

# PLANNING BIG!

THE TRIANGLE BIKEWAY

**Town of Chapel Hill**

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# PROJECT LEADERS



Iona Thomas, AICP

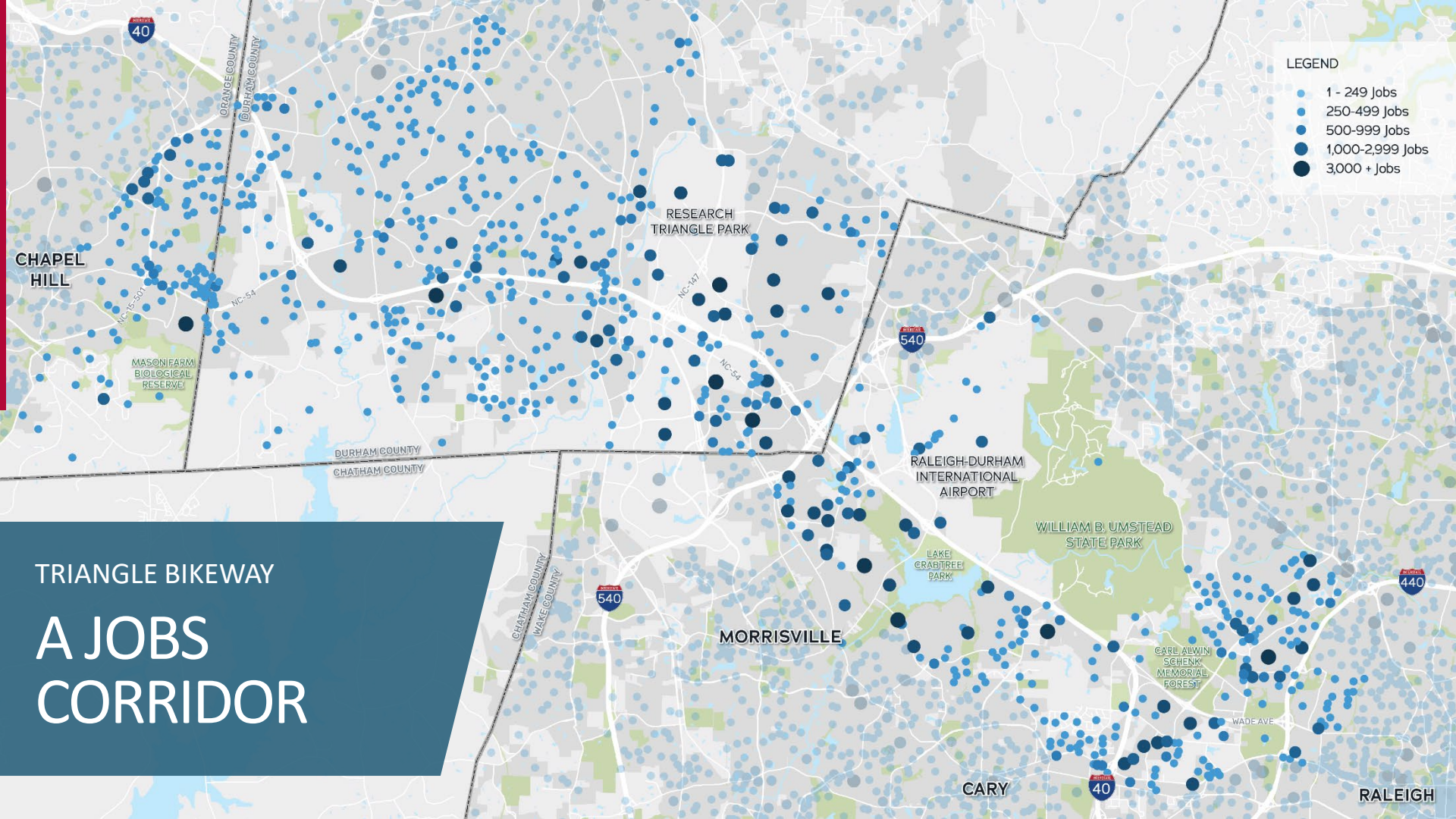


Dale McKeel, AICP



Kenneth Withrow, AICP





TRIANGLE BIKEWAY  
A JOBS  
CORRIDOR

## TRIANGLE BIKEWAY

# PROJECT GOALS



### 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.



### 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 permissable 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

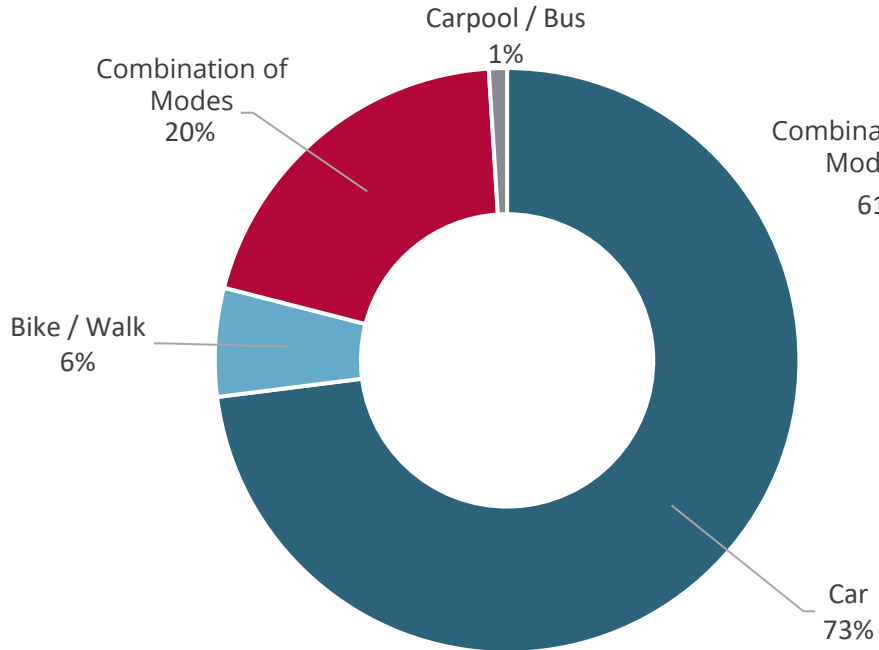
# CASE STUDIES



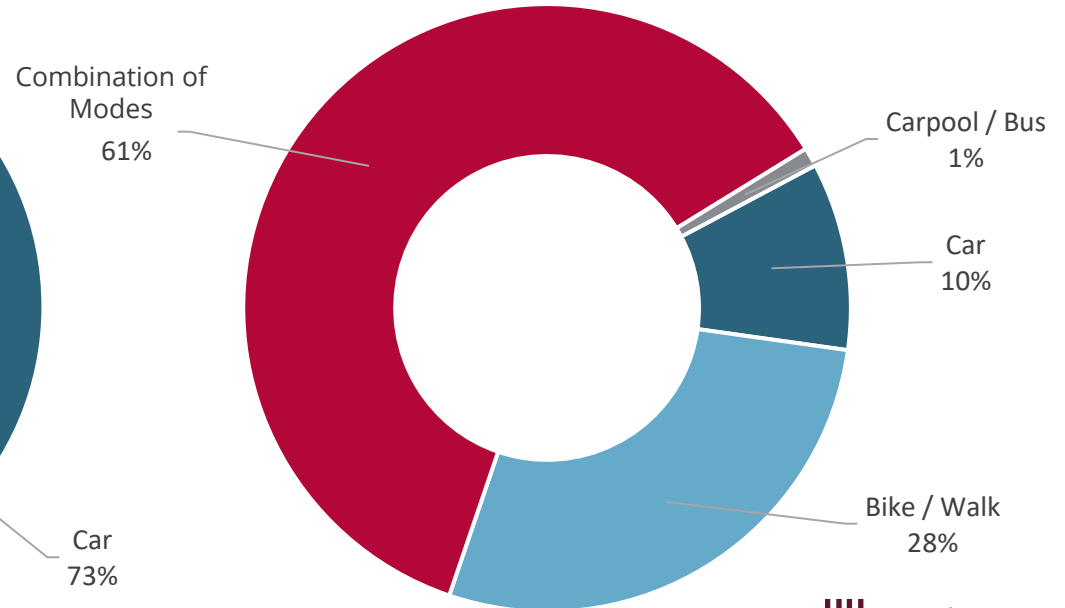
- > I-90 Trail  
King County, WA
- > US 36 Bikeway  
Boulder, CO
- > Path 400  
Atlanta, GA
- > Business 40 Sidepath  
Winston-Salem, NC
- > Custis Trail  
Arlington County, VA
- > Charter Oak Greenway  
East Hartford, CT

# STAKEHOLDER ENGAGEMENT COMMUTE PATTERNS

## CURRENT COMMUTE

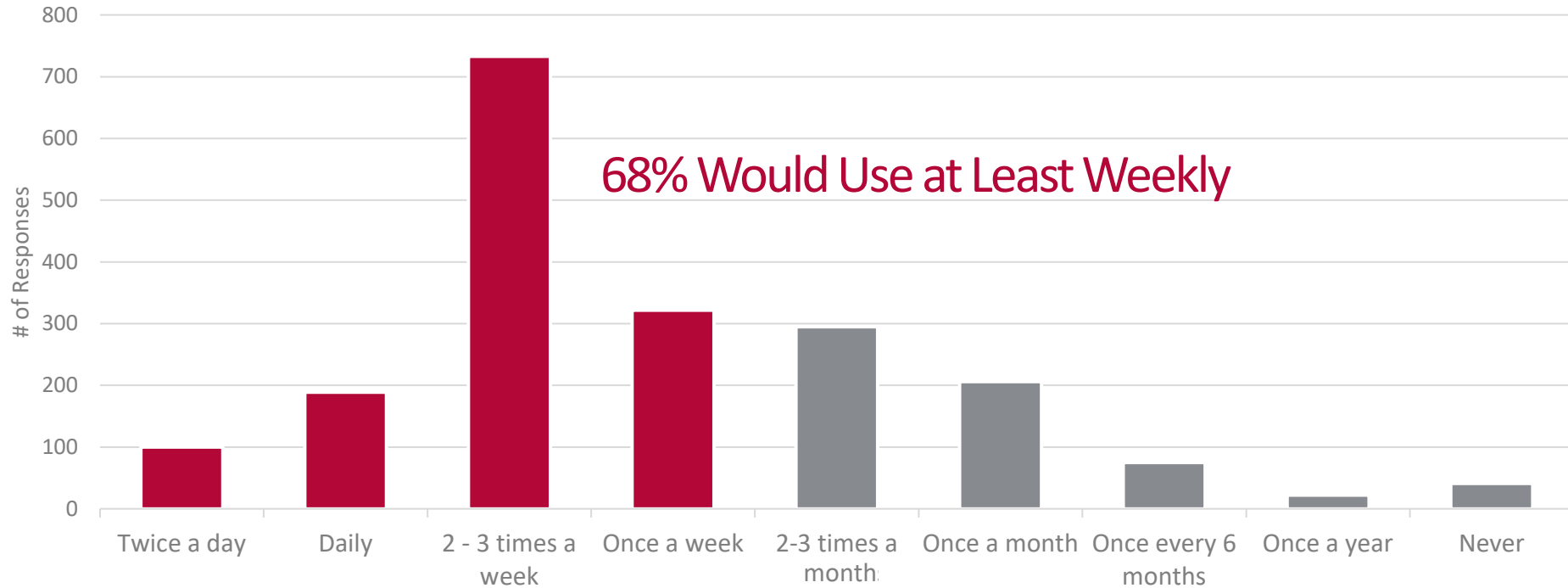


## DESIRED COMMUTE



## STAKEHOLDER ENGAGEMENT

# FREQUENCY OF USE



# OPPORTUNITIES + CONSTRAINTS



### ENVIRONMENT

Connect users with natural resources while minimizing impacts to environmental 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.



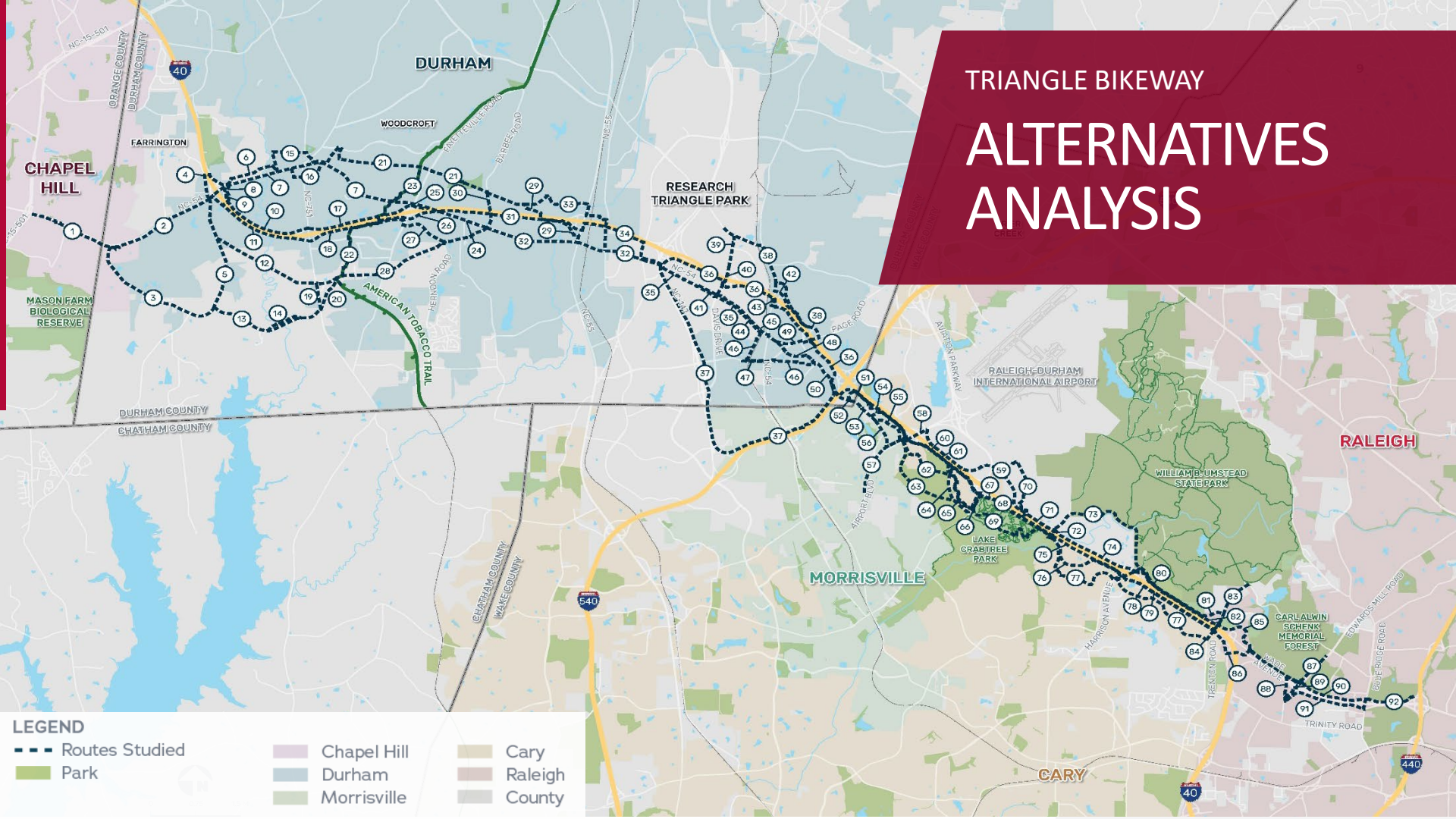
### STAKEHOLDER INPUT

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



## TRIANGLE BIKEWAY

# ALTERNATIVES ANALYSIS



**LEGEND**  
- - - Routes Studied  
Park

Chapel Hill	Cary
Durham	Raleigh
Morrisville	County



TRIANGLE BIKEWAY

# RECOMMENDED ALIGNMENT

## BY THE NUMBERS:

23 MILES

8 GRADE-SEPARATED CROSSINGS (BRIDGES OR TUNNELS)

70% OF CORRIDOR WITHIN NCDOT I-40/WADE AVE RIGHT-OF-WAY

17 DIRECT TRANSIT CONNECTIONS

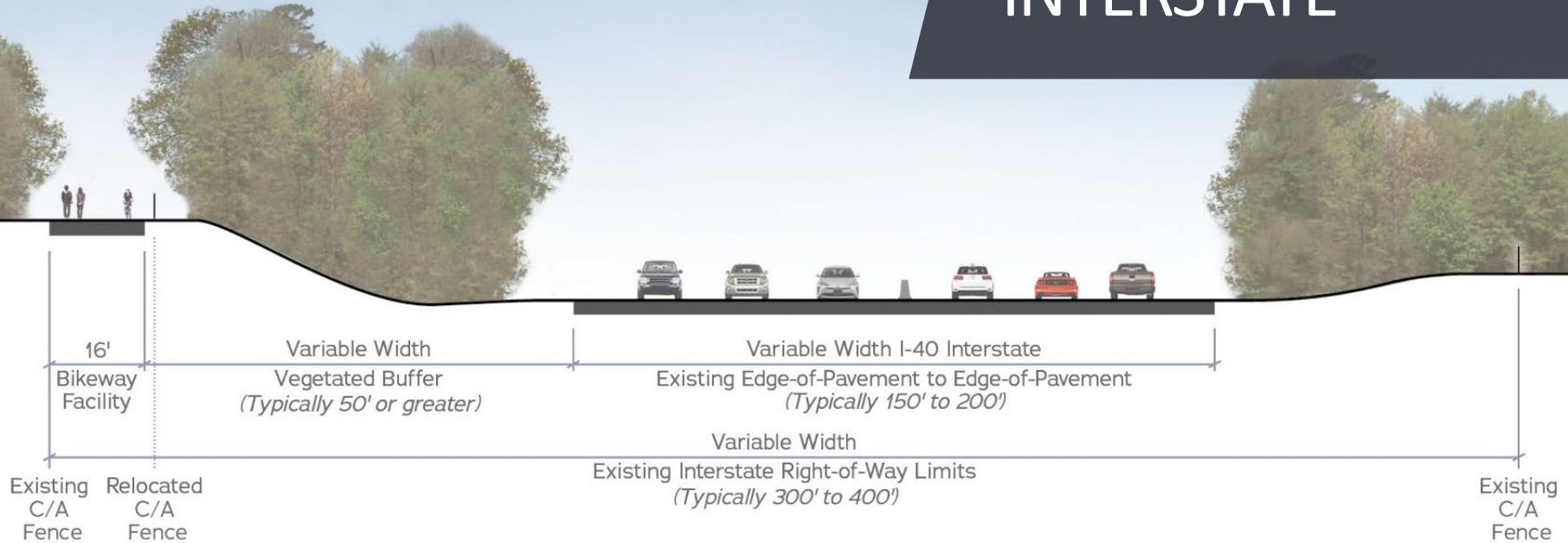
22 DIRECT BIKE/PEDESTRIAN FACILITY CONNECTIONS

186,000 JOBS ALONG THE CORRIDOR

61,000 HOUSEHOLDS IN THE STUDY AREA

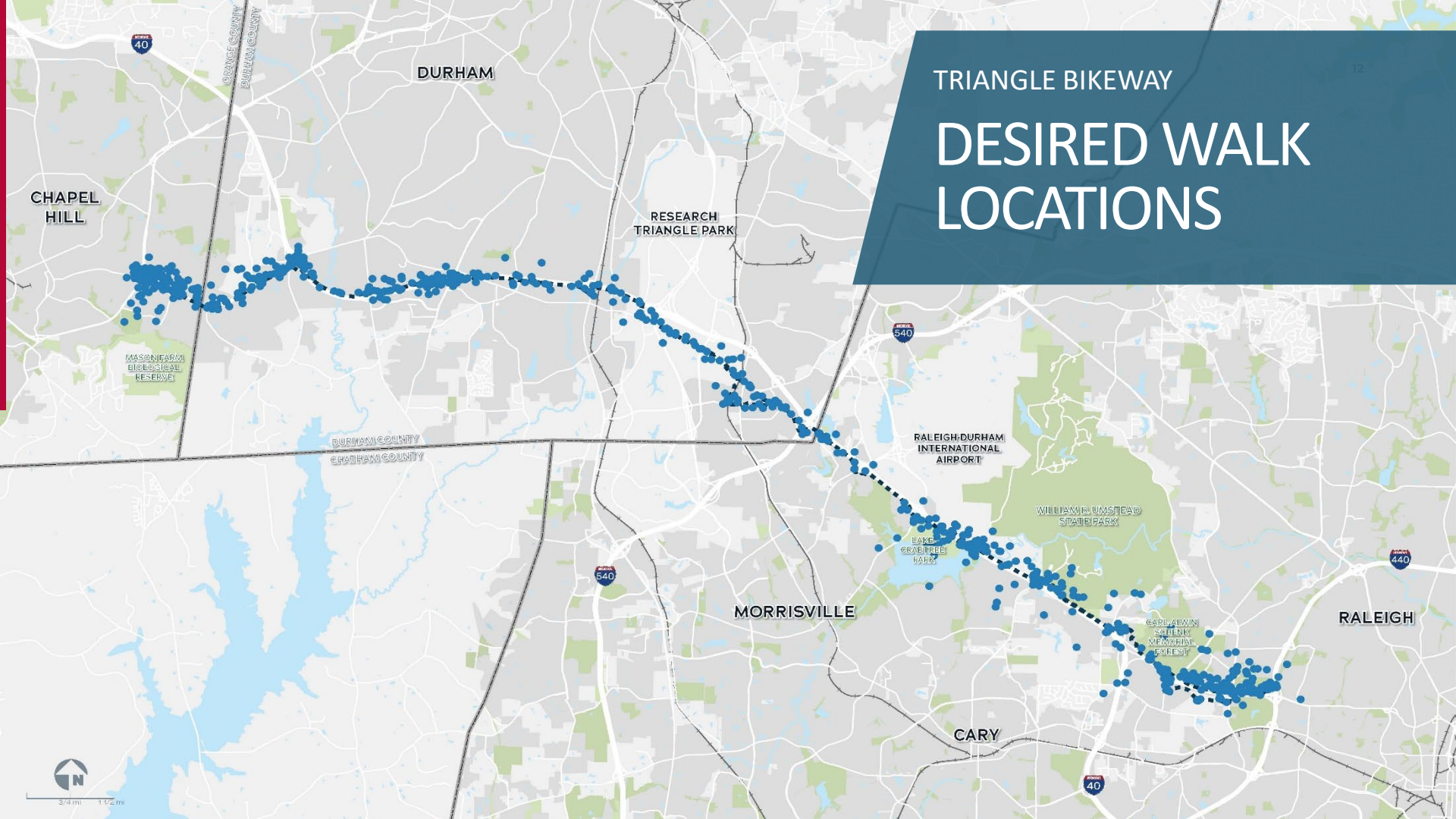
## TRIANGLE BIKEWAY

# RELATIONSHIP TO INTERSTATE



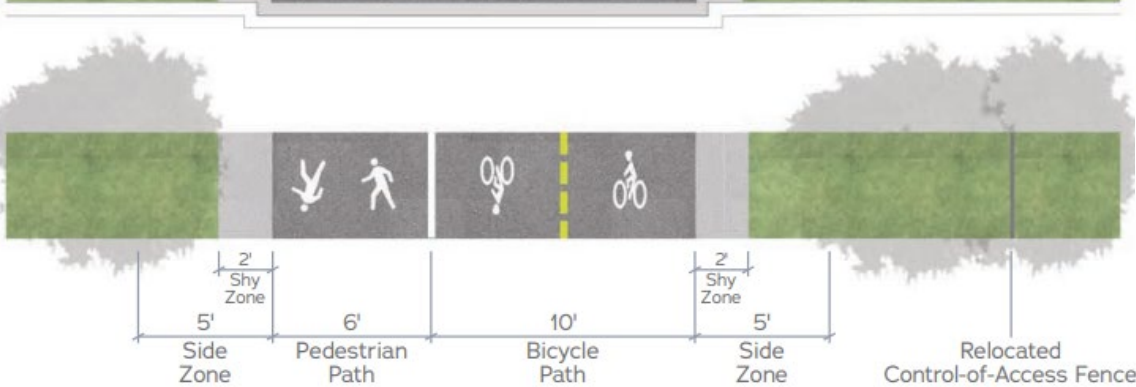
## TRIANGLE BIKEWAY

# DESIRED WALK LOCATIONS



# TRIANGLE BIKEWAY

# TYPICAL SECTION



# NOT A TYPICAL GREENWAY

## KEY DIFFERENCES INFLUENCING COSTS:

- > **Width of Pavement** – 12' vs. 16' (33% increase)
- > **Lighting** – adds approximately \$225K to \$250k per mile
- > **Grade Separation** – existing culverts vs. new tunnels; shorter span bridges for creeks vs. longer span bridges for interstate/other roadways.
- > **At-Grade Crossings** – increased # of RRFB, PHB, and phasing/other accommodations at existing traffic signals
- > **Maintenance of Traffic** – increased construction interaction w/ high-volume roadways
- > **Fence** – minimal fence/safety rail vs. C/A fence required for entire length along I-40
- > **Pavement Markings** – minimal vs. required along entire length for separating bikes/peds

# CONSTRUCTION ESTIMATES IN TODAY'S DOLLARS

## 2022 BASE YEAR CONSTRUCTION COSTS:

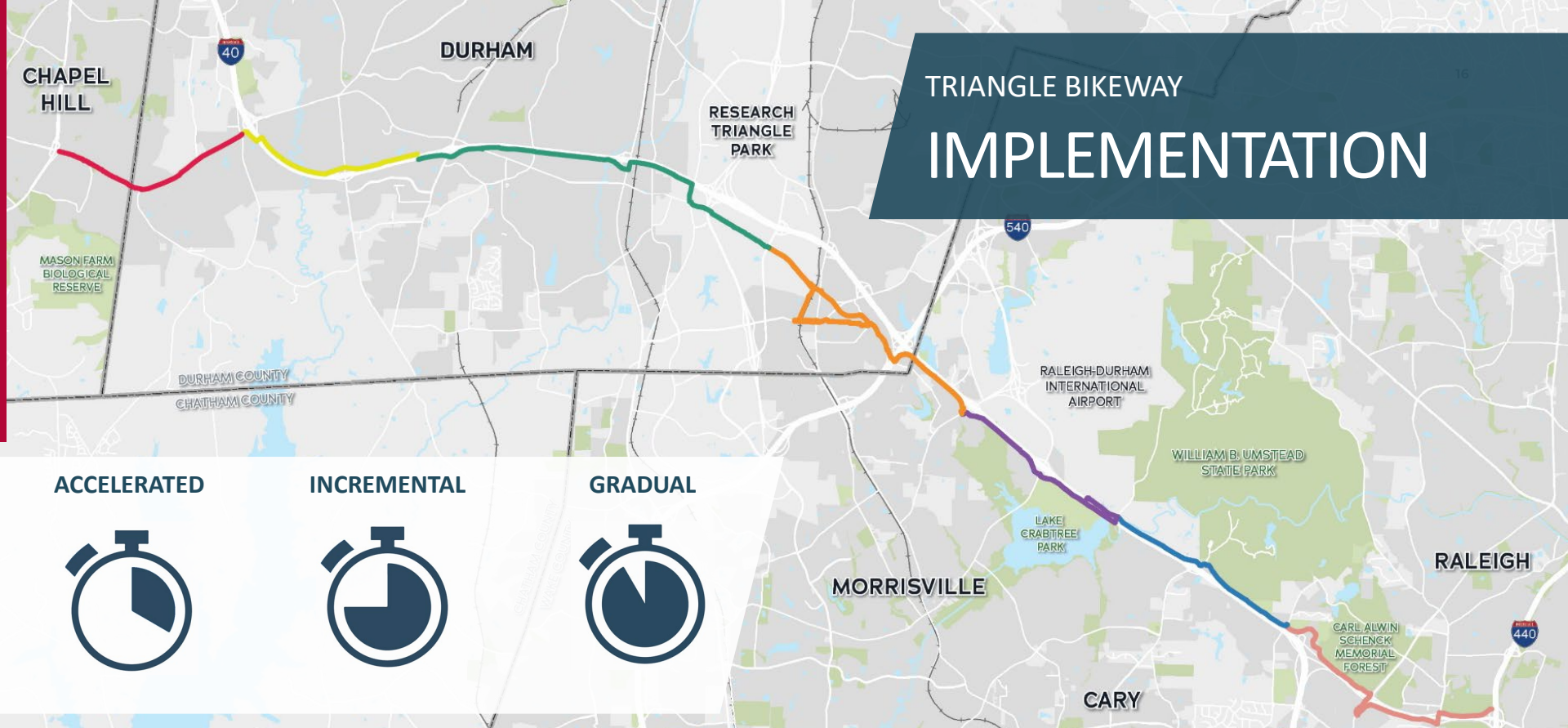
- > CAMPO Segments – \$45,338,000
- > DCHC MPO Segments – \$63,173,000

**Includes:** 12% Construction Engineering and Inspection (CEI) and 20% Project Contingency.

**Does not include:** Right-of-way acquisition; utility relocations; inflation/escalation; additional planning, permitting, surveying, environmental documentation, or design.

## TRIANGLE BIKEWAY

# IMPLEMENTATION



ACCELERATED



INCREMENTAL



GRADUAL



DURHAM-CHAPEL HILL-CARRBORO MPO

CAPITAL AREA MPO

CHAPEL HILL

DURHAM

RTP

DURHAM

MORRISVILLE

CARY

RALEIGH

SEGMENT 1

SEGMENT 2

SEGMENT 3

SEGMENT 4

SEGMENT 5

SEGMENT 6

SEGMENT 7



## TRIANGLE BIKEWAY

# IMPLEMENTATION

### SCENARIO 1: ACCELERATED WAKE COUNTY PATH

\$5.18M for Design, Environmental & Permitting

- \$4,695,000 Wake County
- \$485,000 Research Triangle Foundation
- RAISE Grant Application
- Schedule to come



DURHAM COUNTY

WAKE COUNTY

SEGMENT 1

SEGMENT 2

SEGMENT 3

SEGMENT 4

SEGMENT 5

SEGMENT 6

SEGMENT 7

TRIANGLE BIKEWAY  
MILESTONES

- ✓ Project included in both CAMPO – DCHC MTPs
- ✓ Endorsed by both CAMPO - DCHC MPOs
- ✓ Triangle Bikeway Regional Advisory Committee Established
- ✓ TriangleBikeway.com website lives on
- ✓ Wake County Moving Forward on Accelerated Implementation Path

An aerial rendering of a multi-use trail, the Triangle Bikeway. The trail is paved and features a yellow line on the left side, a dashed white line with a bicycle symbol and an arrow, and a solid white line on the right. Pedestrians are walking on the left side, and cyclists are riding on the right side. A crosswalk with white stripes and a red flag is visible on the right side of the trail. The trail is surrounded by lush green trees and grass. A tall silver pole stands near the crosswalk. The sky is blue with some clouds.

TRIANGLE BIKEWAY

QUESTIONS?



# YEAR OF THE TRAIL

◀ 2023 ★ NC ▶



**GREAT  
TRAILS  
STATE  
COALITION**



**BUILDING THE GREAT TRAILS STATE**



## Great Trails State Coalition

### 2023 Legislative Agenda

# NORTH CAROLINA IS THE GREAT TRAILS STATE



**Good Roads State**

- ✓ Vision
- ✓ Community Demand
- ✓ State Leadership
- ✓ Commitment
- ✓ Funding



**Great Trails State**

- ✓ Vision
- ✓ Community Demand
- State Leadership
- Commitment
- Funding

# THE GREAT TRAILS STATE COALITION



Image by Piedmont Fat Tire Society



Image by Piedmont Legacy Trails



Image by NC State Parks



Image by NCDOT

## WHO WE ARE

- A broad, diverse coalition committed to bringing the benefits of trails to all of North Carolina – nonprofits/local government/industry partners
- All trail types: Hike / Bike / Walk / Run / Paddle / Ride
- All 100 Counties
- State agency partners





**INDUSTRY**



**NON-PROFITS**



**LOCAL GOVERNMENT**



**PARTNERS**





## THE GOAL OF THE COALITION

- Secure sustained state funding for trails
- Brand North Carolina as “The Great Trails State”



# 2021 Long Session Victories

- ✓ **2023 Year of the Trail Designation**
- ✓ **29.15 M for the Complete the Trails Fund**
  - only for State Trails and supporting non-profits
  - only for natural surface trails
- ✓ **\$2 million for paved trail feasibility studies**
- ✓ **Engage one of the best lobbyists in the State**
- ✓ **Found Allies and Built Partnerships**

# 2023 Long Session Goals

- ✓ **Establish Great Trails State Fund**
  - Competitive Grant Program
  - All Types of Trails Eligible
  - May use to Match Federal Grants
  - Administered by DNCR
- ✓ **Make one-time \$50,000 to State Trail Non-Profits**
  - Recurring



# 29 NON PROFIT MEMBERS



THE CONSERVATION FUND



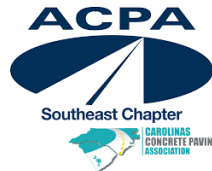
AARP



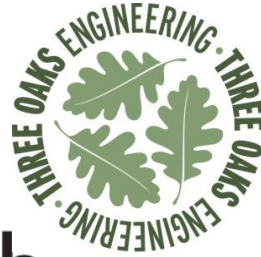
FOOTHILLS CONSERVANCY OF NORTH CAROLINA



RIVERLINK



# 15 INDUSTRY PARTNERS



# AGENCY PARTNERS



ECONOMIC  
DEVELOPMENT  
PARTNERSHIP of  
NORTH CAROLINA



NC DEPARTMENT  
OF NATURAL AND  
CULTURAL RESOURCES

OUTDOOR **NC**<sup>SM</sup>

**NC**  
NORTH CAROLINA

# LOCAL GOVERNMENT MEMBERS



**Goal: Build the Cities, Towns and Counties for Trails Working Group**

# WHY JOIN THE GREAT TRAILS STATE COALITION

- ✓ Amplify the call for Great Trails State funding
- ✓ Work together with other Local Governments for trails - Trails Peer Group
- ✓ Participate in GTSC Committees (Legislative, Year of the Trail, Recruitment)
- ✓ Help guide trail policy recommendations
- ✓ Coordinate with Non-Profits and Industry to make your voice louder
- ✓ Connect your community to the movement







## HOW TO JOIN

### It's Easy!

- ✓ Go to [www.greattrailsstatecoalition.org](http://www.greattrailsstatecoalition.org)
- ✓ Pick the right level of support for your community
  - \$500-\$2,500 or above
- ✓ Designate your participant(s) for Cities, Towns and Counties for Trails Working Group





# 2023 YEAR OF THE TRAIL





# YEAR OF THE TRAIL

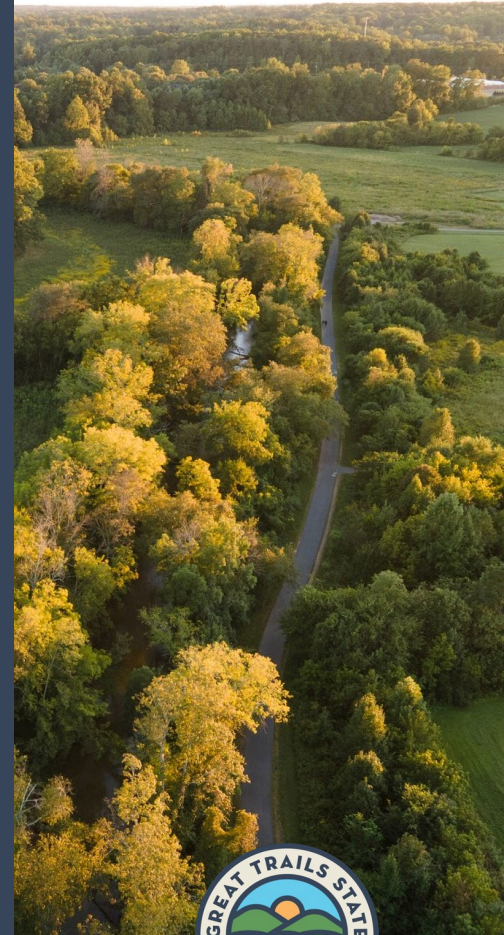
2023 • NC •

DISCOVER YOUR TRAIL!

@greattrailsonc | greattrailsonc.com

# GOALS

- **Inspire people** of all ages, abilities, and backgrounds to try trails
- **Demonstrate the importance of trails** to elected officials
- **Boost outdoor recreation tourism** across the state
- **Promote safe and responsible** use of trails, aligning with Outdoor NC Leave No Trace principles.
- **Advance diversity & inclusion** on trails.



# THE CAMPAIGN

- Engagement and events in all 100 counties
- Website/Social media
- Local **toolkits** for communities with Year of the Trail assets
- **Advertising** - outdoor, radio, print media
- **Call for Artists** program
- **Merchandise**
- **PBS NC Partnership** – 30-minute documentary titled “Ten to Try” and 10 short trail profiles
- Presenting at **conferences**
- **Measurement** and reporting



# TOOL KITS



## 1. Introductory Information

- YOTT Toolkit Fact Sheet
- YOTT Brochure
- Logos, Assets & Brand Usage Guide

## 2. All About Trails

- What makes a good trail
- Trail Asset Analysis Worksheet

## 3. Trail User Guides

- Trail Day Planning Checklist
- Leave No Trace (Outdoor NC)

## 4. How to Host a YOTT Event

- Templates - Event Planning, Volunteer Recognition, Banners, Proclamation template, Event Flier, Event Evaluation

## 5. Community Engagement Strategies

*Communicating trails benefits and ideas and tools for advocating for trails in your community.*

- Finished Social Media Assets - Monthly Content Calendars, Canva Templates, Trail Awareness Flier, Editorial templates, Trail story ideas

## 6. Trail Support beyond 2023

- *How to stay engaged with trails in NC and your community and how to become part of the Great Trails State Coalition.*

## Jan: New Year, New Trails

Inspiration: New Years, resolutions

*Potential Focus: finding trails, trail orgs, trail events, trail initiatives, setting goals for the community trails, getting on trail*

## Feb: Make a Date with a Trail

Inspiration: Valentine's Day

*Potential Focus: bring new folks to trail, trail events, volunteer on trails, getting on trail*

## Mar: Spring into Action

Inspiration: First day of spring

*Potential Focus: getting active, health, joining a trail initiative, connecting with legislator, getting on trail*

## Apr: Celebrate NC Trails

Inspiration: Earth Day/Month

*Potential Focus: Volunteer events, celebrating volunteers, learning about environmental impacts of trails, getting on trail*

## May: Explore NC Trails

Inspiration: NC Trails Act ratified 50<sup>th</sup> anniversary (22<sup>nd</sup>)

*Potential Focus: learn trails history & current orgs supporting trail development & maintenance, exploring new trails, visioning trail opportunities, getting on trail*

## Jun: Out(doors) and About this Summer

Inspiration: Summer

## Jul: Celebrate NC Parks

Inspiration: Nat'l Parks & Rec Month may adopt their theme

*Potential Focus: promoting trails maintained by local, state, national parks, recreation options on trails, learning about parks in the area, getting on trails*

## Aug: Wellness & Trails

Inspiration: Nat'l Wellness Month

*Potential Focus: trails benefits to health, trails benefits to environment, getting on trails, safety on trails*

## Sep: Achieve a Trail Goal

Inspiration: back to school

*Potential Focus: personal or community goal campaigns, trail advocacy, getting on trails*

## Oct: Trail Innovators: Past & Present

Inspiration: Grandma Gatewood's birthday (25)

*Potential Focus: history of NC trails, learning supporters of trail initiatives in the area, connecting with legislator, becoming a trail innovator, getting on trails*

## Nov: Show Gratitude for NC Trails

Inspiration: Thanksgiving

*Potential Focus: trail events, clean ups, trail advocacy, getting on trails*

## Dec: Year in Review & Future Aspirations

Inspiration: end of year, end of YOTT

2023  
**YEAR OF THE TRAIL**

SPONSORS



# SECU Foundation

PEOPLE HELPING PEOPLE®





# How to Get Involved

- ✓ Share This Legislative Agenda with your Municipal Lobbyist
- ✓ Complete Our Survey - <https://www.surveymonkey.com/r/QF6VRTX>
- ✓ Pass a Resolution of Support for Year of the Trail
- ✓ Plan Year of the Trail events
- ✓ Join the Great Trails State Coalition
- ✓ Become a sponsor of Year of the Trail





## ENGAGE

[www.greattrailsnc.com](http://www.greattrailsnc.com)

[www.greattrailsstatecoalition.org](http://www.greattrailsstatecoalition.org)

@greattrailsnc

## EMAIL ADDRESS

[info@greattrailsnc.com](mailto:info@greattrailsnc.com)





# Recommendation

- 1) That the Council adopt Resolution R-8 supporting regional implementation of the Triangle Bikeway
- 2) That the Council adopt Resolution R-9 in support of joining the Great Trails State Coalition in 2023