

WELCOME!

Today's TCC meeting is being held online. The meeting will begin shortly.

Please be prepared to mute your audio following roll call.

Call In: 650-479-3208 Meeting Code: 477 159 580 Meeting Password: MEET

PUBLIC COMMENTS SPEAKER SIGN UP SHEET:

https://docs.google.com/spreadsheets/d/1UoRM7bA4lE1ty2lpfAV4zZBMEijWPUui1J5 lzp5YVVg/edit?usp=sharing

Download Presentation Slides: <u>https://campo.legistar.com/Calendar.aspx</u>



Technical Coordinating Committee Meeting

March 3, 2022 10:00 AM

1. Welcome and Introductions Roll Call of Voting Members & Alternates

City of Creedmoor City of Raleigh (5) County of Franklin County of Granville County of Harnett County of Johnston County of Wake (2) GoCary GoRaleigh GoTriangle Town of Angier Town of Apex

Town of Archer Lodge Town of Bunn Town of Cary (2) Town of Clayton Town of Franklinton Town of Fuguay-Varina Town of Garner Town of Holly Springs Town of Knightdale Town of Morrisville Town of Rolesville Town of Wake Forest

Town of Wendell Town of Youngsville Town of Zebulon Federal Highway Administration N.C. Dept. of Transportation (6) N.C. State University N.C. Turnpike Auth. Raleigh Durham Airport Auth. Research Triangle Foundation Rural Transit (GoWake Access) Triangle J. Council of Govts. Triangle North Executive Airport



2. Adjustments to the Agenda

Additional Action Item:

5.6 Locally Administered Projects Program (LAPP) Additional Funding Request: C-5604OF Blue Ridge Road Pedestrian Improvements



3. Public Comments

This is an opportunity for comments by those in attendance. Please limit comments to three (3) minutes for each speaker.



4. Minutes

4.1 TCC Meeting Minutes: February 3, 2022

Requested Action:

Approve the February 3, 2022 Meeting Minutes.



5. Regular Business



5.1 Triangle Bikeway Study and Final Report





Technical Coordinating Committee
March 3, 2022



Project Team















Agenda



- Project Goals
- > Existing Conditions & Future Plans
- > Community Engagement
- Preferred Alternative
- > Triangle Bikeway Report
- Next Steps
- Review & Adoption Schedule



Project Goals



FEASIBILITY & IMPLEMENTATION STUDY



EQUITY

Prioritize equal access to the Triangle Bikeway for all, through public engagement, project delivery and investment



CONNECT TO JOBS

Provide seamless connections between the Triangle Bikeway, the regional transportation network, employment centers and local neighborhoods.



SAFETY

Address the safety needs of users of all ages and abilities in the design and development of the Triangle Bikeway.



REGIONAL COLLABORATION

Collaborate with government entities and other regional stakeholders to understand priorities and concerns. Build support of jurisdictional partners for future funding, design, construction and maintenance.



Q D



TRANSPORTATION CHOICE

Provide a direct and accessible route separated from traffic as a bicycling and walking option for commuters and recreational users. Make meaningful connections to transit and active transportation networks.



PUBLIC BENEFIT + SUPPORT

Listen to the community to help identify opportunities and challenges. Recommend an alignment that will generate public support and build momentum for future funding efforts.



FEASIBILITY

Utilize locations for the bikeway alignment that are permittable and reduce the time required for implementation. Minimize the impact of the bikeway on environmental features and the natural habitat.



IDENTITY

Create a unique identity for the bikeway that will be instantly recognizable and highlight the regional commitment to both recreational and commuter bicycling to residents and visitors alike.



RESILIENCY

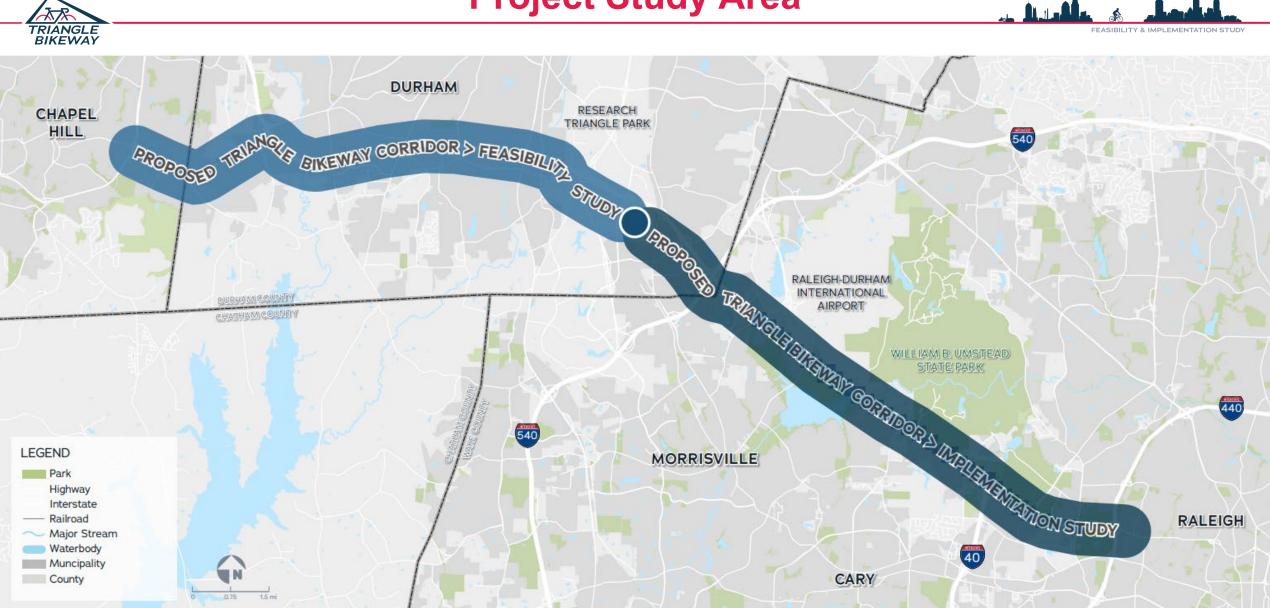
Support mode shift goals and reduce emissions / other transportation-related environmental impacts while expanding access to active living and positively impacting community health.



TRIANGLE BIKEWAY

Project Study Area







www.trianglebikeway.com







TRIANGLE BIKEWAY STUDY

NC CAMPO











The Triangle Bikeway project will study the idea of a 17-mile bicycle path. The bikeway will link Raleigh, Research Triangle Park (RTP), Durham and Chapel Hill along I-40 and NC 54. The current planning effort includes design and construction recommendations between Raleigh and RTP, and a corridor assessment for the connection west to Durham and Chapel Hill. The bikeway will connect Triangle communities making both short and long bike trips for work, play and daily errands possible. Ideas from residents will shape the plan. Agencies across the region are working together in the planning process, which will take approximately 18 months.



"Excited to see this project happening. I will be able to safely switch to 100% bike commuting when the bikeway is complete."

 Comment on project website





Case Studies



FEASIBILITY & IMPLEMENTATION STUDY

CASE STUDIES

The Triangle Bikeway will transform the region by providing active transportation opportunities connecting neighborhoods and employment centers in Raleigh, Cary, Morrisville, Research Triangle Park, Durham, and Chapel Hill. Several innovative shared-use path projects that parallel highway corridors serve as precedents and provide valuable lessons learned for the development of the Triangle Bikeway.

Ideas from these projects that influence the bikeway's design and project development include:

> Aligning trails within state DOT right-of-way

Strong connections to transit

 Design elements to support effective commuting (lighting, separate walking and bicycling zones)

Establishing strong partnerships

 Prioritizing large-scale transportation investments







Existing Conditions & Future Plans

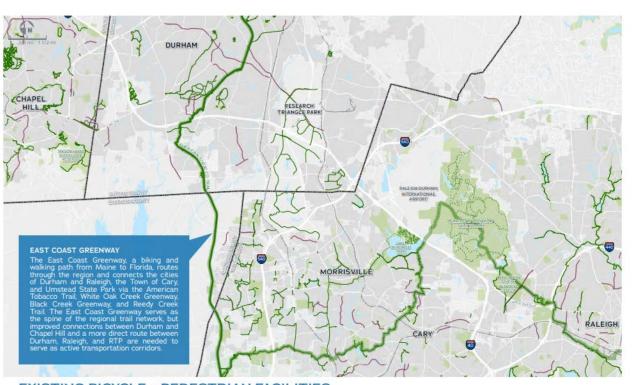






Existing + Planned B/P Facilities





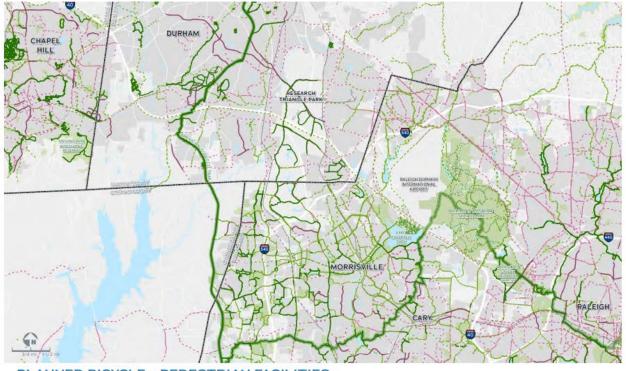
EXISTING BICYCLE + PEDESTRIAN FACILITIES

Triangle municipalities have extensive greenway networks with over 250 miles of greenway in the region. The Town of Chapel Hill has approximately 18 miles of paved or natural surface greenways, and the City of Durham has over 30 miles of greenways. Research Triangle Park has over 20 miles of paved pedestrian trails, and the Town of Morrisville has a growing greenway network with 9 miles. The Town of Cary and the City of Raleigh have robust greenway networks with over 80 miles and 100 miles of greenway, respectively.

While regional bike connectivity is limited, the bicycle networks of Triangle municipalities are growing and provide the framework to build a more connected active transportation system for the region. In Durham, blke lanes along Commellis Rd improve connections between Research Triangle Park and Downtown, via the American Tobacco Trail, Similarly, existing bike lanes adjacent to the study area will provide connections to major destinations in Chapel Hill, Durham, and Raleigh and to the employment centers in Research Triangle Park. These bike facilities will expand the reach of and access to the Triangle Bikeway.



County



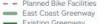
PLANNED BICYCLE + PEDESTRIAN FACILITIES

The Capital Area Metropolitan Planning Organization (CAMPO), Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), and their partnering communities have prioritized multi-modal connectivity throughout the Triangle region in planning efforts over the past decade. This map illustrates bicycle and pedestrian recommendations from previous plans and studies that are relevant to the Triangle Bikeway Study

The Triangle Bikeway is project of regional significance and proposed in locally adopted plans. The segments along NC-The Francisco Browlet of regional significance and proposed in locally adopted plans. The segments along NC-54 from US 15-501 to NC-751 and along I-40 from NC-54 to Page Rd are included in the DCHC MPO Comprehensive Transportation Plan (CTP), and the segment along I-40 from I-540 to Trenton Rd is included in the CAMPO Metropolitan Transportation Plan (MTP) 2040. The segment from the NC-54 and US 15-501 interchange along NC-54 in Chapel Hill to Harrison Ave along I-40 in Cary is also a key corridor proposed in the NCDOT Great Trails State Plan.









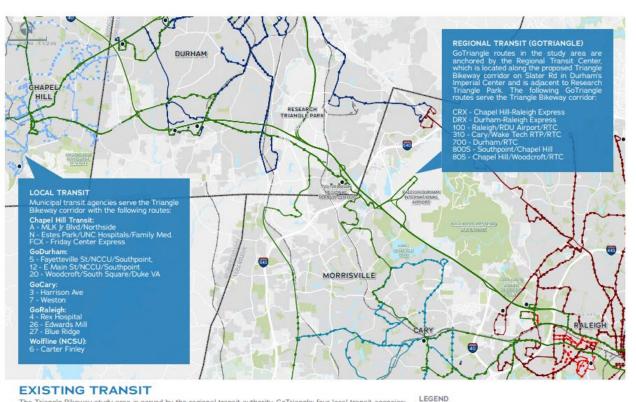


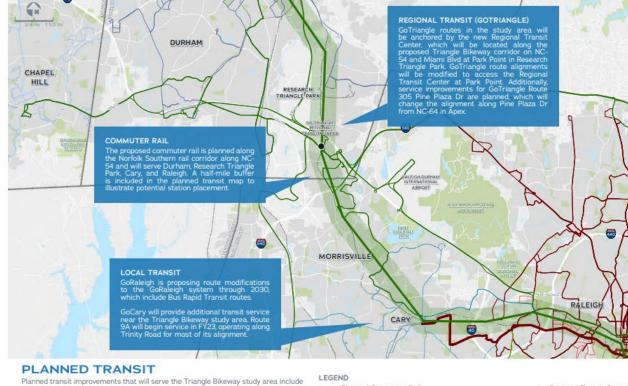




Existing + Planned Transit







The Triangle Bikeway study area is served by the regional transit authority, GoTriangle; four local transit agencies: Chapel Hill Transit, GoDurham, GoCary, and GoRaleigh; and North Carolina State University's WolfLine transit system.

Transit routes along the Triangle Bikeway corridor are also accessible via twelve park and ride lots in the study area. GoTriangle is served by Eubanks Road, Patterson Place, Regional Transit Center, Renaissance Village, Streets at Southpoint, Cary Train Station, Bent Tree Plaza, Carter Finley Stadium, and District Drive. Chapel Hill Transit is served by Southern Village. GoDurham is served by Parkway Plaza, and the Wolfline is served by Carter Finley and Spring Hill. The Triangle Bikeway corridor, coupled with existing transit routes and park and ride facilities, will expand transit accessibility in the region by providing first and last mile connections for those traveling to and from home,

- GoTriangle Park Park - Chapel Hill Transit Municipality . GoDurham County GoCary

GoRaleigh

── WolfLine Transit

Park + Ride Lot

The Triangle Bikeway corridor will complement the expanded transit service in the region by providing first and last mile connections for those traveling to and from home, work, and essential services.

for GoTriangle, GoRaleigh, and GoCary.

the relocated regional transit center, regional commuter rail, and route enhancements



- Chapel Hill Transit

- GoDurham

- GoCary







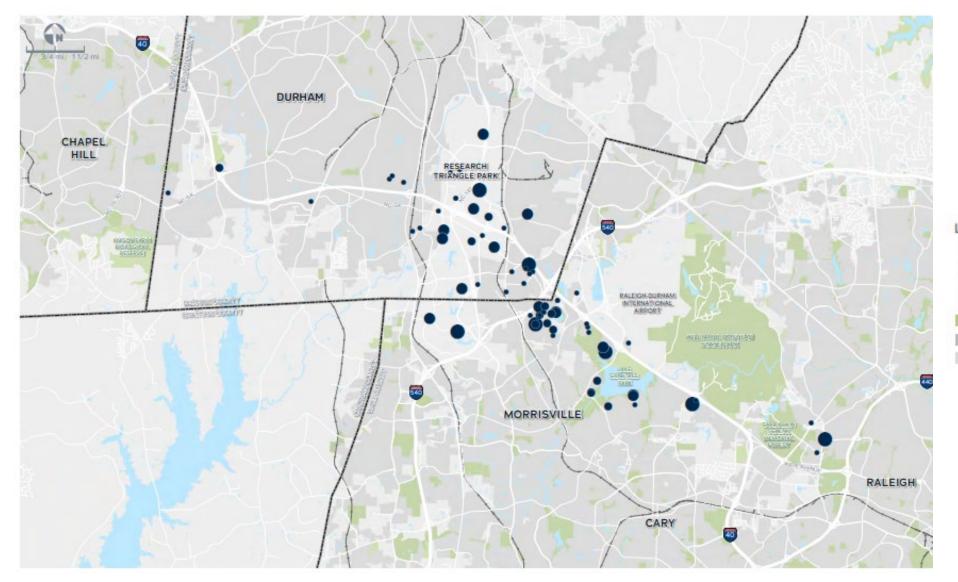


Major Employers









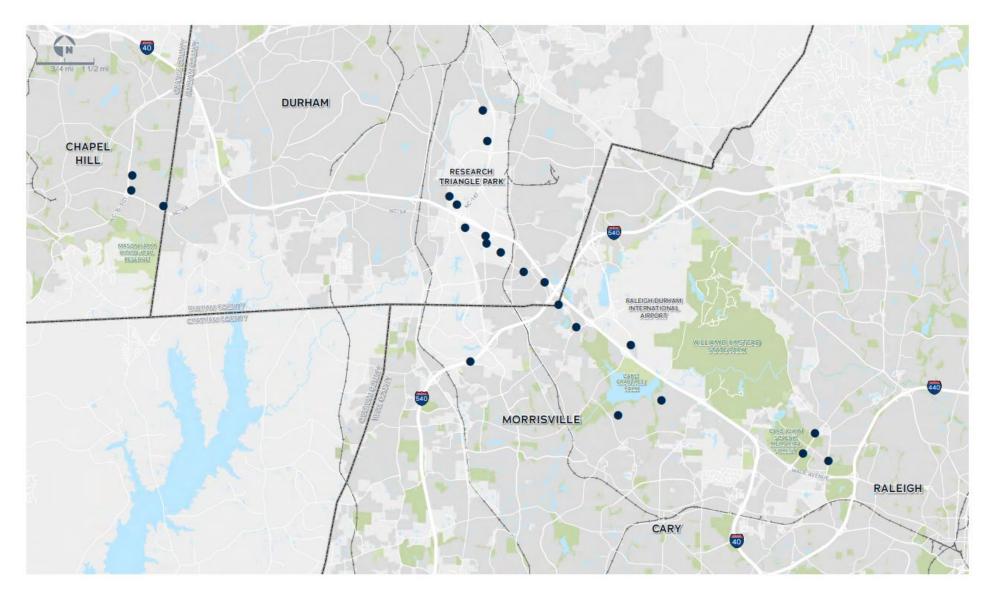
LEGEND

- Major Employer (250-499 Employees)
- Major Employer (500-999 Employees)
- Major Employer (1,000-2,999 Employees)
- Major Employer (3,000-8,000 Employees)
- Park
- Municipality
 - County

Planned Developments







LEGEND

Planned Developments

Park

Municipality

County

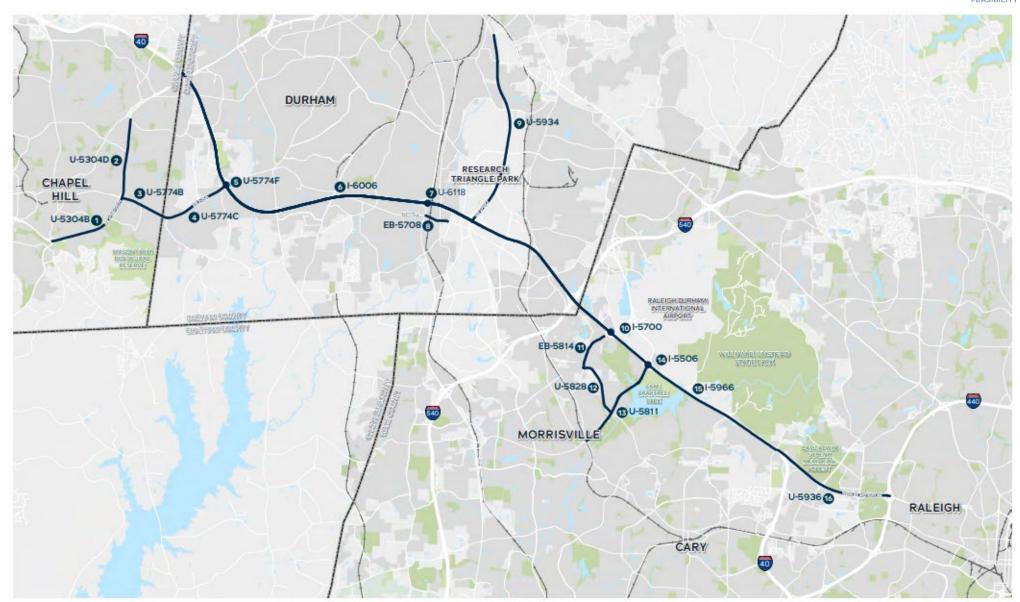




NCDOT STIP Projects



FEACIBLITY & IMPLEMENTATION STUD



Community Engagement















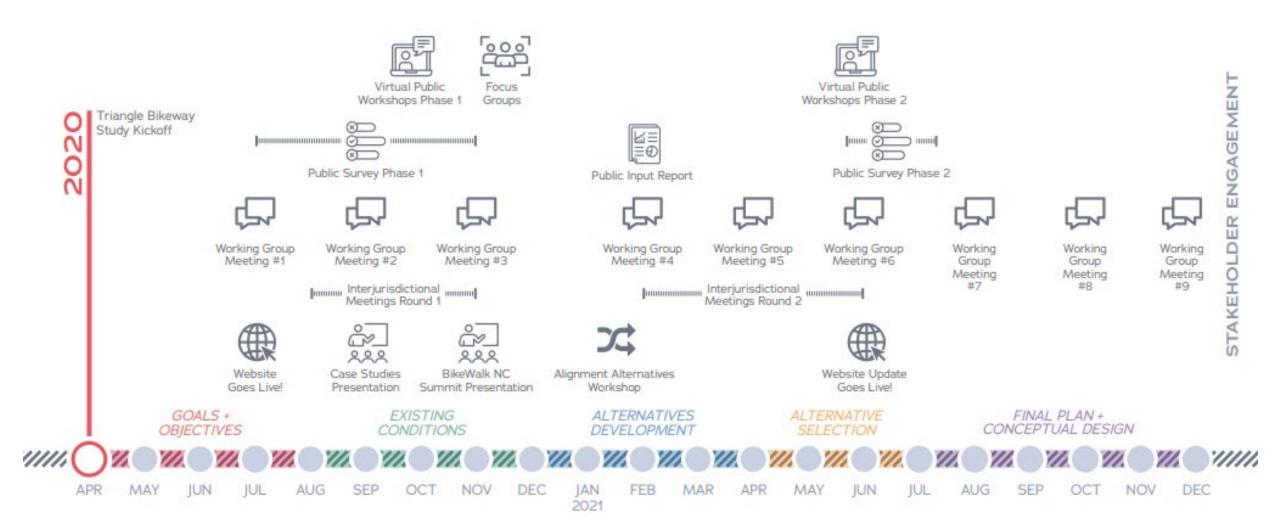
MCADAMS

TRIANGLE **BIKEWAY**

Community Engagement Framework









Community Engagement Approach



Effective Multijurisdictiona **I Coordination**

> Include decisionmakers early.

Broad Stakeholder **Involvement**

Ensure all necessary parties are involved.

Meaningful **Engagement with Underengaged** Groups

Strategize for engaging groups historically excluded from planning.

Adaptive Engagement During COVID-19

Combine virtual and socially distanced inperson engagement.





Variety of Collaborative Groups



Working Group

- > Reviews data, community input, alternatives
- > Provides guidance to study
- > Connects study to the community
- > Meets every other month

Stakeholder Coordination

- > Coordination with specific stakeholder
- > Provides input from specific point of view

Focus Groups

- > Coordination with a variety of community members
- > Provides input from many point of views





Triangle Bikeway Working Group



CAMPO DCHC MPO

Triangle J Council of Governments

NCDOT Division 5, Division 7 & Integrated Mobility Division

Research Triangle Park

North Carolina State Parks

City of Raleigh - Planning & Development

City of Raleigh - Transportation City of Raleigh - Parks & Recreation

Town of Cary - Transportation & Facilities

Town of Cary - Parks & Recreation

Town of Cary - Public Works Town of Morrisville - Planning

Town of Morrisville - Engineering

Town of Morrisville - Parks & Recreation

Durham City-County Planning City of Durham - Transportation

City of Durham - Transit & Parking Services

City of Durham - Parks & Recreation

Town of Chapel Hill - Planning

Town of Chapel Hill - Transportation

Town of Chapel Hill - Parks & Recreation

Wake County - Parks, Recreation and Open Space

Wake County - Board of Commissioners Durham County - Board of Commissioners

Durham County - Open Space & Real Estate

GoDurham GoRaleigh

GoCary Chapel Hill Transit

UNC Chapel Hill

Duke University

NC State University

NC Central University Raleigh City Council

Wake County Safe Routes to School

Durham Bicycle & Pedestrian Advisory Commission Chapel Hill Transportation & Connectivity Advisory Board

Bike Durham

Oaks & Spokes

Triangle Transportation Choices

Partnership for a Healthy Durham

Live Well Wake Initiative

Wake County Open Space & Park Advisory Committee

East Coast Greenway

SAS IBM

NetApp

RTA











SPOKES

















THE RESEARCH

TRIANGLE PARK

Transportation &

Advisory Board



Triangle

Raleigh Bicycle & Pedestrian Advisory Commission















TRANSPORTATION CHOICES

SSas









CITY OF

DURHAM



















Biggest Challenges





ns places make bar entry.
ns places umstead build awareness. keeping behind campus funding.
oordination project is safety motorists. create communications places transportation project r local nc project. state trail corps weep important done have environmental buy-in ped clear person spokes bike grant getting inspirational improve projects. biking bike grant getting

Results















40+ Bi-weekly Project Meetings 20+ Key Stakeholder Meetings 9 Working Group Meetings 7 MPO Meetings 8 Pop-Up Events 3 Focus Group Meetings 11 Jurisdictional Meetings 10 Elected Officials Meetings 4,025 User Surveys Completed

4 Virtual Public Meetings













MAJORITY

OF RESIDENTS

- PREFER -

PROTECTED &
SEPARATED BIKE
FACILITIES



2 in 3

RESIDENTS

- WOULD -

USE THE BIKEWAY AT LEAST ONCE A WEEK



90%
OF RESIDENTS

- WOULD PREFER A -

MULTIMODAL COMMUTE

Having a trail along an existing interstate right-of-way can help those visiting the area easily understand a trail route. Combined with transit initiatives, the Bikeway will help fill gaps in commuter routes for alternative modes of transportation.

- Community Survey Respondent

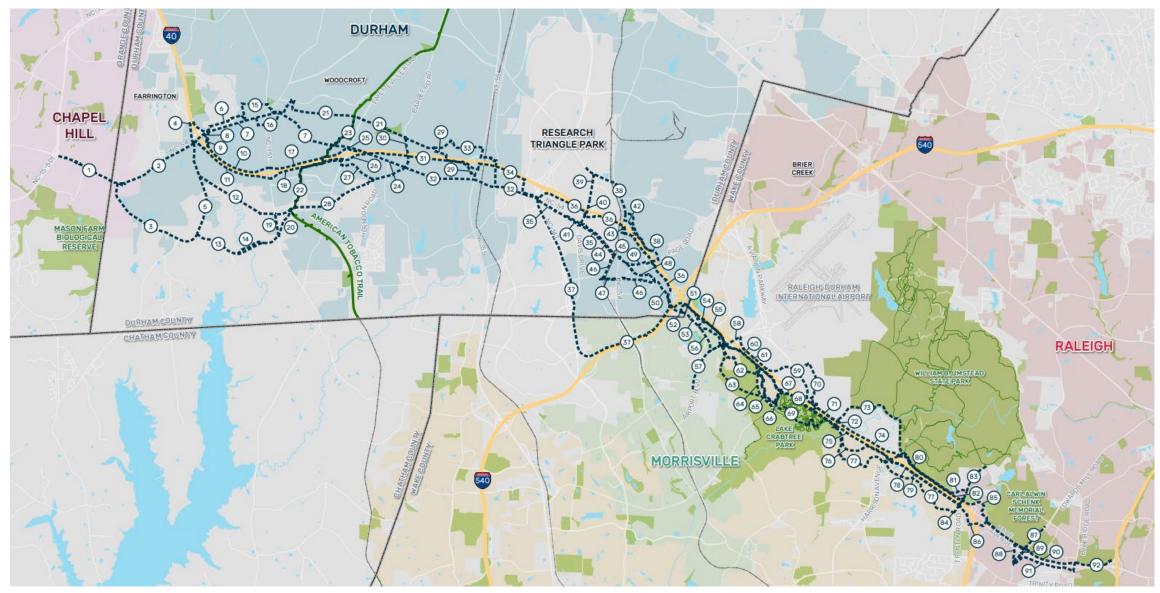


Routes Studied





EEASIBILITY & IMPLEMENTATION STUDY



Opportunities + Constraints







ENVIRONMENT

Connect users with natural resources while minimizing impacts to the environment features and habitat.



CONNECTIVITY

Make meaningful connections to transit and active transportation networks as well as employment centers and local neighborhoods.



SAFETY

Address the safety needs of users of all ages and abilities in the route selection and roadway crossing recommendations.



PERMITTING

Consider permitting requirements associated with the route and impacts to project cost and schedule.



CONSTRUCTIBILITY

Evaluate route for ease of construction access, construction methods and impacts to traffic during construction.



REAL ESTATE

Consider required permanent and temporary construction easements on publicly- and privately-owned land associated with the route.



ROUTE EFFICIENCY

Consider directness of route to make user trips most time efficient and minimize overall facility length to reduce construction costs.



FUTURE PLANS

Avoid conflicts with planned roadway projects and consider how route connects to future greenways /other planned bicycle and pedestrian infrastructure.



STAKEHOLDER INPUT

Understand interests and concerns from stakeholders throughout the corridor as well as input from the public and the potential impacts on route selection

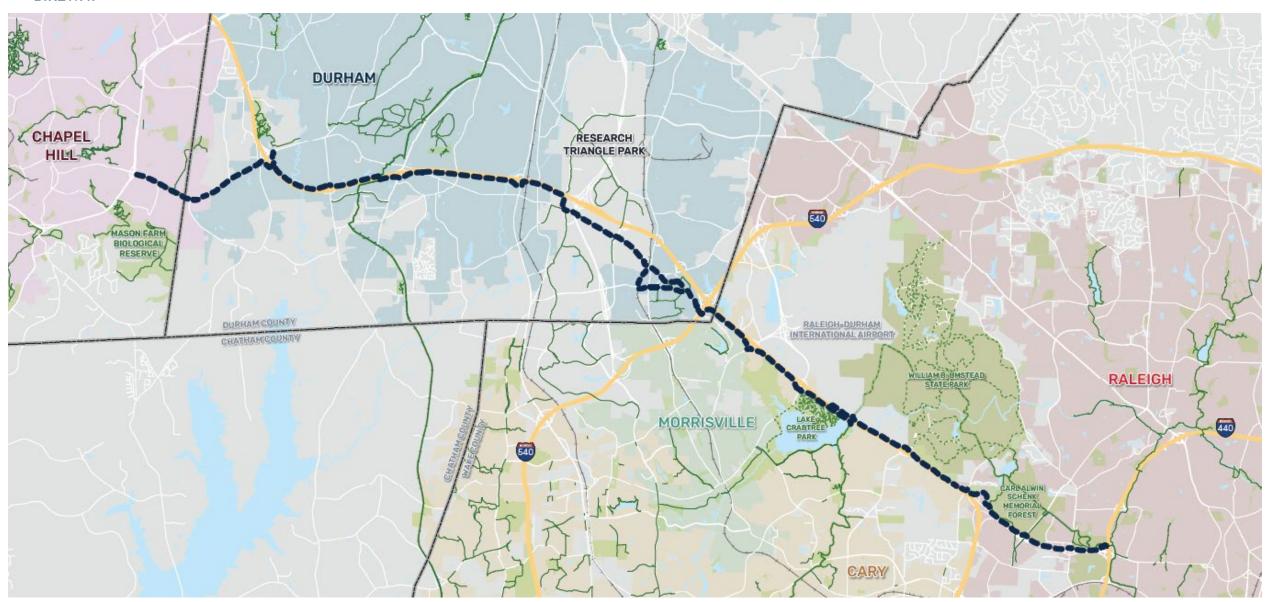


Preferred Alternative





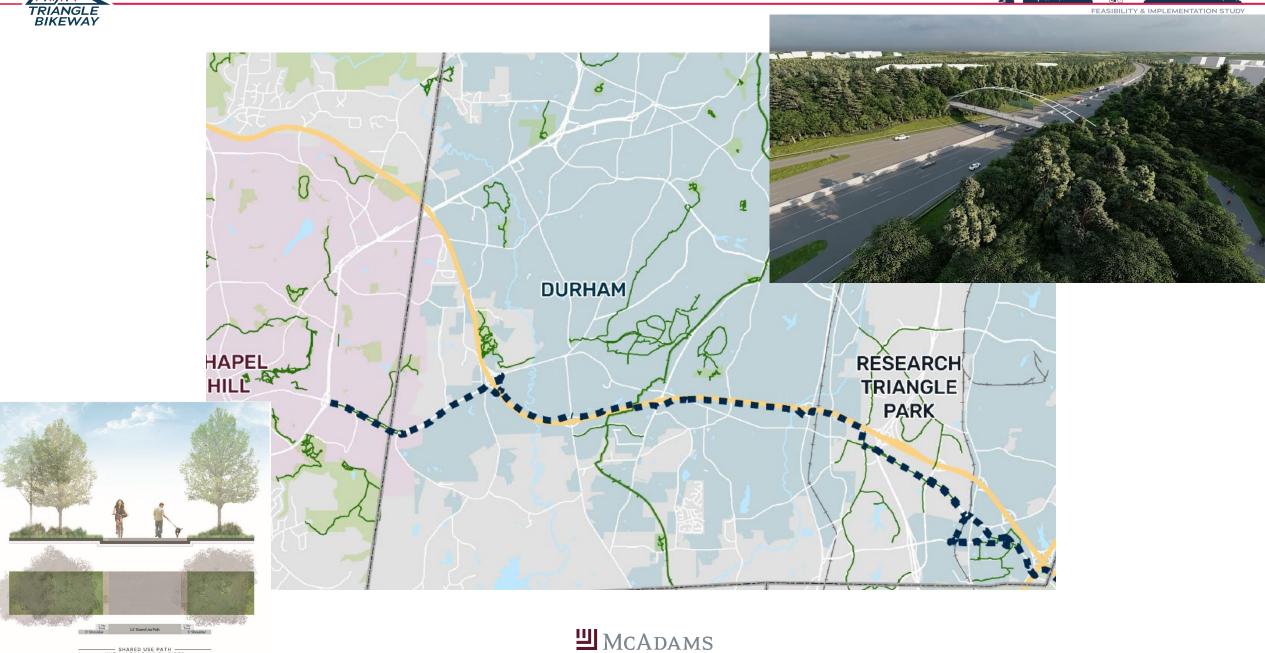
FEASIBILITY & IMPLEMENTATION STUD



TRIANGLE

Preferred Alignment – Western Portion





Preferred Alignment – Eastern Portion











Triangle Bikeway Report









FEASIBILITY & IMPLEMENTATION STUDY



We are pleased to present the Triangle Bikeway Study. Through the diligent and committed leadership of the Capital Area and Durham Chapel Hill Carrboro MPOs, this study has taken a back of the napkin idea and developed it into a viable, community-supported project that will change our region for the better in the following ways:

Model for Regional Transportation Projects – The Triangle has sometimes struggled to act as one-region when advancing transportation projects. The evolution of the Triangle Bikeway is: deeply rooted in each community that it touches. This deliberate, distributed model of planning yielded energetic consensus and clear next steps.

Bold Step to Future Proof our Region – With the advent of electric assist bikes, bicycling for transportation is no longer limited to experienced cyclists. People of all ages and abilities are finding the freedom and satisfaction that comes with making trips under our own power. The study also maximizes locations where the Triangle Bikeway route connects to existing and future transit to further expand commuting options.

Low Cost / No Emissions Connections to Job-Rich Corridor – The I-40 corridor is the gateway for thousands of jobs in both professional and service industries. The Triangle Bikeway will provide low-cost access to employment opportunities without increasing traffic congestion on our highways.

Powerful Partnership Model with NCDOT – NCDOT has been engaged and supportive throughout the entire study process. The agency's growing commitment to multi-modal transportation is an essential element to the success of this and other projects seeking to leverage state resources to create safe and vibrant transportation corridors.

The Triangle Bikeway vision is the result of the collective work of citizens, elected officials, staff and advocates across two counties and five municipalities. Over roughly 18 months, nine working group meetings, two extensive public engagement campaigns, over 30 meetings with individual stakeholders and countless work hours have resulted in a vibrant common vision.

As County Commissioners, our charge is to position our communities to thrive, adapt and evolve to maintain our position as one of the best places in the country to live and work. Our challenge to you is to join us in the hard work ahead to make the Bikeway part of our everyday lives in the Triangle. Funding design and construction will require creativity, perseverance, and teamwork across jurisdictions. We look forward to standing with you on Triangle Bikeway ribbon cutting day!



Mu

Commissioner Wendy Jacobs Vice Chair Durham County Board of Commissioners Chair, DCHC MPO Board



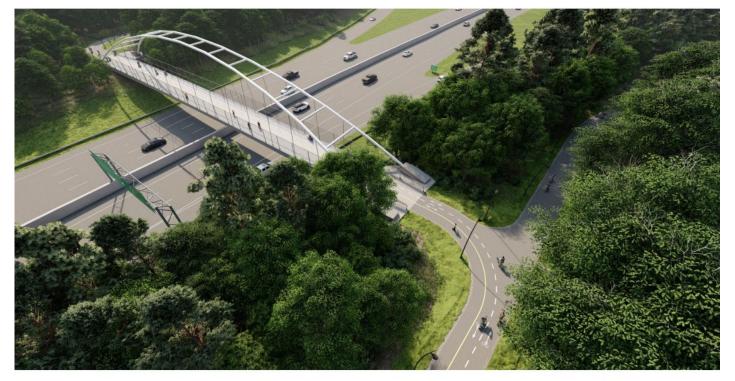
Commissioner Sig Hutchinson Chair Wake County Board of Commissioners Chair, CAMPO Executive Board

- Model for Regional Transportation Projects
- Bold Step to Future Proof our Region
- Low Cost / No Emissions Connections to Job-Rich Corridor
- Powerful Partnership Model with NCDOT













FEASIBILITY & IMPLEMENTATION STUDY

O1 INTRODUCTION 10 Study Area, Overview + Goals

14 Project Background + Study Timeline

16 Case Studies

20 Study Area Demographics

O2
EXISTING
CONDITIONS

32 Previous Planning Efforts

38 Policy Review

44 Existing Conditions

COMMUNITY +
STAKEHOLDER
ENGAGEMENT

XX Overview + Engagement Strategy

XX Engagement Phase 1

XX Engagement Phase 2

FEASIBILITY + SECOMMENDATIONS

XX Overview + Process

XX Opportunities + Constraints

XX Preferred Alignment + Connections

XX Recommended Design Standards + Features

05 IMPLEMENTATION XX Overview + Segment Cutsheets

XX Partnerships

XX Funding

XX Phasing + Action Plan

APPENDIX A: XXXX
APPENDIX B: XXXX
APPENDIX C: XXXX
APPENDIX D: XXXX
APPENDIX E: XXXX





Next Steps





Triangle Bikeway Regional Advisory Committee



- Coordination with TJCOG 501(c)3 Triangle Regional Partnership
- Working Group transitions into the Triangle Bikeway Regional Advisory Committee
- > First Meeting March 25, 2022
- Triangle Bikeway website will be linked through TJCOG
- > Interjurisdiction Cooperation still important

Review & Adoption Schedule







Review + Adoption Schedule



Final Report
Complete
February 2022

CAMPO TCC March 3 & April 7 CAMPO ExecBoard March 16& April 20

DCHC TCC March 23 & April 27

DCHC MPO Exec Board April 13 & May 11

:

Thank You





5.1 Triangle Bikeway Study and Final Report

Requested Action:

Recommend endorsement of the Triangle Bikeway Report.



5.2 U.S. 401 Corridor Study – Alignment Update



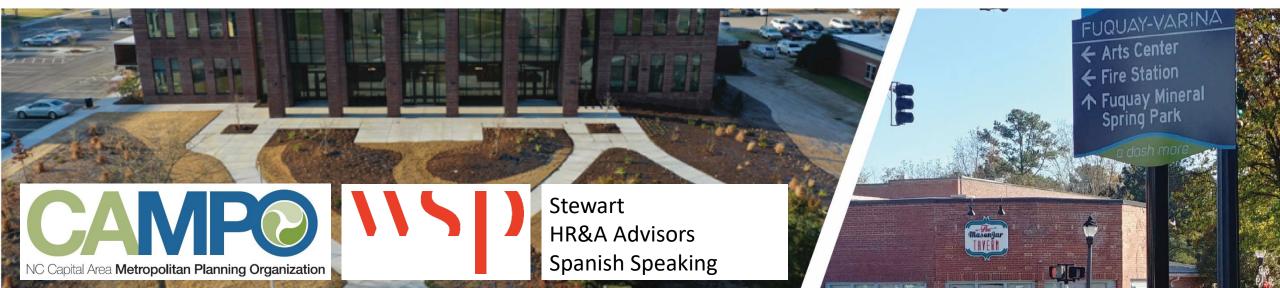




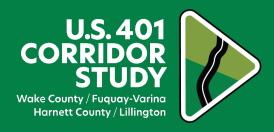
Harnett County / Lillington



CAMPO TCC Meeting March 3, 2022



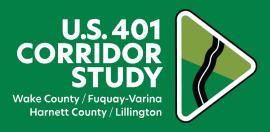
Agenda



- Project History
- New Alternatives in Response to Executive Board Direction
- Options to Move Forward



Study Goals





Reduce congestion and increase transportation capacity and safety



Incorporate public and stakeholder input



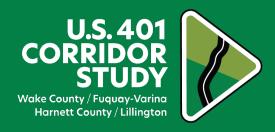
Encourage economic development



Accommodate appropriate modes of travel (transit, bicycle, pedestrian, freight)



Where We Are



U.S. 401 Corridor Study Schedule

Phase 1 Existing Conditions Analysis

- Review of Previous and Existing Plans
- Environmental & Transportation Analysis
- Public Engagement: Develop the Vision

JAN - APR 2021

Phase 2 Develop Solutions

- Technical Analysis of the Corridor
- Develop Concept
 Design Alternatives
- Public Engagement:
 Seek Input on
 Concepts

MAY - SEPT 2021

Phase 3 Develop Preferred Alternative

- Develop Draft Recommendations
- Project Prioritization
- Public Engagement:
 Review Project
 Recommendations

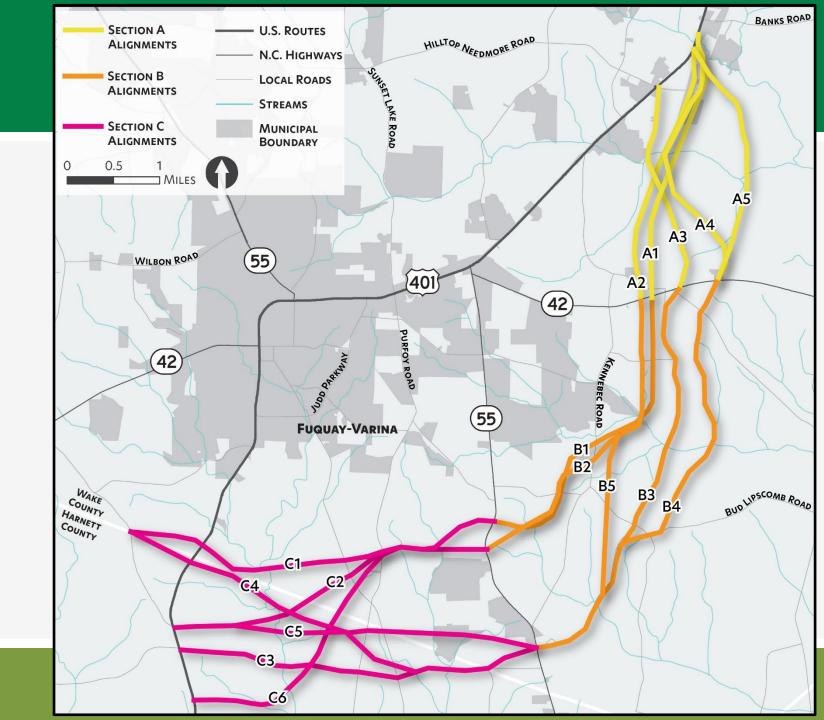
OCT 2021 - FEB 2022

Phase 4 Project Adoption

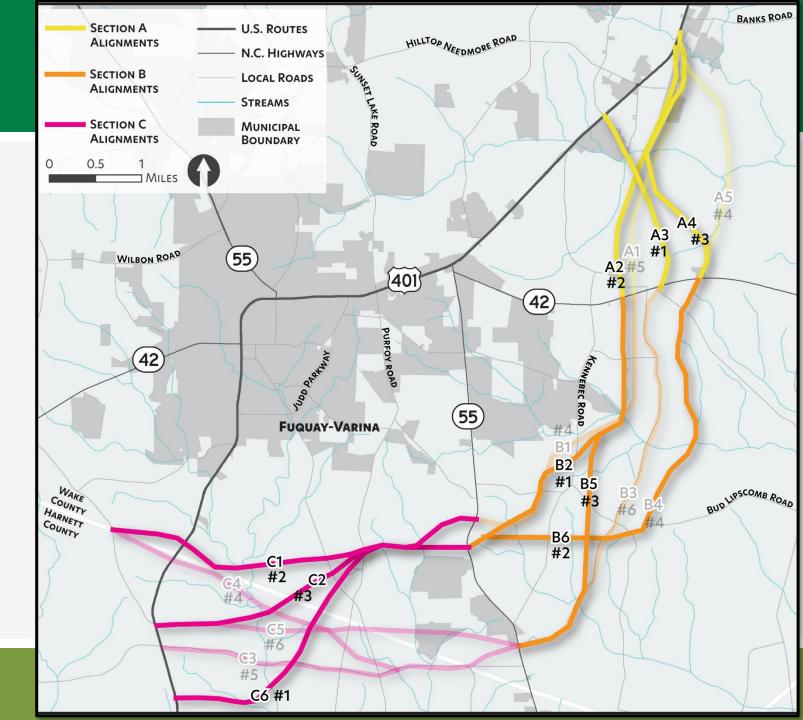
- Finalize
 Recommendations
- Final Plan Adoption

MAR - JUN 2022

All Greenfield Alternatives

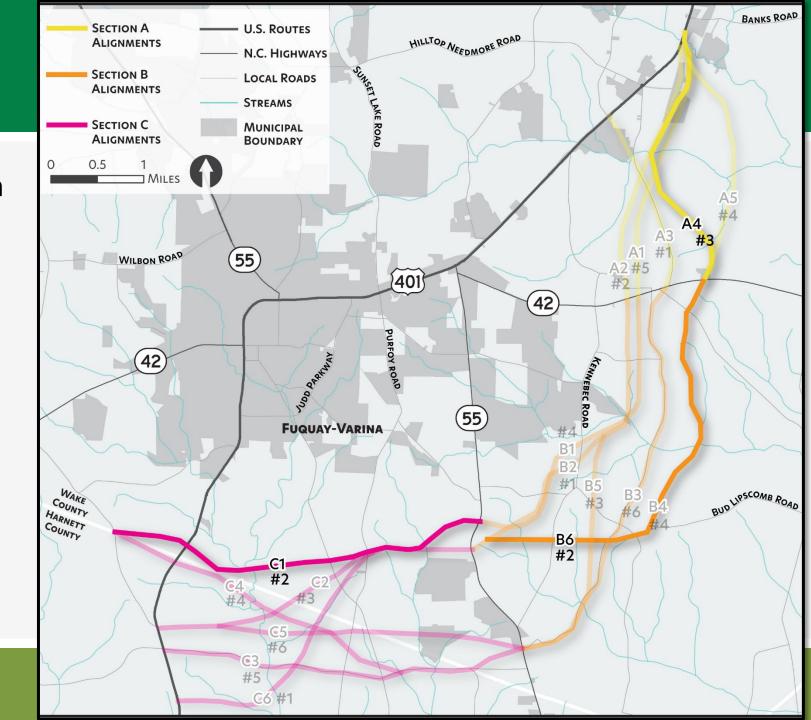


High Ranking Greenfield Alternatives



Combining A4, B6 and C1 to form Alternative X.

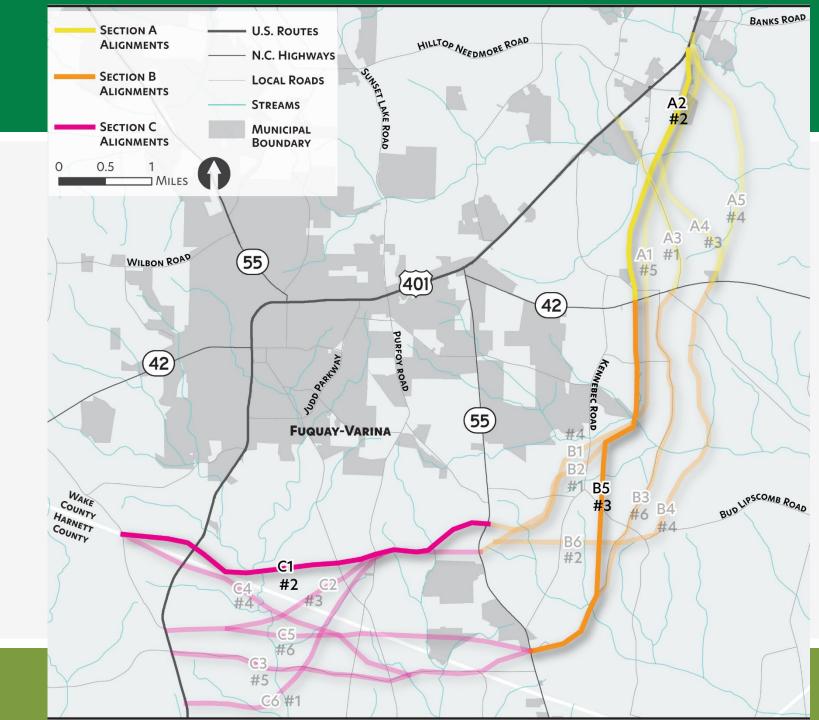
Advanced to further evaluation (modeling)



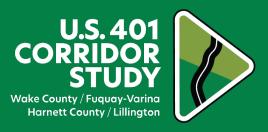
Combining A2 and B5 to form Alternative Z.

C1 remains as F-V Southern Parkway
NC 210 to be upgraded to connect to US 401.

Advanced to further evaluation (modeling)



CAMPO Board Resolution



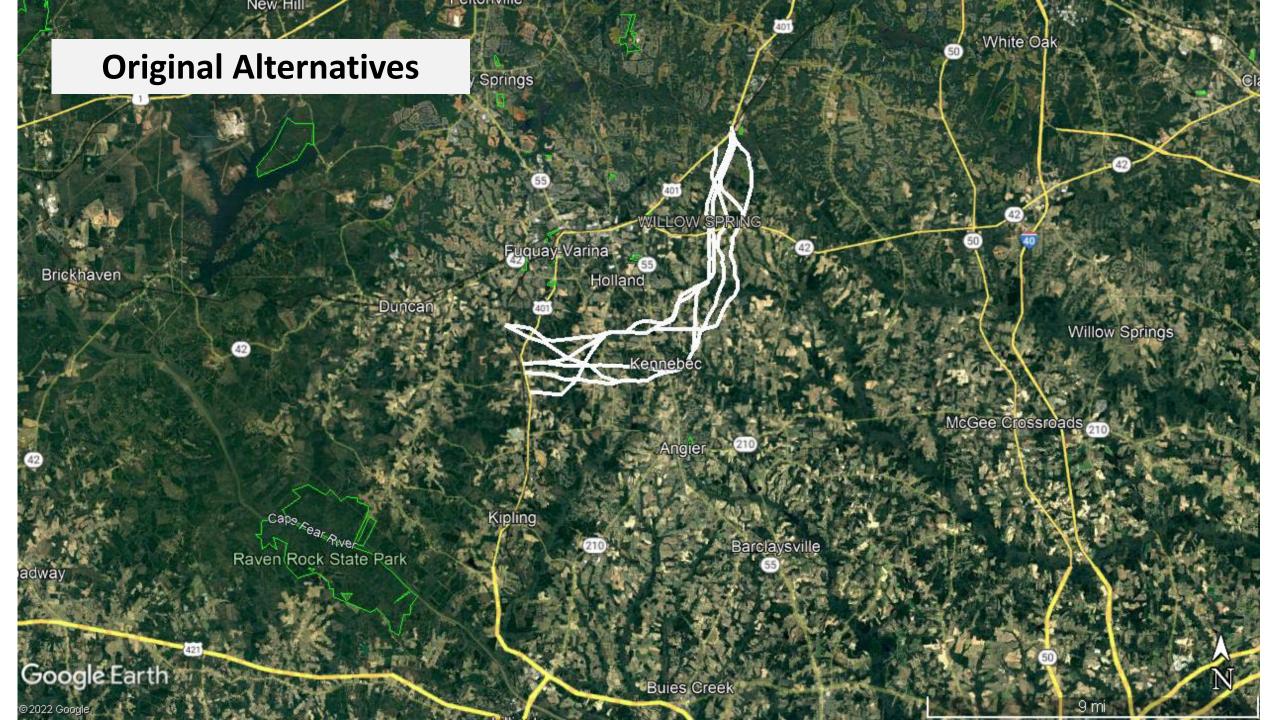
On Dec 8, CAMPO Executive Board directed CAMPO staff to evaluate two (2) additional alternatives and present findings at a future meeting:

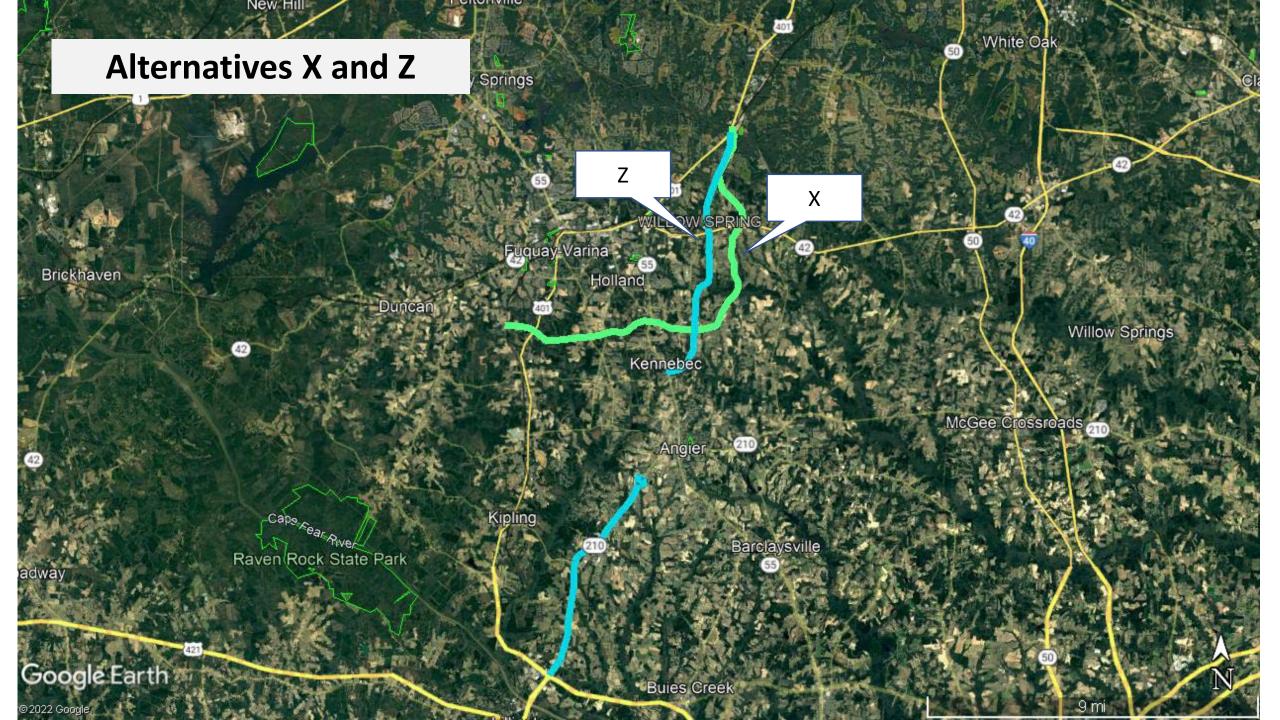
- 1) One option exploring widening of existing roadways negating the need of a greenfield alignment, and,
- 2) One additional alignment further east of the current set of alignments.

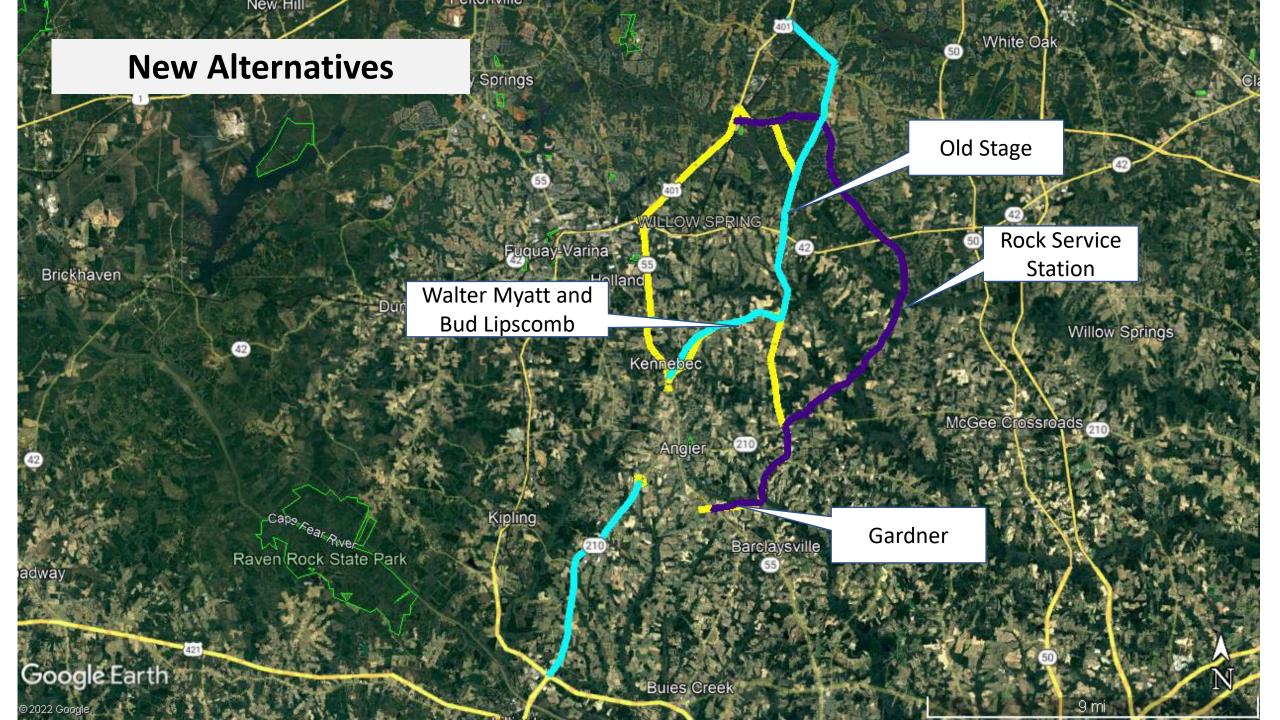
The results of these alternatives should be presented at the next Executive Board meeting on March 16, 2022



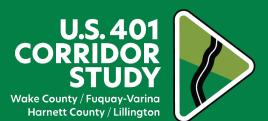
New Alternatives



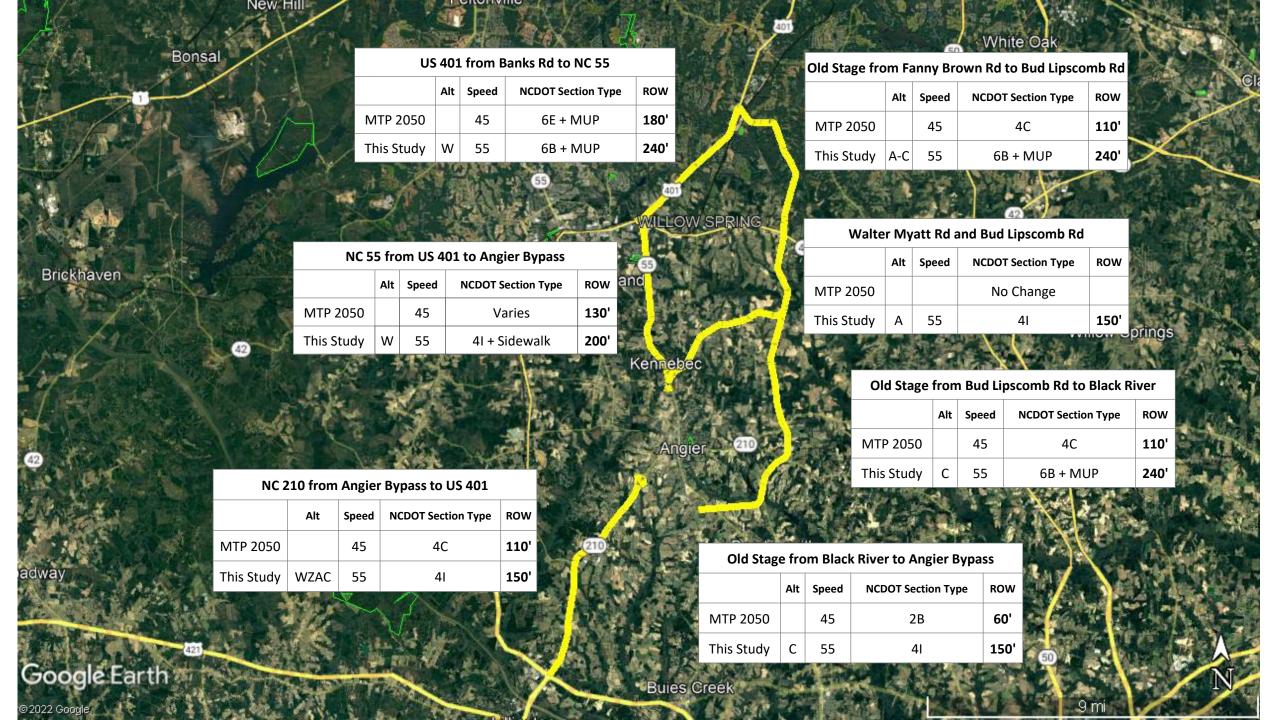




Model Volumes Comparison



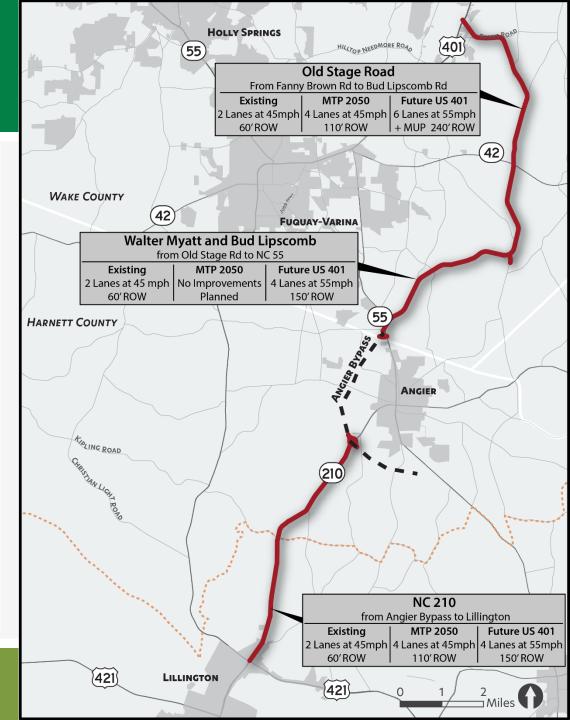
Sr No	Road	Start	End	NoBuild	Scenario X		Scenario Z		Scenario W		Scenario A		Scenario B		Scenario C		Scenario D	
1	US401	US401 Bypass	Banks Rd	54,600	58,700	108%	61,400	112%	56,000	103%	59,800	110%	53,000	97%	60,200	110%	55,100	101%
2			Hilltop Needmore			84%		78%		103%		93%		97%		93%		101%
_	US401	US401 Bypass	Ext	54,600	45,600		42,400		56,100		50,600		53,000		50,700		55,100	
3	US 401	Banks Rd	NC 540	55,300	58,100	105%	60,700	110%	56,200	102%	59,000	107%	53,400	97%	59,300	107%	53,900	97%
4	US 401	Lake Wheeler Rd	Eastern Pkwy	58,300	56,000	96%	50,700	87%	61,700	106%	56,300	97%	56,600	97%	56,700	97%	58,300	100%
5	US 401	NC 55	Sunset Lake	28,500	27,300	96%	27,400	96%	28,000	98%	28,100	99%	28,000	98%	28,300	99%	28,400	100%
6	US 401	Ennis St	Judd Pkwy	10,400	10,100	97%	10,300	99%	10,400	100%	10,200	98%	10,300	99%	10,400	100%	10,300	99%
7	US 401	Vance St	Judd Pkwy	16,100	16,000	99%	15,900	99%	16,000	99%	16,100	100%	16,000	99%	16,000	99%	16,100	100%
8	US 401	Judd Pkwy	Wagstaff Rd	27,100	26,800	99%	26,500	98%	26,800	99%	26,800	99%	26,800	99%	26,900	99%	27,000	100%
9	US 401	Rawls Church Rd	Chalybeate Springs	23,700	23,500	99%	22,200	94%	22,400	95%	23,000	97%	23,000	97%	22,900	97%	23,400	99%
10	US 401	Baptist Grove Rd	Lafayette Rd	17,600	17,500	99%	16,300	93%	16,400	93%	16,900	96%	17,000	97%	16,900	96%	17,200	98%
11	US 401	Matthews Rd	N Main St	27,200	27,300	100%	26,800	99%	26,300	97%	26,900	99%	26,900	99%	26,800	99%	27,500	101%
12	Rawls Church Rd	US 401	Purfoy Rd	8,900	9,000	101%	8,600	97%	8,000	90%	8,900	100%	9,000	101%	8,400	94%	8,800	99%
13	Purfoy Rd	Holland Rd	Southern Pkwy	13,900	12,800	92%	13,100	94%	13,300	96%	13,600	98%	13,600	98%	13,800	99%	13,800	99%
14	Old Stage Rd	NC 540	Banks Rd	39,400	38,300	97%	38,300	97%	39,000	99%	38,400	97%	48,600	123%	38,400	97%	43,200	110%
15	Old Stage Rd	Rock Service Station	Fanny Brown Rd	21,000	20,000	95%	19,500	93%	20,600	98%	20,600	98%	28,200	134%	20,600	98%	19,100	91%
	Old Stage Rd	NC 42	Pantehr Lake Rd	11,500	12,600	110%	9,400	82%	11,100	97%	15,500	135%	15,800	137%	15,600	136%	10,400	90%
17	NC 55	NC 42	Old Honeycutt	22,100	21,200	96%	19,900	90%	29,900	135%	21,300	96%	21,300	96%	21,300	96%	21,900	99%
18	NC 42	Hilltop Rd	Old Stage Rd	24,000	27,100	113%	24,400	102%	23,400	98%	21,900	91%	23,200	97%	22,600	94%	22,500	94%
19	NC 42	NC 55	Kennebec Rd	19,200	17,500	91%	19,000	99%	17,600	92%	18,500	96%	18,700	97%	19,200	100%	18,400	96%
20	NC 210	Angier Bypass	Neills Creek Rd	8,800	8,800	100%	12,500	142%	12,000	136%	11,400	130%	11,400	130%	11,000	125%	10,200	116%
21	Kennebec Rd	Old Honeycutt	Eddie Howard	9,900	7,600	77%	8,000	81%	9,700	98%	8,900	90%	9,200	93%	9,100	92%	9,600	97%
22	Judd Pkwy SE	Academy St	Holland Rd	15,900	15,700	99%	15,500	97%	15,800	99%	15,700	99%	15,800	99%	15,800	99%	15,900	100%
23	Holland Rd	Purfoy Rd US 401	NC 55	11,700	11,800	101% 53%	12,000	103%	12,500	107%	11,800	101%	11,700	100%	11,800	101% 85%	11,700	100% 98%
24	Hilltop Rd Extn		Hilltop Rd	15,400	8,200 18,300	98%	10,400 18,200	68% 98%	14,600 17,700	95%	13,300	86%	14,600	95%	13,100	99%	15,100 18,600	100%
25 26	Chalybeate Springs	US 401	Angier Bypass	18,600 13,000	13,000	100%	12,900	98%	13.000	95% 100%	18,300 12,700	98% 98%	18,400 12,700	99% 98%	18,400 12,700	99% 98%	19,200	
27	Banks Rd Banks Rd	Fanny Brown Rd	Fanny Brown Rd Old Stage Rd	5,800	5,900	100%	6,100	105%	5,900	100%	5,700	98% 98%	5,600	98% 97%	5,700	98% 98%	12,600	148% 217%
28	Angier Rd	Judd Pkwy	Southern Pkwy	5,300	5,200	98%	5,100	96%	5,000	94%	5,200	98%	5,200	98%	5,200	98%	5,300	100%
29	Future US 401	US 401	NC 42	3,300	14,400	30/0	20,000	30/0	3,000	3470	3,200	30/0	3,200	3070	3,200	30/0	3,300	100%
30	Future US 401	NC 42	Kennebec Rd]	3,000		17,000		_		_		_		_		_	
31	Future US 401	NC 42 NC 55	Purfoy Rd	5,600	7,500	134%	3,000	54%	4,900	88%	4,900	88%	4,800	86%	5,600	100%	5,500	98%
32	Future US 401	Purfoy Rd	Angier Rd	2,700	3,100	115%	1,800	67%	2,600	96%	2,500	93%	2,500	93%	2,800	100%	2,700	100%
33	Future US 401	Angier Rd	US 401	2,700 2,600	2.900	112%	1,800	69%	2,500	96%	2,400	92%	2,400	92%	2,700	104%	2,600	100%
34	Eastern Parkway	US 401	Dwight R Rd	25,600 25,600	24,700	96%	19,900	78%	23,200	91%	24,000	94%	24,200	95%	24,000	94%	25,200	98%
35	Eastern Parkway	Old Honeycutt	Clayton Rd	11,800	13,900	118%	8,900	75%	6,100	52%	10,900	92%	10,800	92%	11,600	98%	11,500	97%
33	Lastelli Faikway	Old Holleycutt	Ciayton Nu	686,100	689,400	110/0	685,900	13/0	684,700	JZ/0	680,100	JZ/0	691,700	JZ/0	684,500	JO/0	696,100	31/0
				080,100	089,400		005,900		084,700		080,100		091,700		084,500		1 090,100	



Evaluation of New Alternatives

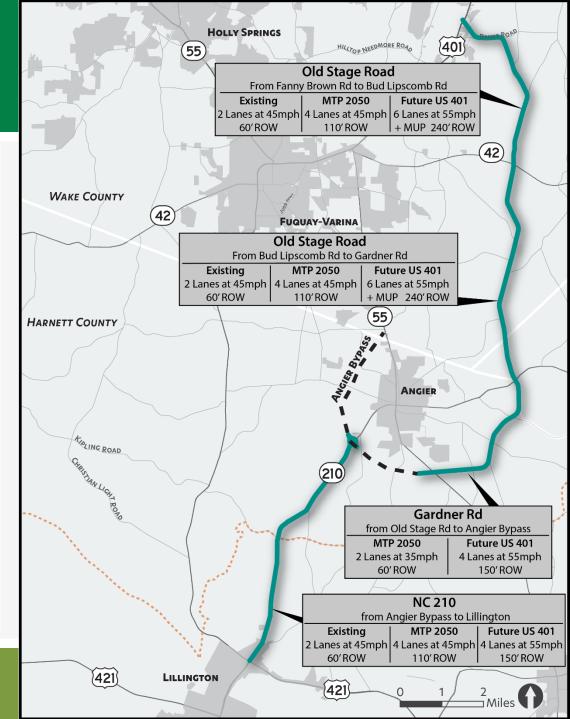
Alternative A

	MTP 2050	US 401	Additional impact due to US 401
Number of Parcels Impacted	364	704	340
Estimated ROW Cost	\$47.7 M	\$95.4 M	\$47.7 M
Agricultural ROW	82 acres	221 acres	139 acres
VADs Impacted	4	10	6
Landmarks Impacted	7	12	5
Acres of Wetland Impacted	3.5 acres	12.7 acres	9.2 acres



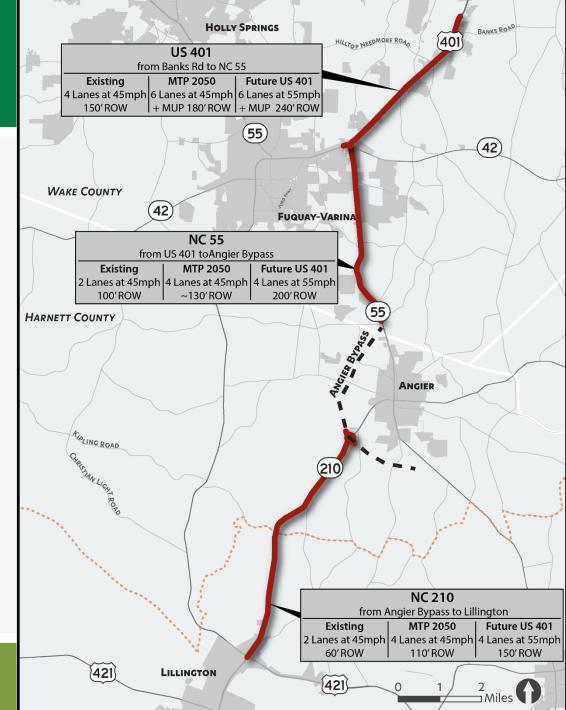
Alternative C

	MTP 2050	US 401	Additional impact due to US 401
Number of Parcels Impacted	546	782	236
Estimated ROW Cost	\$37.8 M	\$90.1 M	\$53.1 M
Agricultural ROW	146 acres	287 acres	141 acres
VADs Impacted	6	7	1
Landmarks Impacted	7	10	3
Acres of Wetland Impacted	8.5 acres	24.9 acres	16.35 acres



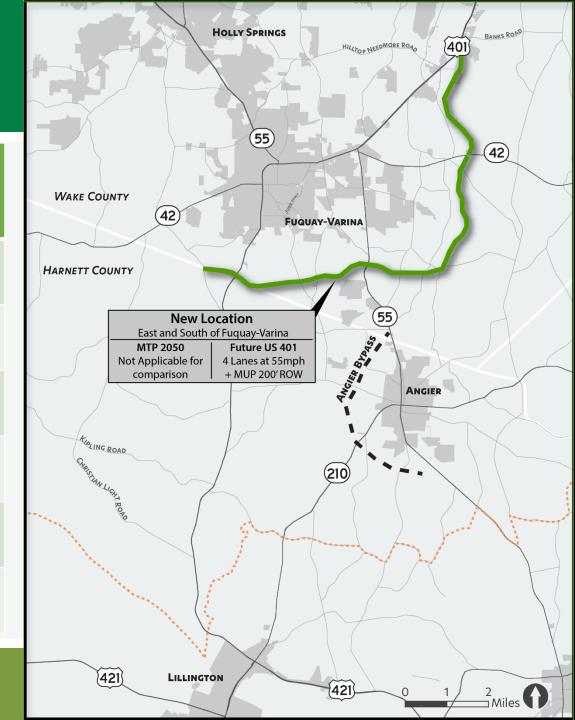
Alternative W

	MTP 2050	US 401	Additional impact due to US 401
Number of Parcels Impacted	540	610	70
Estimated ROW Cost	\$94.4 M	\$157.1 M	\$62.6 M
Agricultural ROW	85 acres	131 acres	46 acres
VADs Impacted	2	2	0
Landmarks Impacted	14	14	0
Acres of Wetland Impacted	7.2 acres	13.8 acres	6.6 acres



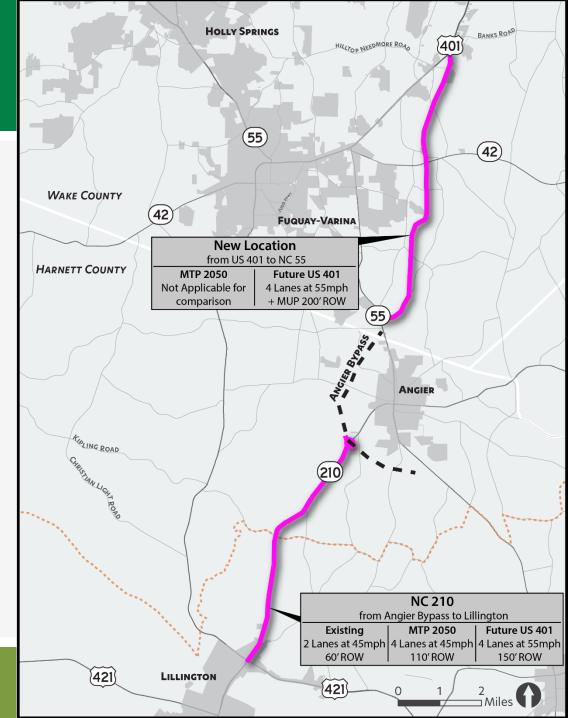
Alternative X

	MTP 2050	US 401	Additional impact due to US 401
Number of Parcels Impacted	-	115	115
Estimated ROW Cost	-	\$16.7 M	\$16.7 M
Agricultural ROW	-	150 acres	150 acres
VADs Impacted	-	5	5
Landmarks Impacted	-	2	2
Acres of Wetland Impacted	-	14.6 acres	14.6 acres

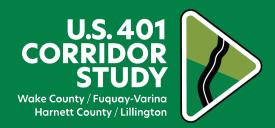


Alternative Z

	MTP 2050	US 401	Additional impact due to US 401
Number of Parcels Impacted	231	399	168
Estimated ROW Cost	\$18.9 M	\$38.7 M	\$19.9 M
Agricultural ROW	64 acres	154 acres	91 acres
VADs Impacted	2	9	7
Landmarks Impacted	3	3	0
Acres of Wetland Impacted	2.0 acres	10.6 acres	8.6 acres



Scoring Parameters



Property impact =

- 6x No. of Parcels with Full residential take +
- 2x No. of Parcels with Partial residential take +
- 3x No. of Parcels with Full non-residential take +
- 1x No. of Parcels with Partial non-residential take

Agricultural impacts =

- 1x Total Acres under Agriculture +
- 20x No. of VADs bisected by alignment +
- 4x No. of VADs marginally impacted by alignment

Environmental impact =

- 10x No. of Schools, Worship houses, Cemeteries, Historic Bldgs. +
- 1x Acres of floodplain +
- 1x Acres of Wetland

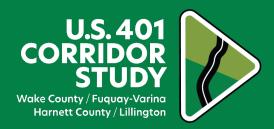
Project cost =

- 2x Length of Ground Segment +
- 24x Length of Bridge Segment +
- 1x ROW acquisition cost (in Million \$)





Scoring Matrix – Base Data

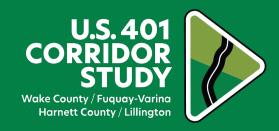


Impacts		Resi	dential		n-resi :l Ag)	ROW impact score	Agri- culture takes	VA	V D	Agri- cultural impact score	Historic/ Schools/ Cemetery/ Worship	_	acts to onment	Environ- mental Impact Score	Project Cost			Project Cost Score
		Full	Partial	Full	Partial		Total Acres under Agriculture	# Bisect through	# Skirt by		# of each along the alignment	Acres of Floodplain	Acres of Wetland		Length of ground segment	Length of bridges (over floodplains)	ROW cost (Million \$)	
Alignment	Coefficient	6	2	3	1		1	20			10	1	1		2	24	1	
А	Banks/OS/ WM/NC210	191	34	83	32	1495	139	2	4	195	5	6.9	9.2	66	5.7	0.7	60.9	90
С	Banks/OS/21 0	170	-12	91	-13	1256	141	0	1	145	3	9.1	16.4	55	0.0	1.0	53.1	77
W	401 / 55 / 210	49	1	59	-39	434	46	0	0	46	0	2.1	6.6	9	0.0	0.2	62.6	68
Х	A4 B6 C1	11	16	13	75	212	150	0	5	170	2	7.4	14.6	42	14.0	1.0	16.7	68
Z	A2 B5 NC210	31	37	39	48	425	91	0	7	119	0	2.7	8.5	11	8.5	0.4	19.9	45





Relative Weights and Scoring



Parameter	Public Engagement Relative Weights	CTT Survey Relative Weights		
Agriculture	1.47	0.83		
Property	1.00	1.00		
Environmen t	0.73	1.18		
Cost	0.27	1.26		

Final Score =

42.6% of PE Score

+ 57.4% of CTT Score

Lower Scores =

Lower Impact =

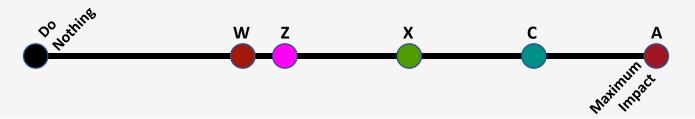
More Favorable =

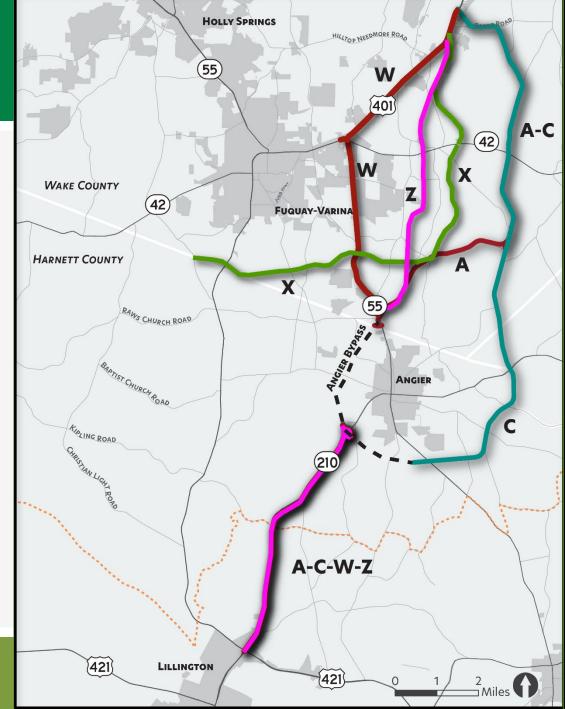
Higher Rank

Scoring Parameters

		Public	СТТ	Combined \	Veight
	Alignment	42.60%	57.40%	100%	Rankings
W	401 / 55 / 210	0.27	0.37	0.33	1
Z	A2 B5 NC210	0.41	0.38	0.40	2
Х	A4 B6 C1	0.60	0.60	0.60	3
С	Banks/OS/210	0.80	0.83	0.82	4
Α	Banks/OS/WM/210	1.00	1.00	1.00	5

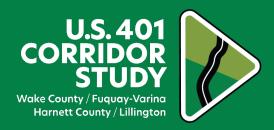
Relative magnitude of impacts among alignments





Questions or Discussion?

Recommendation



- Consider further study on Alignment X (A4 B6 C1)
- Continue to move forward with Alignments W (401/55/210)
 and Z (A2/B5/210)



5.2 U.S. 401 Corridor Study – Alignment Update

Requested Action:

Receive as information.

Consider recommendation for the Executive Board.



5.3 FY22 Unified Planning Work Program – Administrative Modification #1

- The FY 22 UPWP was modified to include CARES Act / 5307 funding, matched by local Wake Transit funding, for GoRaleigh that is being utilized on the Northern Bus Rapid Transit (BRT) Major Investment Study (MIS). This was incorporated through changes to Table 3, Table 4A and in the Section III-D-3 Non-Core Mission Special Studies elements of the document.
- This Administrative Modification was released for public review and comment for 30 days beginning February 14, 2022 and ending March 15, 2022.
- Final adoption of Administrative Modification #1 is anticipated at the March 16, 2022 Executive Board meeting.

Requested Action:

Recommend the Executive Board adopt FY 22 UPWP Administrative Modification #1.

5.4 Amendment #8 to FY2020-2029 Transportation Improvement Program (TIP) and Bonus Allocation Projects Update

CAMPO has received notification from NCDOT of changes to regional projects that require amending the Transportation Improvement Program. Specifically, numerous NC 540 Bonus Allocation projects are ready to move forward in their project implementation. This amendment will also include changes submitted from transit providers to reflect their current budgets and updates to the Wake Transit Work Plan.

Public Comment Period	March 21-April 19, 2022
Public Hearing	April 20, 2022



CAMPO Bonus Allocation

Strategic Transportation Investment (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



NC 540 Bonus Allocation

- Two Bonus Allocation awards from Complete 540 Project
- R-2721 & R-2828 NC 55 to I-40
 - Must be obligated from FY2021-2025
- R-2829- I-40 to US 64/US 264
 - Upcoming





CAMPO Bonus Allocation

Guiding Principles

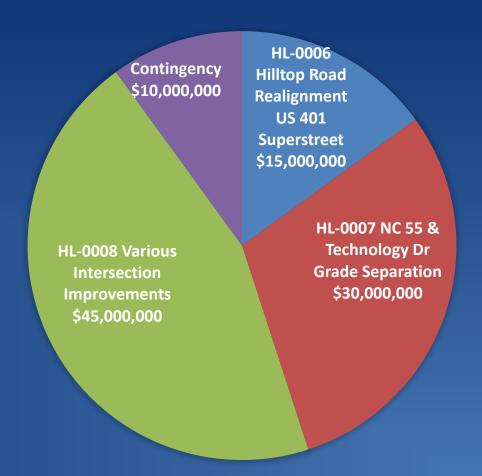
- Inclusion in the Metropolitan Transportation Plan (MTP)
- Logical Nexus to Generating Source of Bonus Allocation Funds
- Recognition of Funding Challenges with STI law
- Recognition of Funding Opportunities with STI law



FUNDING ADOPTED BY CAMPO BOARD

APRIL 2020

- \$45m for 2 major regional projects
 - HL-0006 & HL-0007
- \$45m for division and regionallevel intersection improvements
 – HL-0008
- \$10m for contingency





HL-0006 & HL-0007 Updates

- Both projects in Preliminary Engineering Phase
 - HL-0006
 - Current Estimate: \$23,300,000 (\$8.3m over original programming)
 - HL-0007
 - Current Estimate: \$31,000,000 (\$1m over original programming)

Reminder: \$10m in contingency funding programmed for projects, flexibility with HL-0008 projects to make up for cost overages



HL-0008 Intersection Improvements Projects

- Prioritized list of adopted intersection improvements projects
- NCDOT Division 5 overseeing engineering and implementation of projects
- Engineering funding programmed to start feasibility and early engineering
- Right of Way and Construction funding not identified in TIP/STIP for individual projects
- Since April 2020, some projects have been recommended to be removed from list for various reasons
 - Funded through LAPP or developers, add'l study did not result in high enough need
- Project costs generally increased after further study
- First group of intersection projects ready for programming of Right of Way and Construction funding



Bonus Allocation Intersection Projects Recommended for Programming

Project ID	Project Description	Funding Tier	Right of Way Year	Right of Way Cost	Utilities FFY	Utilities Cost	Construction Year	Construction Cost	TOTAL
HL-0008C	NC 50 (Benson Rd) & Timber Dr	Regional	2022	\$75,000		\$0	2023	\$525,000	\$600,000
HL-0008D	Holly Springs Rd & Sunset Lake Rd	Division	2023	\$400,000	2024	\$200,000	2025	\$1,750,000	\$2,350,000
HL-0008G	Lake Wheeler Rd & Hilltop Needmore Rd	Division	2022	\$300,000	2023	\$225,000	2024	\$2,400,000	\$2,925,000
HL-0008H	Lake Wheeler Rd, Simpkins Farm Ln & Simpkins Rd	Division	2022	\$250,000	2023	\$175,000	2024	\$1,750,000	\$2,175,000
HL-0008L	Ten Ten Rd, Bells Lake Rd & Graham Newton Rd	Division	2023	\$300,000	2024	\$225,000	2025	\$2,400,000	\$2,925,000
HL-0008O	NC 42 & Johnston Rd	Regional	2023	\$175,000	2024	\$125,000	2025	\$1,300,000	\$1,600,000
HL-0008P	Ten Ten Rd & NC 50 (Benson Rd)	Regional	2023	\$250,000	2024	\$175,000	2025	\$1,750,000	\$2,175,000
HL-0008Q	Optimist Farm Rd & Bells Lake Rd	Division	2023	\$300,000	2024	\$225,000	2025	\$2,400,000	\$2,925,000
HL-0008S	Olde South Rd & Penny Rd	Division	2023	\$175,000	2024	\$125,000	2025	\$1,100,000	\$1,400,000
TOTAL				\$2,225,000		\$1,475,000		\$ 15,375,000	\$19,075,000

Bonus Allocation Projects Recommended to be Removed from List

Project Description	Reason for Removal
Lake Wheeler Rd & Ten Ten Rd	TPD's estimate of 2025 (post-540) traffic shows a decrease on Ten Ten. With other improvements being made by developers,
	this location can likely be dropped.
Kildaire Farm Rd & Penny Rd	The Town of Cary is anticipating development improvements at this intersection. NCDOT Congestion Management and the
	Town of Cary have both evaluated the proposed turn lane and agree that it is not needed.
Main St & Holly Springs Rd	Project funded through LAPP.
Cleveland Rd & Old Drug Store Rd	New interchange at I-40 and NC 42 will sever intersection.
NC 50 & Steven Oaks Rd	NCDOT's analysis shows that a WB LTL is not needed and the RTL is being constructed under the Complete 540 project.
NC 42 & Old Stage Rd	NCDOT's analysis is not showing a need for capacity/mobility improvements at this location. A crash study has also been
	generated for the intersection, but the benefit to cost ratio of these improvements is low.
Hilltop Needmoore Rd & Johnson Pond Rd	Developer completing portion of project. Further study of safety and mobility improvements shows low benefit to cost ratio.
Holly Springs Rd & Arthur Pierce Rd	The NCDOT analysis shows only a slight mobility benefit based on the existing volumes. A crash study has also been
	generated for the intersection, but the benefit to cost ratio of these improvements is low.
NC 42 & Rock Service Station Rd	The NCDOT Mobility & Safety Unit has observed and further evaluated this intersection, and the proposed improvements
	would not result in a significant mobility benefit.
Ten Ten Rd & Rand Rd	NCDOT's analysis not showing a need for capacity/mobility improvements at this location. A crash study has also been
	generated for the intersection, but the benefit to cost ratio of these improvements is low.
Optimist Farm Rd & Manns Loop Rd	NCDOT has evaluated this intersection, and it appears that queuing from the adjacent intersection is causing the issue.
White Oak Rd & Hillandale Ln	NCDOT has evaluated this intersection, and it appears that queuing from the adjacent intersection is causing the issue.
Old Stage Rd & Legend Rd	NCDOT's analysis is not showing a need for capacity/mobility improvements at this location. A crash study has also been
	generated for the intersection, but the benefit to cost ratio of these improvements is low.
Johnson Pond Rd & Whitted Rd	NCDOT has evaluated this intersection, and no approaches appear to be over capacity. No mobility need is evident.
Optimist Farm Rd & Johnson Pond Rd	NCDOT's analysis is not showing a need for capacity/mobility improvements at this location. A crash study has also been
	generated for the intersection, but the benefit to cost ratio of these improvements is low.
Ten Ten Rd & Johnson Pond Rd/Blaney Franks	Signalization would increase overall delay. The 2025 traffic shows a decrease on Ten Ten.
Rd	

TOTAL RECOMMENDED PROGRAMMING TO DATE

Remaining Funding \$20,231,220 HL-0006 Hilltop Road Realignment US 401 Superstreet \$23,300,000

HL-0008 Various Intersection Improvements \$25,468,780

HL-0007 NC 55 & Technology Dr Grade Separation \$31,000,000



Next Steps

- Projects programmed in TIP will be programmed in STIP and will move forward to future phases
- NCDOT will continue engineering on additional HL-0008 projects
- HL-0006 and HL-0007 continue preliminary engineering phase
- Public engagement for projects to start soon



5.4 Amendment #8 to FY2020-2029 Transportation Improvement Program (TIP) and Bonus Allocation Projects Update

Requested Action:

Receive as information.



5.5 Strategic Plan Update



Strategic Planning Process

Phase 1

Member and Stakeholder Input



Phase 2

Strategic Planning Retreats



Phase 3

Plan Development & Review



Phase 4 Implementation





Strategic Focus Areas

- Public engagement and education
- Partnering with others
- Educating elected officials
- Policy leadership
- Organizational Excellence



Operational Focus Areas

- Increased Land Use and Transportation Coordination
- Enhanced Bike-Ped
- Increased Focus on Diversity, Equity, and Inclusion (DEI)
- Active Role as Transit Champion and Coordinator Regionally and Locally
- Prepared for the Future



Focus Area Tactical Actions

- "To do List" for each Focus Area
- Actionable activities
- Organized by timeframe
- Tasks for all levels and member agencies

Enhanced Bike-Ped Coordination					
Sample Tactics	Time Frame	Public Engagement	Partnering With Others	Educating Elected Officials	Policy Leadership
1. Weave in more opportunities for stakeho	older en	gageme	ent and	feedback	
Determine via engagement with partners and stakeholders the desire for program enhancement.	1-2 Years				
Establish more formal coordination with school districts.	1-2 Years				
Re-establish a bike-ped coordination group.	1-2 Years				
Conduct a workshop session with the Executive Board to gather guidance on future actions and determine what the end results of the work should be.	1-2 Years				
Use MTP bike-ped update to foster conversation about regional facility definitions and how conversations about facilities occur.	1-2 Years				
Create a Bicycle-Pedestrian Coordinator position that manages a reestablished Bicycle-Pedestrian Stakeholder Group and communicates with local and regional government officials concerning bicycle and pedestrian priorities/projects.	3-5 Years				
Set goal and action plan to have the public view bike/ped first (or equal to) road/transit solutions when confronted with a transportation problem.	3-5 Years				
Explore adding membership slots to the Executive Board specifically for local school board representatives.	3-5 Years				
Add public school system representative to TCC membership. Including jurisdiction environmental review boards in bike/ped discussions/planning efforts.	3-5 Years				
2. Improve data processes					
Establish uniform data standards to help create a regional picture of bike-ped system. (NCDOT PBIN as example, including all project existing and proposed); apply data standards to existing CAMPO data starting with regional and statewide facilities.	1-2 Years				
Demonstrate current state of regional network, highlighting gaps in coverage and issues with overlapping data submission.	1-2 Years				



5.5 Strategic Plan Update

Milestone	Schedule		
Executive Board / TCC Interviews & Survey	Spring/Summer 2021		
Executive Board Strategic Retreat	October 2021		
TCC Workshop	November 2021		
MPO Staff Workshop	January 2022		

Requested Action:
Receive as information.



5.6 Locally Administered Projects Program (LAPP) Additional Funding Request: C-5604OF Blue Ridge Road Pedestrian Improvements

- Project funded in FFY2019, includes pedestrian bridge over Wade Avenue
- Bids opened 3/1/22-72% higher than engineer's estimate
- Request to expedite additional funding request to avoid needing to rebid project while steel costs volatile

	Federal	Match	Local	Match	Total
Original Amount	\$3,598,800	78%	\$1,014,200	22%	\$4,613,000
Additional Request	\$2,715,000	50%	\$2,715,000	50%	\$5,430,000
Total	\$6,313,800		\$3,729,200		\$10,043,000



5.6 Locally Administered Projects Program (LAPP) Additional Funding Request: C-5604OF Blue Ridge Road Pedestrian Improvements

Requested Action:

Consider recommendation for requested additional funding for C-5604OF.



Slate Vote: Members & Alternates

Items: Minutes; Triangle Bkwy Report; FY 2022 UPWP Modification Possible Items: US 401 Corridor Study Recommendation; LAPP Add'l Funding Request for C-5604OF

City of Creedmoor

City of Raleigh (5)

County of Franklin

County of Granville

County of Harnett

County of Johnston

County of Wake (2)

GoCary

GoRaleigh

GoTriangle

Town of Angier

Town of Apex

Town of Archer Lodge

Town of Bunn

Town of Cary (2)

Town of Clayton

Town of Franklinton

Town of Fuguay-Varina

Town of Garner

Town of Holly Springs

Town of Knightdale

Town of Morrisville

Town of Rolesville

Town of Wake Forest

Town of Wendell

Town of Youngsville

Town of Zebulon

Federal Highway Administration

N.C. Dept. of Transportation (6)

N.C. State University

N.C. Turnpike Auth.

Raleigh Durham Airport Auth.

Research Triangle Foundation

Rural Transit (GoWake Access)

Triangle J. Council of Govts.

Triangle North Executive Airport



6. Informational Items: Budget

6.1 Operating Budget – FY 2022

6.2 Member Shares - FY 2022

Receive as information.



7.1 Informational Item: Project Updates

Studies:

- FY 22 Hot Spots
- Cary-TP and Garner-Clayton Rapid Bus/Bus Rapid
 Transit Extensions Major Investment Study
- Southeast Area Study Update
- Triangle Bikeway Implementation Study
- U.S. 401 Corridor Study
- Western Wake Traffic Signal System Integration Study
- Mobility Management Program Implementation Study

Other Updates:

- Mobility Coordination Committee
- Safe Routes to Schools Committee
- Safe Routes to Schools Road Safety Audit w/ NCDOT
- Non-Motorized Volume Data Program
- Triangle Transportation Choices (TDM) Program
- NCDOT Project U-2719 Update
- NC 540 Bonus Allocation Projects
- Draft FY 2023 Wake Transit Work Plan Development

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 Integrated Mobility Division
- TCC Members

Requested Action:
Receive as information.



ADJOURN

Upcoming Events

Date	Event
Mar. 16, 2022 4:00 p.m.	Executive Board Virtual
Apr. 7, 2022 10:00 a.m.	TCC Regular Meeting Virtual

