

## **FINAL PLAN SUMMARY PRESENTATION**

Durham Board of County Commissioners October 6, 2025

#### **Caroline Stahlschmidt**

Senior Project Manager, Destination by Design

#### Sarah Johnson, PLA, AICP

Landscape Architect, Toole Design Group

#### **Holly Waterman**

Landscape Designer, Destination by Design



## **Project Management Team**

- Durham County Transportation Department
- City of Durham Parks and Recreation
- **Triangle West Transportation** Planning Organization
- East Coast Greenway Alliance
- North Carolina Department of Transportation



CITY OF **DURHAM** 









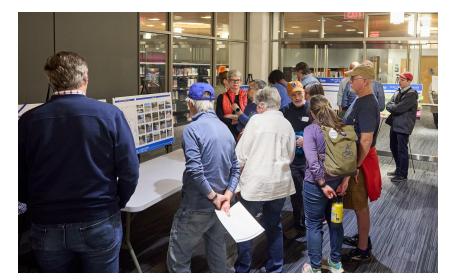






## **AGENDA**

- 1. Discovery & Phase 1 Engagement
- 2. Plan Development
- 3. Phase 2 Engagement
- 4. Trail Segment Recommendations









Project Timeline	Oct-24	Nov-24	Dec-23	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25
Task 1. Direction Setting													
1.1 Kick-Off Meeting & Plan Brand													
1.2 Public Engagement Strategy Development													
Task 2. Existing Conditions, Discovery	and F	rame	work	Plan I	Develo	opme	nt						
2.1 Spatial Data & Demand for Trail Use													
2.2 Physical Inventory and Assessment of Right of Way (ROW)													
Task 3. Public Engagement (Phase 1)													
3.1 Review Online Survey Results													
3.2 Public Workshops, Focus Groups & Drop-In Sessions (Phase 1)													
Task 4. Draft Plan Development and F	ublic	Engag	geme	nt (Ph	ase 2								
4.1 DRAFT Plan Development													
4.2 Public Workshops, Focus Groups & Drop-In Sessions (Phase 2)													
Task 5. Final Plan Development													
5.1 Trail Operation, Maintenance and Security & Budget Assessment													
5.2 Draft & Final Plan Document													
5.3 Plan Presentation													



## **Overall Durham-to-Roxboro Trail Timeline**

- Identified as an Opportunity: In multiple City and County adopted plans since 1988
- Durham-to-Roxboro Rail Trail Plan: 1-year planning process initiated in 2024
- Corridor Acquisition:
  - Last attempted in 2000s; Funding planned in Durham County's CIP since 2006
  - The Conservation Fund has been coordinating with Norfolk Southern for 2+ years
  - Anticipated closing by end of 2025
  - No eminent domain required for corridor acquisition
  - NCDOT will own the corridor as a Rail Corridor Preservation project that would allow for an interim compatible trail use (similar to the American Tobacco Trail)
- Design and Development:
  - Will occur in phases, over many years (10-20+ years)
  - o A specific schedule is not determined at this time, will depend on staff and funding



## **PROJECT GOALS**

#### **Assets**



- ➤ Leverage the ROW and publicly-owned properties for trailheads & amenities
- ➤ Reduce impacts to environmentally-sensitive areas

## **Partnerships**



- ➤ Support long-range planning goals for Durham County, City of Durham, Triangle West TPO, East Coast Greenway, and NCDOT.
- ➤ Trail-oriented development through partnerships with adjacent businesses and property owners

## Connectivity



- ➤ New regional transportation choice and link together destinations
- ➤ Welcoming trail environment that supports users of all ages and abilities

## **PROJECT GOALS**

## Unity



- ➤ Thoughtfully integrate the trail design into local communities
- ➤ Design the trail and its crossings to reduce potential conflicts between all modes (ped/bike/vehicle)

## Distinctive



- ➤ Elevate local culture and history through design elements, amenities, and interpretation
- ➤ Trail identity that is specific to this area of Durham and Person Counties

## Strategy



- ➤ Accommodate increased population growth and trail use
- > Funding opportunities for phased implementation of the trail

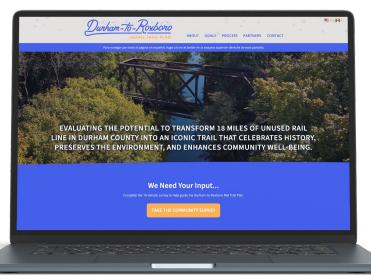
## DISCOVERY & PHASE 1 ENGAGEMENT



## Phase 1 – Tools of Engagement

January 15 - March 23

- Project Fact Sheet
- Website Portal
- Social Media
- Community Online Survey
- Public Workshops
- Focus Groups
- Pop-Up Events







WHAT TO EXPECT

## **Phase 1 – Community Survey**

OPEN JANUARY 15 -MARCH 24

2,994
TOTAL RESPONSES

62 PAPER RESPONSES 2,932 ONLINE RESPONSES 1.372 EMAILS COLLECTED

88

**ZIP CODES REPRESENTED** 

# GENERAL USAGE | IMPROVEMENTS & PRIORITIES COMMUNITY SUPPORT | MAP BASED FEEDBACK | SURVEY RESPONDENT DEMOGRAPHICS



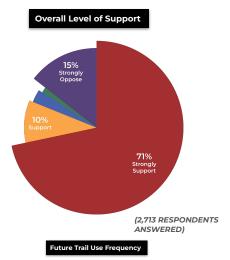
Para navegar por la encuesta en español, haga clic en el botón en la esquina superior derecha de esta pantalla.





## **Phase 1 – Survey Results**

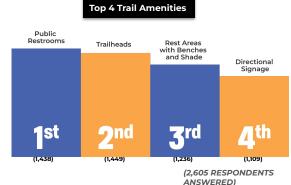
(2,878 RESPONDENTS ANSWERED)



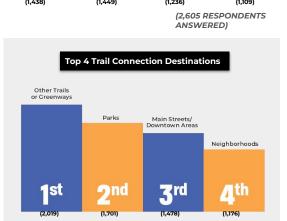
6% Daily

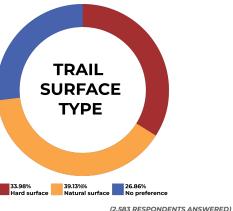
18% Never

A few times a

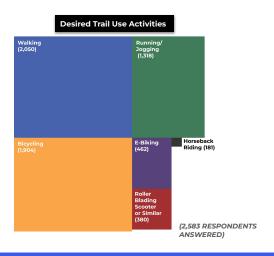








(2,583 RESPONDENTS ANSWERED)



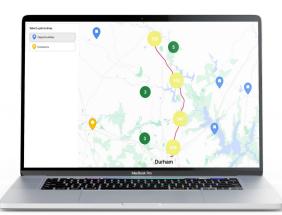


## **Survey Interactive Map**

**2,994** Survey Respondents

**578** Map Respondents

1,917 Map Comments



## **OPPORTUNITIES (1,220)**

#### **Connections**

- Neighborhoods
- Trails in the area
- Schools
- Recreation + cultural assets

#### **Outdoor Recreation Development**

- Hiker/ biker campsites + other trail-oriented development
- Kayak put-in
- Fishing accesses
- Plenty of parking
- Pedestrian/ bicycle permeability + bike commuting

#### **Education**

- Wildlife viewing areas
- Nature museum along trail
- Highlight history

## CONCERNS (697)

#### **Safety**

- Pedestrian crossings with proper signals
- Speeding cars + high traffic
- Crime
- Proximity to hunting area
- Adequate lighting
- Residential disturbance/ trespassing
- Patrolling/ emergency phones along route

#### **Long-Term Sustainability**

- Drainage in flood-prone areas
- Wetland + wildlife protection
- Litter + stream pollution
- Gentrification

#### **Amenities**

• Sufficient parking + bathrooms

### Public Workshops (174 participants)

- 1. North Regional Library (65)
- 2. Edison Johnson Recreation Center (40)
- 3. Durham County Library (69)

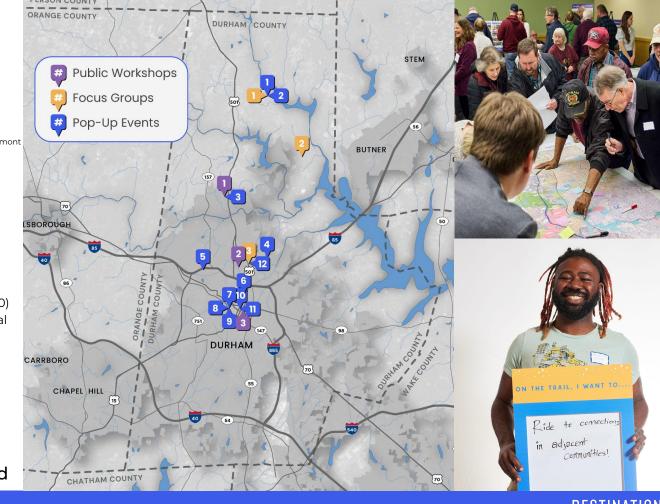
#### Focus Groups (43 participants)

- 1. North Durham Community (20) Bahama + Rougemont
- 2. Stagville Descendants Council (3)
- 3. Bragtown Community Association (20)

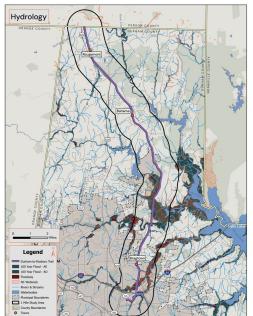
#### Pop-Up Events (425 participants)

- 1. Bahama & Rougemont Ruritan Clubs (40)
- 2. Bahama & Rougemont Public Information Meeting (210)
- 3. North Regional Library (15)
- 4. Bragtown Branch Durham Public Library (10)
- 5. LEAP Program Preschool St Luke's Episcopal Church (10)
- 6. Durham Farmers Winter Market (25)
- 7. Go Durham Bus Station (15)
- 8. Go Durham Bus Station(15)
- 9. Go Durham Bus Station (30)
- 10. BPAC Monthly Meeting (Virtual) (20)
- 11. DOST Monthly Meeting (20)
- 12. Bragtown Baptist Church (15)

**642** Total Participants Engaged

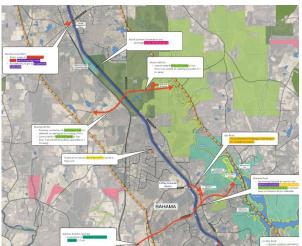


# PLAN DEVELOPMENT









#### **American Tobacco Trail**





**Precedents** 









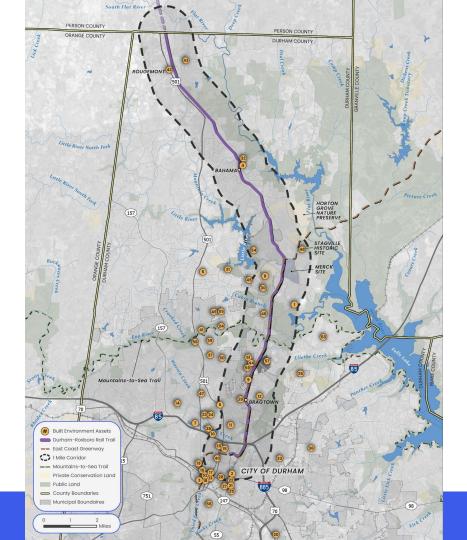
DESKTOP ANALYSIS | INTERNAL CRITIQUE | REVIEW OF NEARBY TRAILS | PRECEDENTS

## **Asset Inventory & Analysis**

## **Natural Environment Assets**

21 Public Parks | 6 Nature Preserves | 8 Lakes & Rivers 12 Bike/ Pedestrian Rail & Connector Trails

## **Built Environment Assets**











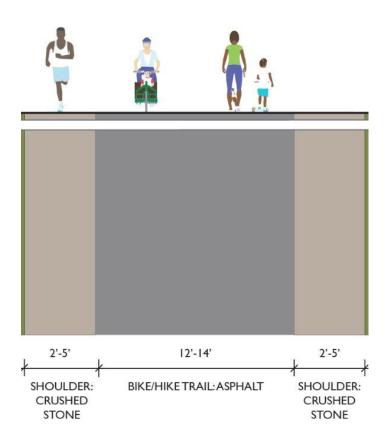






FIELD WORK | BRIDGE INSPECTIONS | PROPERTY OWNERS VISITS | DRONE CAPTURE

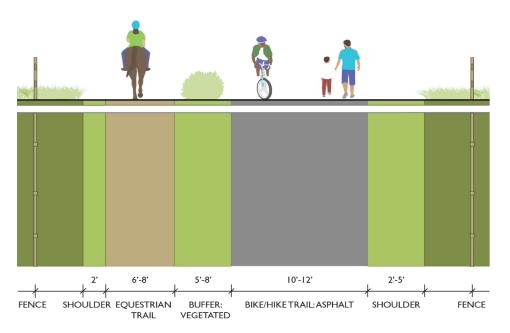
## **Final Typical Section**







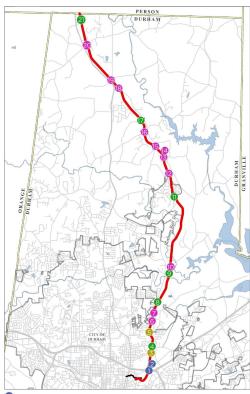
## Potential Alternative Section for N. Durham County





There is the potential that future phases of design could ensure portions of the trail in N. Durham County support equestrian use. Partnership with local equestrian groups would be needed before moving this potential alternative forward.

## **Road Crossings**



- Grade-Separated
- Type A: Unsignalized (Pavement Markings and Signage)
- Type B: Signalized (Rectangular Rapid Flashing Beacon or Pedestrian Hybrid Beacon)
- Type C: Unsignalized or Signalized

#### Recommendations

- Flexibility for future engineering judgment per DOT request
- Type A (unsignalized), Type B (signalized), and either A or B
- Plus toolkit of add-on treatments (e.g., speed cushions, rumble strips, etc)

#### **TYPE A: UNSIGNALIZED**

#### Pavement Markings + Signage



## TYPE B: SIGNALIZED

User-Activated Flashing Lights (Rectangular Rapid Flashing Beacon)





User-Activated Stop Light (Pedestrian Hybrid Beacon)



\* NCDOT requires sponsoring agency (e.g., Durham County) to provide/maintain signals



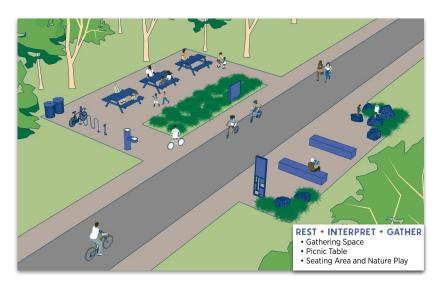
## PHASE 2 ENGAGEMENT



## Phase 2 – Tools of Engagement

## May 1 - September 24

- Website Portal
- Social Media
- Community Online Survey
- **Public Workshops**
- **Focus Groups**
- **Project Coordination Meetings**
- Postcard Mailer to Residents
- Pop-Up Events















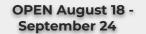






## **Phase 2 – Community Survey**

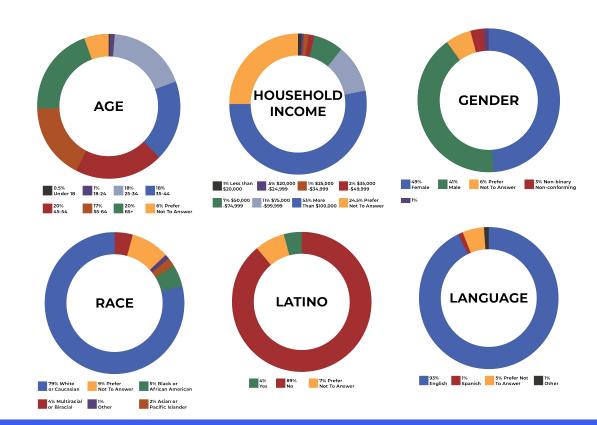
## CONCEPTUAL DESIGNS | TRAIL CROSSINGS | TRAIL DESIGN SURVEY RESPONDENT DEMOGRAPHICS





**451** English **2** Spanish

39
ZIP CODES REPRESENTED



## **Community Survey**

## Of the 451 Survey Responses:

71% Positive/In Support of Trail

11% Negative/Not in Support of Trail

7% Neutral

**10%** Did not provide comments

I love the idea of the connectors at the schools. We have no bike lanes out here at all.

I feel this trail is a brilliant and needed addition to our community.

Right in the middle of a low income neighborhood. NOT A GOOD IDEA.

Trail users should have priority at every crossing. If that requires signals at each intersection, then that should be provided.

As a Bahama resident... I very strongly welcome this rail to trail project!

As a resident of Rougemont, THIS IS AWESOME. Highly support, perfect location!

We moved from Durham city to Bahama for the privacy, we do NOT want any of this running behind our property. I am concerned about crime along the trail, particularly as you get closer to downtown.

Dearborn needs this, there are little to no sidewalks and it's not safe for pedestrians, especially students.

Maximize parking at trail heads.

This is a waste of money, space, and of valuable resources that are needed on projects that the community will actually benefit from.

I'm very excited about this future trail. I strongly support this plan!



#### **Public Workshops (92 Participants)**

- 1. Downtown Durham Library (36)
- 2. Edison Johnson Recreation Center (31)
- 3. Spruce Pine Lodge (25)

#### **Focus Groups (35 Participants)**

- 1. Changed by Youth Ambassador Program (10)
- 2. Land & Water Conservation Groups (11)
- 3. North Durham Bahama/Rougemont (9)
- 4. Stagville Descendants Council (5)

#### **Project Coordination (19 Participants)**

- 1. NC Wildlife Resources Commission and US Army Corps of Engineers (6)
- 2. City and NC Dept. of Transportation (8)
- 3. Land Use and Housing (3)
- 4. Durham County Sheriff's Office (2)

## General Information Sessions (67 Participants)

- 1. Stagville Descendants Council (2)
- 2. Durham Farmland Protection Board (15)
- 3. Durham Bicycle & Pedestrian Advisory Board (15)
- 4. Durham Open Space & Trails Commission (15)
- 5. Exchange Club of Greater Durham (20)

## **373 Total Participants Engaged**

#### **Pop-Up Events (160 Participants)**

- 1. Bragtown Community Association (5)
- 2. DOST Trails and Open Space Tour (15)
- 3. Bimbe (10)
- 4. Bragtown Juneteenth Festival (10)
- 5. Durham Farmers' Market (30)
- 6. Black Farmers' Market (15)
- 7. Afternoon in the Park (15)
- 8. North Durham Farmers' Market (20)
- 9. We Got You Durham Resource Fair (20)
- 10. Free Market Thursday (20)







## Focus Group Themes – Phase 2

#### Trail, Amenities, Trailheads, and Waysides

- Support for accessibility and wider trail than ATT
- Support for improved parking at Penny's Bend
- Excitement for trailheads and waysides to provide "third spaces" for community-building
- Desire to limit impact to nature; preserve shade
- Concern about loss of privacy, crime, gentrification

### **Community Connections**

- Excited about connections to parks and green spaces
- Concern & interest in connections to schools
- Desire for basic infrastructure (e.g., sidewalks) before building the trail or, at least along with building the trail
- Concern for safety at road crossings
- Concern about loss of privacy along connector trails

#### History, Culture, and Interpretation

- Excitement for sharing local history (Stagville, Bragtown, Indigenous communities) in an honest and uplifting way
- Desire to highlight unique natural features (plant and animal communities, geologic formations)
- Interest in integrating technology for tours

### Implementation and Engagement

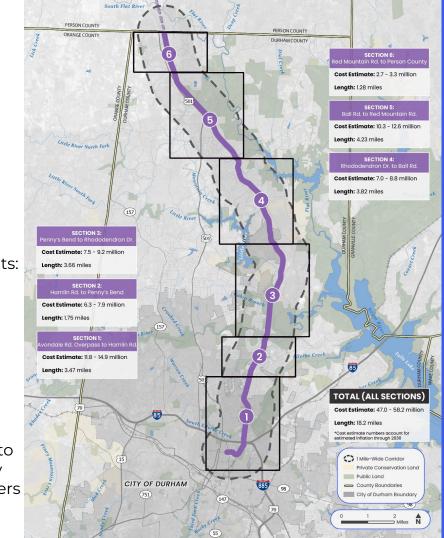
- Desire for engagement to continue beyond this Plan
- Youth prefer an online survey
- Concern about maintenance and enforcement if trail is implemented
- Feeling that there is a lack of clarity on whether the trail is 100% going to be constructed or if it is not "set in stone" yet



## TRAIL SEGMENT RECOMMENDATIONS

## **Trail Segments**

- Roadmap for how the Durham-to-Roxboro Rail Trail
   Plan can move from vision to reality.
- Full 18.2-mile corridor represents a major investment, implementation will occur in stages.
- Flexible and opportunistic approach to capitalize on available funding and partnerships will be essential.
- Project Management Team identified six trail segments:
  - 1: Avondale Rd. Underpass to Hamlin Road
  - 2: Hamlin Rd. to Penny's Bend
  - 3: Penny's Bend to Rhododendron Dr.
  - 4: Rhododendron Dr. to Ball Rd.
  - 5: Ball Rd. to Red Mountain Rd.
  - 6: Red Mountain Rd. to Person County Line
- Preliminary conceptual designs. Final design subject to change based on engineering, survey data, regulatory review, and collaboration with adjacent property owners regarding encroachments.



## Avondale Rd. underpass to Hamlin Rd.

#### **LOCATION AND TRAIL LENGTH**

Avondale Rd. underpass to Hamlin Rd. (3.47miles)

- 100% in Urban Growth Boundary (as of Sept. 2025)
- 86% percent in City of Durham (as of Sept. 2025)

#### **STRUCTURE REQUIRED (1)**

Partial or full rebuild of bridge at Ellerbe Creek

#### AT-GRADE CROSSINGS (4)

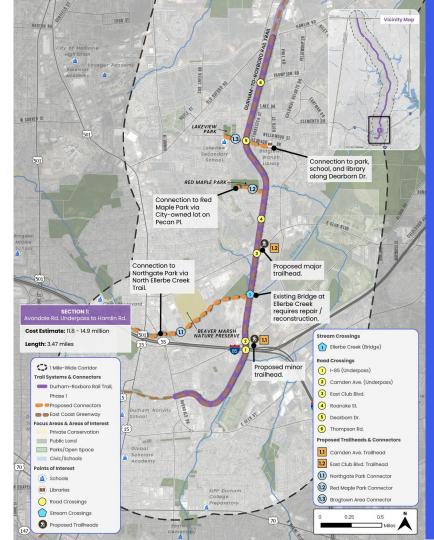
- 1. E. Club Blvd. Signalized (either RRFB or PHB)
- 2. Roanoke St. Unsignalized (Yield sign)
- 3. Dearborn Dr. Signalized (either RRFB or PHB)
- 4. Thompson Rd. Unsignalized or Signalized (either Yield sign, RRFB, or PHB)

#### **UNDERPASS IMPROVEMENTS (2)**

- 1-85 underpass
- Camden Ave. underpass

#### **KEY CONNECTIONS AND DESTINATIONS**

Downtown Durham, American Tobacco Trail, Durham Rail Trail, proposed R. Kelly Bryant Trail, Northgate Park, proposed Goose Creek Trail, proposed North Ellerbe Creek Trail, Red Maple Park, Bragtown, Lakeview Park, Lakeview Secondary School, Bragtown Branch Library, Go Durham bus stops, East Coast Greenway (shared route)

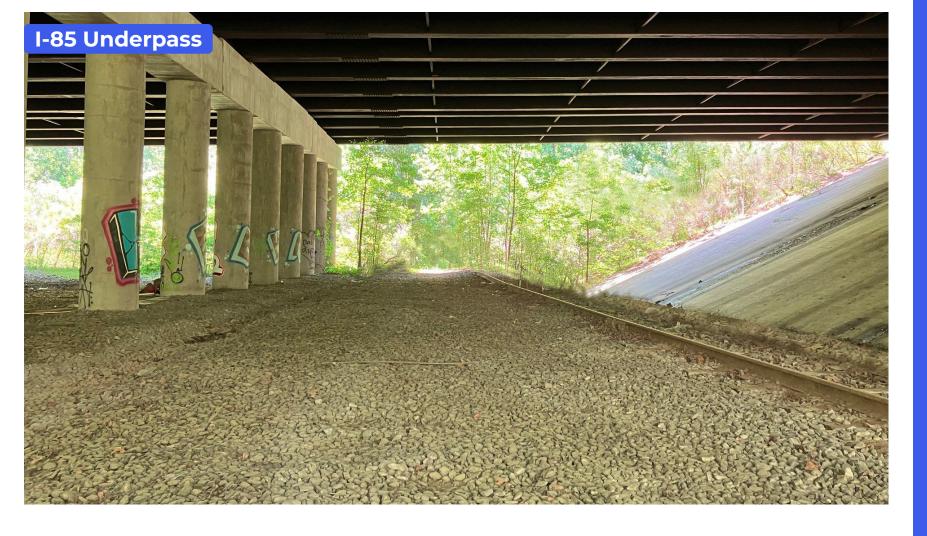




<sup>\*</sup>Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review.

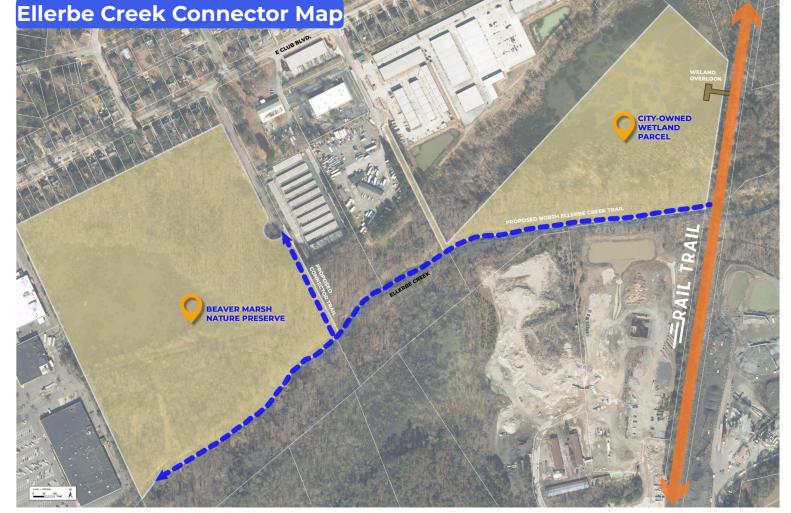


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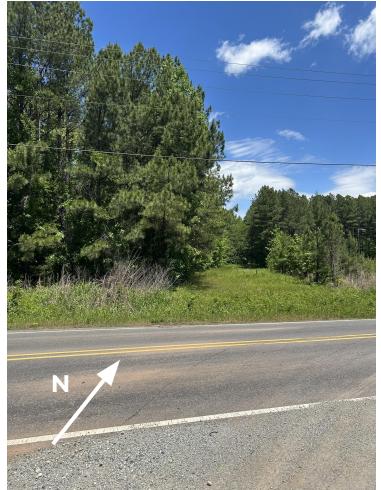


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<sup>\*</sup>Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review. Expected collaboration with adjacent property owner and NCDOT regarding ROW and property access during future design phase.

## Hamlin Rd. to Penny's Bend

#### **LOCATION AND TRAIL LENGTH**

Hamlin Rd. to Penny's Bend (1.75 miles)

- 91% in Urban Growth Boundary (as of Sept. 2025)
- 0% percent in City of Durham (as of Sept. 2025)

### **STRUCTURE REQUIRED (1)**

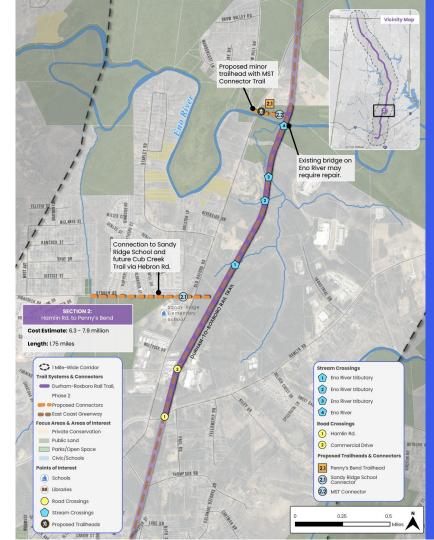
One existing railroad bridge at Eno River (may require repair)

## **AT-GRADE CROSSINGS (2)**

- Hamlin Rd. Unsignalized or Signalized (either Yield sign, RRFB, or PHB)
- 2. Commercial Driveway Unsignalized (Yield sign)

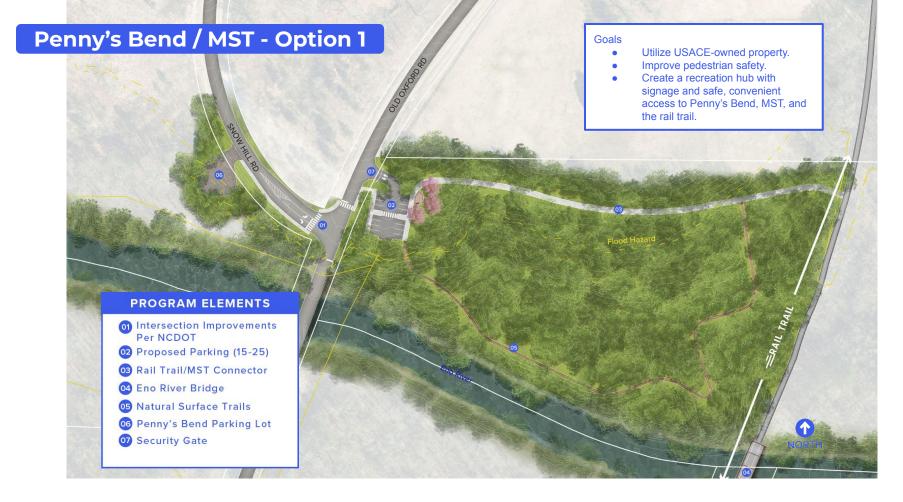
#### **KEY CONNECTIONS AND DESTINATIONS**

Penny's Bend, Mountain-to-Sea Trail, proposed Cub Creek Trail, Sandy Ridge Elementary, East Coast Greenway (shared route)



<sup>\*</sup>Potential Trailhead in between Hamlin Rd. and Hebron Rd. is being considered. Not included in the cost estimate.

<sup>\*\*</sup> Future Northern Durham Parkway would cross the trail at Hebron Rd. Should be explored as a grade-separated design.



<sup>\*</sup>Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review.



\*Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review. NCDOT suggested that the connection between the parking lot and rail trail could utilize space under the Old Oxford vehicular bridge.

## Penny's Bend to Rhododendron Dr.

### **LOCATION AND TRAIL LENGTH**

Penny's Bend to Rhododendron Dr. (3.66 miles)

- 60% in Urban Growth Boundary (as of Sept. 2025)
- 0% percent in City of Durham (as of Sept. 2025)

### **STRUCTURE REQUIRED (1)**

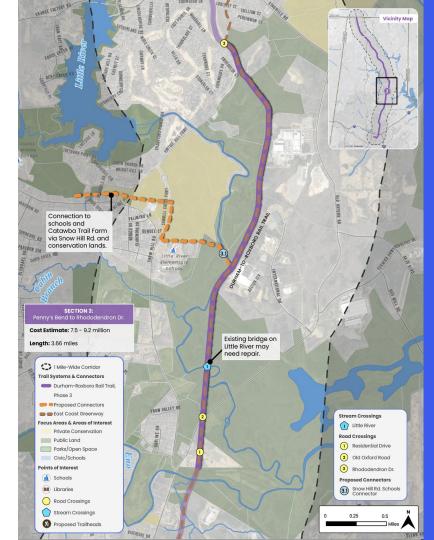
One existing railroad bridge at Little River (may require repair)

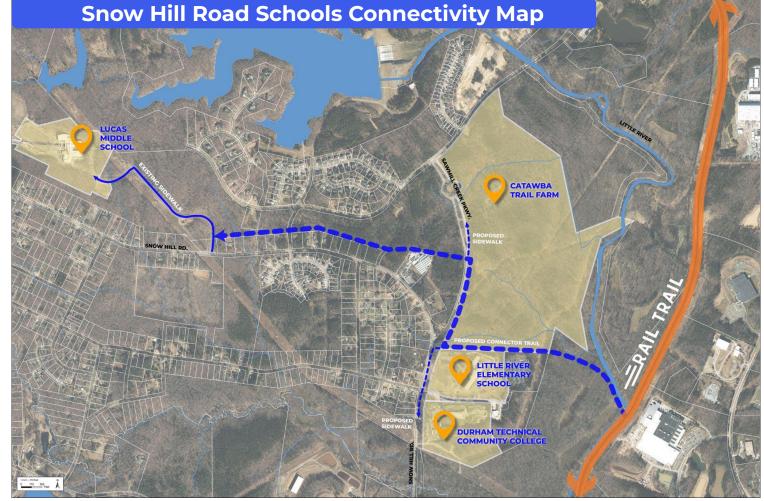
## **AT-GRADE CROSSINGS (3)**

- 1. Residential Driveway Unsignalized (Yield sign; livestock may warrant future consideration)
- 2. Old Oxford Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- 3. Rhododendron Dr.. Unsignalized (Yield sign)

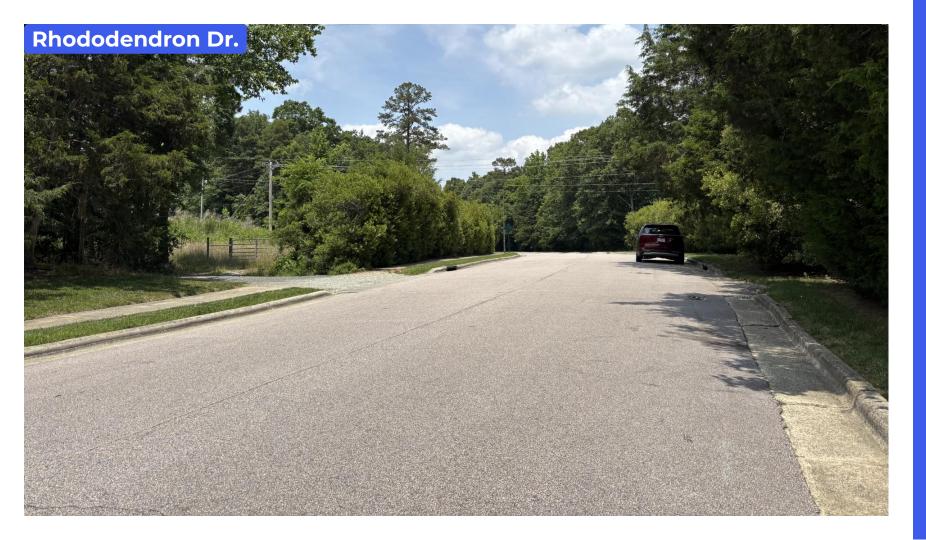
### **KEY CONNECTIONS AND DESTINATIONS**

Little River Elementary, Lucas Middle School, Durham Technical College, Catawba Trail Farm, the historic location of the Great Trading Path, East Coast Greenway (shared route)





\*Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review. Further coordination with the NCWRC and USACE would be needed for these trail connections.





\*Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review.

## Rhododendron Dr. to Ball Rd.

#### **LOCATION AND TRAIL LENGTH**

Rhododendron Dr. to Ball Rd. (3.82 miles)

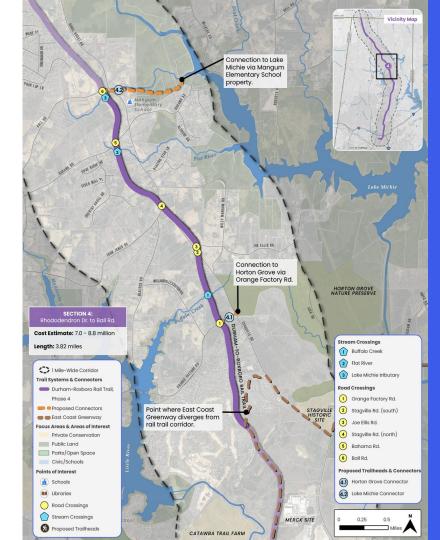
- 29% in Urban Growth Boundary (as of Sept. 2025)
- 0% percent in City of Durham (as of Sept. 2025)

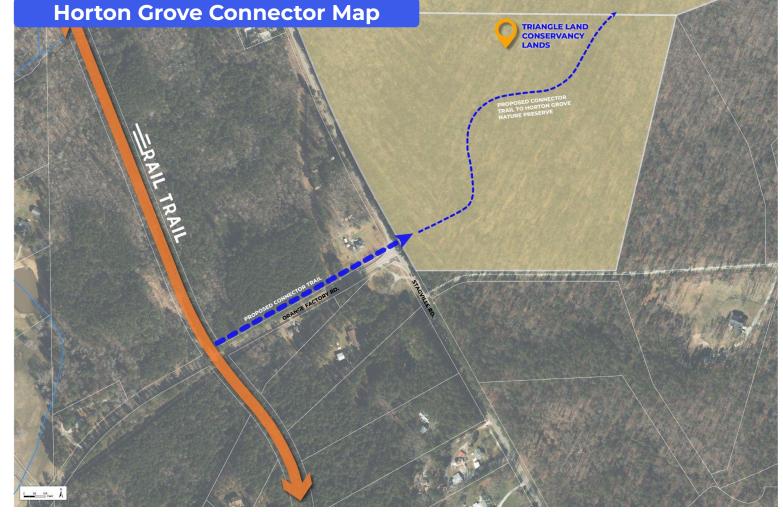
### **AT-GRADE CROSSINGS (6)**

- Orange Factory Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- 2. Stagville Rd. (south) Unsignalized or Signalized (either Yield sign or RRFB)
- 3. Joe Ellis Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- 4. Stagville Rd. (north) Unsignalized or Signalized (either Yield sign or RRFB)
- 5. Bahama Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- 6. Ball Rd. Unsignalized (Yield sign)

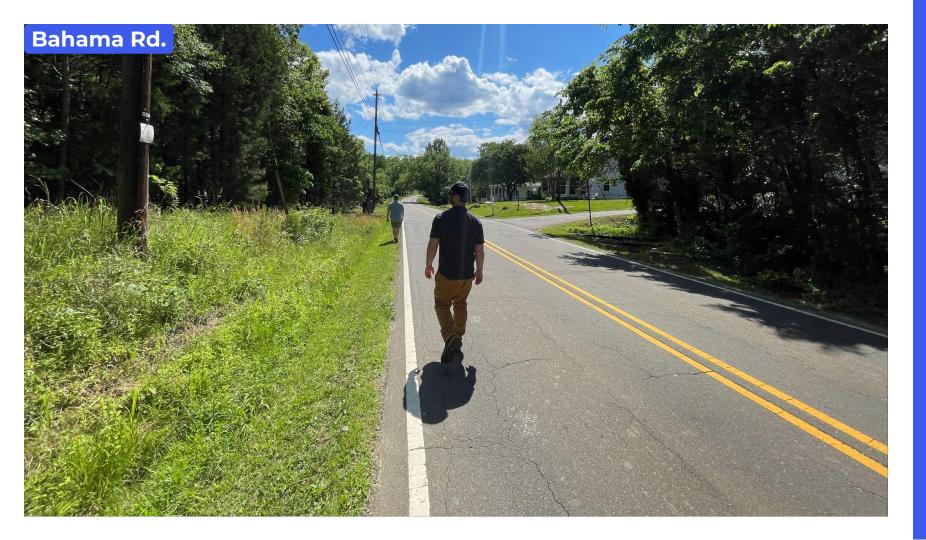
### **KEY CONNECTIONS AND DESTINATIONS**

Stagville Historic Site, Horton Grove Nature Preserve, Lake Michie, Mangum Elementary, East Coast Greenway (trail divergence)



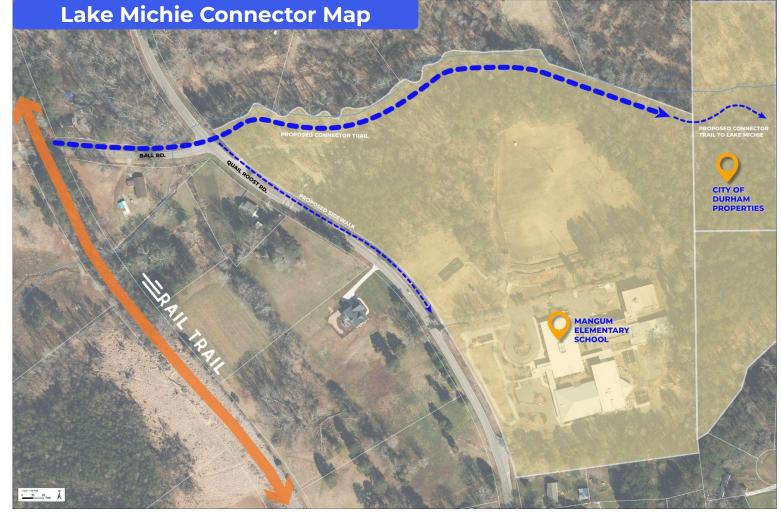


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## Ball Rd. to Red Mountain Rd.

#### LOCATION AND TRAIL LENGTH

Ball Rd. to Red Mountain Rd. (4.23 miles)

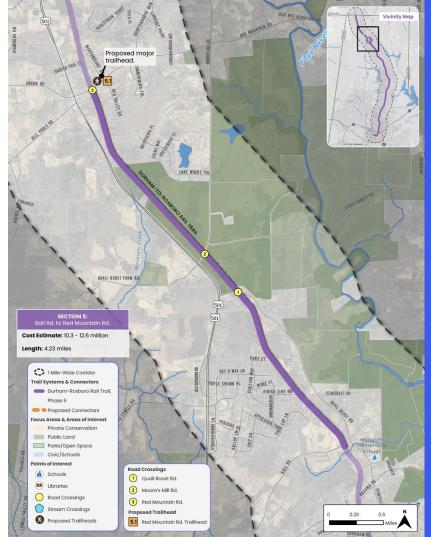
- 0% in Urban Growth Boundary (as of Sept. 2025)
- 0% percent in City of Durham (as of Sept. 2025)

## **AT-GRADE CROSSINGS (3)**

- Quail Roost Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- 2. Moores Mill Rd. Unsignalized or Signalized (either Yield sign or RRFB)
- Red Mountain Rd. Unsignalized or Signalized (either Yield sign or RRFB)

#### **KEY CONNECTIONS AND DESTINATIONS**

Rougemont, Rougemont Train Depot (private)





\*Preliminary conceptual design. Final design subject to change based on engineering, survey data, and regulatory review.

# Red Mountain Rd. to Person County Line

#### LOCATION AND TRAIL LENGTH

Red Mountain Rd. to Person County Line (1.28 miles)

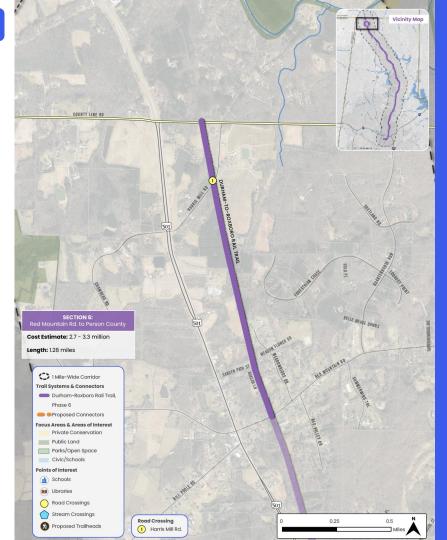
- 0% in Urban Growth Boundary (as of Sept. 2025)
- 0% percent in City of Durham (as of Sept. 2025)

### **AT-GRADE CROSSINGS (1)**

Harris Mill Rd. – Unsignalized (Yield sign)

### **KEY CONNECTIONS AND DESTINATIONS**

Person County portion of the Durham-to-Roxboro Rail Trail



# **Key Implementation Takeaways**

- 1. **Corridor Current Ownership:** Norfolk Southern (No eminent domain associated with acquisition).
- 2. **Corridor Purchase:** Facilitated by the Conservation Fund, NCDOT anticipates the purchase of the corridor in late 2025.
- 3. **Federal Funding:** Typical and critical for the implementation of these types of projects. Federal transportation funding is typically provided at 80% with a 20% non-federal match.
- 4. **State Funding**: Eligible for funding from State Parks. Trail has been identified as part of the Great Trails

  State Plan and includes segments of the Mountains-to-Sea State Trail and East Coast Greenway State

  Trail
- 5. **Cost Estimate:** \$46–57M for Durham County & City of Durham portions (including trail support facilities and trailheads) Complete estimate of probable cost included in final report.
- 6. **Establishing Roles:** Durham County & City of Durham need to establish roles for trail development & ongoing maintenance/management. Within Durham County, roles need to be established among departments.



# **Durham County's Next Steps**

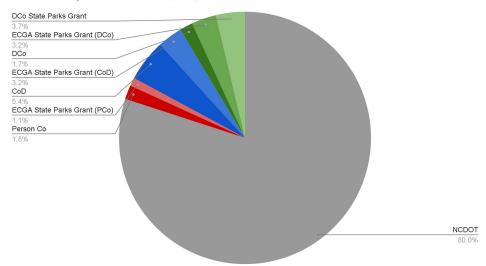
## Approval of Funding for Acquisition

- Budget Ordinance Amendment
- NCDOT Funding Agreement
- State Parks Grant Agreement
- ECGA State Parks Grant

## • Formal Adoption of Plan

- Requesting feedback today to guide the final plan report
- Later this year, final plan report will be presented for adoption
- Future: Funding for Design and Construction





**Net Cost to Durham County = \$223,000 or 1.7% of the Corridor Acquisition Cost** 





**QUESTIONS?** 

