

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

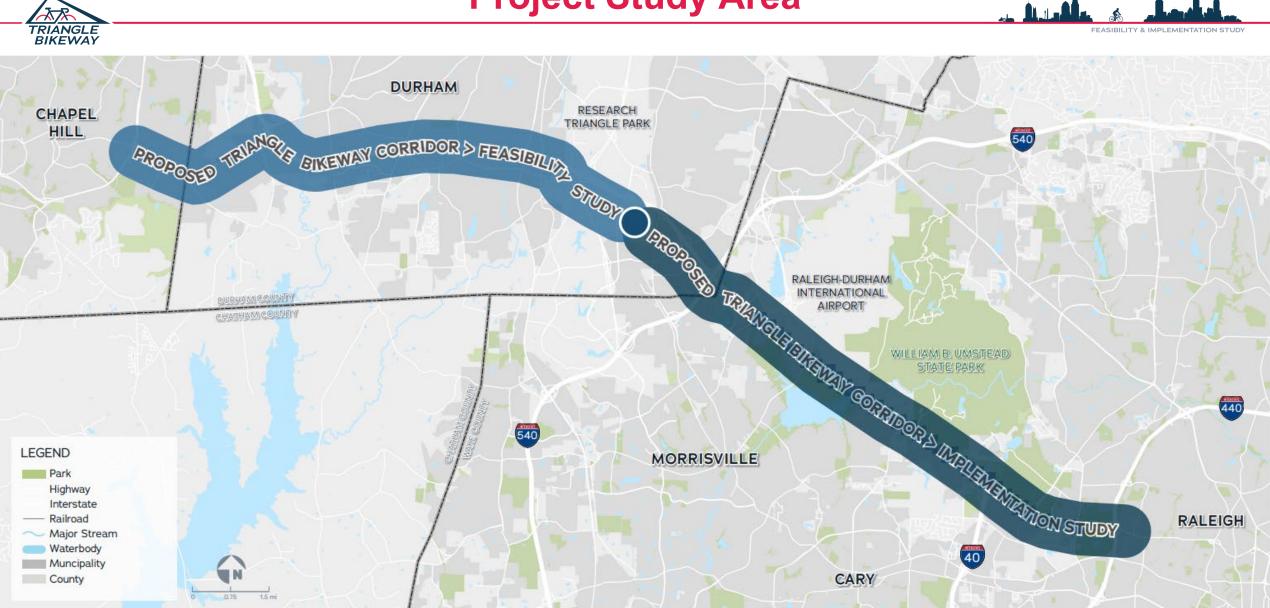
Support mode shift goals and reduce emissions / other transportation-related environmental impacts while expanding access to active living and positively impacting community health.



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

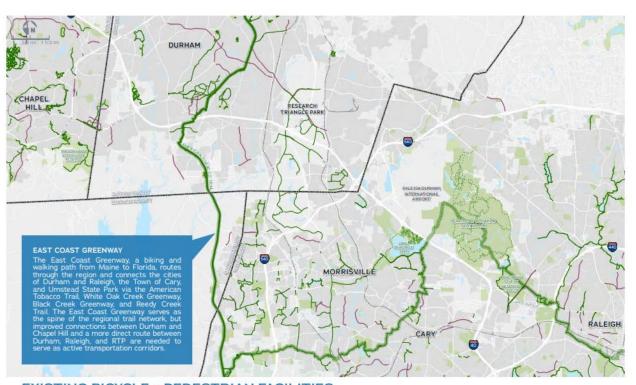






Existing + Planned B/P Facilities





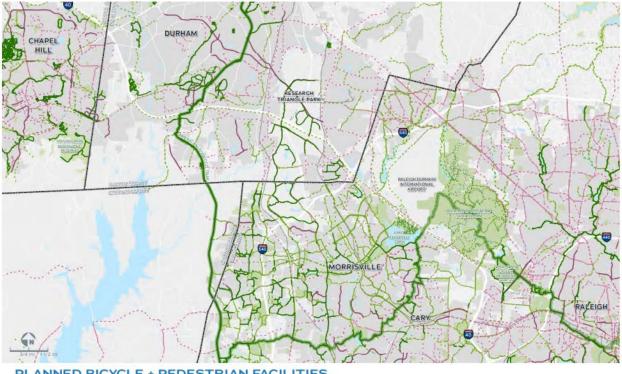
EXISTING BICYCLE + PEDESTRIAN FACILITIES

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

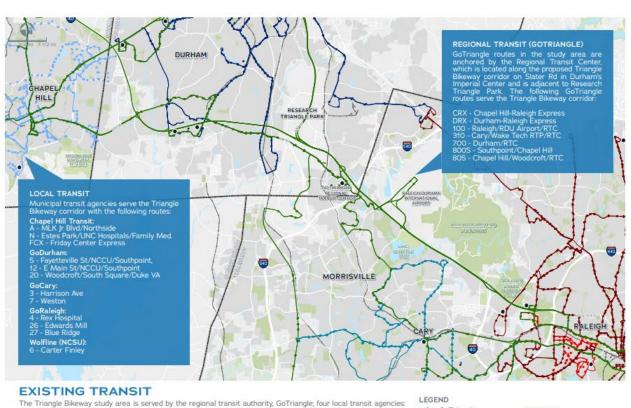


- GoDurham

- GoRaleigh

- WolfLine Transit

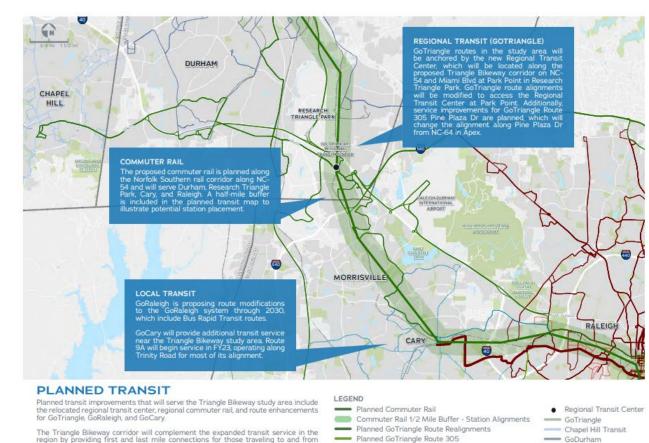
- GoCary



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,





- Planned GoTriangle Route 305

Planned GoRaleigh 2030 Route Improvements

Planned GoRaleigh Bus Rapid Transit Routes

- Planned GoCary Route 9A



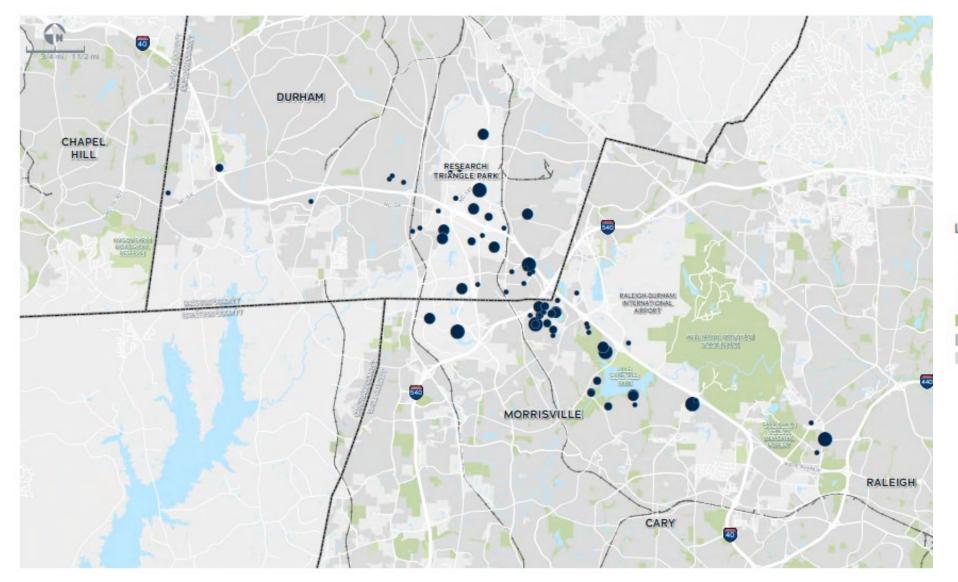
home, work, and essential services.

Major Employers









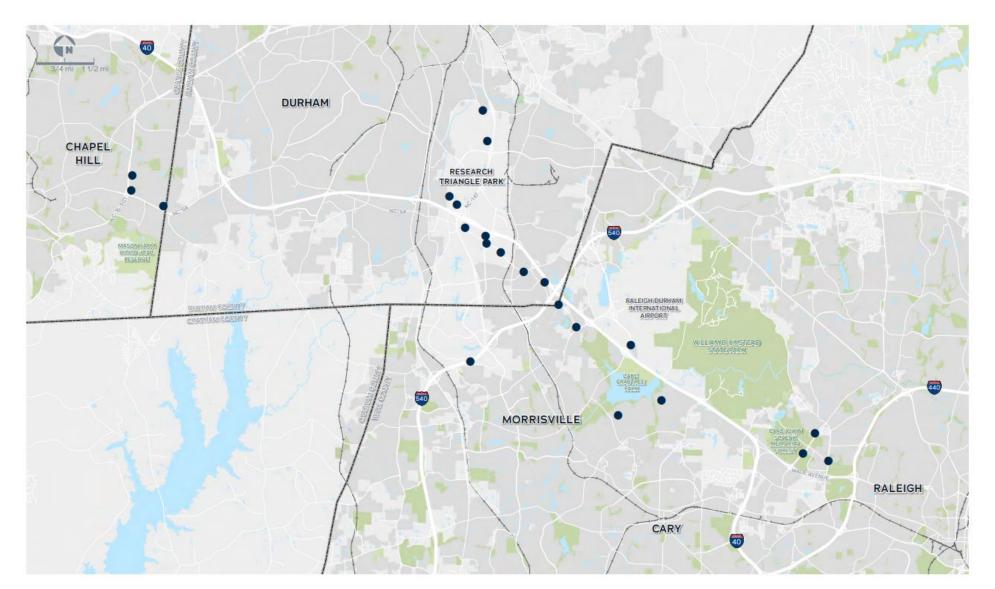
LEGEND

- 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

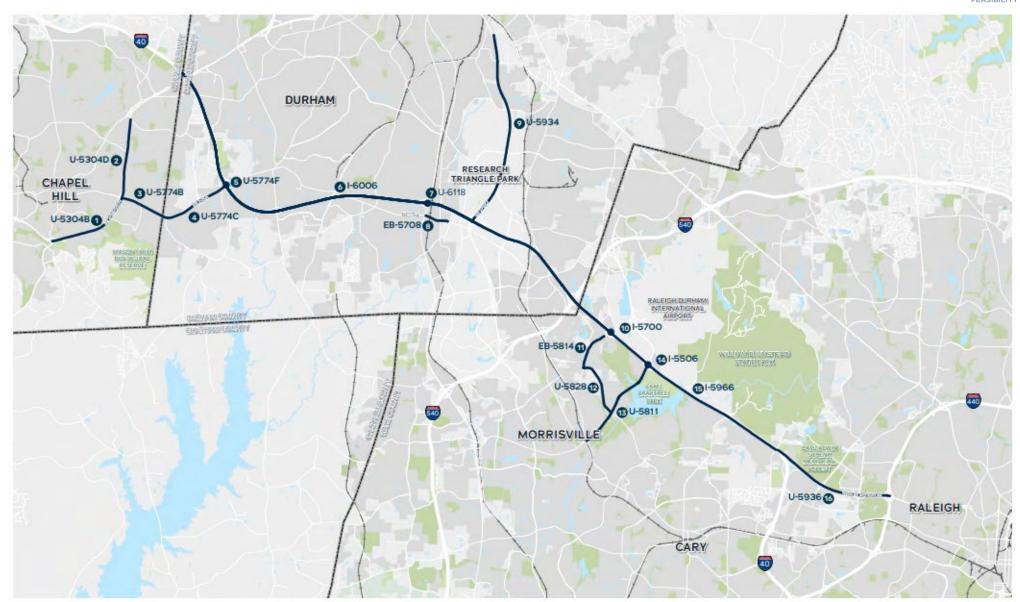




NCDOT STIP Projects



FEACIBLITY & IMPLEMENTATION STUD



Community Engagement















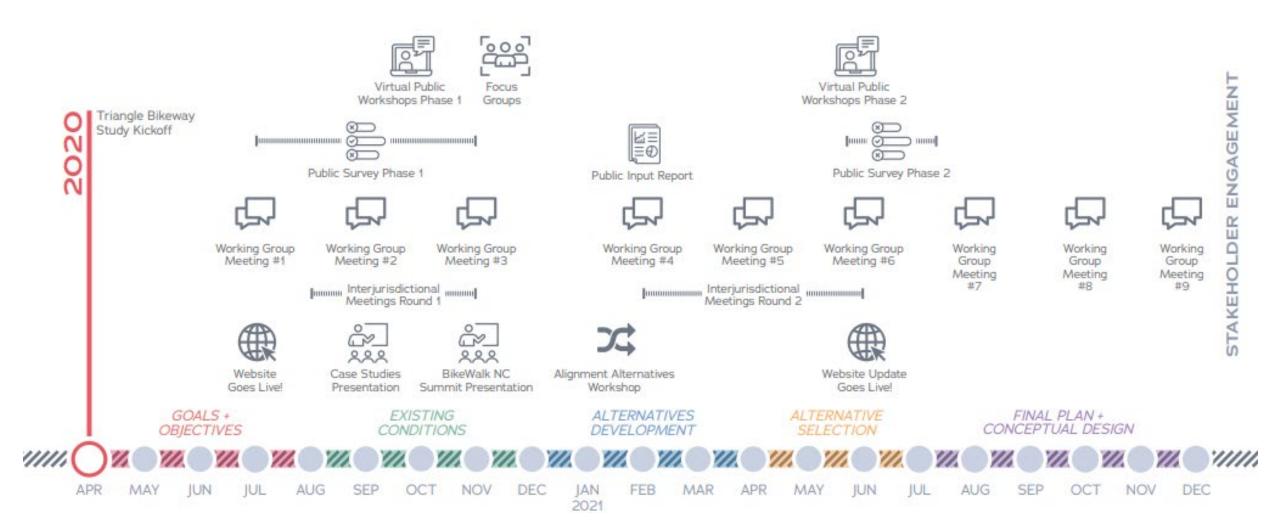
MCADAMS

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









Greenway.







TRANSPORTATION CHOICES

SSas



COUNTY



Open Space

WAKE and Park Advisory

Committee







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





Big Takeways





FEASIBILITY & IMPLEMENTATION STUD



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

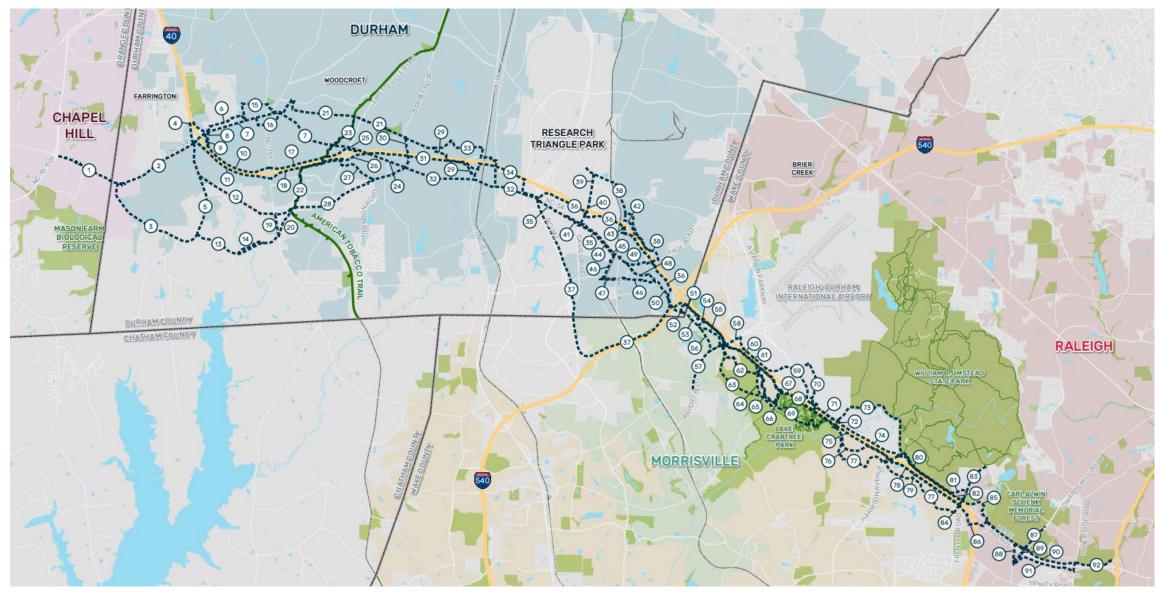


Routes Studied





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

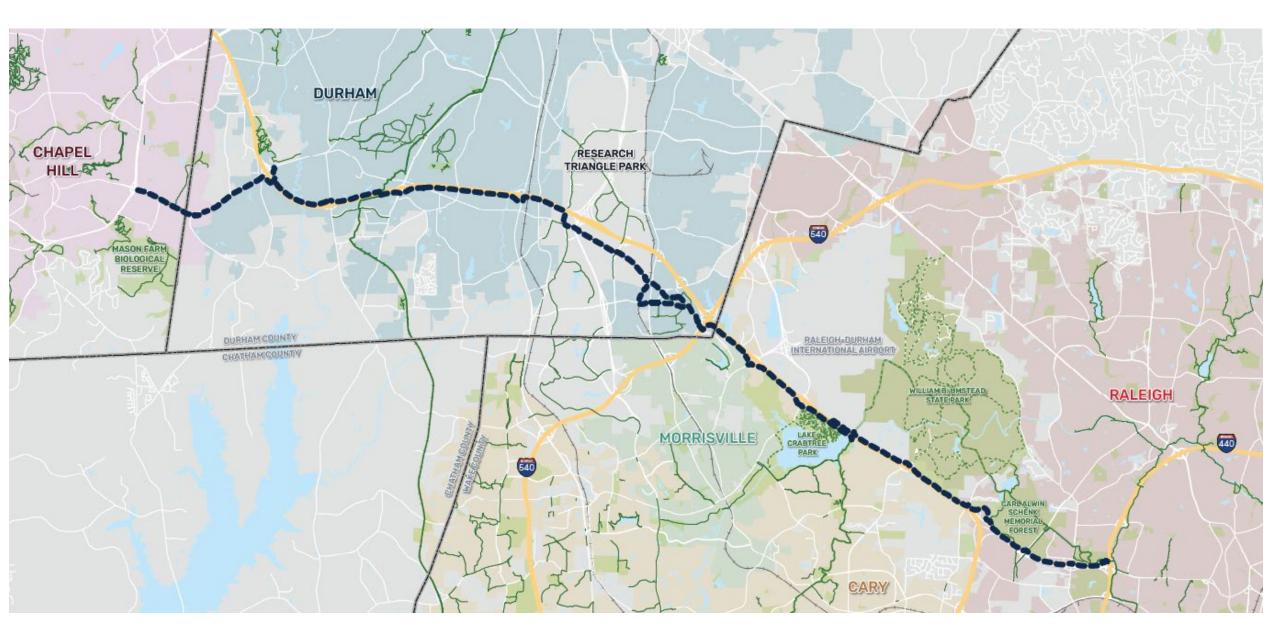


Preferred Alternative





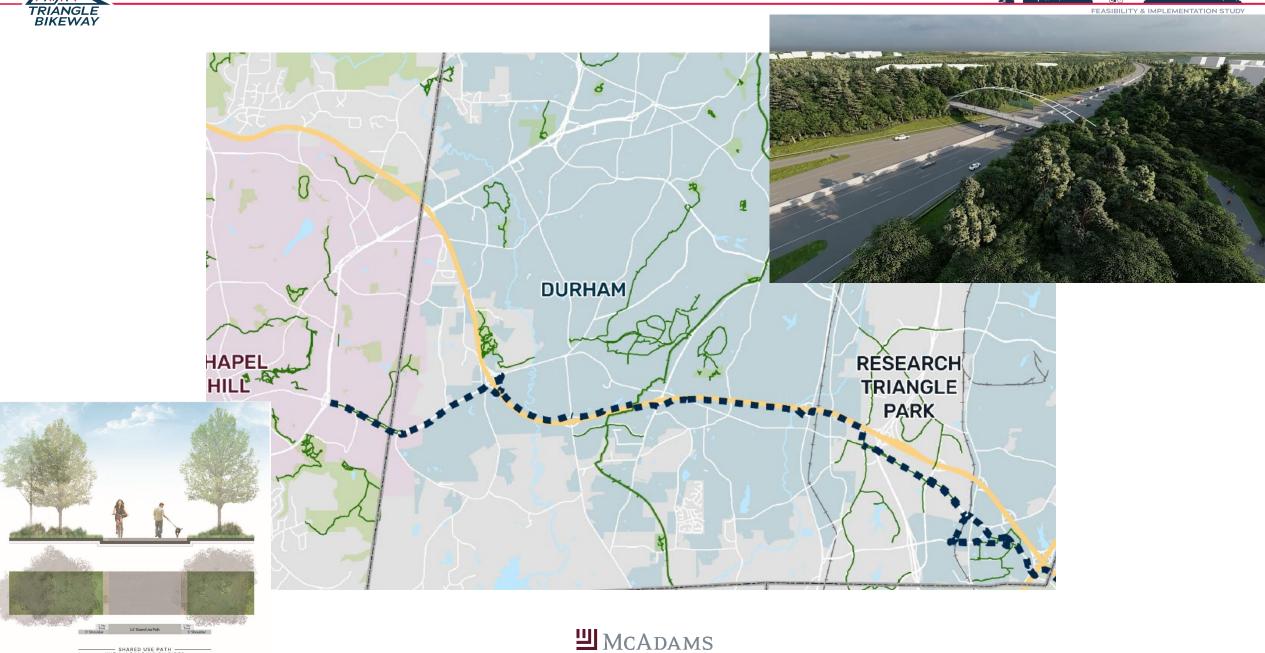
FEASIBILITY & IMPLEMENTATION STUDY



TRIANGLE

Preferred Alignment – Western Portion





Preferred Alignment – Eastern Portion











Triangle Bikeway Report











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



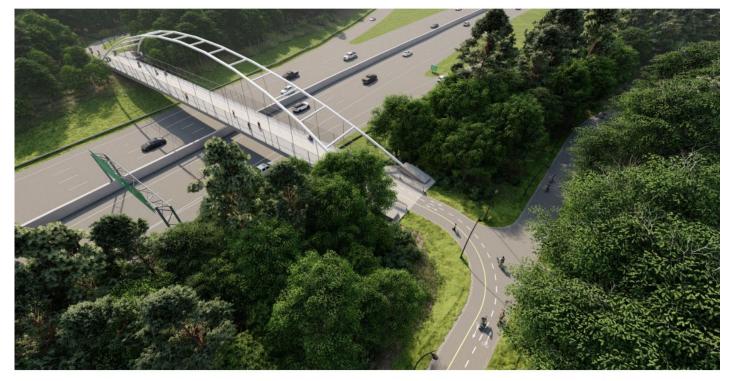
Commissioner Sig Hutchinson Chair Wake County Board of Commissioners Chair, CAMPO Executive Board

- 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

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





FEASIBILITY & IMPLEMENTATION STUDY

