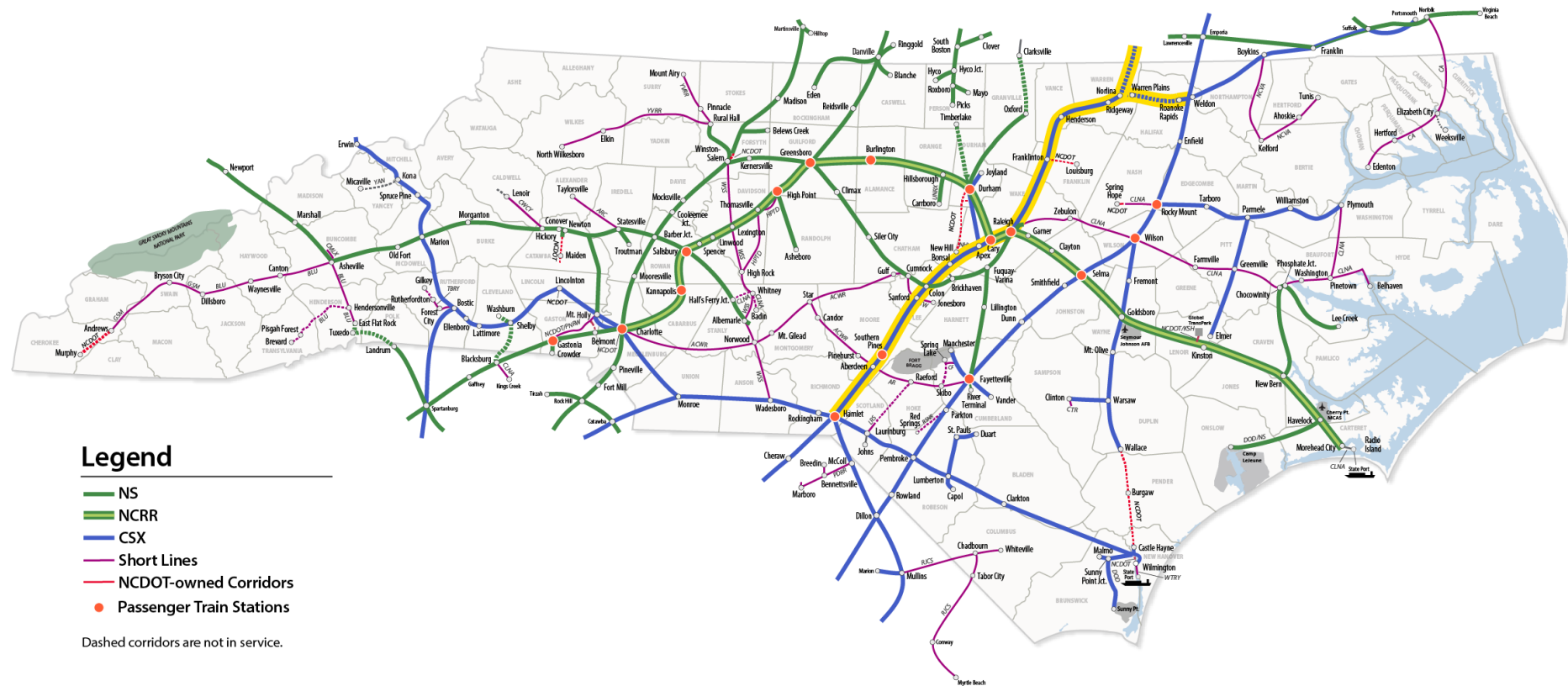
Department of Transportation



S-Line Opportunity

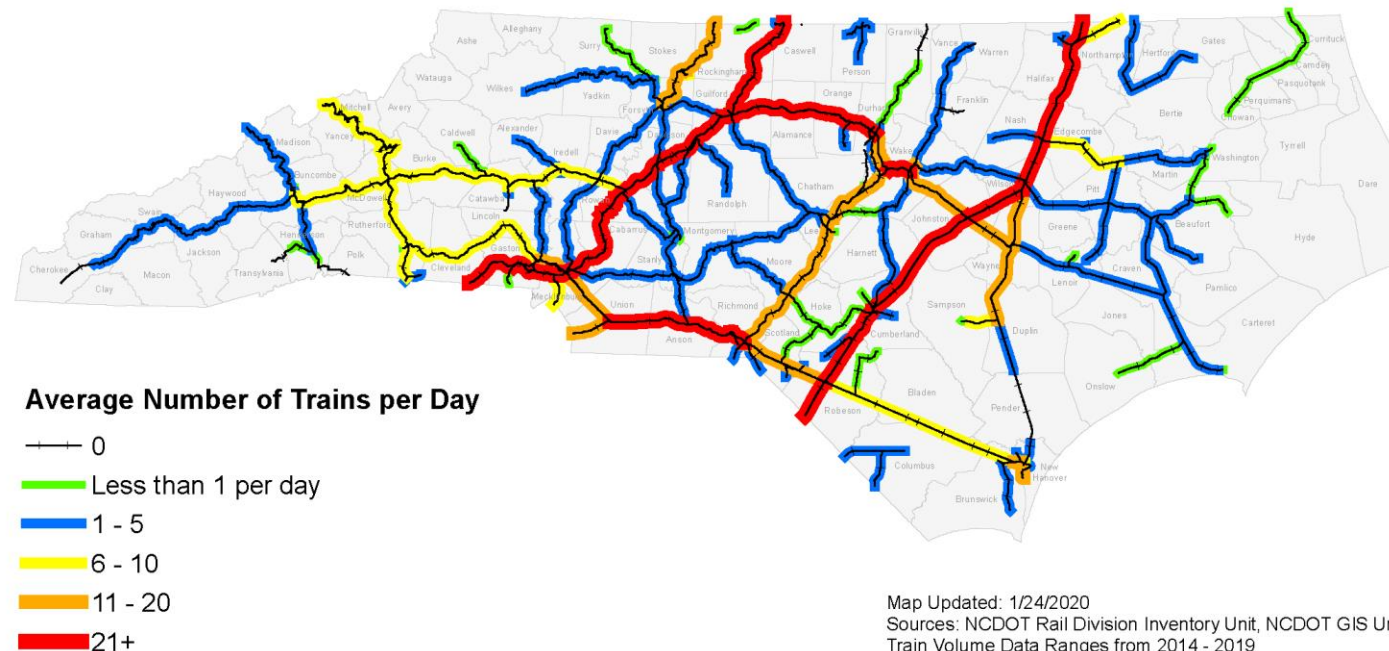
March 5, 2020

North Carolina Railroad System



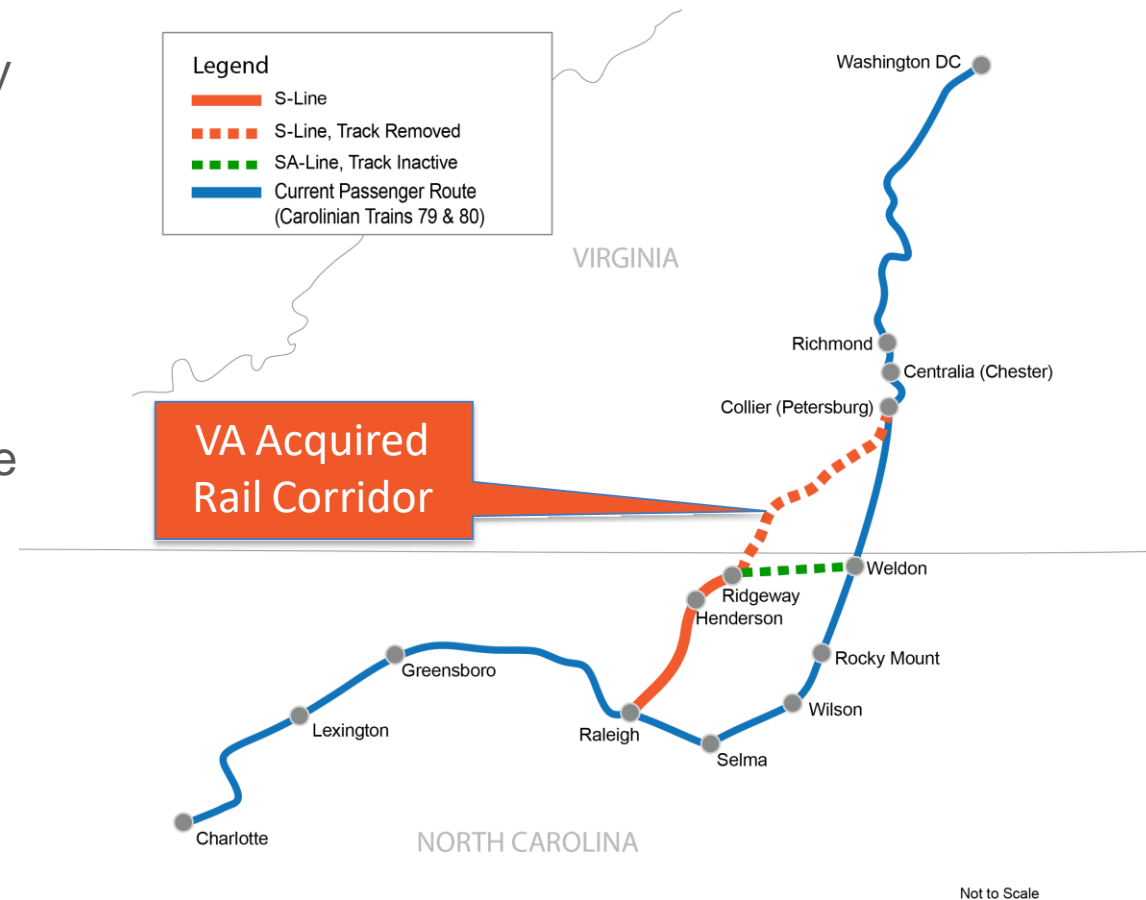
Class I Railroads “Rationalizing” Their Networks

- Focusing on core routes that carry large volumes of through freight trains
- Selling off stub ended and redundant rail corridors
- Lower-volume lines need to be preserved to serve existing and prospective industries and provide passenger rail expansion opportunities

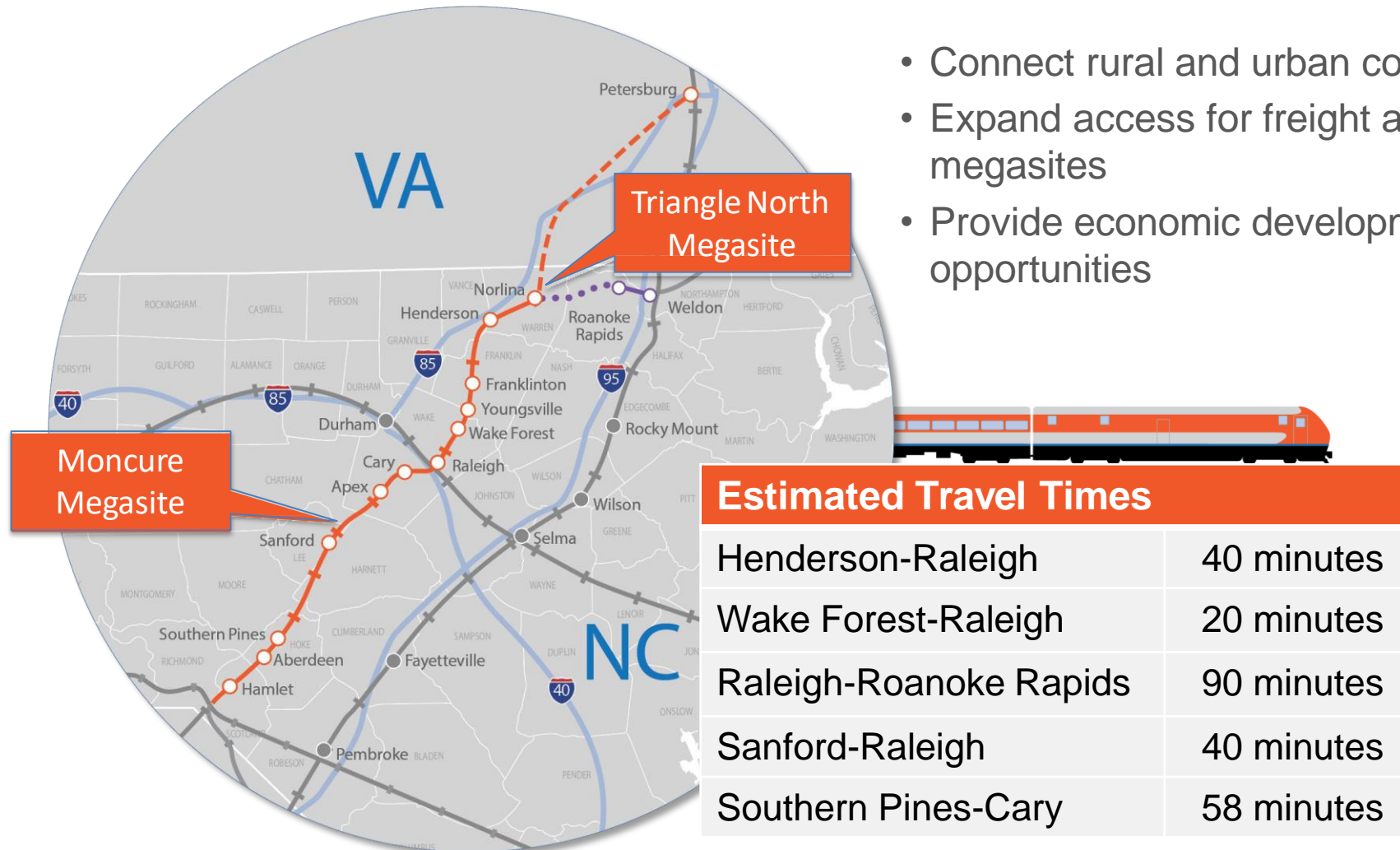


Virginia & CSX Landmark Rail Agreement

- State of VA purchased 350 miles of railroad right of way and 225 miles of track
- State ownership allows for:
 - Control of land and access
 - On-time service
 - Implementation of future technologies
 - Economic development along the corridors



S-Line Acquisition Opportunity



- Connect rural and urban communities
- Expand access for freight and megasites
- Provide economic development opportunities

Estimated Travel Times

Henderson-Raleigh	40 minutes
Wake Forest-Raleigh	20 minutes
Raleigh-Roanoke Rapids	90 minutes
Sanford-Raleigh	40 minutes
Southern Pines-Cary	58 minutes

Estimated time subject to further analysis.

Existing Conditions on the S-Line

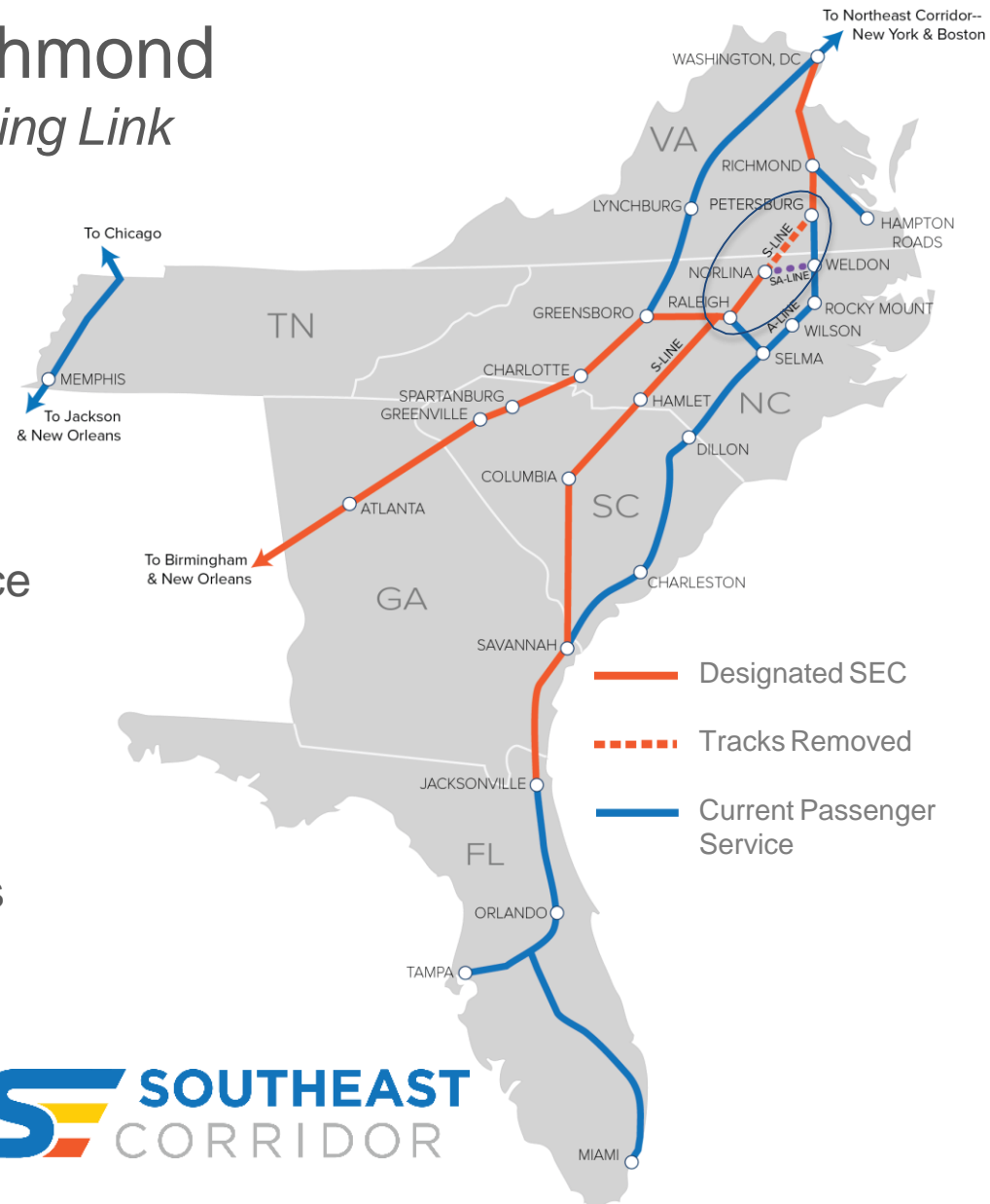
- **Petersburg to Ridgeway**
 - Out of service, tracks removed
 - Recently purchased by Virginia
- **Ridgeway to Raleigh**
 - 25 mph, local freight traffic only
- **Raleigh to Hamlet**
 - 60 mph, local freight + passenger service



Raleigh to Richmond

S-Line is the Missing Link

- Critical link in the federally-designated Southeast Corridor
- Will expand and improve passenger and freight services
- Will reduce passenger trip times and improve on-time performance
- Will increase north-south freight capacity and rail network resiliency
- Will connect manufacturing and job centers to population centers



Preparing for CRISI 2020 – How You Can Help

CRISI (Consolidated Rail Infrastructure and Safety Improvements) 2020

- House and Senate updated language for the CRISI program – *now allows for right of way acquisition of at least \$45M*
- Opportunity for the State of North Carolina
 - ROW funding available: \$45M minimum
 - Federal/local match: 80/20 minimum
- Resolutions of Support will make the grant application stronger

Resolutions in support of the development of the S-Line and SA-Line have been passed by:

- Wake County Commission
- TARPO
- Town of Franklinton
- Town of Sanford
- Town of Wake Forest
- Lee County Commission
- Wake Forest Chamber of Commerce

CRISI Program Background

Individual project awards have ranged from:

- \$58K to \$10M (FY 17)
- \$157K to \$34M (FY 18)

NCDOT Awards:

- \$10M (FY 17)
- \$34M (FY 18)

Funding Preferences:

- Projects with < 50% federal share
- Projects with multiple non-federal sources



CRISI 2020 Release of Funding Opportunity:

- Late Spring / Early Summer

Stakeholder Meetings

- Local, State, and Federal Elected Officials
- City and County Engineering, Planning, and Development Staff
- Transit Agencies, MPOs, RPOs, Advocacy Groups, Chambers of Commerce
- Economic Development Professionals, Developers, Financial Consultants, Rail Advisory Industry Leaders, Railroads



Next Steps

Building on Virginia's Success

- Encourage local government and others to pass resolutions of support
- Seek matching non federal funds for CRISI application
- Compete for CRISI 2020
- Partner with MPOs, RPOs, and communities to progress corridor development and planning
- Secure funding for incremental projects through STI and federal discretionary grants to improve rail infrastructure for new rail services



5.8 S-Line Resolution of Support

Requested Action:

Recommend approval of S-Line Resolution of Support
to the Executive Board.

5.9 Safety Performance Measures and Targets FY20

5.9 Safety Performance Measures and Targets FY20

CAMPO is required by federal law through the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act to adopt 18 specific transportation performance measures. These measures are divided into four categories: Safety, Pavement/Bridge, System Performance, and Transit Assets.

MPOs are required to establish performance targets for each of these measures on an annual basis by either:

1. Agreeing to plan and program projects so that they contribute towards the accomplishment of the State DOT targets or
2. Develop their own quantifiable targets for their metropolitan planning area by a methodology consistent with federal reporting requirements

MPOs are further required to establish their targets not later than 180 days after the State DOT establishes and reports targets.

PM1 – Safety

1. Number of fatalities
2. Fatality rate (per 100 million VMT)
3. Number of serious injuries
4. Serious injury rate (per 100 million VMT)
5. Number of non-motorized fatalities and serious injuries

NCDOT establishes and reports their targets in August. CAMPO must establish theirs by February.

PM1 – NCDOT Safety Targets

Safety Performance Measure	2014-2018	2016-2020
Total Fatalities	1,396.4	1,227.8
Rate of Fatalities	1.211	1.084
Total Serious Injuries	3,362.6	2,812.8
Rate Serious Injuries	2.886	2.462
Total Non-motorized Fatalities & Serious Injuries	494.6	426.6

5.9 Safety Performance Measures and Targets FY20

Requested Action:

Review safety performance targets and recommend the Executive Board agree to plan and program projects that contribute toward the accomplishment of the State's targets.

6. Informational Item: Budget

6.1 Member Shares – FY 2020

6.2 Operating Budget – FY 2020

Requested Action:
Receive as information.

7.1 Informational Item: Project Updates

- Commuter Corridors Study
- (SRTS) John Rex Endowment Grant Award Update
- Triangle Regional ITS
- R.E.D. Priority Bus Lane Study
- Fayetteville/Raleigh Passenger Rail Study
- Triangle TDM Program
- Triangle Bikeway Implementation Study
- Non-Motorized Volume Data Program
- Mobility Coordination Committee
- NCDOT Highway Project U-2719
- Wake Transit Vision Plan Update
- Greater Triangle Commuter Rail Alternatives Analysis
- Northeast Area Study Update
- Coordinated Human Services Public Transportation Plan Update

Requested Action:
Receive as information.

7.2 Informational Item: Public Engagement Updates

Requested Action:
Receive as information.

8. Informational Item: Staff Reports

- MPO Executive Director
- TCC Chair
- NCDOT Transportation Planning Division
- NCDOT Division 4
- NCDOT Division 5
- NCDOT Division 6
- NCDOT Rail Division
- NC Turnpike Authority
- NCDOT Bicycle & Pedestrian Planning Division

Requested Action:
Receive as information.

ADJOURN

Upcoming Events

Date	Event
March 18, 2020 4:00 p.m.	Executive Board One City Plaza
March 23, 2020 8:30 a.m.	MPO 101 Training (rescheduled) One City Plaza
March 26, 2020 8:00 a.m.	Triangle Bike and Ped Workshop Raleigh Union Station/2 nd Floor
April 2, 2020 10:00 a.m.	Technical Coordinating Committee One City Plaza
April 15, 2020	Executive Board One City Plaza





<https://www.eventbrite.com/e/10th-annual-triangle-bike-ped-workshop-tickets-90204037705?aff=erelexpmlt>