

NORTH ASHEBORO
GREENWAY FEASIBILITY STUDY

City of Asheboro

NORTH CAROLINA

2024

ACKNOWLEDGMENTS

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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....04

01 INTRODUCTION08

- Overview + Study Goals
- Background + Site History
- Process + Schedule
- Previous Plans + Existing Policies
- Review

04 EVALUATION + RECOMMENDATIONS80

- Overview
- Summary of Evaluation Criteria
- Decision Matrix + Alignment Alternatives
- Preferred Alignment Recommendations
- Policy + Program Recommendations

02 STUDY CONSIDERATIONS + ALTERNATIVES DEVELOPMENT.....20

- Overview
- Planning Level Considerations
- Natural Environment Considerations
- Human Environment Considerations
- Alternatives Development

05 IMPLEMENTATION100

- Overview
- Preferred Alignment Cutsheets
- Partner Roles
- Action Plan
- Maintenance Recommendations

03 COMMUNITY ENGAGEMENT.....64

- Overview
- Community Engagement Plan
- Meeting Summaries
- Community Survey Summary

APPENDICES.....124

- Appendix A: Funding Resources
- Appendix B: Design Resources
- Appendix C: Community Engagement
- Appendix D: Cost Estimates



EXECUTIVE SUMMARY

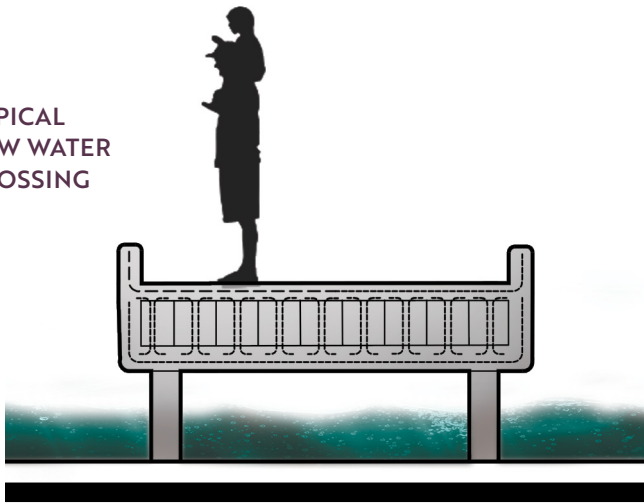
STUDY PROCESS

Potential routes for the North Asheboro Greenway Feasibility Study were developed and evaluated using an approach that considered the built, natural, social, and economic environments. The study commenced in July 2023 and concluded in May 2024. The study process was divided into four phases: Study Conditions, Route Analysis, Study Recommendations, and Implementation. The project assesses existing conditions, evaluates potential routes for opportunities and constraints, develops detailed cost estimates, and provides strategies for implementation for the greenway corridor identified in this document. The project team developed and evaluated two route alternatives, and recommendations for preferred routes were identified through community input, technical analysis, input from the study steering committee, and landowner outreach.

PREVIOUS PLANNING EFFORTS

The North Asheboro Greenway Feasibility Study builds on local, regional, and statewide plans for greenways and other transportation facilities. Reviewing existing plans that support greenway initiatives offers a wealth of knowledge and experiences that can inform the development of future projects in the City of Asheboro. The review of existing plans may help the project team better understand community needs, identify local design principles, and best practices, consider environmental factors, and develop effective funding and implementation strategies for the proposed North Asheboro Greenway.

TYPICAL
LOW WATER
CROSSING

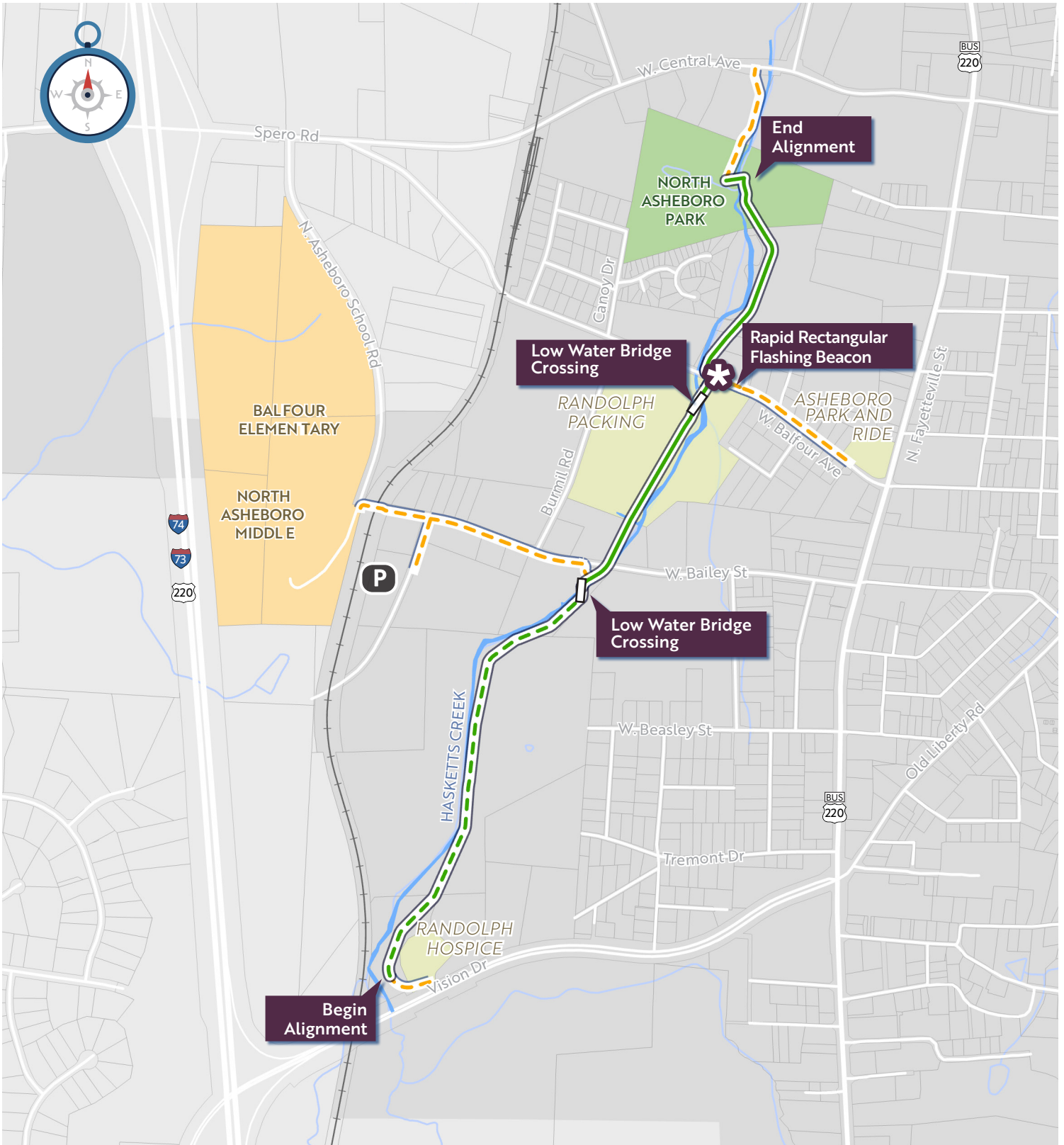


TYPICAL
GREENWAY
SECTION



PREFERRED ALIGNMENT

Beginning in the vicinity of the Randolph Hospice Center near Vision Drive, this alignment alternative runs north following the existing sewer easement through privately owned property on the eastern side of Hasketts Creek before utilizing a low water crossing back to the western side. The alignment then dives underneath West Bailey Street, and a connector trail along West Bailey Street provides access to a parcel identified as suitable for a trailhead and parking lot, as well as a future connection to the Balfour Elementary School and North Asheboro Middle School. The main alignment moves north along the existing sewer easement on the parcel owned by Randolph Packing before utilizing a short low water crossing bridge to span Hasketts Creek to the east. An at-grade crossing is provided on West Balfour Avenue, and a connector trail located on the north side of the street would provide access to the Asheboro Park and Ride. The greenway alignment would move north through several private properties before terminating within North Asheboro Park over the existing greenway bridge. In a future phase, the main line will continue north past West Central Avenue.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY ALIGNMENT ALT. B

0' 1,000' 2,000'

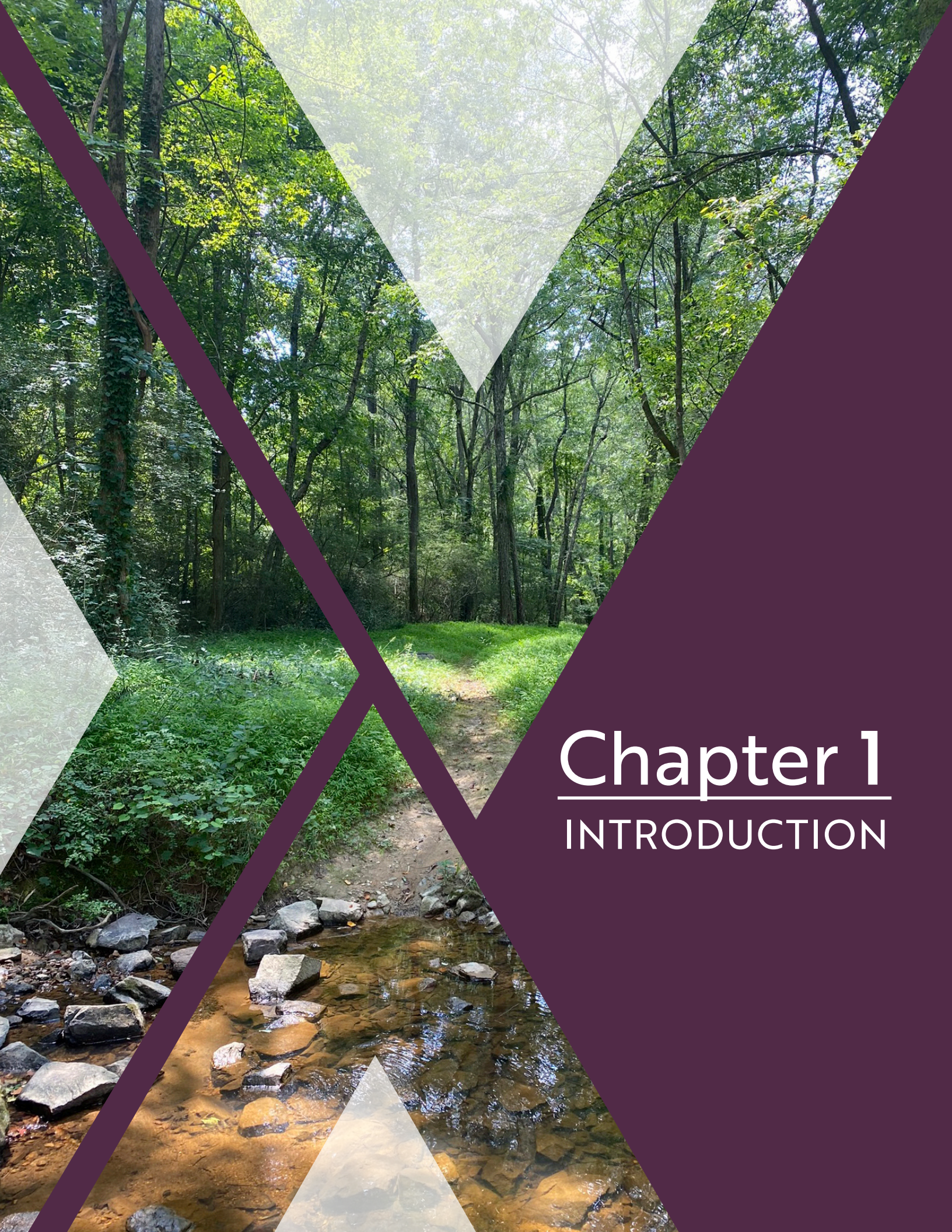
LEGEND

Existing Conditions

- +— Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Greenway Alternatives (Color Varies)

- Implemented Alternative
- Future Alternative Phase
- Future Connector Phase
- Ⓟ Potential Trailhead
- ⊠ Pedestrian Bridge
- ⊠ Pedestrian Signal



Chapter 1

INTRODUCTION

Visioning for Success

During the project kick-off meeting, Working Group members provided input on what success will look like for the North Asheboro Greenway Feasibility Study. This input was distilled into the following key points, which will be used to guide the study and ultimately help the City identify a preferred alignment for the North Asheboro Greenway.



Increased Interest and Support: A successful study should lead to a heightened level of interest, excitement, and community support for greenways in Asheboro. This, in turn, fosters a positive environment for greenway development.



Learning from Past Failures: Building on the lessons from previous unsuccessful projects, success means ensuring that the community has a more positive experience with greenway development this time around.



Funding Preparedness: The study should position the City to secure funding for the greenway, ensuring that financial resources are available to bring the project to fruition.



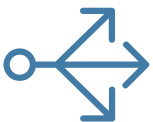
Sustainability and Maintenance: Success involves establishing a plan for the long-term sustainability and maintenance of the greenway corridor to ensure its continued functionality and appeal.



Community Well-being: A successful outcome includes an investment in the health of the community by providing access to outdoor recreational facilities, building on the strong participation in the Mayor's Challenge program.



User Guidelines: Success also entails clearly identifying the types of trail users allowed on the greenway, including considerations for motorized vehicles like E-bikes, ensuring safe and harmonious usage.



Strategic Corridor Selection: The study's success is evident in its choice of a previously identified greenway corridor along an existing easement with few nearby neighbors, demonstrating thoughtful planning.



Positive Precedent: Success sets a positive precedent for greenway development in Asheboro, potentially attracting future residential development that aligns with the greenway's objectives.

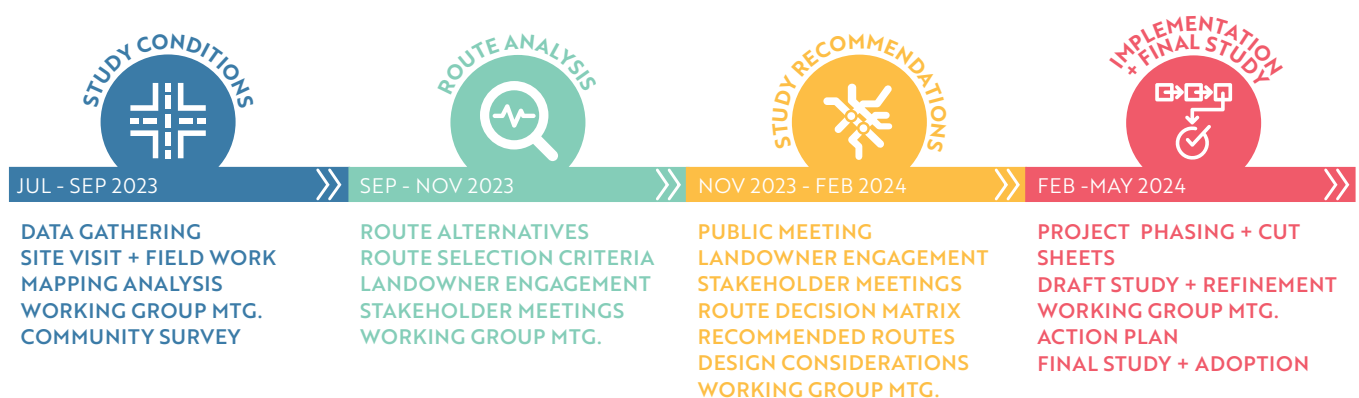
What is a Feasibility Study?

Feasibility studies bridge the gap between conceptual planning, prioritization, and project programming. They build upon higher-level planning efforts and comprehensively assess possible alignment alternatives. These studies evaluate technical feasibility from design, permitting, and constructability perspectives. Input solicited from the local community and stakeholders guides the recommended alignments. Preliminary cost estimates based on quantities are generated to inform decision making, identify funding needs, and determine the next steps for project implementation. It is important to note that a feasibility study does not present a final design for construction. The final alignment of a project will depend on willing property owners and available funding.



Process & Schedule

Potential routes for the North Asheboro Greenway Feasibility Study were developed and evaluated using an approach that considered the built, natural, social, and economic environments. The study commenced in July 2023 and concluded in May 2024. The study process was divided into four phases: Study Conditions, Route Analysis, Study Recommendations, and Implementation & Final Study. The study process graphic below outlines key components for each phase. Engagement efforts were integrated throughout the study, including meetings with the Working Group, stakeholders, landowners, and the general public.



Study Area Profile

The North Asheboro Greenway is a proposed 1.8-mile corridor that begins at Vision Drive and extends northward along Hasketts Creek until it reaches West Central Avenue. The initial alignment under consideration will prioritize the utilization of existing sewer line easements, traversing floodplain areas in the process. This potential route will also pass through commercial properties, large rural residential lots, and open spaces associated with homeowners associations and institutional uses. Additionally, there is a strong desire to establish a connection to North Asheboro Park, which could also serve as a trailhead. Other desired connections include Balfour Elementary School and North Asheboro Middle School. This linkage would follow the West Bailey Street public right-of-way (ROW) from the Hasketts Creek bridge to North Asheboro School Road. It is important to note that all segments of the proposed greenway fall within the Asheboro corporate limits.

ABOUT THE STUDY

As the City of Asheboro embarks on its inaugural greenway project, a comprehensive analysis of the corridor is essential to identify opportunities, constraints, and generate potential costs for the next phase of project development. This feasibility study assesses the potential route scenarios of the corridor alignment, including options on both sides of the creek, at major road intersections, and at the railroad crossing on West Bailey Street. Furthermore, the study recommends a walkable and bikeable alignment that will provide future connections to the nearby schools and park.

The study's objectives encompass enhancing local connectivity, accessibility, safety, and environmental protection, and these will serve as a guiding framework throughout the study process. To achieve these goals, the study will involve several key components, including:

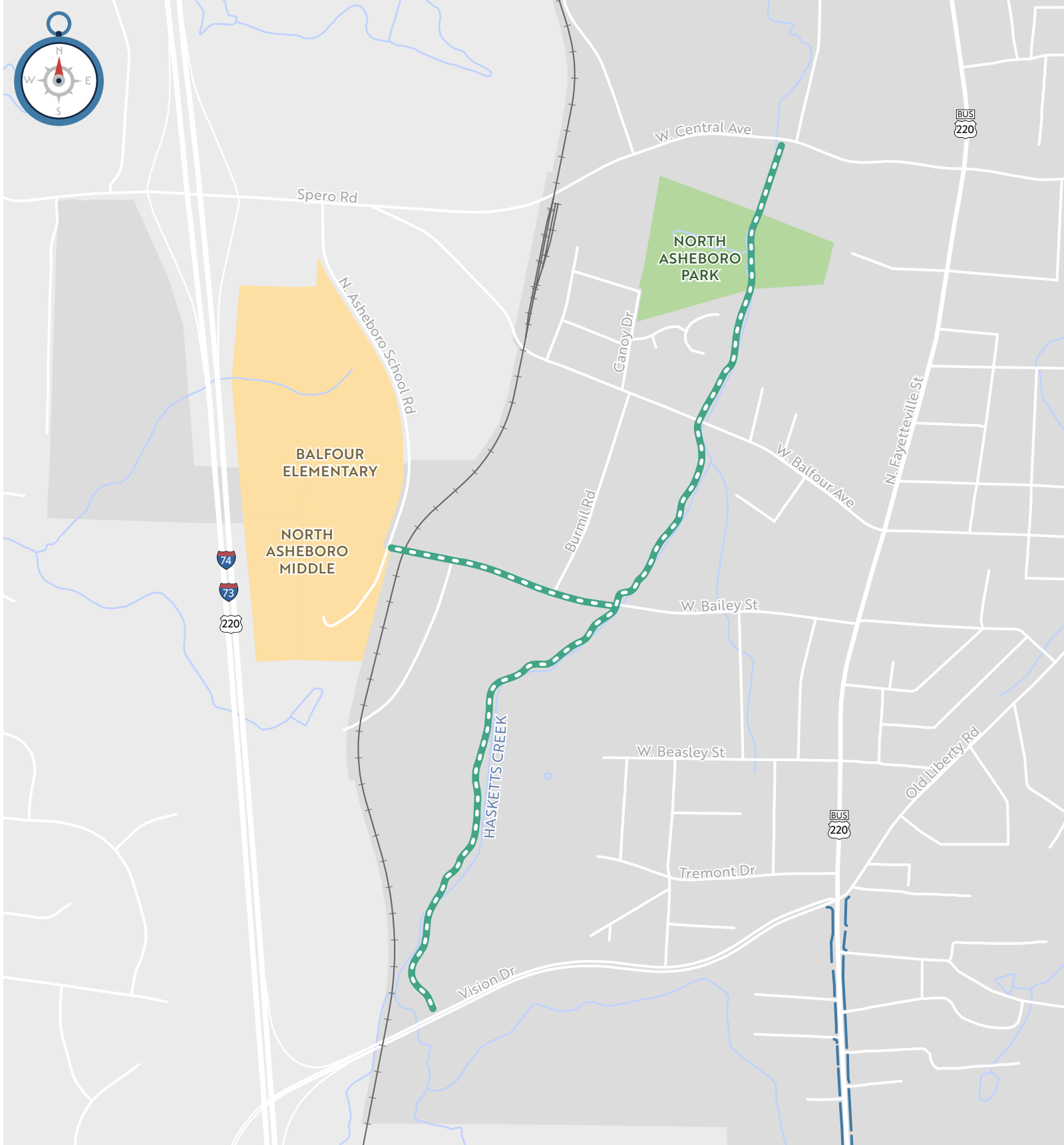
Stakeholder + Public Engagement: This involves developing a community engagement plan to coordinate with stakeholders, conducting working group meetings, and organizing public meetings at regular intervals throughout the study process. Coordination with project partners such as NCDOT, City of Asheboro staff, and local government staff is also integral.

Existing Conditions Analysis: This phase will encompass an extensive GIS analysis with base mapping and a thorough examination of environmental features and topography.

Alternative Route Alignments: The study will identify landowner and acquisition challenges, assess road and stream crossings, and evaluate environmental and permitting constraints for various route options.

Preferred Route Development: This phase involves the creation of acquisition strategies, planning-level cost estimates, design considerations, and project phasing for the selected route.

Development of a Final Study Document: The feasibility study serve as a comprehensive document that outlines implementation action steps, funding resources, and design resources to guide the greenway project to its successful completion.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY Study Area



- Preliminary Study Corridor
- Existing Sidewalk
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County



Previous Planning Efforts

The North Asheboro Greenway Feasibility Study builds on local, regional, and statewide plans for greenways and other transportation facilities. Reviewing existing plans that support greenway initiatives offers a wealth of knowledge and experiences that can inform the development of future projects in the City of Asheboro. The review of existing plans may help the project team better understand community needs, identify local design principles, and best practices, consider environmental factors, and develop effective funding and implementation strategies for the proposed North Asheboro Greenway. An understanding of nearby planned projects can also impact the design or delivery of the North Asheboro Greenway and should be coordinated with the greenway’s development.

EXISTING PLAN/STUDY	KEY RECOMMENDATIONS RELATED TO THE NORTH ASHEBORO GREENWAY FEASIBILITY STUDY
<p>City of Asheboro Comprehensive Pedestrian Transportation Plan (2008)</p>	<p>The City of Asheboro Comprehensive Pedestrian Transportation Plan establishes a vision for Asheboro’s pedestrian network in the year 2025. Projects included in the plan are prioritized with the most critical projects being included in small area plans. Public input found a lack of sidewalks and multiuse paths is the greatest barrier to walking, and Fayetteville St ranked among the streets most in need of improvement. A road widening and sidewalk project planned between Vision Dr/Old Liberty Rd and the Randleman city line has not yet been realized. W Balfour Ave between Canoy Dr and N Fayetteville St and W Bailey St between North Asheboro Middle School and N Fayetteville St, as well as intersection improvements at N Fayetteville St and Bailey St and N Fayetteville St and Strider St, are recommended but did not score high in the prioritization process. A 0.8-mile multiuse path between North Asheboro Middle School and North Asheboro Park is recommended for implementation within 6-15 years and would follow Hasketts Creek. The Pedestrian Transportation Plan also includes policy recommendations to require sidewalks for new residential construction and new development or change of use where curb and gutter exists, as well as acquiring public access easements when sewer and water easements are created on proposed greenway corridors.</p>
<p>Asheboro Comprehensive Transportation Plan (2014)</p>	<p>The Asheboro Comprehensive Transportation Plan (CTP) identifies multimodal transportation needs through 2040. The widening of N Fayetteville St to a four-lane boulevard from Claude Holden Dr to Old Liberty Rd is recommended as a highway project, as well as sidewalks and bicycle facility improvements on N Fayetteville St. A multiuse path is recommended on a new alignment between W Presnell St and Art Bryan Dr, including the North Asheboro Greenway corridor.</p>

EXISTING PLAN/STUDY	KEY RECOMMENDATIONS RELATED TO THE NORTH ASHEBORO GREENWAY FEASIBILITY STUDY
City of Asheboro 2020 Land Development Plan (2000, updated 2009 and 2015)	The City of Asheboro 2020 Land Development Plan guides growth and development for the city. It includes recommendations for 5-7 miles of proposed greenways from previous planning efforts, and the North-East planning area is specifically identified for greenway development along streams. The plan identifies N Fayetteville St as likely to be near capacity by the year 2025. Among the goals of the plan are to require pedestrian facilities in all new land development projects.
City of Asheboro Comprehensive Parks and Recreation Plan (2021)	The City of Asheboro Comprehensive Parks and Recreation Plan identifies needs for parks, recreation, and cultural services offered in Asheboro. Building greenways and trails ranked as one of the community's top priorities in community engagement efforts. Recommendations related to the North Asheboro Greenway Feasibility Study include updating and implementing the Comprehensive Pedestrian Transportation Plan to improve pedestrian accessibility to park sites, provide bicycle parking at parks, and establishing a trail system incorporating informal trails and new trails recommended with other municipal facilities.
NCDOT Great Trails State Plan (2022)	The North Carolina Department of Transportation's (NCDOT) Great Trails State Plan, completed in 2022, helped to identify priorities of existing trail users. Among the top destinations for current users were local and regional parks (#1), small towns and rural communities (#3), and river, lake, and beach access points (#4). The plan identifies a preferred route along the Deep River that will connect Randleman and communities north with the existing Deep River Rail Trail in Ramseur, as well as a route that will connect through Asheboro and the study area to the Uwharrie National Forest. The plan also emphasizes key design features including the need for wayfinding and branding, roadway crossings with traffic calming features or median refuges, and the need to coordinate with developers.

Policy Review

Policy review plays a crucial role in informing the planning process for greenways. By conducting a thorough policy review, the project team can ensure that trail planning is informed by current policies, regulations, and funding mechanisms. This helps create a solid foundation for developing the North Asheboro Greenway Feasibility Study to ensure the trail is feasible, compliant with regulations, and aligned with broader policy goals, ultimately leading to the successful implementation and sustainable management of the project. The table below provides an overview of existing policies and ordinances at the local, state, and federal levels that may impact trail design and development in the study area for the North Asheboro Greenway.

EXISTING POLICY	KEY POLICIES TO GUIDE THE NORTH ASHEBORO GREENWAY FEASIBILITY STUDY
Asheboro Code of Ordinances (2023)	The Asheboro Code of Ordinances requires sidewalks to be maintained by the adjacent property owner.
Asheboro Subdivision Ordinance (2023)	Article VI, Sec. I of the Asheboro Subdivision Ordinance requires any thoroughfare designated on the Comprehensive Transportation Plan to be included on the subdivision plat. Any proposed trails or rights-of-way for pedestrians and bicyclists must also be included on sketch design plats, preliminary plats, and final plats. The Subdivision Ordinance does not require but encourages sidewalks, especially in high density development. Pedestrian crosswalk easements at least 15 feet in width may be required to provide public access to areas such as parks, schools, or lakes if deemed necessary by the Planning Board and approved by City Council. Sidewalks are required in Planned Unit Developments.
Asheboro Zoning Ordinance (2023)	The Asheboro Zoning Ordinance requires a minimum vegetative buffer of 50 feet against development activities along all perennial waters. Development within this buffer is prohibited except for water-dependent structures and public projects including greenways where no practical alternative exists.

EXISTING POLICY**KEY POLICIES TO GUIDE THE
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY****NCDOT Complete Streets
Policy (2023)**

The NCDOT Complete Streets Policy Update was adopted by the Board of Transportation in August 2019. This policy requires NCDOT to consider and incorporate multimodal facilities in the design and improvement of all transportation projects in North Carolina. The adopted Comprehensive Transportation Plan (CTP) is considered the controlling plan for the identification of nonmotorized facilities to be evaluated as part of a roadway project. The CTP may include and/or reference locally adopted plans for public transportation, bicycle and pedestrian facilities, and greenways. Bicycle, pedestrian, and public transportation facilities that appear in the CTP directly or by reference will be included as part of the proposed roadway project, and NCDOT is responsible for the full cost of the project. Bicycle, pedestrian, and transit facilities incidental to a roadway project where a need has been identified through the project scoping process but not identified in an adopted plan may be included in the project. Inclusion of these incidental facilities requires the local jurisdiction to share the incremental cost of constructing the improvements based on population thresholds. The policy also establishes maintenance responsibility for active transportation facilities. Bicycle, pedestrian, and transit improvements inside a municipal boundary are subject to local maintenance. Projects that have not completed environmental review prior to August 2019 are subject to the Complete Streets Policy.

**NCDOT Roadway Design
Manual (2021)**

The latest edition of the NCDOT Roadway Design Manual (RDM) was adopted in 2021 and recently updated in April 2022. This document outlines engineering design requirements for design of roadway facilities within the NCDOT right-of-way (ROW) and relies heavily on established engineering standards, such as the American Association of State Highway and Transportation Officials (AASHTO) Green Book, guidance documents from the Federal Highway Administration (FHWA), and other engineering design references. Section 4.14, Pedestrian Facilities, provides a detailed overview of the design requirements for sidewalks and multi-use paths built along NCDOT roadways. Guidance includes topics such as minimum width, minimum vertical clearance, minimum railing height, roadway crossings, grade separation, and curb ramps. Together, these factors will influence future design and construction of any portion of the greenway within NCDOT ROW. Additionally, NCDOT has a clear zone requirement for its roadways. The clear zone is defined as "The unobstructed traversable area provided beyond the edge of the traveled way is termed the clear zone. This area is used for the recovery of errant vehicles and includes shoulders, bike lanes, and auxiliary lanes." The width of the clear zone requirement varies based on the traffic volume, design speed, and cross slope of shoulder for the roadway in question. This clear zone can have implications for multi-use path development as it may increase the amount of needed ROW.

EXISTING POLICY**FHWA Guidance on
Bicycle and Pedestrian
Accommodation (2011)****KEY POLICIES TO GUIDE THE
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY**

Under the US Department of Transportation (DOT) Policy Statement on Bicycle and Pedestrian Accommodation, "The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes." There are no Federal laws or regulations that prohibit shared use paths or bicycle use along or near Interstate highways or other freeways. Bicycle and pedestrian accommodations may be allowed on Interstate and other major highways and freeways. Bridges are essential in any transportation network, and many Interstate or other freeway bridges often are the only possible bridges across rivers, canyons, railroads, other highways, or other major barriers. Major highway bridges often are necessary links for nonmotorized transportation networks.

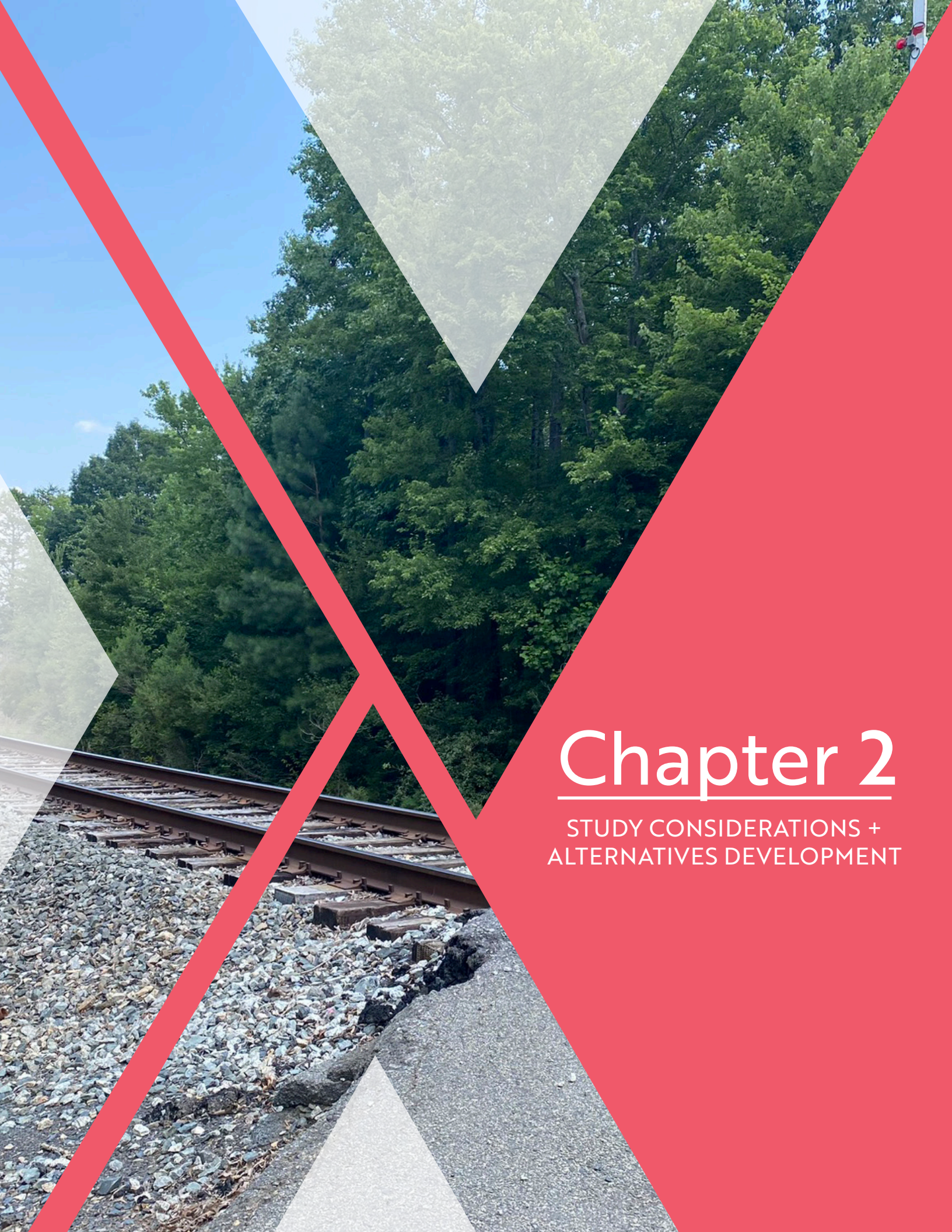
Under 23 U.S.C. 217(g), transportation plans must consider bicycle and pedestrian accommodations.

23 U.S.C. 217(g) Planning and Design:

1. In General. --Bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State in accordance with sections 134 and 135, respectively. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted.
2. Safety considerations. --Transportation plans and projects shall provide due consideration for safety and contiguous routes for bicyclists and pedestrians. Safety considerations shall include the installation, where appropriate, and maintenance of audible traffic signals and audible signs at street crossings.



Central Ave looking east toward Hasketts Creek



Chapter 2

STUDY CONSIDERATIONS +
ALTERNATIVES DEVELOPMENT

Planning Considerations

Planning level considerations provide insight into the social and economic environments within a study area and may influence the proposed alignments for a greenway. The demographic analysis for this study helped to inform the public engagement approach and to ensure proposed recommendations met the diverse needs of people residing along the corridor. The following planning level considerations were reviewed as part of this study: Community demographics and employment density.

COMMUNITY DEMOGRAPHICS

Analyzing demographic trends is crucial for effective planning of the active transportation network in the study area. This analysis helps the study team better understand the diverse needs of the community residing within the study corridor. Demographic data was sourced from the 2020 American Community Survey (ACS) 5-year estimates (2016-2020), obtained through the United States Census Bureau.

The Demographic Study Area (DSA) for the *North Asheboro Greenway Feasibility Study* encompasses 27 block groups, as indicated in the accompanying map (see right). These selected block groups are located within a three-

mile radius of the initial alignments examined and collectively represent an estimated total population of 36,224 people.

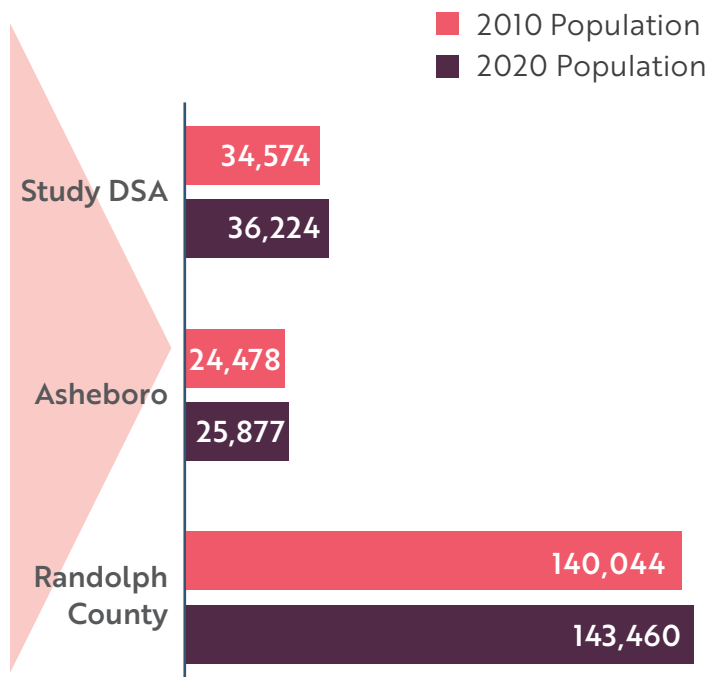
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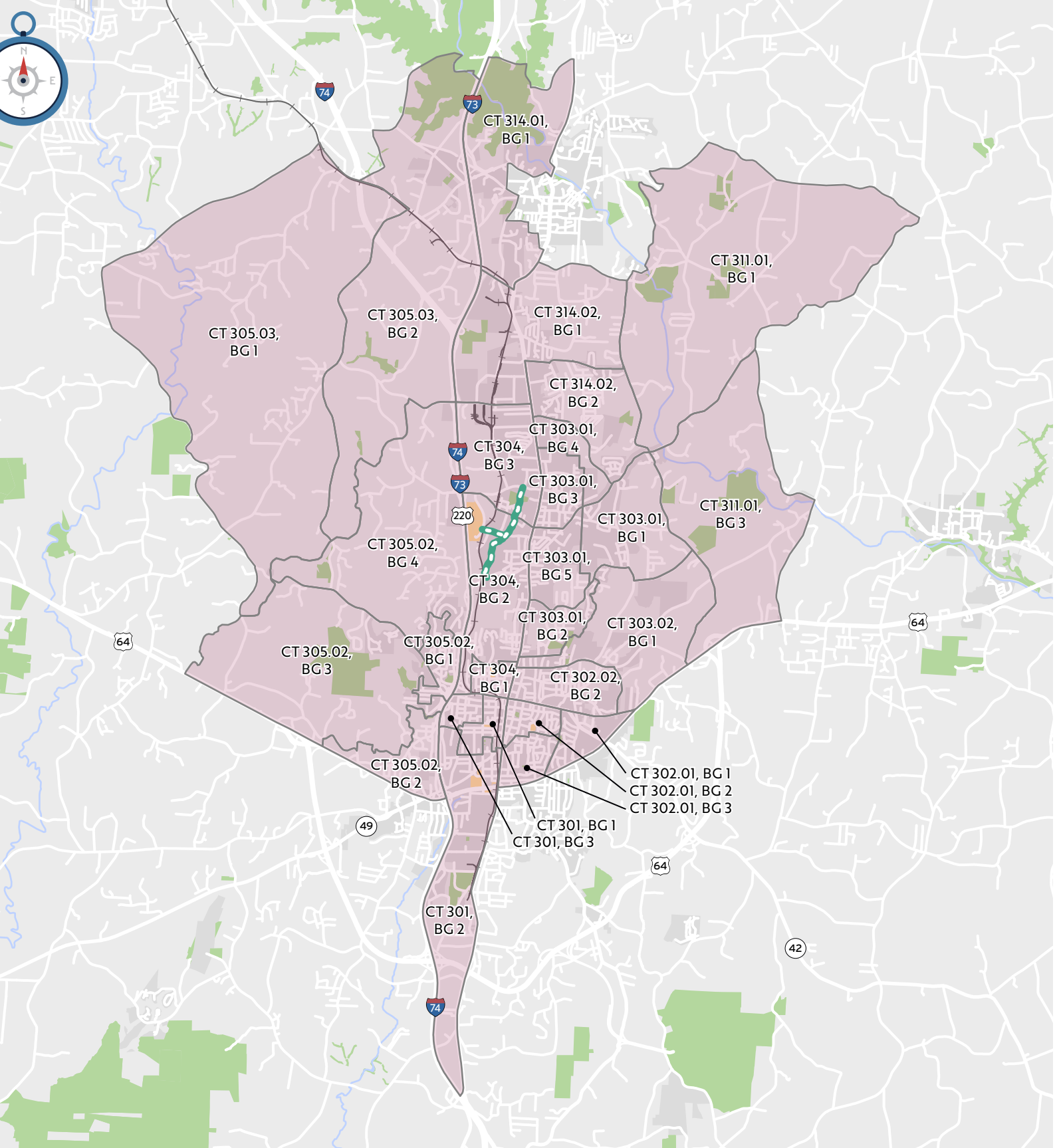
- Population
- Age
- Race, ethnicity, + minority
- Households living below the poverty level
- Income
- Language
- Vehicle availability
- Commute

POPULATION

According to ACS data, the population of the DSA in 2010 was 34,574, which increased to 36,224 in 2020, reflecting a 4.8 percent increase (equivalent to a 0.5 percent annualized growth rate). Similarly, the City of Asheboro experienced a 5.7 percent increase in population (24,478 to 25,877 population). This was similar to the City of Asheboro’s annualized growth rate of 0.6 percent. In contrast, Randolph County only experienced a 0.2 percent annualized growth rate during the same period. North Carolina as a whole took the lead and witnessed a 12 percent increase in population, corresponding to a 1.1 percent annualized growth rate.

Enhancing active transportation infrastructure, such as greenways, has the potential to attract new residents and businesses to the area. Additionally, it can contribute to the overall quality of life for residents in the surrounding region. By providing accessible and appealing options for active transportation, the community can leverage these improvements to foster growth, boost its local economy, and enhance the well-being of its residents.





NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Block Groups within 3 Miles of the Project

1.5 3 Miles

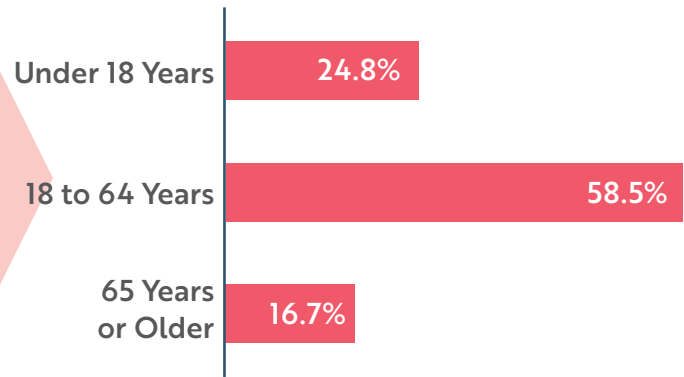
LEGEND

- Preliminary Study Corridor
- Railroad
- Roadway
- Study Area Census Tract (CT) Block Group (BG)
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

AGE

The median age of residents in the DSA is 38.6 years old. More than half (58.5%) of the DSA’s population falls within the range of 18 to 64 years old. This data indicates a significant presence of working-age individuals within the DSA. The remaining population is divided into 24.8 percent under the age of 18 and 16.7 percent at or over the age of 65.

Considering these demographics, it is crucial for the design of future greenways to accommodate users of all ages and abilities. By ensuring accessibility and inclusivity, the North Asheboro Greenway can cater to the needs and preferences of diverse user groups, including children, seniors, and individuals with varying physical abilities. This approach will create a welcoming and inclusive environment that promotes active transportation and supports the well-being of all residents within the DSA.

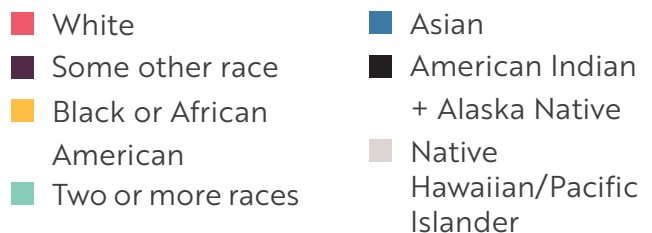
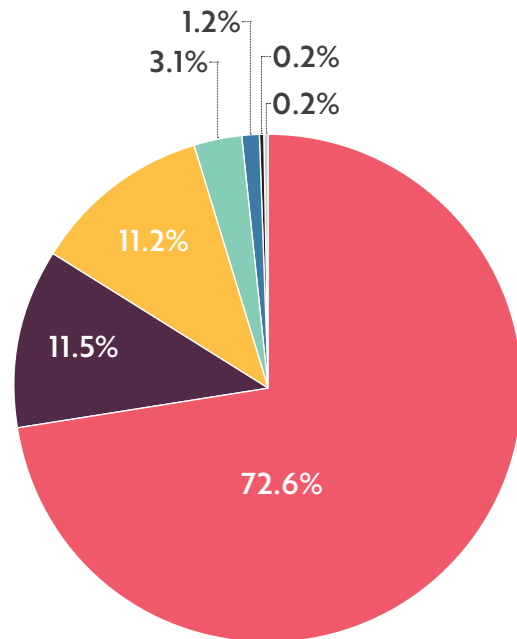


RACE, ETHNICITY, + MINORITY

The DSA is primarily composed of White residents, accounting for 72.6 percent of the population. The “Some Other Race” category represents 11.5 percent, while Black or African American individuals make up nearly 11 percent (11.2%). Two or more races account for 3.1 percent, followed by Asian individuals at 1.2 percent, and American Indian and Alaska Native and Native Hawaiian/Pacific Islander individuals at 0.2 percent. Additionally, approximately 23.5 percent of the DSA’s population identifies as Hispanic.

According to the U.S. Census, minorities encompass all non-white races and Hispanic populations who are also White. In the DSA, the minority population represents approximately 38 percent (38.3%) of the total population. This percentage is higher than the state’s average minority rate of 37.4 percent.

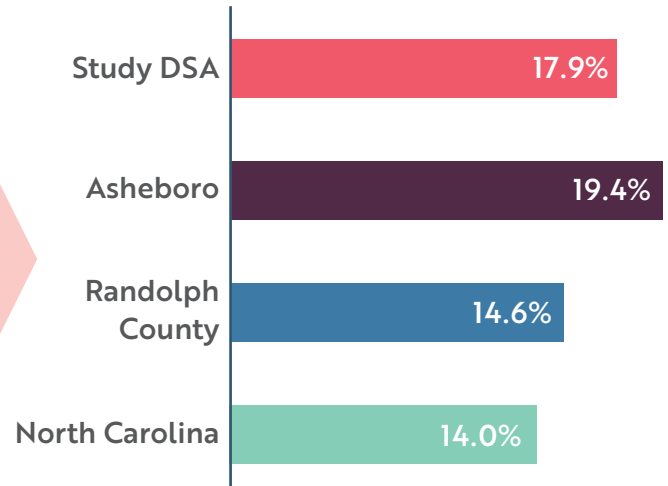
Understanding the demographic composition of the DSA is crucial for developing inclusive and equitable greenway infrastructure. By considering the needs and preferences of diverse communities, planners and engineers can ensure that the design and accessibility of the North Asheboro Greenway promotes inclusivity and provides equal opportunities for all residents, regardless of their racial or ethnic backgrounds.



HOUSEHOLDS LIVING IN POVERTY

The percentage of households living below the poverty level in the DSA is less than 20 percent (17.9%). This poverty rate is lower than the rate of the City which is 19.4 percent. However, it is slightly higher than the poverty rate for the state, which stands at 14.0 percent.

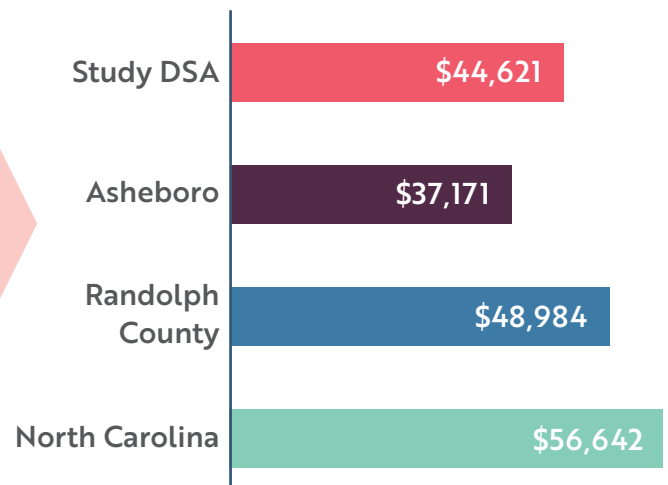
Understanding the poverty rate within the DSA is essential for developing initiatives and infrastructure that address the needs of the community. By considering the economic challenges faced by a portion of the population, planners and engineers can ensure that future projects, such as the North Asheboro Greenway, are designed to provide accessible and affordable transportation options that benefit all residents, regardless of their socioeconomic status.



HOUSEHOLD INCOME

Based on the recent 5-year estimates from the ACS, the median household income for residents in the DSA is \$44,621. This figure surpasses the median household income for Asheboro, which stands at \$37,171. However, it falls below both the overall median household income rate for Randolph County and North Carolina, which are at \$48,984 and \$56,642, respectively.

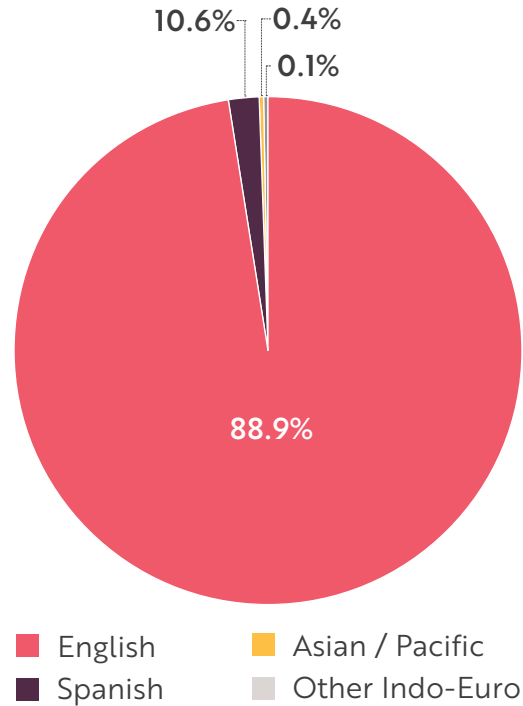
Understanding the income levels within the DSA provides valuable insights for planning and development initiatives. By recognizing the economic landscape, planners can tailor projects, such as greenways, to meet the needs and aspirations of the local community. Additionally, it underscores the importance of creating opportunities for economic growth and prosperity while striving for equitable access to resources and amenities that enhance the overall well-being of residents in the DSA.



LANGUAGE

English is the primary language spoken in the DSA, accounting for 88.9 percent of the population. Adult individuals aged 18 and older who speak English “less than very well” make up approximately 11 percent (11.1%) of the DSA’s population. Spanish is the second most commonly spoken language, representing 10.6 percent of the population, followed by “Asian/Pacific” at 0.4 percent and “Other Indo-Euro” at 0.1 percent. These language trends align with those observed in the City of Asheboro as a whole.

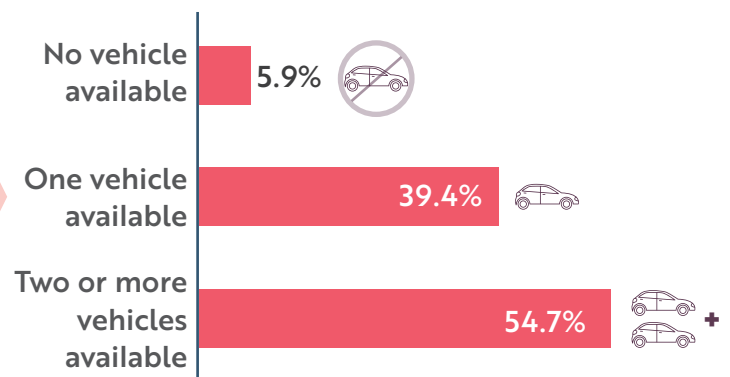
Recognizing the predominant languages spoken within the DSA is vital for ensuring effective communication and inclusivity in the planning of greenway infrastructure. It highlights the need for providing multilingual resources and engaging diverse language communities in public outreach efforts. By addressing language barriers, planners can foster a sense of belonging and actively involve all residents in shaping the future of the community’s active transportation network.



ACCESS TO VEHICLES

Out of the 14,312 occupied housing units in the DSA, the majority (54.7%) have access to two or more vehicles. Approximately 40 percent (39.4%) have access to one vehicle, while 5.9 percent of occupied housing units do not have access to a vehicle. These rates closely resemble the state’s statistics, where 5.6 percent of households lack vehicle access, 31.4 percent have access to one vehicle, and 63.0 percent have access to two or more vehicles.

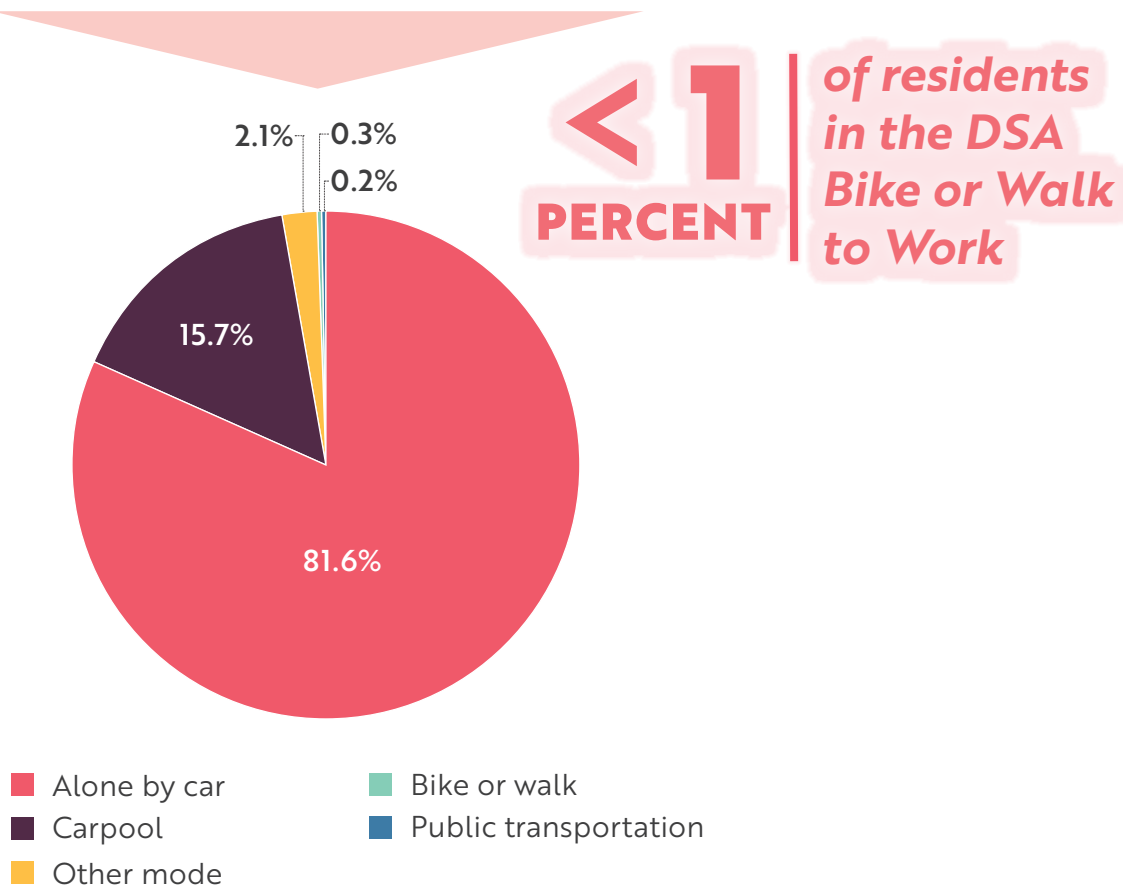
Considering the distribution of vehicle access within the DSA is crucial for the planning and construction of the North Asheboro Greenway. The future development of this greenway can provide a valuable transportation alternative for residents who do not have access to vehicles or rely on shared vehicles within their households. By offering a safe and convenient active transportation option, the greenway can enhance mobility, improve connectivity, and contribute to a more inclusive and sustainable community for all residents within the DSA.



COMMUTE

Almost 82 percent (81.6%) of residents in the North Asheboro Greenway DSA commute to work alone in a car. Carpooling is the second most popular mode for residents (15.7%), while a small percentage of the DSA's population use another mode of transportation to commute (2.1%). Only 0.3 percent prefer biking or walking to work and 0.2 percent of the DSA's population uses public transportation. Overall, the DSA's commute mode trends differ from the state's statistics (see biking/walking), where 85.9 percent commute alone by car, 9.7 percent carpool, 2.1 percent choose biking or walking, 1.3 percent select another mode, and 1.0 percent utilize public transportation.

Understanding the predominant commuting modes within the DSA helps inform transportation planning and the development of greenway infrastructure. By acknowledging the heavy reliance on private vehicles, planners can prioritize initiatives that promote alternative modes of transportation, such as biking, walking, and carpooling. Encouraging and enhancing these alternative modes will not only reduce traffic congestion and environmental impact but also contribute to improved public health, increased physical activity, and a more sustainable and livable community for residents within the North Asheboro Greenway DSA.



Once constructed, the North Asheboro Greenway may serve as a last-mile solution for vehicleless households that rely on nearby transit services to run errands and reach essential destinations.

EMPLOYMENT DENSITY

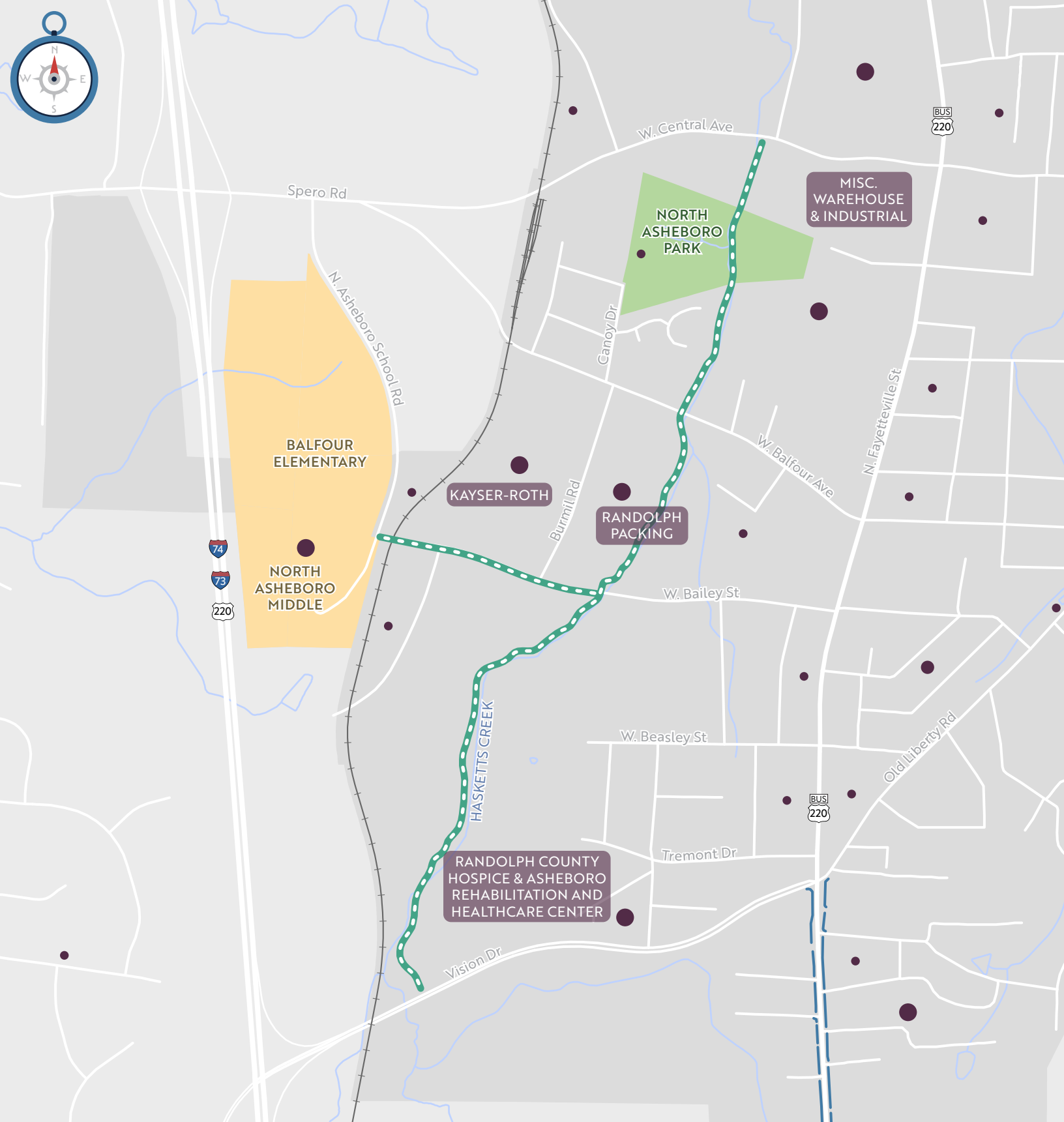
Employment density refers to the number of jobs per unit of land area, and it can exhibit significant variations depending on a locality's economic activity, industrial base, and population size. Understanding employment density is a critical factor in assessing the economic health and development of a region, and it is frequently utilized in conjunction with other demographic and economic indicators to inform policy decisions.

The data displayed in the following map has been sourced from the U.S. Census Bureau's OnTheMap! application. On this map, larger dots indicate a higher concentration of jobs. Notably, there is a pronounced concentration of jobs in Asheboro, particularly in proximity to North Asheboro Middle School, North Asheboro Park, and along Business 220. These areas encompass a mix of industrial, commercial, and residential zones (as detailed in the Zoning Map). According to Future Land Use data, several of the industrial zoned areas are slated to transform into employment centers (see Future Land Use Map). According to census data, manufacturing is the largest industry sector within Randolph County, constituting 34.0 percent of the total jobs (44,444 jobs).

Upon completion, the North Asheboro Greenway has the potential to offer accessible and sustainable transportation options for residents and workers seeking access to various locations within and around the DSA.



The future greenway may provide connections to nearby businesses



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY Employment Density

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 1-49 Jobs
- 50-99 Jobs
- 100-225 Jobs
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

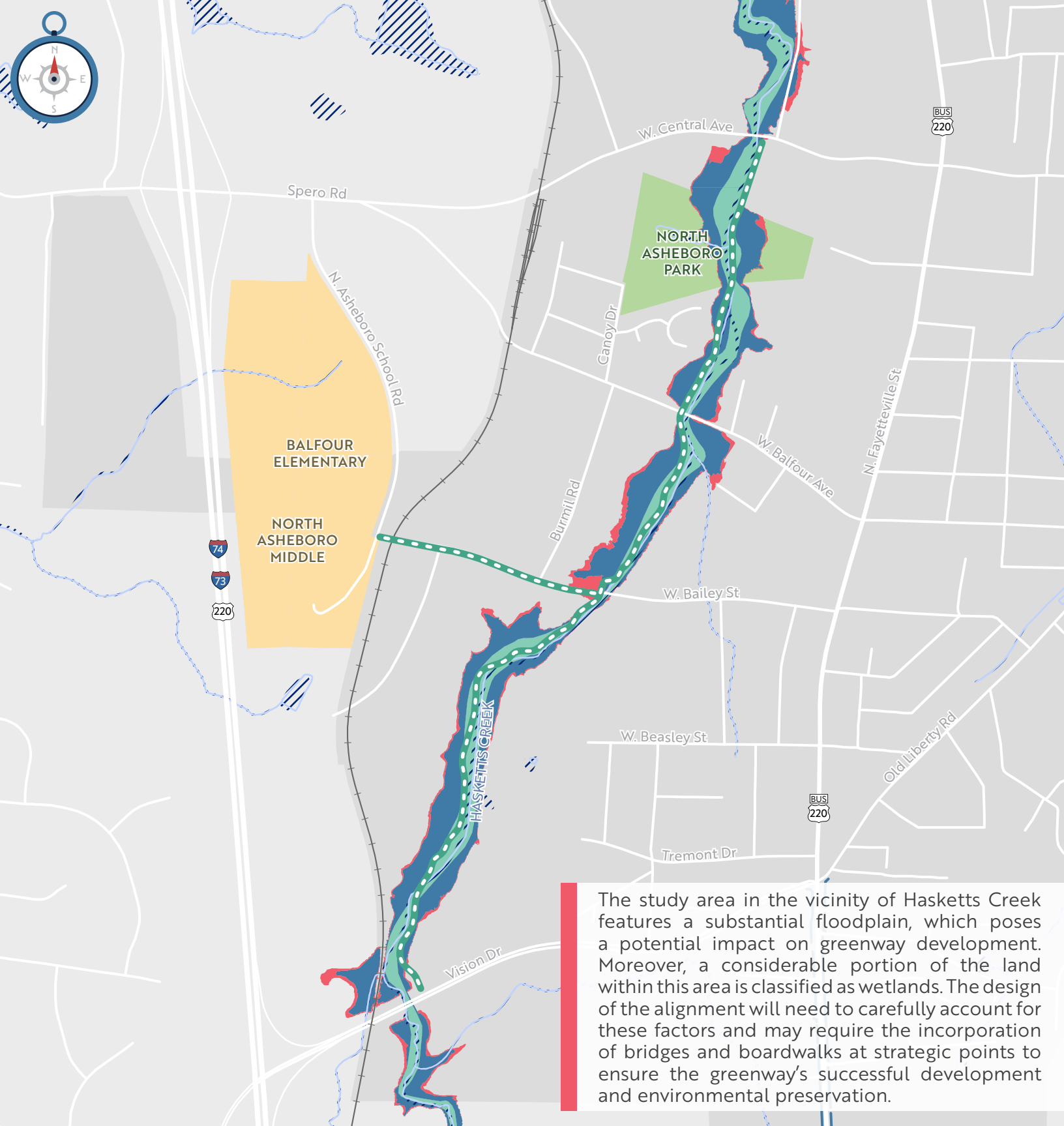
0 0.25 0.5 Mile

Natural Environment Considerations

The study area for the North Asheboro Greenway is predominately characterized by wooded area and Hasketts Creek, which runs adjacent to the study corridor. During the site visit and existing conditions analysis, the project team evaluated environmental features such as topography, wetlands, and flooding impacts. These features were assessed to better understand potential routing options for the greenway alignment, along with any potential constraints or design considerations. Maps displaying natural environment considerations are displayed on the following pages with accompanying captions.



Hasketts Creek at North Asheboro Park



The study area in the vicinity of Hasketts Creek features a substantial floodplain, which poses a potential impact on greenway development. Moreover, a considerable portion of the land within this area is classified as wetlands. The design of the alignment will need to carefully account for these factors and may require the incorporation of bridges and boardwalks at strategic points to ensure the greenway's successful development and environmental preservation.

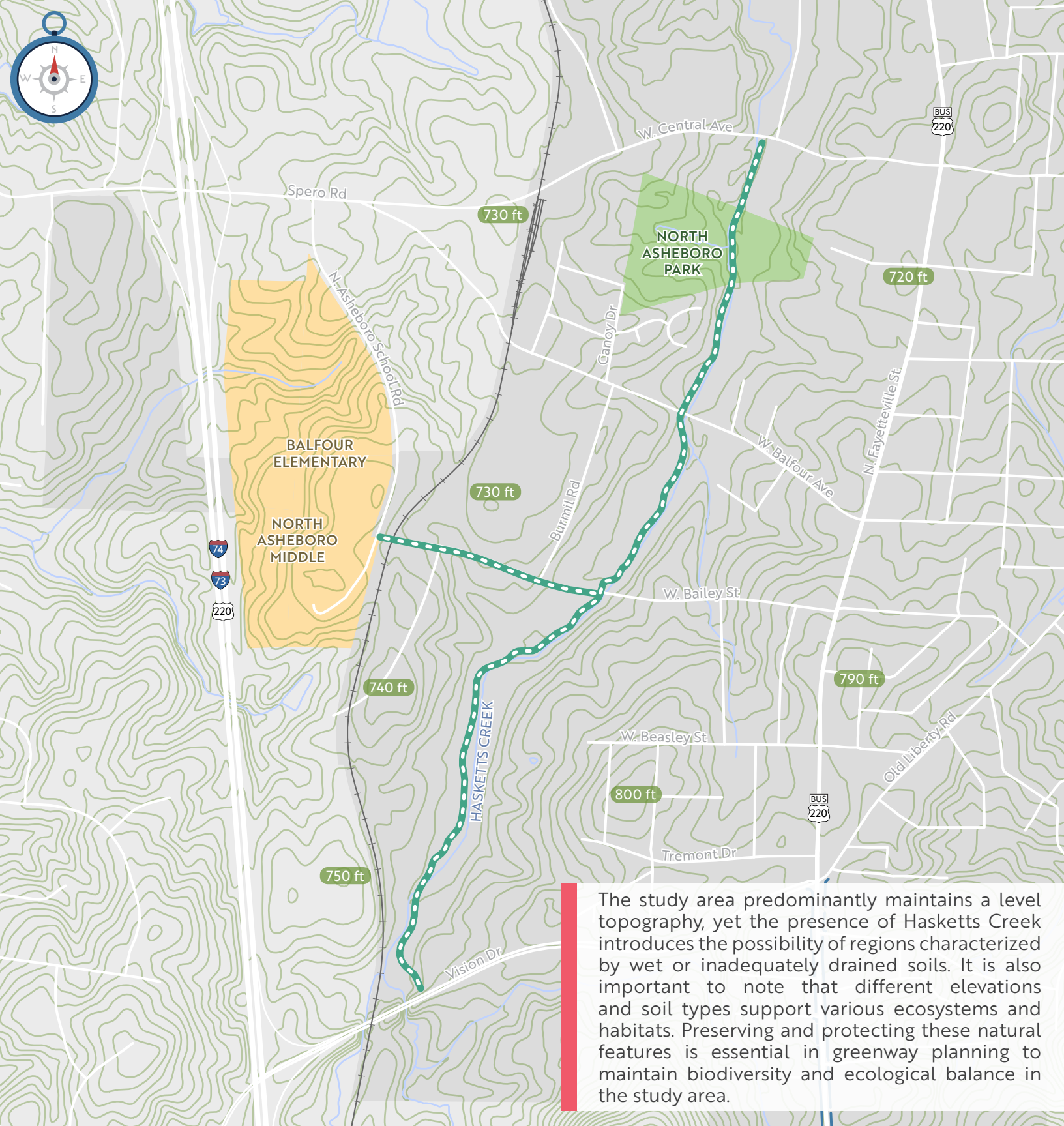
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Wetlands + Flooding

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- Wetlands
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



The study area predominantly maintains a level topography, yet the presence of Hasketts Creek introduces the possibility of regions characterized by wet or inadequately drained soils. It is also important to note that different elevations and soil types support various ecosystems and habitats. Preserving and protecting these natural features is essential in greenway planning to maintain biodiversity and ecological balance in the study area.

NORTH ASHEBORO GREENWAY FEASIBILITY STUDY Topography

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 10-ft Contour
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

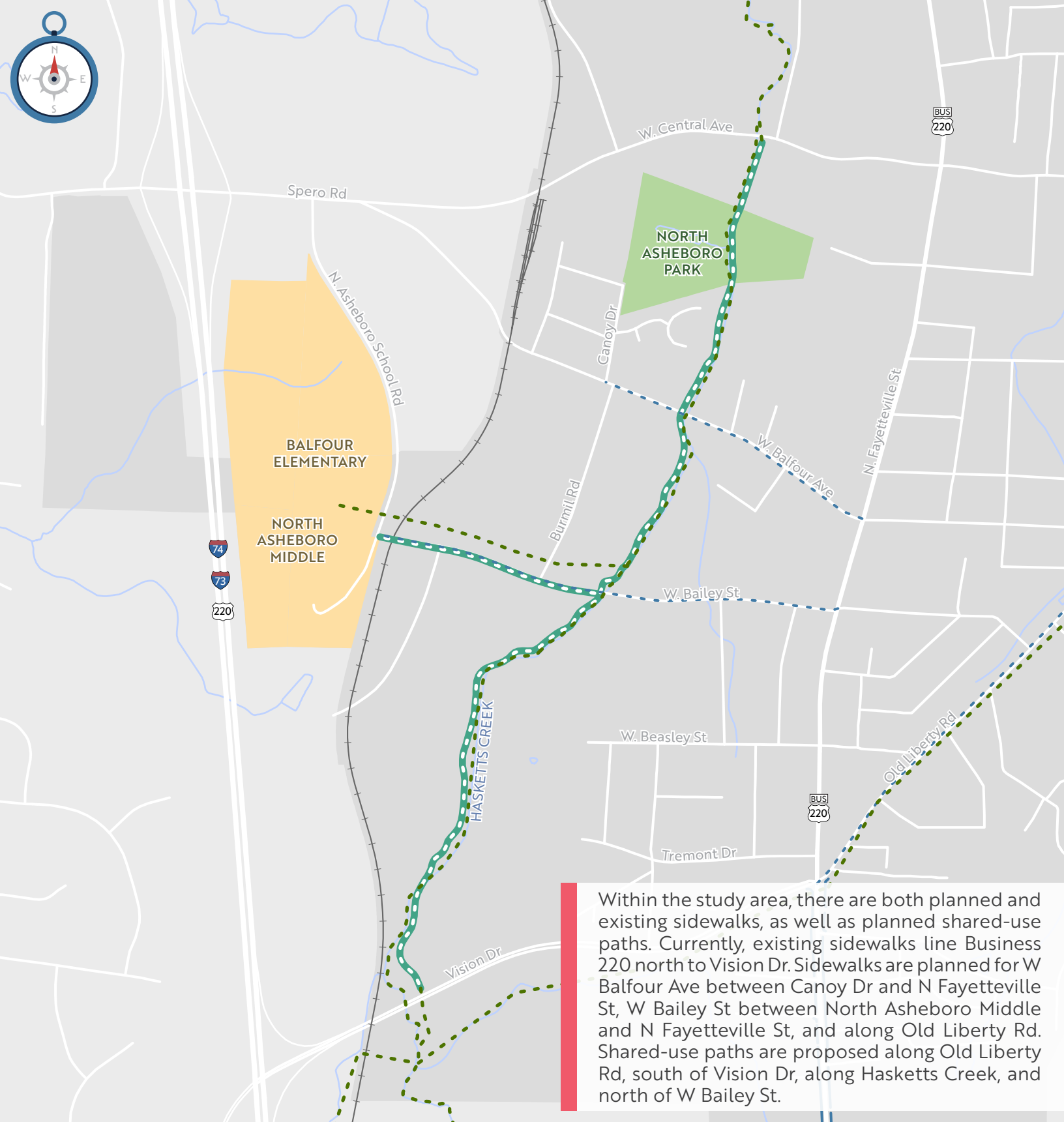
0 0.25 0.5 Mile

Human Environment Considerations

The following human environment considerations were assessed as part of this study:

- ◆ Existing and planned bicycle and pedestrian facilities
- ◆ Bicycle crashes
- ◆ Pedestrian crashes
- ◆ Fatal and serious injury crashes
- ◆ Total crash frequency by intersection
- ◆ Roadway traffic
- ◆ NCDOT Right-of-Way (ROW)
- ◆ Roadway Speed
- ◆ Easements
- ◆ Water and sewer lines
- ◆ Electrical power transmission
- ◆ NCDOT STIP projects (2024-2033)
- ◆ NCDOT HMIP (2023-2027)
- ◆ Existing Transit
- ◆ Zoning
- ◆ Future Land Use

For specific findings related to this feasibility study, please refer to the annotated maps on the following pages.



Within the study area, there are both planned and existing sidewalks, as well as planned shared-use paths. Currently, existing sidewalks line Business 220 north to Vision Dr. Sidewalks are planned for W Balfour Ave between Canoy Dr and N Fayetteville St, W Bailey St between North Asheboro Middle and N Fayetteville St, and along Old Liberty Rd. Shared-use paths are proposed along Old Liberty Rd, south of Vision Dr, along Hasketts Creek, and north of W Bailey St.

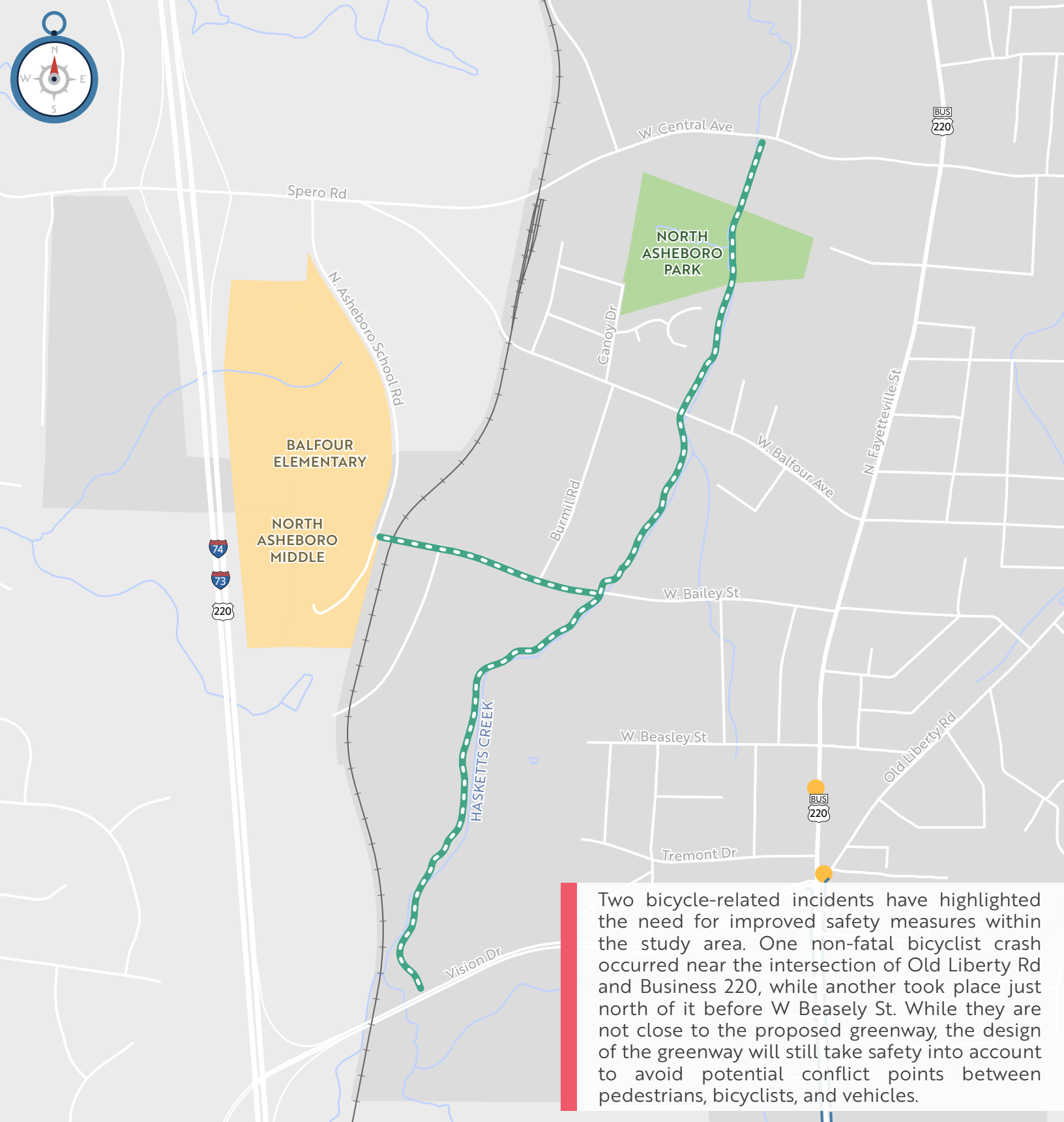
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Existing + Planned Bicycle + Pedestrian Facilities

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- Planned Sidewalk
- Planned Shared-Use Path
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County















Two bicycle-related incidents have highlighted the need for improved safety measures within the study area. One non-fatal bicyclist crash occurred near the intersection of Old Liberty Rd and Business 220, while another took place just north of it before W Beasley St. While they are not close to the proposed greenway, the design of the greenway will still take safety into account to avoid potential conflict points between pedestrians, bicyclists, and vehicles.

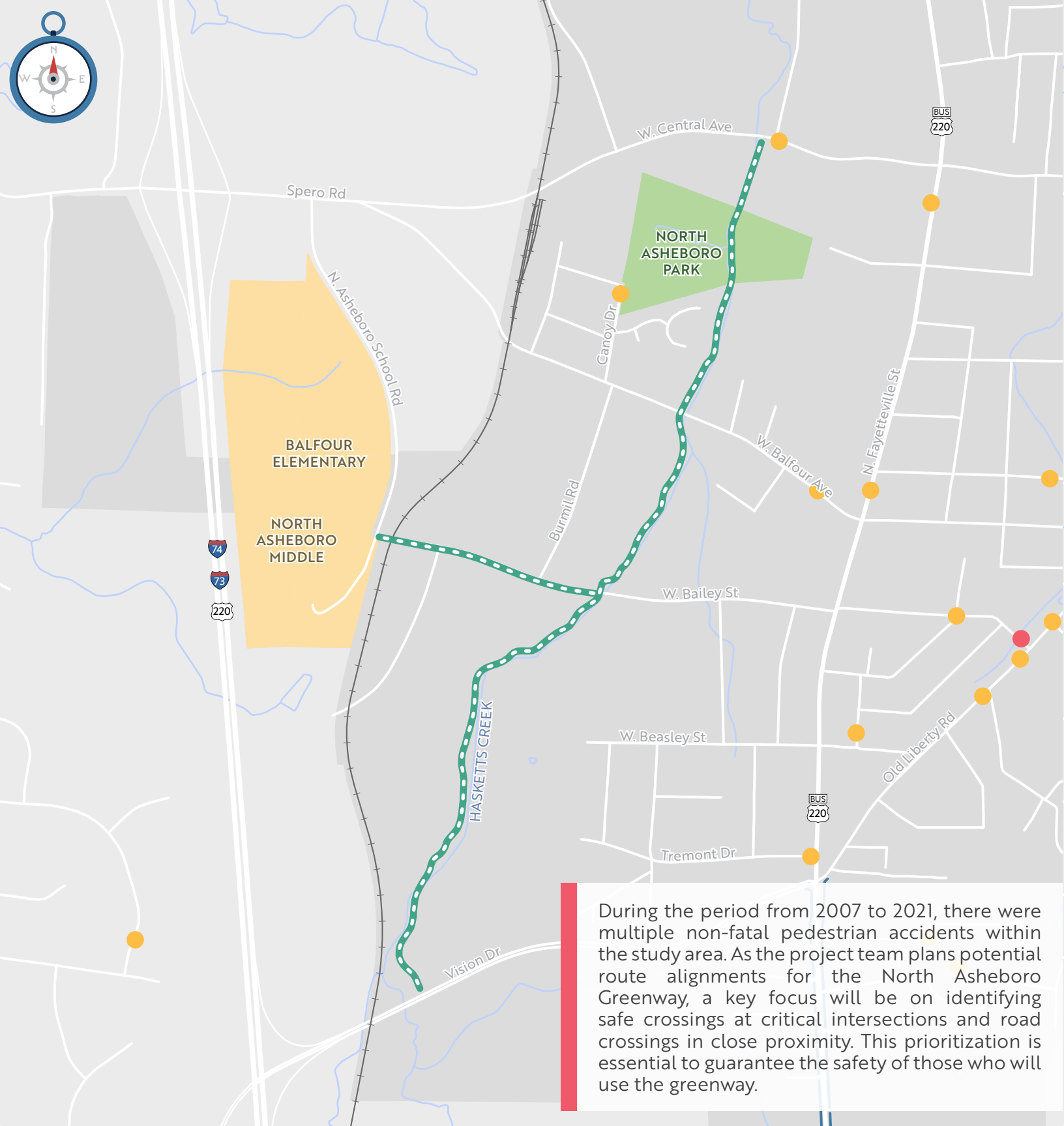
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Bicycle Crashes (2007-2021)

LEGEND

-  Preliminary Study Corridor
-  Existing Sidewalk
-  Non-Fatal Crash
-  Railroad
-  Roadway
-  School
-  Park/Conserved Land
-  Water
-  Asheboro City Limits
-  Randolph County





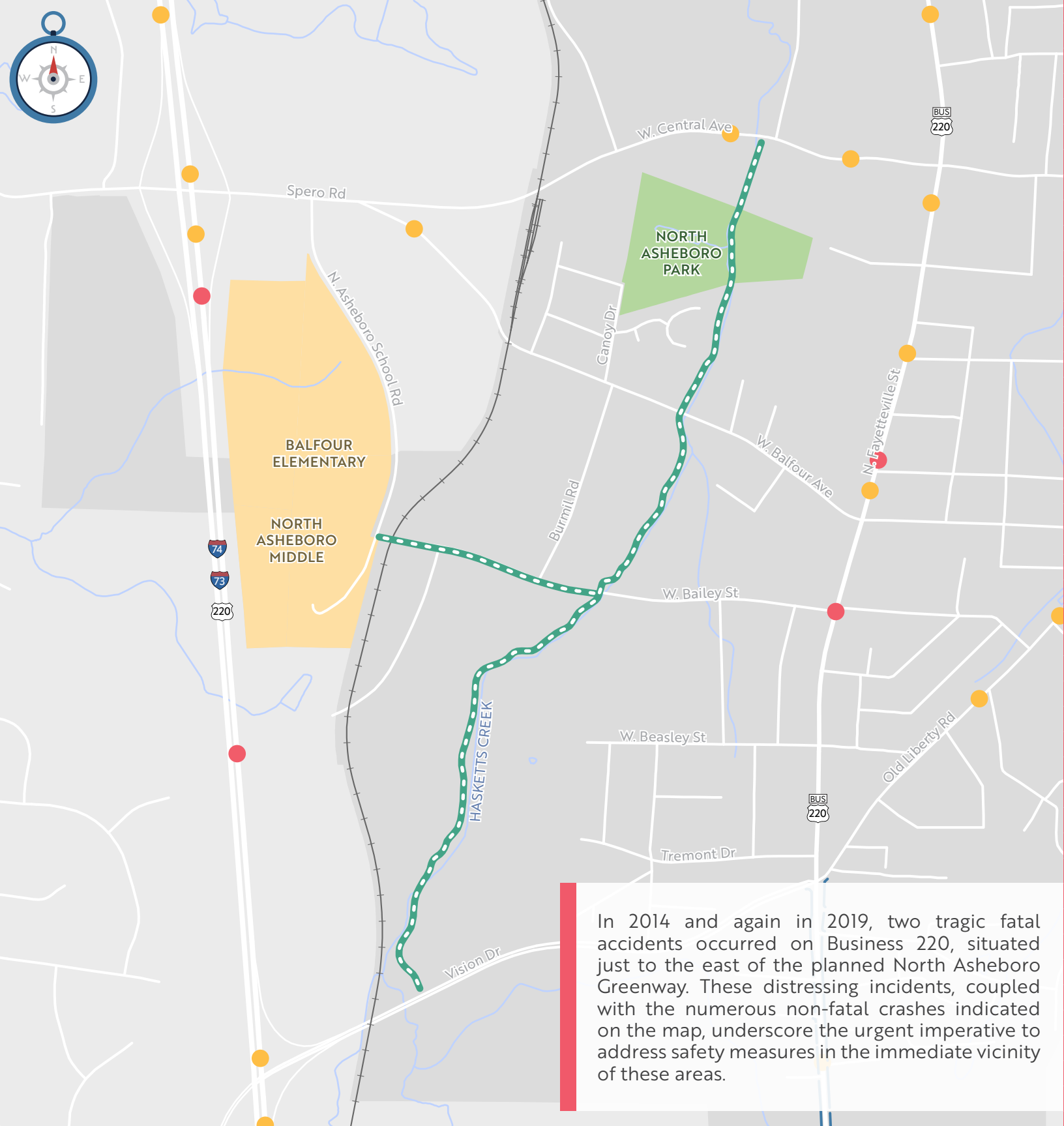
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Pedestrian Crashes (2007-2021)

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- Fatal Crash
- Non-Fatal Crash
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



In 2014 and again in 2019, two tragic fatal accidents occurred on Business 220, situated just to the east of the planned North Asheboro Greenway. These distressing incidents, coupled with the numerous non-fatal crashes indicated on the map, underscore the urgent imperative to address safety measures in the immediate vicinity of these areas.

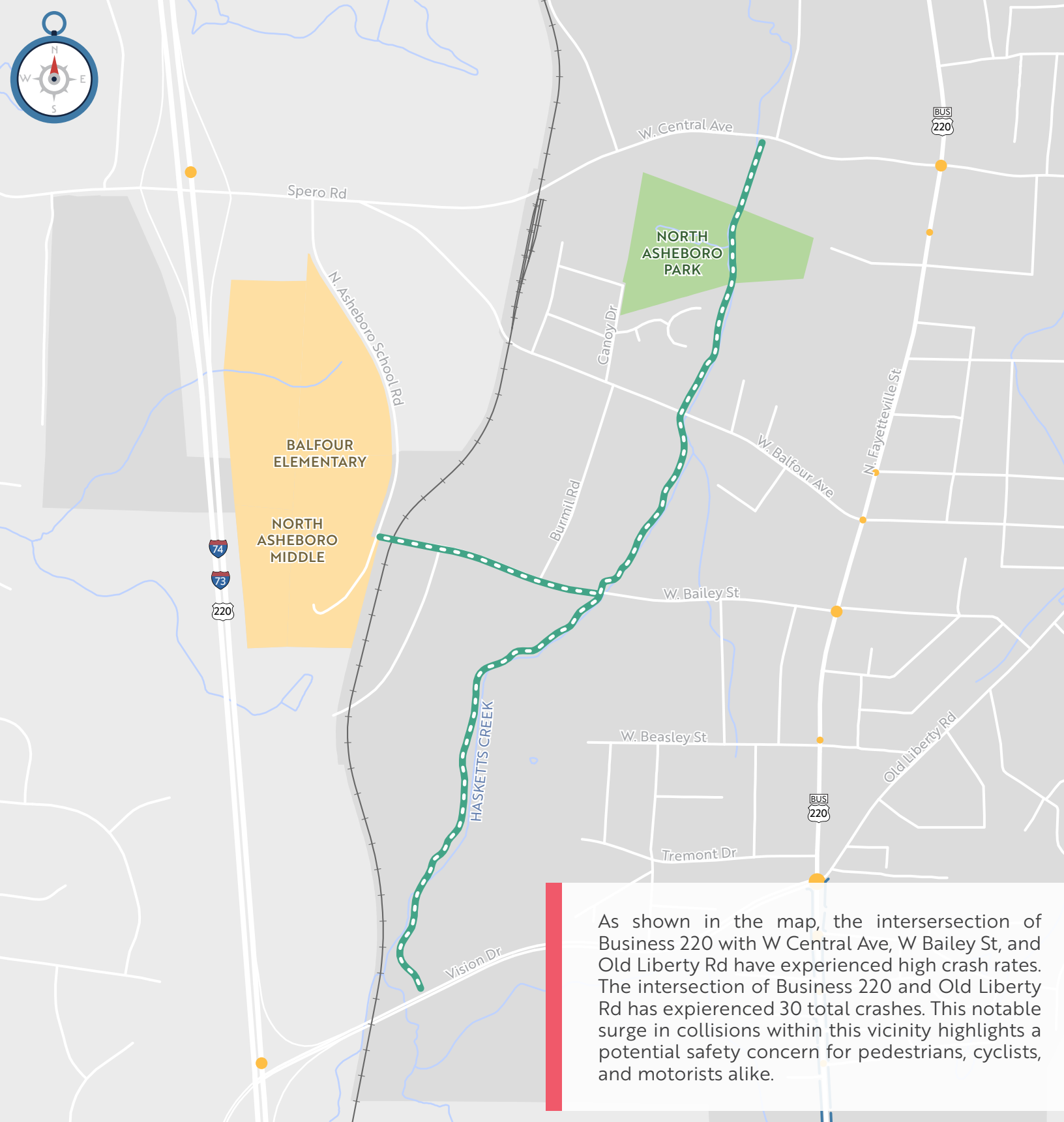
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Fatal + Serious Injury Crashes (2013-2022)

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- Fatal Crash
- Non-Fatal Crash
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



As shown in the map, the intersersection of Business 220 with W Central Ave, W Bailey St, and Old Liberty Rd have experienced high crash rates. The intersection of Business 220 and Old Liberty Rd has experienced 30 total crashes. This notable surge in collisions within this vicinity highlights a potential safety concern for pedestrians, cyclists, and motorists alike.

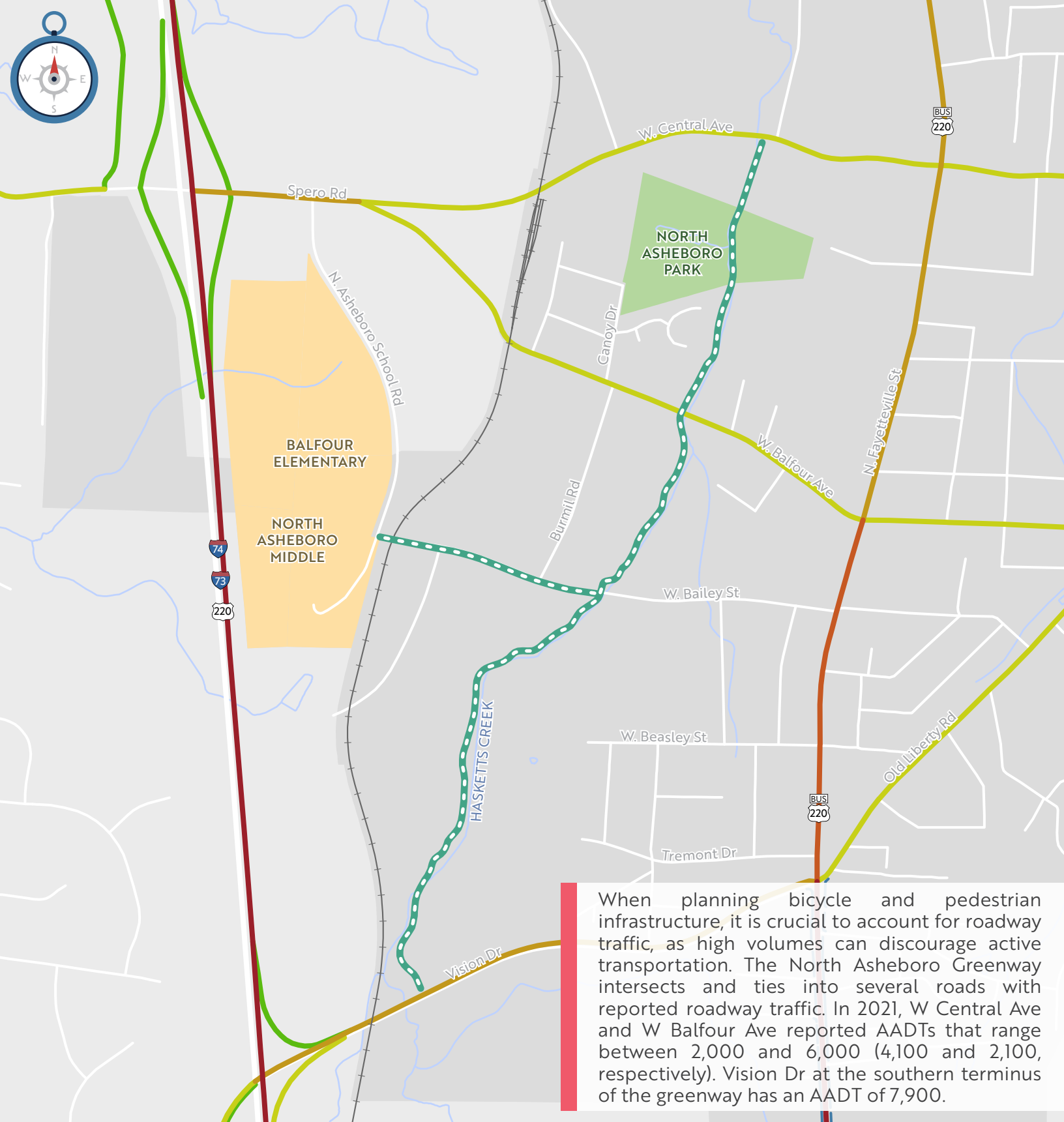
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Total Crash Frequency by Intersection

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 5-9 Intersection Crashes
- 10-24 Intersection Crashes
- 25-30 Intersection Crashes
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



When planning bicycle and pedestrian infrastructure, it is crucial to account for roadway traffic, as high volumes can discourage active transportation. The North Asheboro Greenway intersects and ties into several roads with reported roadway traffic. In 2021, W Central Ave and W Balfour Ave reported AADTs that range between 2,000 and 6,000 (4,100 and 2,100, respectively). Vision Dr at the southern terminus of the greenway has an AADT of 7,900.

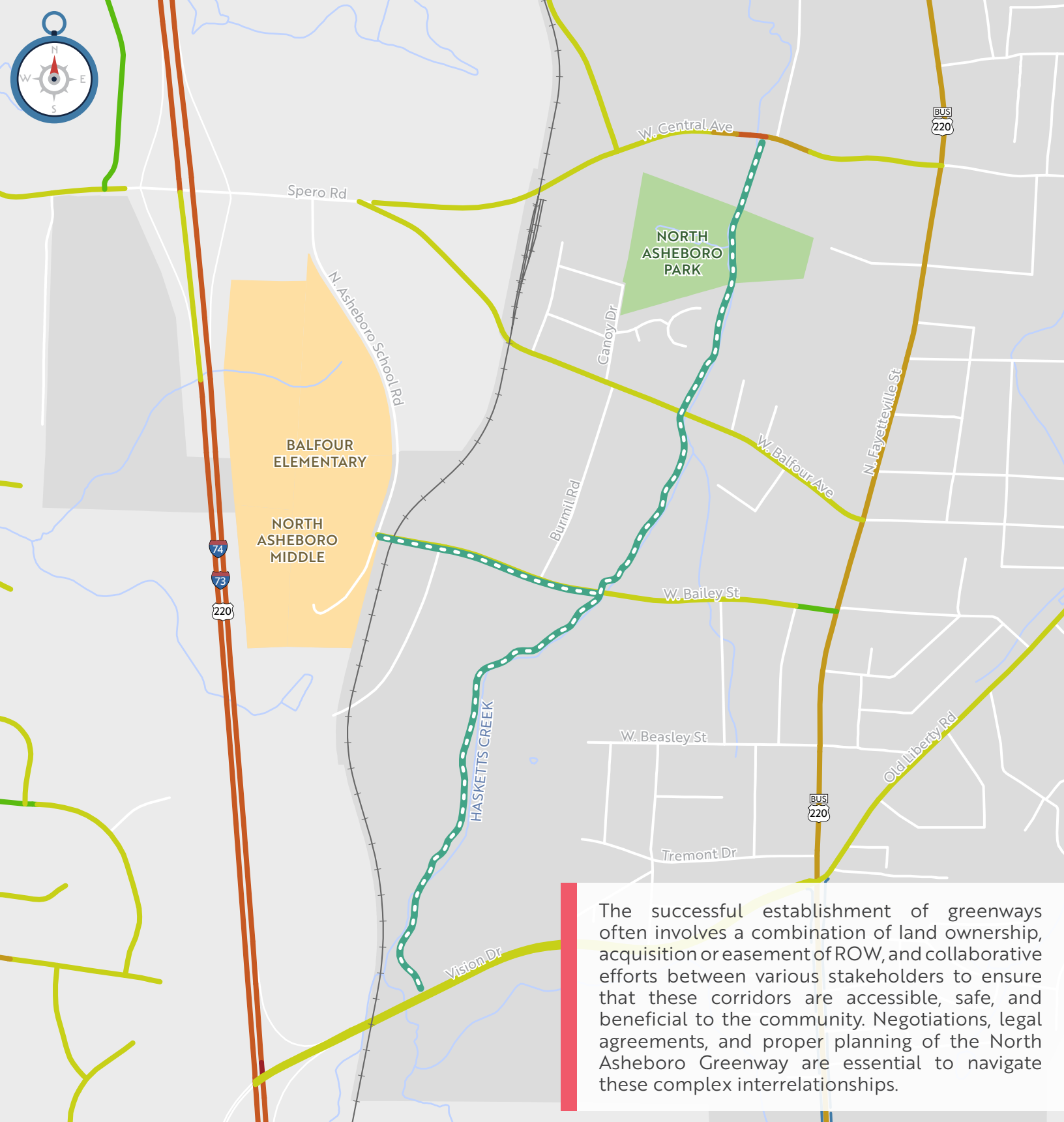
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Roadway Traffic (2021 AADT)

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 150-1,999 AADT
- 2,000-6,000 AADT
- 6,001-12,000 AADT
- 12,001-18,000 AADT
- 18,001-49,500 AADT
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



The successful establishment of greenways often involves a combination of land ownership, acquisition or easement of ROW, and collaborative efforts between various stakeholders to ensure that these corridors are accessible, safe, and beneficial to the community. Negotiations, legal agreements, and proper planning of the North Asheboro Greenway are essential to navigate these complex interrelationships.

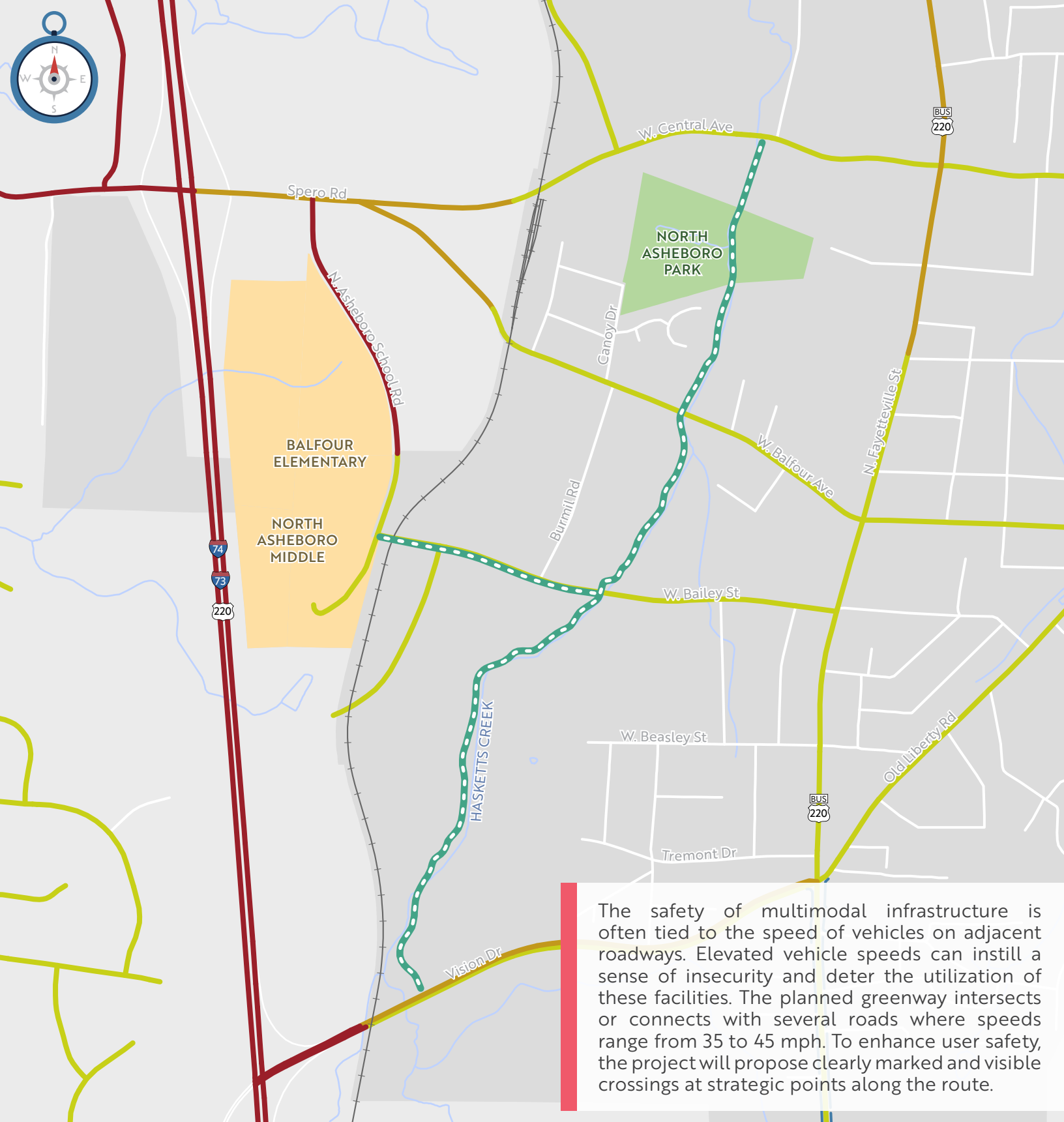
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

NCDOT Right-of-Way

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 0-50 ft
- 51-75 ft
- 76-100 ft
- 101-150 ft
- 151 ft or More
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County





The safety of multimodal infrastructure is often tied to the speed of vehicles on adjacent roadways. Elevated vehicle speeds can instill a sense of insecurity and deter the utilization of these facilities. The planned greenway intersects or connects with several roads where speeds range from 35 to 45 mph. To enhance user safety, the project will propose clearly marked and visible crossings at strategic points along the route.

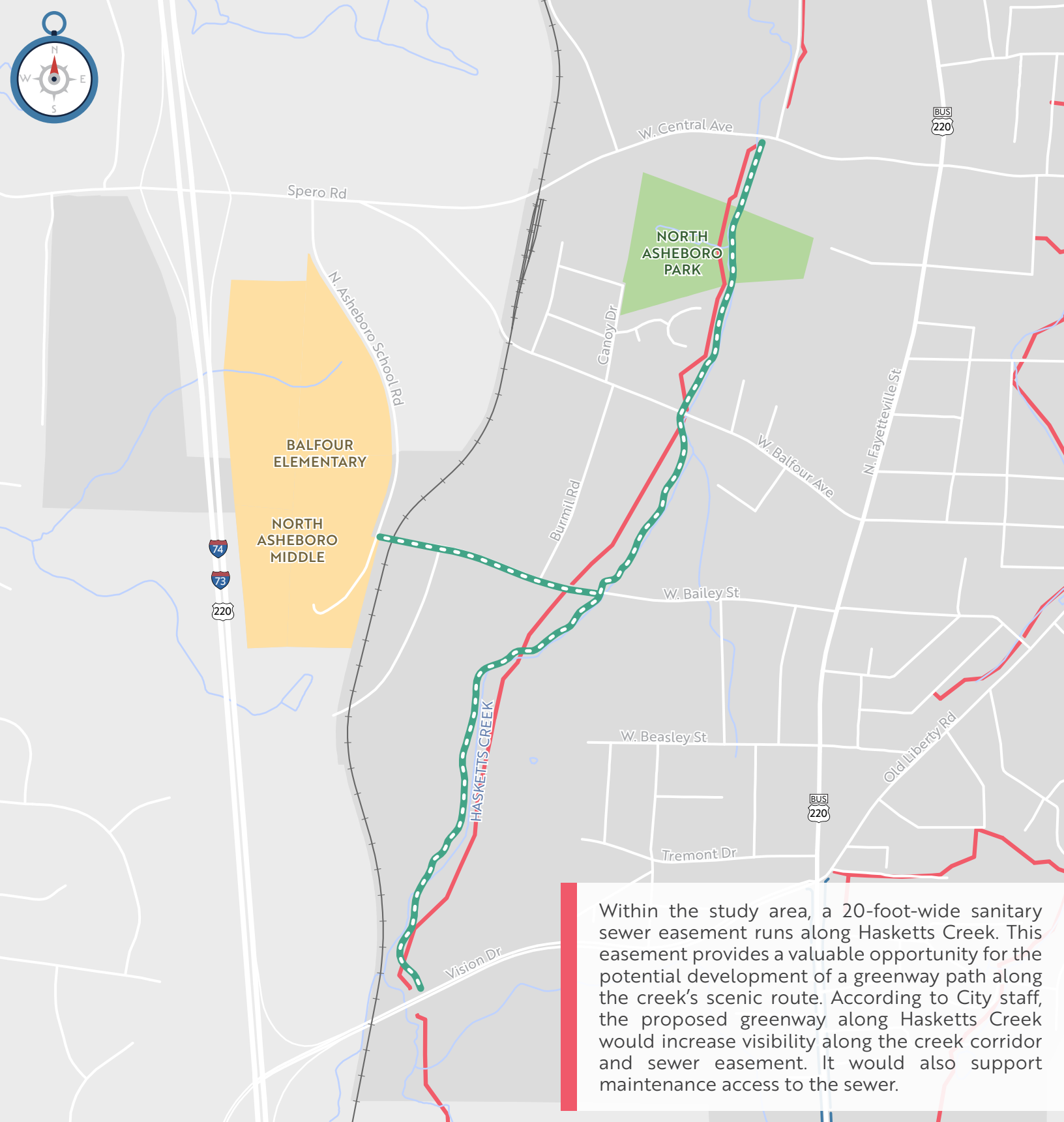
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Roadway Speed

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 35 MPH
- 45 MPH
- 55-65 MPH
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



Within the study area, a 20-foot-wide sanitary sewer easement runs along Hasketts Creek. This easement provides a valuable opportunity for the potential development of a greenway path along the creek's scenic route. According to City staff, the proposed greenway along Hasketts Creek would increase visibility along the creek corridor and sewer easement. It would also support maintenance access to the sewer.

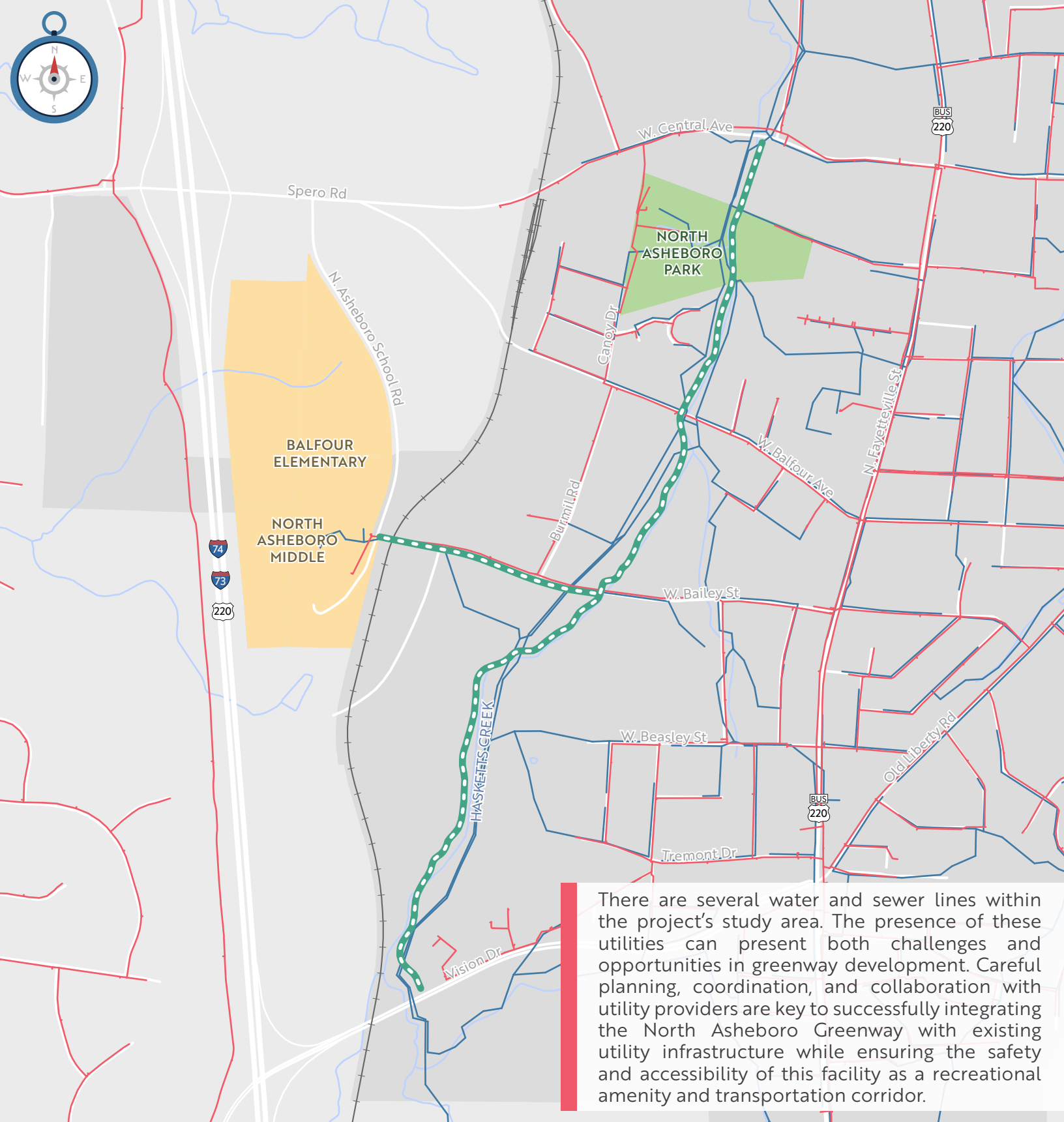
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Easements

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 20-ft Easement
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County





There are several water and sewer lines within the project's study area. The presence of these utilities can present both challenges and opportunities in greenway development. Careful planning, coordination, and collaboration with utility providers are key to successfully integrating the North Asheboro Greenway with existing utility infrastructure while ensuring the safety and accessibility of this facility as a recreational amenity and transportation corridor.

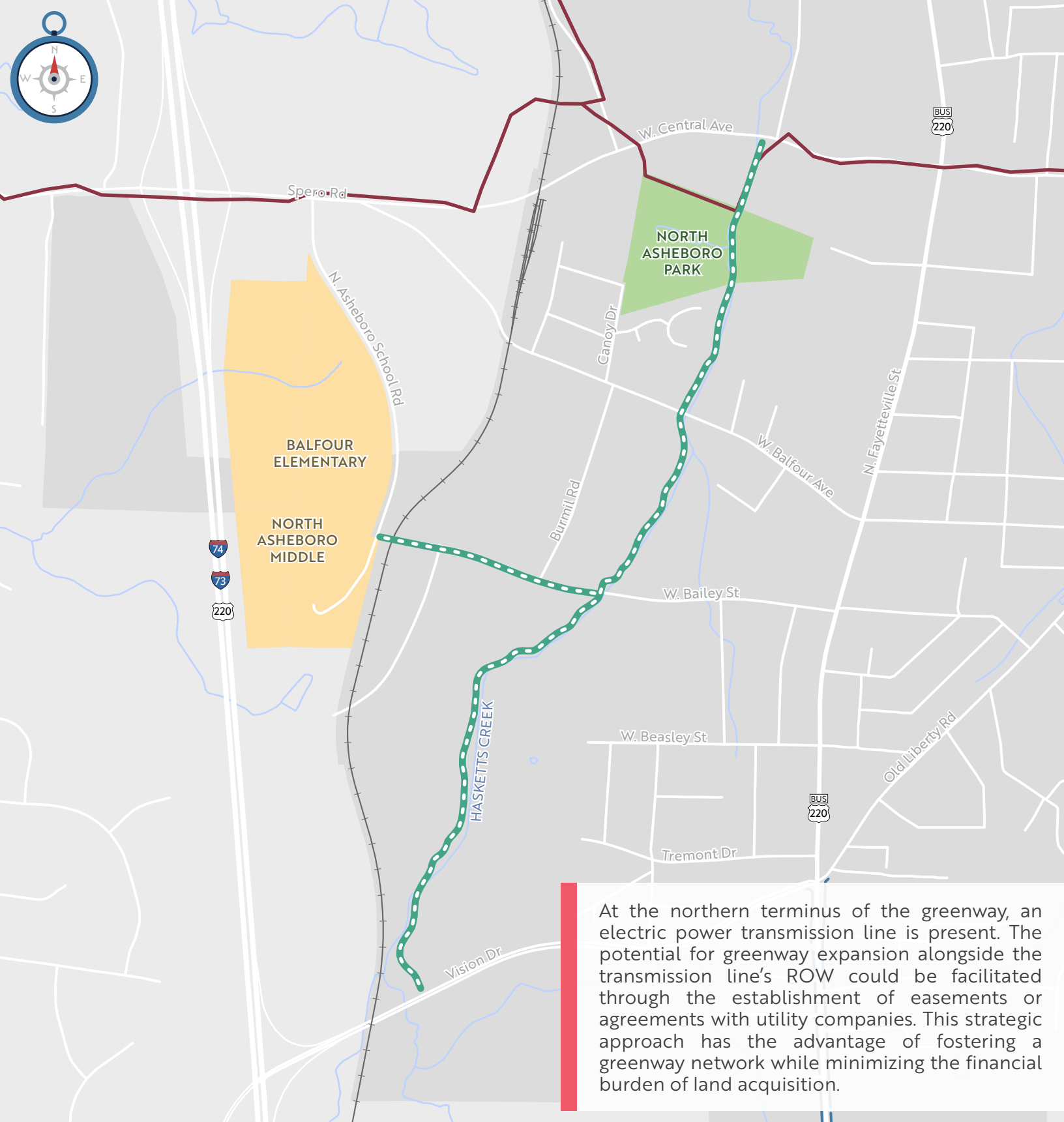
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Water + Sewer Lines

LEGEND

- Preliminary Study Corridor
- Water Main
- Sewer Main
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



At the northern terminus of the greenway, an electric power transmission line is present. The potential for greenway expansion alongside the transmission line's ROW could be facilitated through the establishment of easements or agreements with utility companies. This strategic approach has the advantage of fostering a greenway network while minimizing the financial burden of land acquisition.

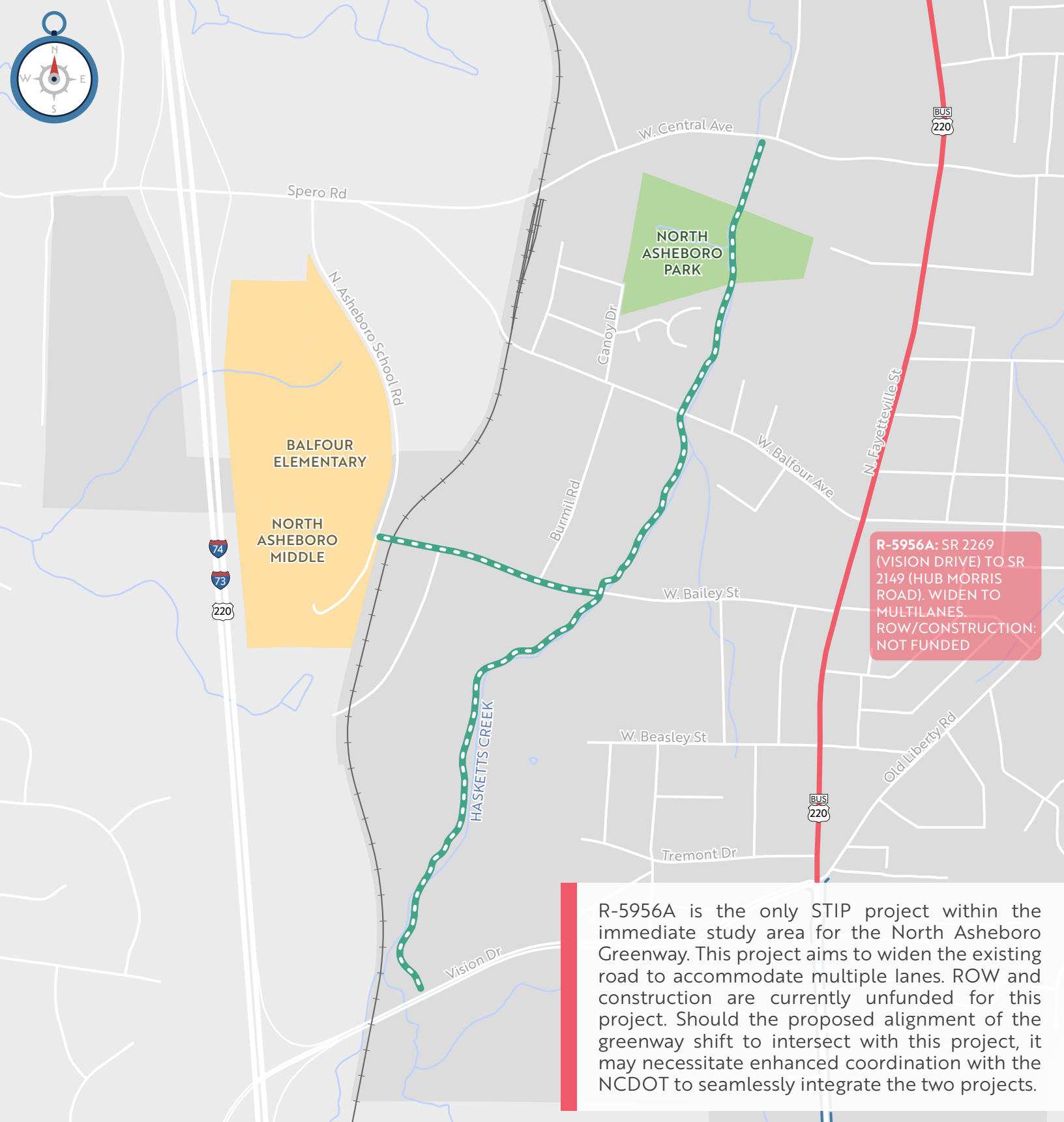
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Electric Power Transmission

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- Electric Power Transmission
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County





R-5956A: SR 2269 (VISION DRIVE) TO SR 2149 (HUB MORRIS ROAD). WIDEN TO MULTILANES. ROW/CONSTRUCTION: NOT FUNDED

R-5956A is the only STIP project within the immediate study area for the North Asheboro Greenway. This project aims to widen the existing road to accommodate multiple lanes. ROW and construction are currently unfunded for this project. Should the proposed alignment of the greenway shift to intersect with this project, it may necessitate enhanced coordination with the NCDOT to seamlessly integrate the two projects.

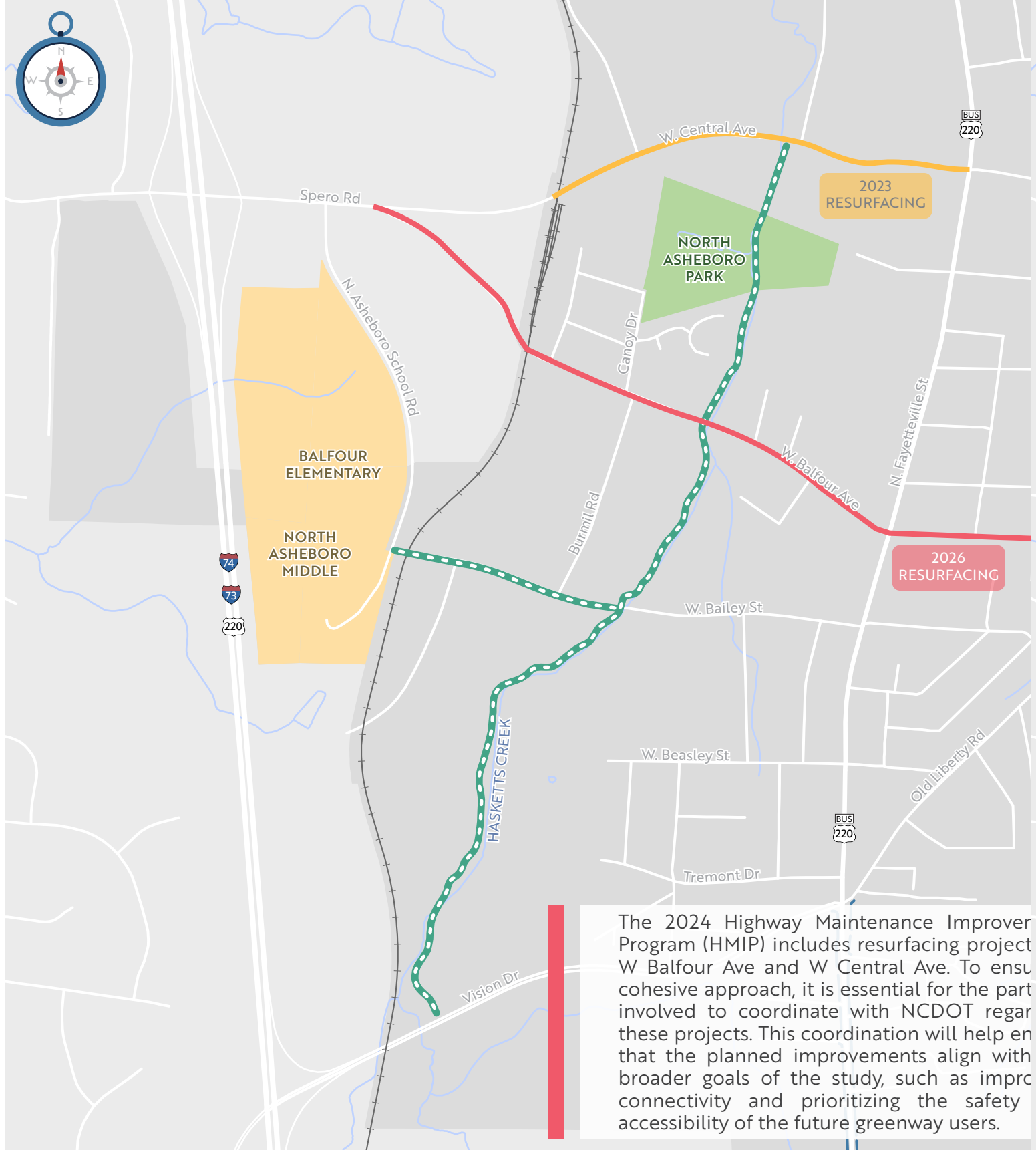
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

NCDOT STIP Project (2024-2033)

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- STIP Project: Div. Highway
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile



The 2024 Highway Maintenance Improver Program (HMIP) includes resurfacing project W Balfour Ave and W Central Ave. To ensu cohesive approach, it is essential for the part involved to coordinate with NCDOT regar these projects. This coordination will help en that the planned improvements align with broader goals of the study, such as imprc connectivity and prioritizing the safety accessibility of the future greenway users.

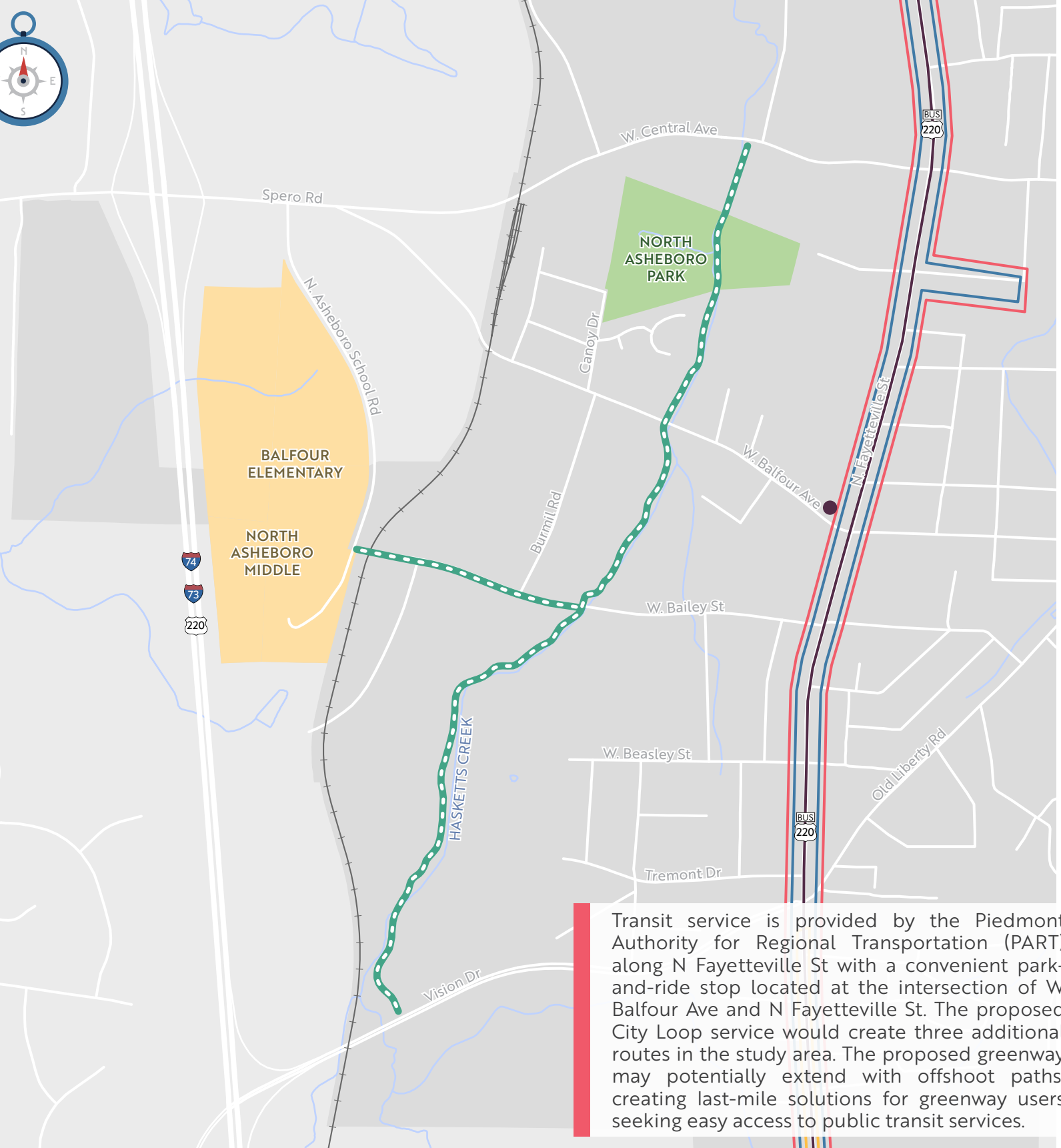
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

NCDOT 2023-2027 HMIP

LEGEND

- Preliminary Study Corridor
- Existing Sidewalk
- 2023 Resurfacing Project
- 2026 Resurfacing Project
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limit
- Randolph County

0 0.25 0.5 Mile



Transit service is provided by the Piedmont Authority for Regional Transportation (PART) along N Fayetteville St with a convenient park-and-ride stop located at the intersection of W Balfour Ave and N Fayetteville St. The proposed City Loop service would create three additional routes in the study area. The proposed greenway may potentially extend with offshoot paths, creating last-mile solutions for greenway users seeking easy access to public transit services.

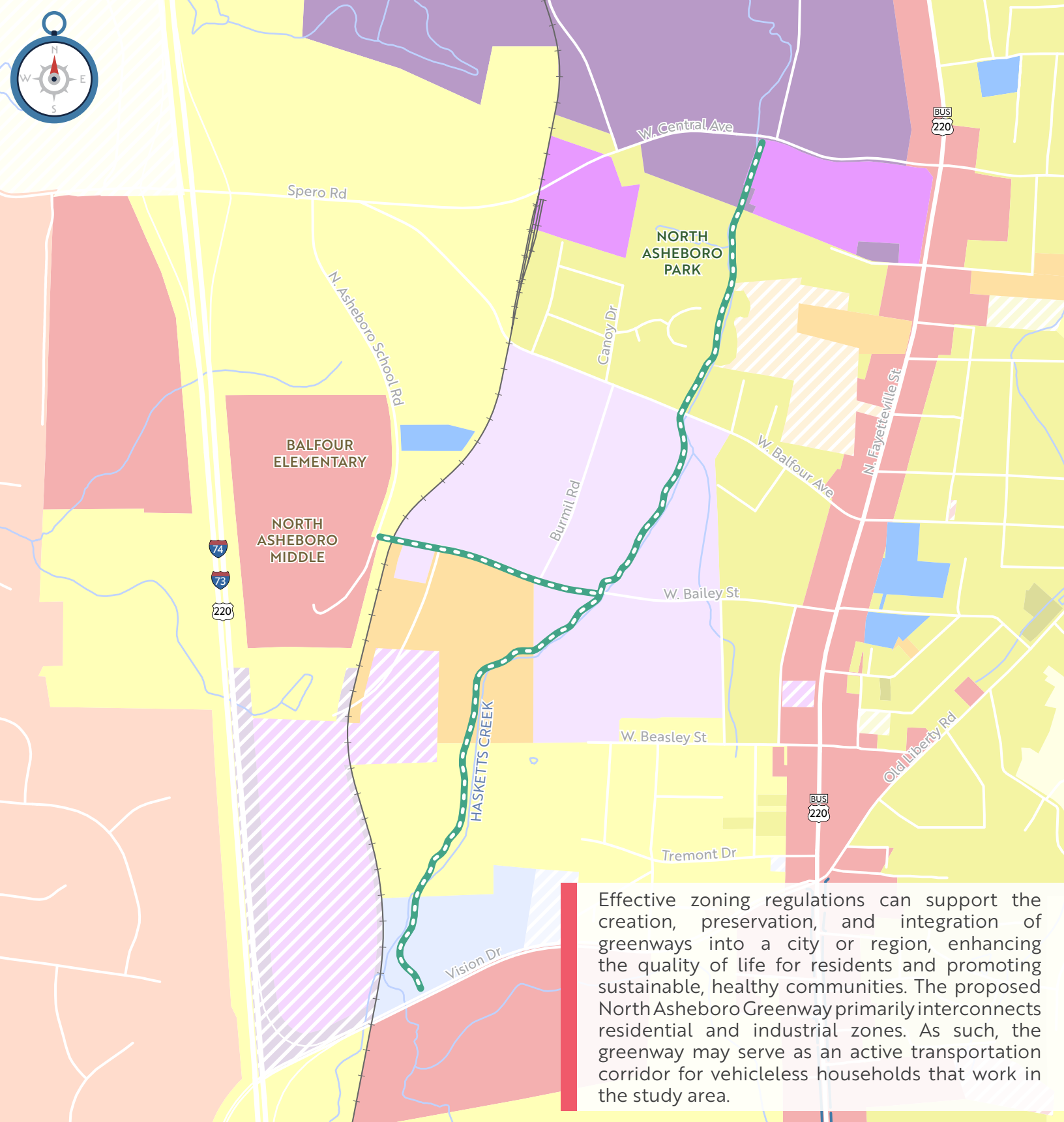
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Existing + Proposed Transit

LEGEND

- Preliminary Study Corridor
- PART Route 10 / Park+Ride
- Proposed City Loop Service:
 - Blue Northbound Route
 - Express Route
 - Red Southbound Route
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0.25 0.5 Mile



Effective zoning regulations can support the creation, preservation, and integration of greenways into a city or region, enhancing the quality of life for residents and promoting sustainable, healthy communities. The proposed North Asheboro Greenway primarily interconnects residential and industrial zones. As such, the greenway may serve as an active transportation corridor for vehicleless households that work in the study area.

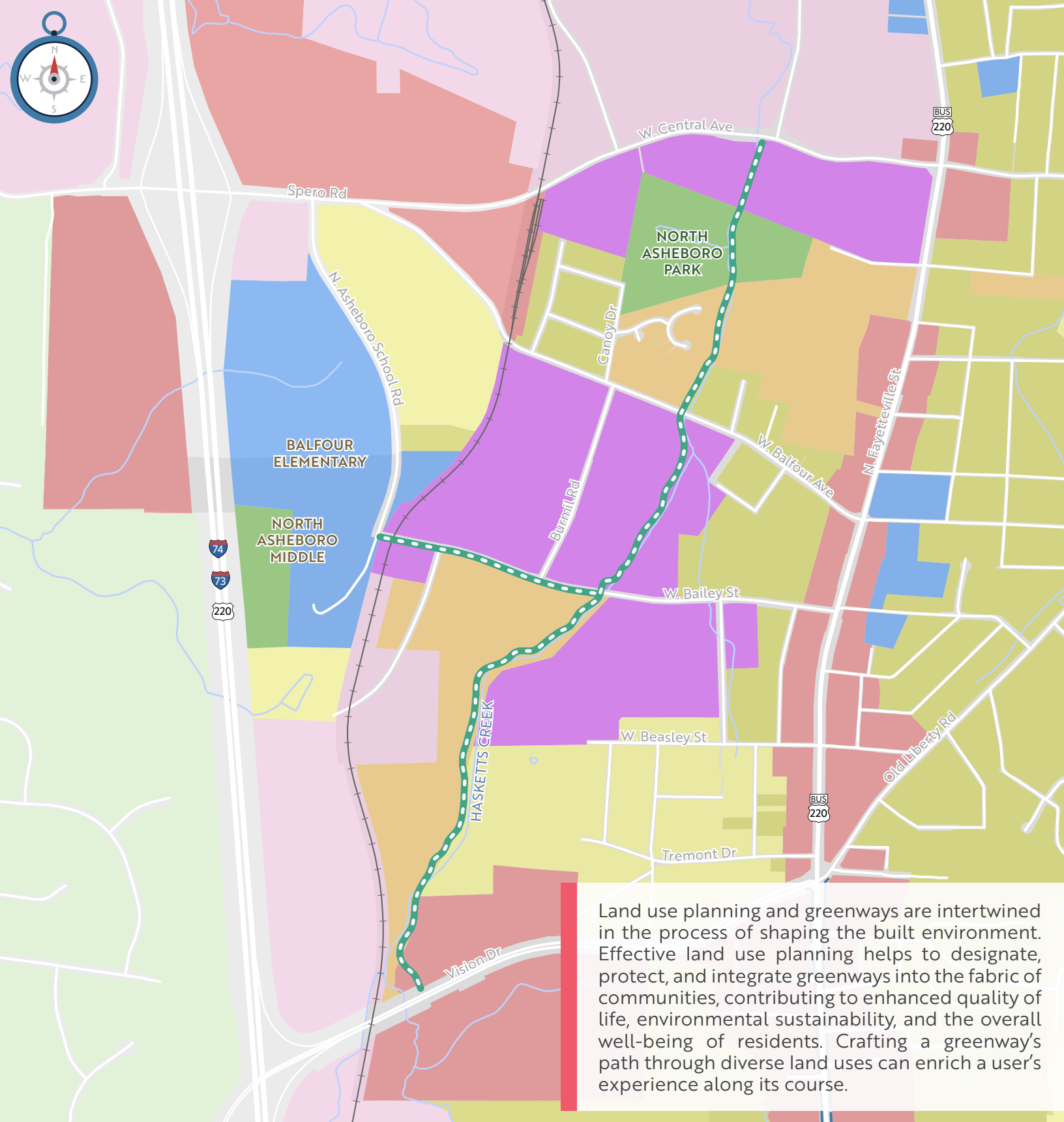
NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Zoning

LEGEND

- Preliminary Study Corridor
- B2
- I1
- I2
- I3
- OA6
- O1
- R10
- R15
- R40
- R7.5
- RA6
- RE
- Conditional Zoning
- Existing Sidewalk
- Railroad
- Roadway
- Water
- Randolph County

0 0.25 0.5 Mile



















Land use planning and greenways are intertwined in the process of shaping the built environment. Effective land use planning helps to designate, protect, and integrate greenways into the fabric of communities, contributing to enhanced quality of life, environmental sustainability, and the overall well-being of residents. Crafting a greenway's path through diverse land uses can enrich a user's experience along its course.

NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Future Land Use

LEGEND

-  Preliminary Study Corridor
-  Commercial
-  Conservation Residential
-  Employment Center
-  Industrial
-  Neighborhood Residential
-  Office + Institutional
-  Parks
-  Suburban Residential
-  Urban Residential
-  Existing Sidewalk
-  Railroad
-  Roadway
-  Water
-  Asheboro City Limits
-  Randolph County

0 0.25 0.5 Mile

OPPORTUNITIES + CONSTRAINTS ANALYSIS

Site visits were performed in the study area to gain a better understanding of the surroundings in North Asheboro. The project team conducted site visits to key destinations (i.e., existing parks, businesses, schools, and neighborhoods), existing bicycle and pedestrian facilities, roadways, bridges, environmentally-sensitive areas, and constrained areas. The observations recorded during the site visits informed the opportunities and constraints analysis. This analysis also considered connectivity to existing and planned active transportation facilities, connectivity to destinations, critical crossings over Hasketts Creek, barriers to accessibility, and gaps between the proposed greenway corridor and the surrounding area.

Several opportunities and constraints such as transmission and sewer lines, easements, topography, and bridges are along the preliminary study corridor. These considerations are displayed in the following images with accompanying captions and are evaluated during the alternatives development phase for the North Asheboro Greenway.



Overhead power lines and steep topography near Vision Dr



Transmission lines along Hasketts Creek



Sewer easement near Vision Dr



W Bailey St bridge over Hasketts Creek



W Balfour Ave bridge at Hasketts Creek



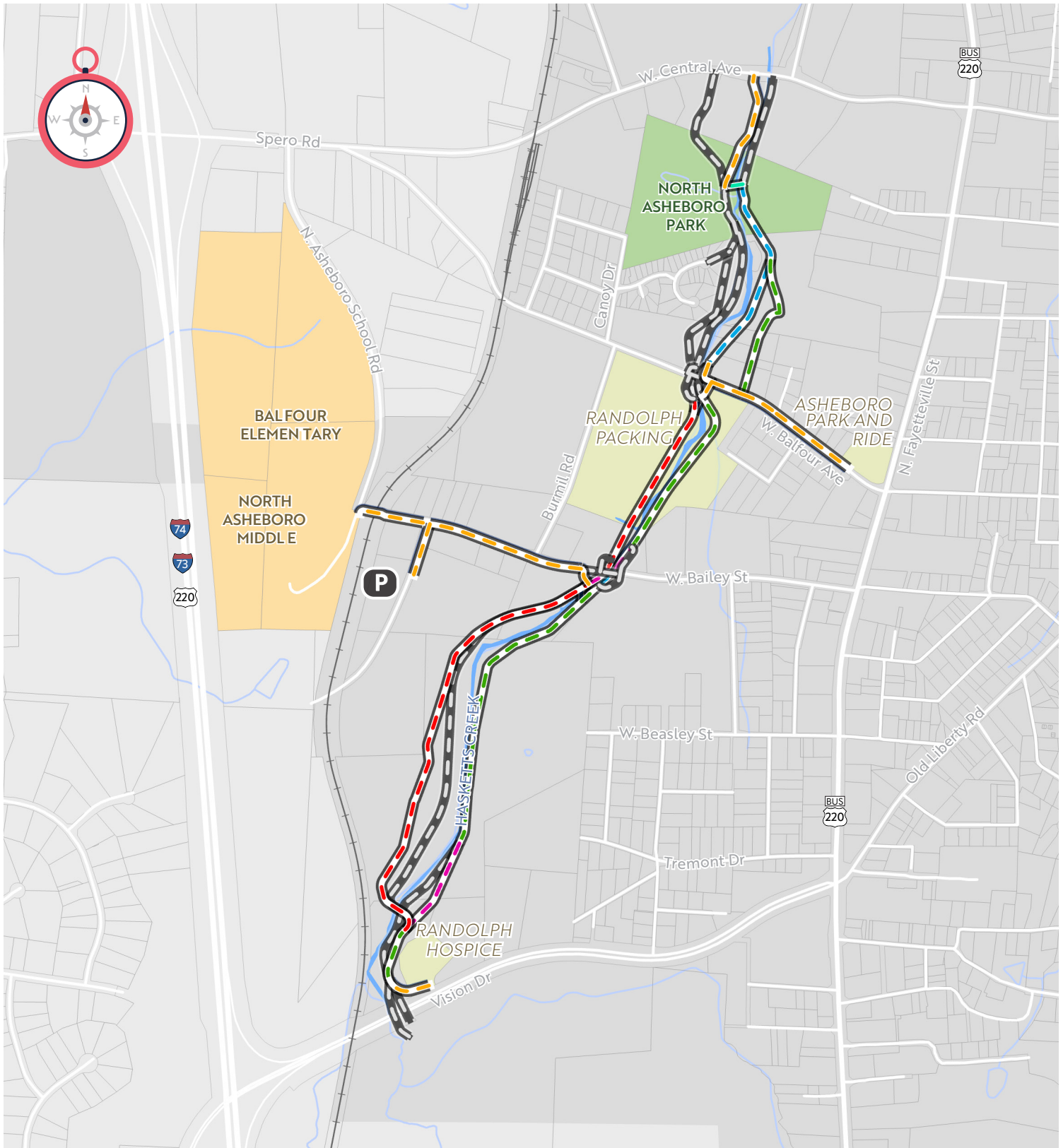
Sewer line under W Balfour Ave bridge



Hasketts Creek through North Asheboro Park



W Central Ave bridge at Hasketts Creek



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Overall Alternatives Map

LEGEND

Existing Conditions

- +— Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Preliminary Greenway Alternatives (Color Varies)

- Alternative Considered
- Alternative Removed
- Ⓟ Potential Trailhead

0' 1,000' 2,000'

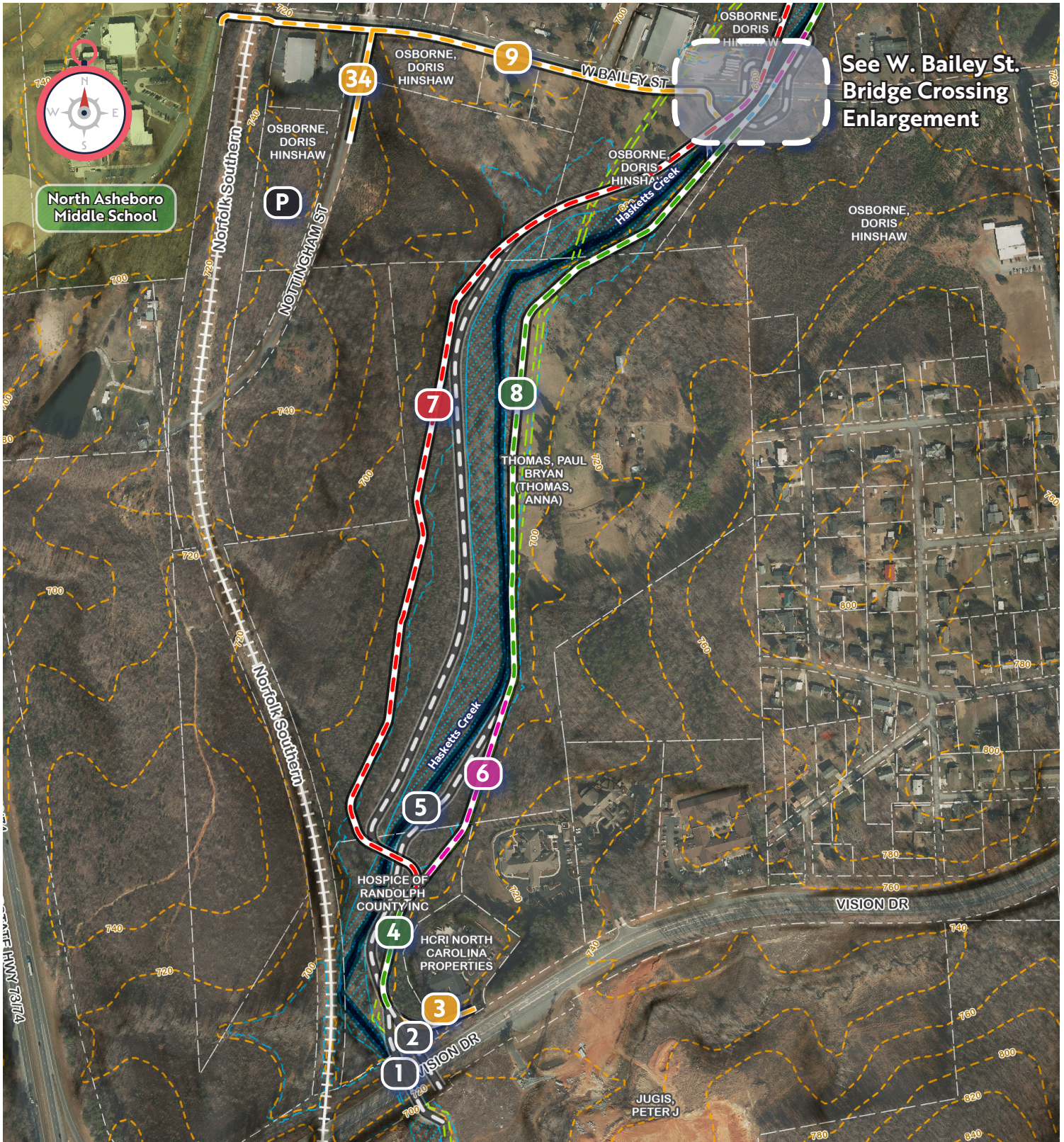
Segment Alternatives Background & Development

The map on this spread provides a summary of the segments in the study area that may impact the development of the North Asheboro Greenway. Numerous segment alternatives were evaluated to determine feasibility and many were removed from consideration due to amplified cost, potential maintenance issues, discussions with concerned property owners, FEMA permitting requirements, NCDOT permitting requirements, as well as working group preference.

Segment alternatives are shown on the following pages and are identified by a specific number and color. Each segment has an accompanied description that identifies opportunities and constraints, overall length, and segment parcel impacts. The color gray has been reserved for segments removed from consideration due to the constraint over-weighing the implementation benefit.

Segments for this corridor followed Hasketts Creek, and existing sewer easement in accordance with City of Asheboro staff preference. The enlargement maps on the following pages show Vision Drive to Hasketts Creek, an enlargement at West Bailey Street, an enlargement at West Balfour Avenue, and the remaining stretch between West Bailey Street and West Central Avenue.

The greenway corridor, and more particularly the proposed segment alternatives pass through numerous privately owned parcels. A majority of the proposed segments must unavoidably utilize some combination of these privately held lands in order to fulfill the future greenway. Property owner coordination is captured in the forthcoming chapter of this study, and was a crucial part of the decision making process for the recommended alignment.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Map A: Southern Corridor Segment Alternatives

0' 500' 1,000'

LEGEND

Existing Conditions

- Parcels
- Railroad
- 2' Contours
- 20' Contours
- Publicly Owned Parcels
- FEMA Floodway
- FEMA 100-yr Floodplain
- Sewer Easement

Preliminary Greenway Alternatives (Color Varies)

- Alternative Considered
- Alternative Removed
- Potential Trailhead

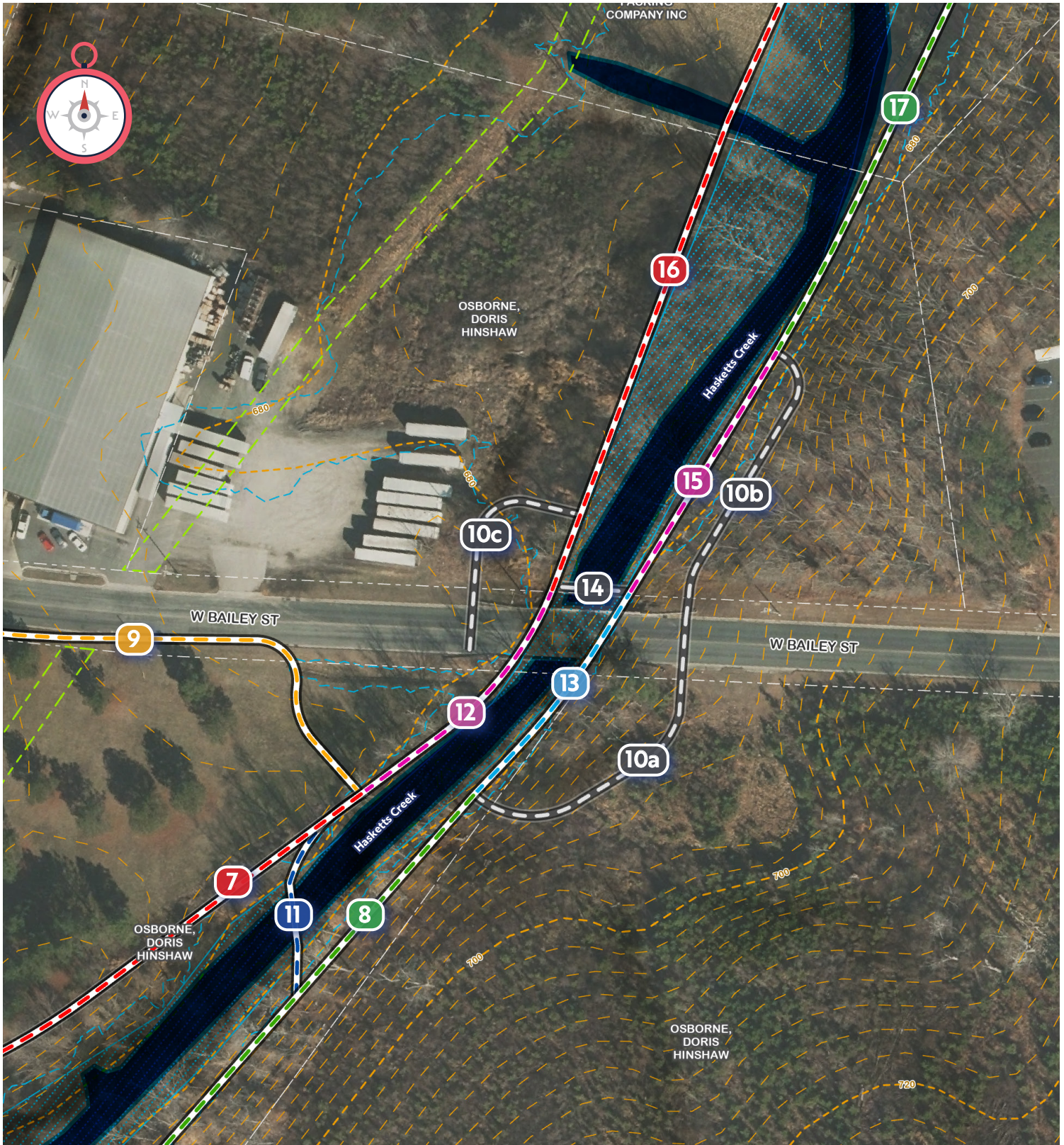
Opportunities & Constraints Table

Segment Alternatives - Southern Corridor (Map A)

SEGMENT	OPPORTUNITY	CONSTRAINT	LENGTH	PARCELS IMPACTED
1	Greenway utilizes the existing culvert underneath Vision Drive, and provides trail continuation without mixing with vehicular traffic.	Additional permitting and flood model investigation will be necessary. Trail maintenance, including sediment removal along this stretch, will be required frequently.	0.10 miles	2
2	Greenway tunnel underneath Vision Drive will avoid floodway impacts and will provide trail continuation without mixing with vehicular traffic.	Relatively higher cost compared to other options.	0.07 miles	2
3	Potential connection to Randolph County Hospice and Brookdale Senior Living facilities.	Steep topography and existing utility infrastructure may require trail to switchback, resulting in additional overall trail length and vegetation clearing.	0.07 miles	1
4	Greenway utilizes existing sanitary sewer easement and reduces the amount of vegetation clearing needed while providing small maintenance vehicles easy access to sanitary lines.	A new easement agreement will still be required to accommodate the trail. Greenway will not completely fit within existing sewer easement due to variety of factors.	0.07 miles	2
5	Alignment is close to eastern stream bank and has opportunity to provide additional visual interest and experiential character.	Additional clearing and grading required. Greenway will be more prone to flooding events that overtop the existing embankment.	0.24 miles	2
6	Greenway utilizes majority of existing sanitary sewer easement.	Turns in sewer easement are abrupt, resulting in less than desirable user experience and compromising on sight distances.	0.15 miles	2
7	This segment utilizes a bridge crossing Hasketts Creek to occupy the undeveloped side of the privately owned parcel. Connection to Asheboro School utilizing Bailey Street is more user friendly.	Bridge and boardwalk structure necessary to cross the creek will increase cost, construction access for majority of this segment will need to occur off of West Bailey. Additional parcel impacts required in comparison to segment alternative 8.	0.68 miles	4
8	Open field is unique to this segment and may provides an opportunity to provide views and experiences tied to a more traditional and pastoral landscape.	Greenway will be centrally located within private property by utilizing existing sewer easement, this may be undesirable with current property owner. Connection to Asheboro School will be more difficult on this side of Hasketts Creek.	0.43 miles	2
9	Opportunity to provide buffered, separated, greenway facility from main alignment to Asheboro School.	Safety and permitting challenges are brought on by connection over the Norfolk Southern Railway.	0.37 miles	7
34	Tie to empty lot to take people to potential trailhead location	Location is far away from main trail alignment	0.08	0

SEGMENTS REMOVED FROM CONSIDERATION

- **Segment 1:** Removed due to anticipated increased cost, implementation hurdles (including additional required geomorphic and hydraulic study) and permitting constraints in comparison to other alternatives, and due to potentially creating an isolated trail endpoint. However, segment 1 could be considered in the future to extend future sections of the Deep River Trail connection towards downtown Asheboro and the Uwharrie Mountains.
- **Segment 2:** Removed due to cost, implementation hurdles (including additional required geomorphic and hydraulic study) and permitting constraints in comparison to other alternatives.
- **Segment 5:** Removed due to concerns of increased flooding events which would increase the frequency of trail maintenance.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Map B: Bailey St. Bridge Crossing

0' 100' 500'

LEGEND

Existing Conditions

- Parcels
- Railroad
- 2' Contours
- 20' Contours
- Publicly Owned Parcels
- FEMA Floodway
- FEMA 100-yr Floodplain
- Sewer Easement

Preliminary Greenway Alternatives (Color Varies)

- Alternative Considered
- Alternative Removed

Opportunities & Constraints Table

Segment Alternatives - Bailey St. Bridge Crossing (Map B)

SEGMENT	OPPORTUNITY	CONSTRAINT	LENGTH	PARCELS IMPACTED
9	Opportunity to provide buffered, separated, greenway facility from main alignment to Asheboro School.	Safety and permitting challenges are brought on by connection over the Norfolk Southern Railway.	0.37 miles	7
10a	Connector trail can provide continuation of wooded experience up to roadway.	Grade differential between roadway and greenway alignment will require a significant grading effort.	0.04 miles	2
10b	Connector trail has opportunity to share one easement with main alignment. Experience down from roadway will provide unique view into Hasketts Creek.	Poor sight distance and excessive crossing grade (+/-10% cross slope) at roadway is less than ideal for greenway users.	0.04 miles	1
10c	Good sight distance and relatively flat grade make this connector ideal.	Large vehicles parked in the vicinity detract from experience. Overhead electric line may need to be relocated.	0.02 miles	1
11	Use a low water crossing to switch sides of Hasketts Creek.	Floodplain and stream buffer impacts	0.03 miles	1
12	Alignment location on this side of Hasketts Creek is ideal for making sensible connection to Asheboro schools.	Low greenway clearance, +/-8.5 ft may require retaining wall along bridge apron.	0.04 miles	1
13	Maintains main alignment on Eastern bank of Hasketts Creek.	Steep embankment at bridge underpass will require a comprehensive grading and benching effort. Alignment location on this side makes connection to Asheboro School difficult.	0.03 miles	1
14	Low water bridge crossing may be utilized to switch sides of the creek while keeping greenway and vehicular users separated.	Significant increase in cost, floodway permitting will need to be evaluated. Increased trail maintenance during storm events due to storm waters overtopping low water bridge.	0.01 miles	1
15	Maintains main alignment on Eastern bank of Hasketts Creek, steep embankment may provide a nice view into the stream.	Steep existing grade will require significant benching effort to accommodate preferred greenway trail section.	0.03 miles	1

SEGMENTS REMOVED FROM CONSIDERATION

Segment 10c was removed due to conflicts with existing vehicular parking and apparent utility relocation. Segments 10a and 10b were removed due to existing topography constraints and poor sight distance at roadway crossing location. Segment 14 was removed due to a significant cost and maintenance increase for this low water crossing.

- **Segments 10a and 10b:** Removed due to existing topography constraints and poor sight distance at roadway crossing location.
- **Segment 10c:** Removed due to conflicts with existing vehicular parking and apparent utility relocation.
- **Segment 14:** Removed due to a significant cost and maintenance increase for this low water crossing.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Map C: W. Balfour Bridge Crossing

0' 100' 500'

LEGEND

Existing Conditions

- Parcels
- Railroad
- 2' Contours
- 20' Contours
- Publicly Owned Parcels
- FEMA Floodway
- FEMA 100-yr Floodplain
- Sewer Easement

Preliminary Greenway Alternatives (Color Varies)

- Alternative Considered
- Alternative Removed

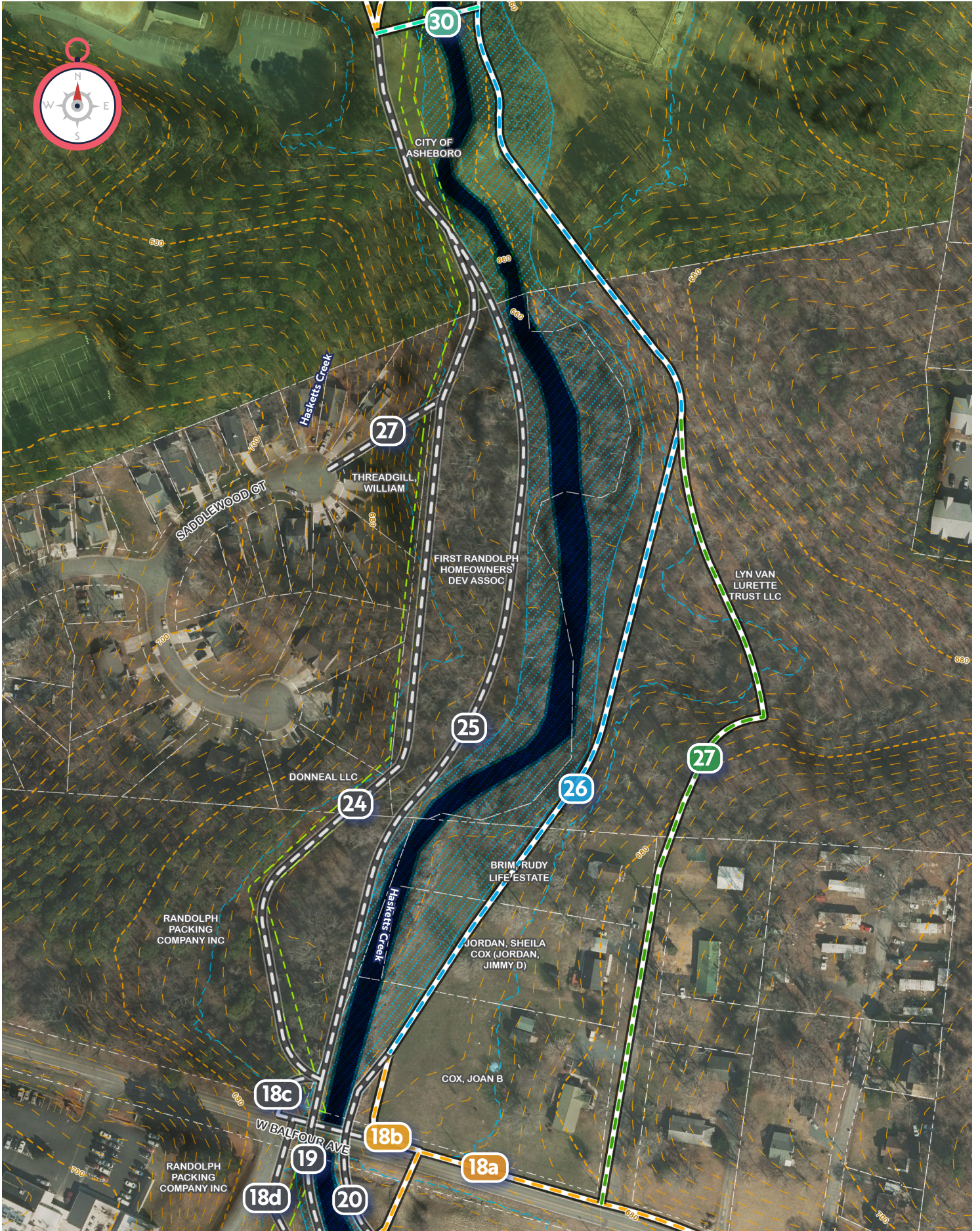
Opportunities & Constraints Table

Segment Alternatives - W. Balfour Bridge Crossing (Map C)

SEGMENT	OPPORTUNITY	CONSTRAINT	LENGTH	PARCELS IMPACTED
18a	Most sensible connection in terms of sight distance and avoids mixing with industrial use vehicles.	May require additional traffic calming measures to safely provide connection across West Balfour Avenue.	0.02 miles	1
18b	Logical connection if main greenway alignment is on eastern creek bank. Ability to connect down West Balfour Avenue to the Asheboro Park and Ride via segment 23.	Significant real estate acquisition will be required from single family property owners. Property owner willingness is unknown.	0.02 miles	1
18c	At-grade connector can be accommodated.	Poor connection to make for crossing roadway due to opposing industrial use driveway and limited sight distances.	0.01 miles	2
18d	Good visibility for greenway users.	Connection will be very difficult, if not impossible due to existing industrial use driveway, overhead utilities, and buried sewer laterals.	0.02 miles	1
19	Easily connects to segments 24, 25, and 16	Exposed sanitary sewer line underneath Balfour Avenue bridge will need to be encased in concrete or protected some other way if main alignment is placed on this side.	0.03 miles	2
20	Avoids most utilities and greenway trail benching underneath bridge is achievable.	Requires right-of-way acquisition from single family home near creek. Willingness of property owner is unknown.	0.03 miles	2
21	This alternative should be utilized if this study determines that the main greenway alignment will need to switch sides of Hasketts Creek. Roadway lane widths may be reduced to accommodate a buffered greenway connector over the bridge.	Additional permitting with NCDOT will be required. Minimally separated facility from roadway traffic will make some greenway users feel uncomfortable.	0.02 miles	0
22a	Low water bridge crossing may be utilized to switch sides of the creek while keeping greenway and vehicular users separated.	Significant increase in cost, floodway permitting will need to be evaluated. Increased trail maintenance during storm events due to storm waters over topping a low water bridge.	0.01 miles	1
22b	Low water bridge crossing may be utilized to switch sides of the creek while keeping greenway and vehicular users separated.	Significant increase in cost, floodway permitting will need to be evaluated. Increased trail maintenance during storm events due to storm waters over topping a low water bridge.	0.01 miles	2
23	Trail spur has an opportunity to connect to complimentary uses such as the Asheboro Park & Ride, Early Childhood Development Center, and the commercial district on Fayetteville St.	Connection will require utility and a minimum of six driveway replacements along the corridor, and will require additional measures if the main line greenway falls on western bank.	0.24 miles	11
27	This alignment alternative utilizes the right-of-way on Yorktown Ln to bridge the connection back to Hasketts Creek	Extensive NCDOT coordination and permitting will be required.	0.43 miles	5

SEGMENTS REMOVED FROM CONSIDERATION

- **Segments 18c and 18d:** Removed due to existing driveway and utilities (sewer, gas, and electric) in the area. Large amounts of truck traffic make integrating bicycle and pedestrians here unadvisable.
- **Segments 19 and 20:** Removed due to bridge clearance restrictions (less than 8 ft) and exposed existing sewer lines.
- **Segment 21:** Removed due to infeasibility of reallocating roadway space to accommodate bicycles and pedestrians in a safe and comfortable manner.
- **Segments 22b, 24, and 25:** Removed due to lack of support from private property owners.



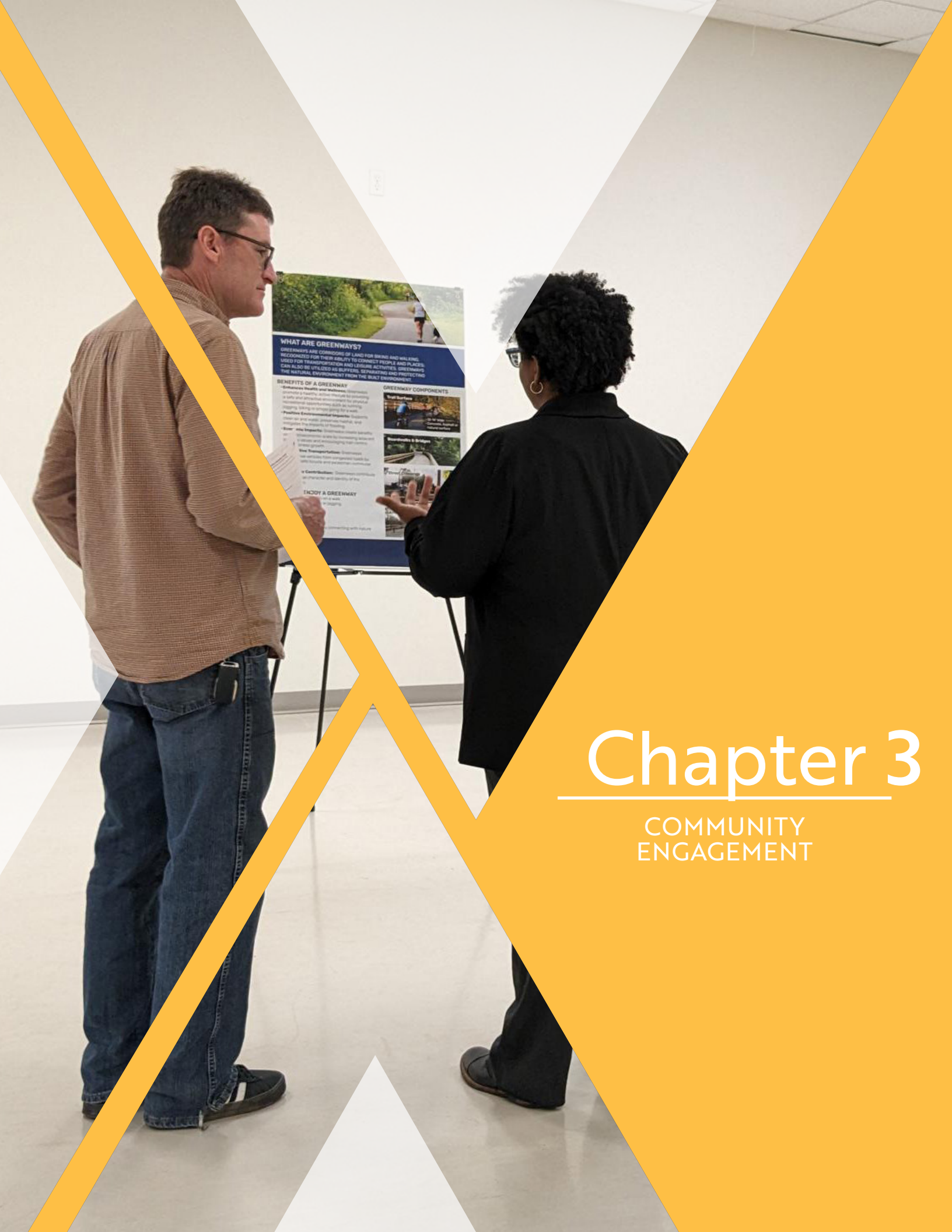
Opportunities & Constraints Table

Segment Alternatives - W. Balfour Bridge Crossing (Map C)

SEGMENT	OPPORTUNITY	CONSTRAINT	LENGTH	PARCELS IMPACTED
18a	Most sensible connection in terms of sight distance and avoids mixing with industrial use vehicles.	May require additional traffic calming measures to safely provide connection across West Balfour Avenue.	0.05 miles	1
18b	Logical connection if main greenway alignment is on eastern creek bank. Ability to connect down West Balfour Avenue to the Asheboro Park and Ride via segment 23.	Significant real estate acquisition will be required from single family property owners. Property owner willingness is unknown.	0.06 miles	1
18c	At-grade connector can be accommodated.	Poor connection to make for crossing roadway due to opposing industrial use driveway and limited sight distances.	0.01 miles	2
18d	Good visibility for greenway users.	Connection will be very difficult, if not impossible due to existing industrial use driveway, overhead utilities, and buried sewer laterals.	0.02 miles	1
19	Easily connects to segments 24, 25, and 16	Exposed sanitary sewer line underneath Balfour Avenue bridge will need to be encased in concrete or protected some other way if main alignment is placed on this side.	0.03 miles	2
20	Avoids most utilities and greenway trail benching underneath bridge is achievable.	Requires right-of-way acquisition from single family home near creek. Willingness of property owner is unknown.	0.03 miles	2
21	This alternative should be utilized if this study determines that the main greenway alignment will need to switch sides of Hasketts Creek. Roadway lane widths may be reduced to accommodate a buffered greenway connector over the bridge.	Additional permitting with NCDOT will be required. Minimally separated facility from roadway traffic will make some greenway users feel uncomfortable.	0.02 miles	0
22a	Low water bridge crossing may be utilized to switch sides of the creek while keeping greenway and vehicular users separated.	Significant increase in cost, floodway permitting will need to be evaluated. Increased trail maintenance during storm events due to storm waters over topping a low water bridge.	0.03 miles	1
22b	Low water bridge crossing may be utilized to switch sides of the creek while keeping greenway and vehicular users separated.	Significant increase in cost, floodway permitting will need to be evaluated. Increased trail maintenance during storm events due to storm waters over topping a low water bridge.	0.01 miles	2
23	Trail spur has an opportunity to connect to complimentary uses such as the Asheboro Park & Ride, Early Childhood Development Center, and the commercial district on Fayetteville St.	Connection will require utility and a minimum of six driveway replacements along the corridor, and will require additional measures if the main line greenway falls on western bank.	0.25 miles	11
27	This alignment alternative utilizes the right-of-way on Yorktown Ln to bridge the connection back to Hasketts Creek	Extensive NCDOT coordination and permitting will be required.	0.28 miles	5

SEGMENTS REMOVED FROM CONSIDERATION

- **Segments 18c and 18d:** Removed due to existing driveway and utilities (sewer, gas, and electric) in the area. Large amounts of truck traffic make integrating bicycle and pedestrians here unadvisable.
- **Segments 19 and 20:** Removed due to bridge clearance restrictions (less than 8 ft) and exposed existing sewer lines.
- **Segment 21:** Removed due to infeasibility of reallocating roadway space to accommodate bicycles and pedestrians in a safe and comfortable manner.
- **Segments 22b, 24, and 25:** Removed due to lack of support from private property owners.



WHAT ARE GREENWAYS?
GREENWAYS ARE CORRIDORS OF LAND FOR BIKE AND WALKING, RECOGNIZED FOR THEIR ABILITY TO CONNECT PEOPLE AND PLACES, USED FOR TRANSPORTATION AND LEISURE ACTIVITIES. GREENWAYS CAN ALSO BE UTILIZED AS BUFFERS, SEPARATING AND PROTECTING THE NATURAL ENVIRONMENT FROM THE BUILT ENVIRONMENT.

BENEFITS OF A GREENWAY

- Enhance Health and Wellness:** Greenways encourage a healthy, active lifestyle by providing a safe and attractive environment for physical activity, such as walking, jogging, biking or simply going for a walk.
- Positive Environmental Impact:** Greenways increase air and water quality, reduce noise, and mitigate the impacts of flooding.
- Revitalize Properties:** Greenways create benefits for property owners by increasing demand for a variety of existing and new commercial and residential development.
- Encourage Transportation:** Greenways can encourage people to use more sustainable and healthier modes of transportation.
- Contribute:** Greenways contribute to the character and identity of the community.

ENJOY A GREENWAY
Walk or bike along a greenway.

GREENWAY COMPONENTS

- Trail Surface:** A path or road surface designed for walking, jogging, or biking.
- Signage & Wayfinding:** Signs and markers that help people find and use the greenway.

Chapter 3

COMMUNITY
ENGAGEMENT

Community Engagement Plan

The project team developed a community engagement plan at the start of the project to guide outreach and outline participation strategies for activities with key partners and members of the public. Additionally, the engagement plan was used to inform the community on the proposed planning process for the North Asheboro Greenway Feasibility Study; provide an overview of prior community involvement; gauge public interest in the planning process; understand where the community desires greenway connections near the greenway corridor; understand how the community would like to use the greenway; and phase and prioritize project segments for future investment and development. This plan served as a flexible document that was updated throughout the study.

Working Group

A Working Group, comprised of local officials, City of Asheboro staff, citizen wellness groups, and Randolph County Trails, played a crucial role in supporting the development of this feasibility study. Members of the Working Group convened on four separate occasions during the project’s duration. The Working Group actively contributed to the study by reviewing and providing feedback on pertinent data, community engagement initiatives, alignment recommendations, and implementation strategies. Additionally, the group took an active role in distributing information and communication materials to the public during outreach events and activities such as the community survey. Individual members and their respective affiliations are provided below. Meeting summaries are provided on the following pages.

WORKING GROUP MEMBERS

Trevor Nuttall, City of Asheboro Planning Department

Justin Luck, City of Asheboro Planning Department

Michael Rhoney, City of Asheboro Water Resources Department

Pearson Parks, City of Asheboro Public Works Department

Jimmy Cagle, City of Asheboro Facilities Maintenance Department

Jonathan Sermon, City of Asheboro Cultural + Recreation Services

Kelly Heath, Asheboro City Council

Jim Rich, Asheboro A3

Mary Joan Pugh, Randolph County Trails Coordinator

Sam Varner, Randolph County Wellness Administrator

WORKING GROUP MEETING #1

The first Working Group Meeting, held at Asheboro City Hall on September 13, 2023, provided attendees with an overview of the study and an analysis of existing conditions within the project study area. The meeting facilitated discussions regarding definitions of success for the study, as well as opportunities and constraints that were identified during a site visit. The project team encouraged Working Group members to continue to review the existing conditions maps and consider additional topics to discuss at future meetings. Key findings from the meeting are highlighted below.

- Planned NCDOT projects may include facilities such as sidewalks on Fayetteville St that may provide connections to the greenway.
- Environmental constraints such as floodplains and topography may be major determinants in the route alternatives for the greenway.
- It is beneficial to align and construct greenways along sewer and water easements; however, the greenway will not be placed directly above these utilities to mitigate for access during routine maintenance.

WORKING GROUP MEETING #2

The second Working Group Meeting was held virtually on November 29, 2023. During this meeting, the project team presented the survey results, opportunities and constraints associated with the greenway corridor, and discussed the route evaluation methodology. Key findings from the meeting are highlighted below.

- Attendees expressed support for a trailhead at North Asheboro Park. Greenway users could also park at the future church on Vision Dr to the south.
- Greenway users may want to park on Vision Dr unless parking can be provided as an option at the Randolph County offices on N Fayetteville St.
- The City of Asheboro coordinated with the Police Department regarding any potential safety concerns associated with the project. The Police Department supports the project and wants to provide the best security they can through lighting, cameras, or other methods as needed and where appropriate.

WORKING GROUP MEETING #3

The third Working Group Meeting was held virtually on March 14, 2024. The project team presented an update on community and stakeholder engagement efforts, a recommended route alternative, preliminary construction cost estimate, and an overview of implementation and funding strategies. Key findings from the meeting are highlighted below.

- Route Alignment Alternative B is recommended at this time due to reduced construction costs and coordination with an existing sewer easement on the east side of Hasketts Creek. Alternative A would be more costly due to bridge and boardwalk construction, and additional land clearing necessary.
- A parking lot could be located near the main corridor on W. Bailey St to address concerns with parking on school property.
- The northern half of the project is expected to be more challenging to construct due to topography and private property constraints.

WORKING GROUP MEETING #4

Text... Key findings from the meeting are highlighted below.

- x
- y
- z

Stakeholder & Private Landowner Engagement

The project team engaged with key stakeholders and private landowners in the study area to gauge support for the project and identify additional considerations for greenway design. Meetings were held with Asheboro City Schools, NCDOT, Piedmont Triad Rural Planning Organization (RPO), and City of Asheboro staff, as well as private landowners.

ASHEBORO CITY SCHOOLS MEETING

The project team met with representatives from Asheboro City Schools on November 7, 2023, to discuss a potential connection from the North Asheboro Greenway to North Asheboro Middle School and Balfour Elementary School. Key findings from the meeting are highlighted below.

- An at-grade railroad crossing at W. Bailey St may require narrowing the travel lanes to accommodate pedestrian safety arms; a bridge overpass would be costly and require additional space in the right-of-way.
- Bus traffic often is congested near W. Bailey St and N. Asheboro School Rd and could be impacted by a greenway connection.
- Campus security is an important factor for the school district when evaluating potential entry locations.

NCDOT DIVISION 8 MEETING

The project team met with representatives from NCDOT Division 8 on December 11, 2023, to discuss crossing the Norfolk Southern railroad at W. Bailey St. Key findings from the meeting are highlighted below.

- NCDOT prefers to maintain roadway lanes at a minimum of 12 ft, with 11 ft lanes acceptable in constrained locations.
- Existing roadway bridges over Hasketts Creek on W. Bailey St and W. Balfour Ave are not ideal for accommodating a multi-use trail due to limited available width, a need for physical separation, and drainage.
- Proposed sidepath on W. Bailey St would likely require curb and gutter with a minimum 2 ft landscaped strip to separate the path from the roadway.

NCDOT RAIL DIVISION MEETING

The project team met with representatives from the NCDOT Rail Division on December 14, 2023, to discuss crossing the Norfolk Southern railroad at W. Bailey St. Key findings from the meeting are highlighted below.

- Railroads typically only allow shared use path crossings within the railroad right-of-way to be 6 ft wide to encourage bicyclists to dismount and walk across. A new at-grade crossing is not likely to be approved by the railroad.
- The path would have to route around the existing gate arms and maintain a minimum distance of 5.5 ft from the existing flashers.
- Flagging service must be provided when doing construction work within a railroad corridor, and should be provided by the contractor.

CITY OF ASHEBORO STAFF MEETING

The project team met with staff representatives from the City of Asheboro on January 17, 2024, to discuss routing and maintenance considerations for the North Asheboro Greenway. Key findings from the meeting are highlighted below.

- The City expects improvements to North Asheboro School Rd to be submitted for a future STIP project, potentially including pedestrian improvements that could connect to the greenway.
- A trailhead could be located on Nottingham St if a feasible location at the southern end of the greenway corridor near Vision Dr cannot be found.
- Segments of the greenway within North Asheboro Park should be designed to minimize impacts to the disc golf course, which is popular with local residents.
- The police department does not have specialized equipment to access the greenway, and may need to use patrol vehicles along the corridor.

PIEDMONT TRIAD RPO MEETING

The project team met with representatives from the Piedmont Triad Rural Planning Organization (RPO) on February 14, 2024, to discuss development and funding considerations for the North Asheboro Greenway. Key findings from the meeting are highlighted below.

- Updated Comprehensive Transportation Plans for the City of Asheboro and Randolph County will be developed in the near future and will likely cover a 10-year planning horizon.
- The Strategic Prioritization (SPOT) process is the main funding avenue through the RPO, but there is opportunity to increase grant writing capacity at a regional level.
- The P7.0 prioritization process is ongoing, and the RPO would not be able to submit the North Asheboro Greenway project for scoring until a future prioritization phase begins.
- The RPO has identified a need for additional grant writing capacity to support projects such as the North Asheboro Greenway.

RANDOLPH COUNTY TOURISM AUTHORITY MEETING

The project team met with leadership from the Randolph County Tourism Authority on April 5, 2024, to discuss the development of the North Asheboro Greenway. Key findings from the meeting are highlighted below.

- An existing pedestrian bridge in North Asheboro Park has accessibility challenges and should be evaluated as part of any new greenway construction.
- The trail will need to be designed to minimize flooding impacts along the creek, which have been a challenge for other nearby recreational trails.
- The Tourism Authority sees greenways as a key amenity to help improve quality of life in the community and enhance existing park facilities.

PRIVATE LANDOWNER COORDINATION

The City of Asheboro took the lead on landowner coordination by sending mailers and notice of the project to all property owners near the proposed route in August and December 2023, and again in April 2024 prior to adoption of the study. The mailer included contact information for City staff as well as a link to project information on the City's website (see Appendix C for a copy of the letter).

Over the course of the project several large property owners contacted the City or attended the public meeting and voiced concerns around security, liability for incidents on their property, maintaining current property uses (including truck parking, manufacturing, and forestry) and providing parking for users. It is expected that these concerns can be addressed in the future through careful consideration of easement agreements, provision of parking, providing clarity around legal requirements, posting trail rules, and monitoring by the local police department if security concerns persist. Still other property owners expressed support and interest for the project and the Arlington Apartments Phase 2 development in particular agreed to provide an easement for future trail construction in the floodplain. Additional design coordination will be needed with Hospice of Randolph County, Randolph Packing, and private property owners on Yorktown Ln who did not respond to letters from the City.

Prior to adoption of the study the City sent an additional mailer in April 2024 to potentially impacted property owners, inviting additional feedback and providing an update on the feasibility study.

Public Meeting

A drop-in style public meeting was hosted at the City of Asheboro Public Works building on December 12, 2023. Maps and information boards were provided for attendees to review at their own pace, and project team staff from the City, NCDOT, and consultant were available to guide attendees through the materials and answer questions. The meeting was advertised on the City's website and social media pages, through emails to local advocacy organizations, and through letters to nearby property owners. Working Group members were also encouraged to share information about the meeting with their networks.

Key findings from the public meeting are highlighted below.

- Multiple access points should be provided, with parking for greenway users and access control measures such as gates or bollards. At the southern end of the corridor, a connection across Vision Dr should be considered to provide a trailhead.
- Attendees expressed concern with user safety due to the remote nature of the greenway corridor, and suggested lighting, security cameras, emergency call boxes, and police patrols.
- Route preferences were varied; Residents with properties close to the greenway prefer a route farther from their homes, while property owners who do not live near the greenway prefer a route that is closer to nearby residents and the North Asheboro Park.
- Non-residential landowners expressed concerns with liability in the event of greenway users trespassing on their property.
- Some adjacent parcels have sold recently and may be developed, potentially incorporating the greenway as a connection.



Community members provide feedback at the public meeting

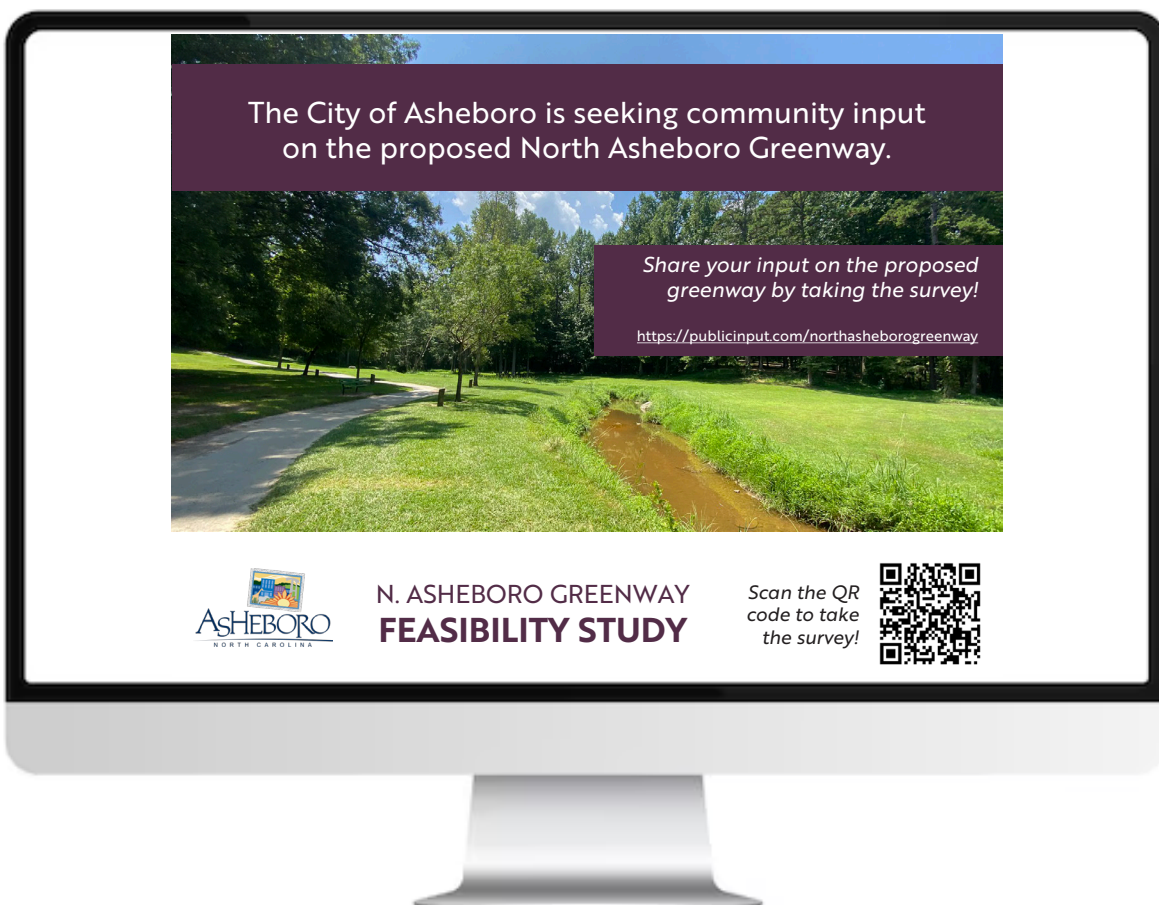
Community Survey

Between October 18 and November 13, 2023, a comprehensive community survey was executed as part of the North Asheboro Greenway Feasibility Study through Publicinput.com. The survey engaged 232 participants and received 2,929 responses, along with 206 comments.

The project team distributed the community survey to accomplish the following goals:

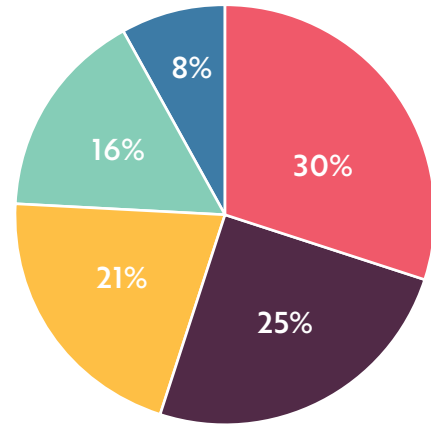
- ◆ Introduce the project and gauge public support.
- ◆ Solicit and compile public comment on destinations, opportunities and challenges, user preferences, and route preferences.
- ◆ Fulfill requests for information.
- ◆ Develop an email contact list for interested parties.

The survey contained three sections: project-specific questions, interactive mapping questions, and optional demographic questions. Overall, the community desires a well-designed, safe, and accessible greenway, showcasing the potential for increased recreational and social activity within the community. Specific survey findings are presented on the following pages.



HOW FREQUENTLY RESPONDENTS USE GREENWAYS + TRAILS

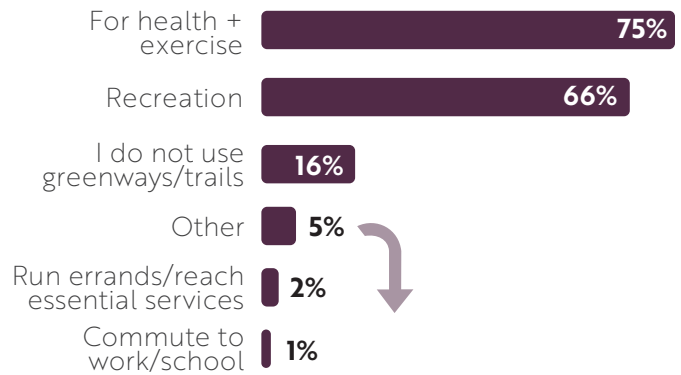
The survey revealed diverse patterns of greenway and trail utilization among respondents. The majority, constituting 30 percent, utilize these recreational facilities a few times a year. Following closely, 25 percent engage with greenways and trails on a more frequent basis, enjoying their benefits a few times a month. Twenty-one percent (21%) of respondents incorporate these facilities into their routine, using them a few times a week. On the other hand, 16 percent of participants reported never utilizing greenways and trails, signaling potential for outreach and promotion. Additionally, 8 percent of respondents showcase daily commitment to these amenities, demonstrating a dedicated and consistent use. These findings highlight the diverse engagement levels with greenways and trails, suggesting opportunities for both increased promotion and tailored offerings to better meet the varied needs of the community.



- Daily
- A few times a year
- A few times a week
- A few times a month
- Never

HOW RESPONDENTS CURRENTLY USE GREENWAYS + TRAILS

The survey findings show the various ways people currently utilize greenways and trails in Asheboro. The majority (75%) highlighted their use for health and exercise, emphasizing the importance of these spaces for physical well-being. Additionally, 66 percent of respondents indicated that they turn to greenways and trails for recreation, underlining their role as valuable leisure spaces. Alternatively, 16 percent of participants reported not using greenways and trails. Furthermore, 5 percent use these facilities for purposes beyond health, exercise, and recreation, showcasing their versatility. A small percentage (2%) utilizes greenways and trails for errands or reaching essential services. Lastly, 1 percent relies on them for commuting to work or school, highlighting the potential of greenways to support sustainable transportation.



Select Responses:

“Safe place to ride a bike.”

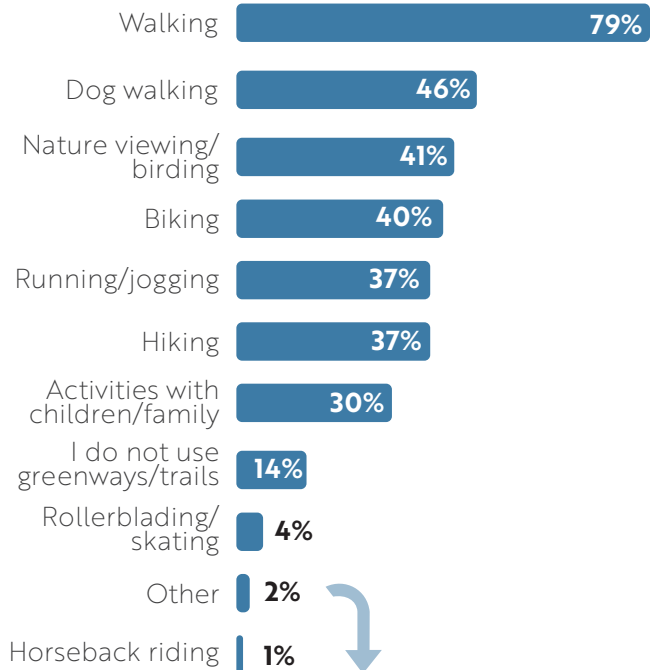
“Dog walking and photography.”

“Walk with my dog.”

ACTIVITIES ALONG GREENWAYS + TRAILS

The survey outcomes offer a comprehensive look at the diverse activities people engage in on greenways and trails. The most popular activity is walking (79%). Nearly half, 46 percent, take the opportunity to walk their dogs, emphasizing the pet-friendly nature of these spaces. Forty-one percent (41%) enjoy the natural surroundings, engaging in nature viewing and birdwatching.

Fourteen percent (14%) of survey participants reported not using greenways and trails. Additionally, 4 percent of individuals rollerblade on these pathways. A small group of respondents (2%) cited other reasons for their greenway use. Lastly, 1 percent of participants enjoy horseback riding on greenways and trails in the area. These findings provide valuable insights into the multifaceted ways in which the community engages with greenways and trails, guiding efforts to enhance and promote these outdoor amenities.

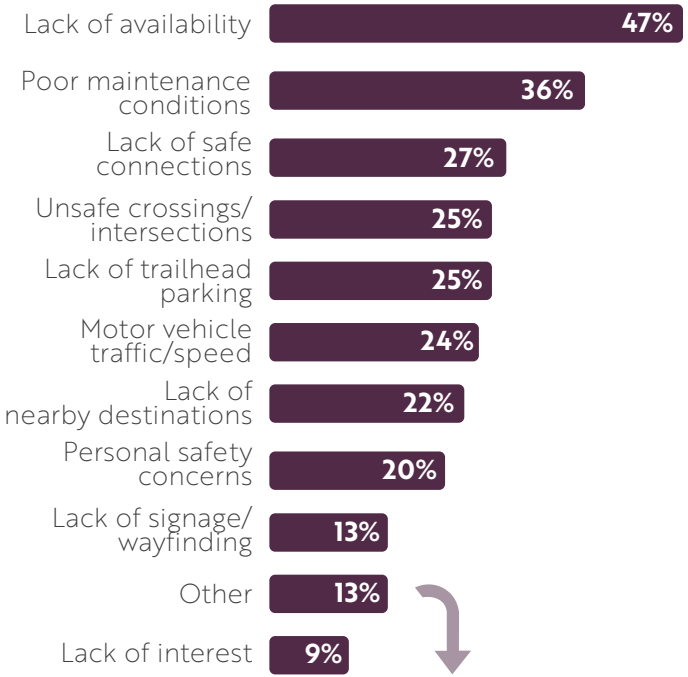


Select Response:
 "There are no greenways to use."

DISCOURAGING FACTORS

Several factors currently discourage respondents from using greenways in and around the study area. The primary deterrent, cited by 47 percent of participants, is the lack of availability, underscoring the need for increased accessibility to outdoor spaces. Following closely, 36 percent express concern about the current maintenance conditions of existing bicycle and pedestrian facilities, emphasizing the importance of upkeep for a positive user experience. Another significant barrier is the absence of safe connections to these facilities, as highlighted by 27 percent of respondents.

For those who selected "other," their concerns revolved around safety, the perceived lack of security, and the insufficiency of greenways in the area. These responses emphasize the need for initiatives addressing safety concerns and creating a sense of security to encourage greenway usage. Nine percent (9%) of respondents admit to having a lack of interest in using greenways, signaling an area for potential outreach and education to showcase the benefits of these outdoor amenities.

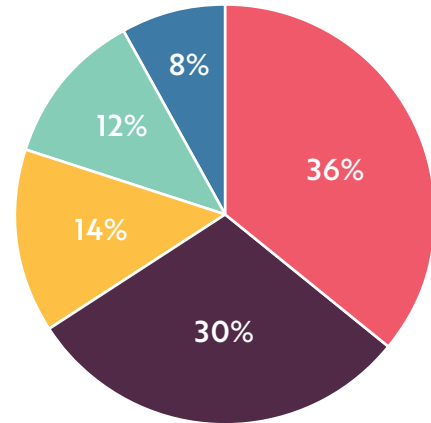


Select Responses:
 "Safety and security!"
 "Too few greenways."

ANTICIPATED FUTURE GREENWAY USE

The survey indicates support among respondents for using the North Asheboro Greenway in the future. Many respondents (36 percent), express a strong commitment, planning to utilize the greenway a few times a week. Following closely, 30 percent of respondents anticipate regular but less frequent use, planning to enjoy the greenway a few times a month. Fourteen percent (14%) of participants express a daily commitment, highlighting the anticipated daily usage of the upcoming greenway.

However, it is important to note that a segment of the respondents (12%), does not intend to use the future greenway. Understanding the reasons behind this lack of interest could provide valuable insights for potential improvements or outreach efforts. On the other hand, 8 percent of respondents plan to use the greenway a few times a year, contributing to the overall diversity of anticipated usage patterns.

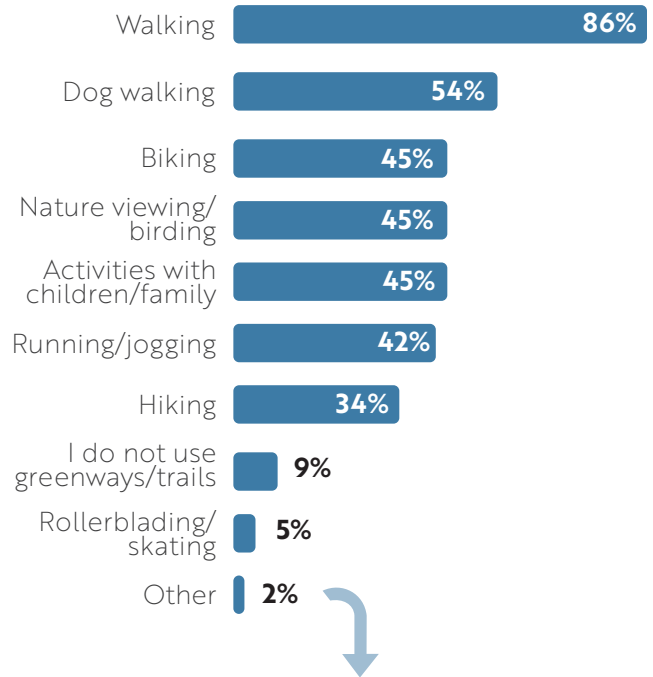


- Daily
- A few times a week
- A few times a month
- A few times a year
- Never

FUTURE ACTIVITIES ALONG THE GREENWAY

The survey findings provide valuable insights into the anticipated uses of the North Asheboro Greenway once it is constructed. Respondents plan to primarily use it for walking (86%), dog walking (54%), biking (45%), nature viewing/birding (45%), and activities with children and family (45%).

A small percentage, 9 percent, indicates a lack of interest in using the greenway. However, 5 percent express an interest in rollerblading or skating on the greenway. An additional 2 percent have unique ideas for utilization, one providing input that they plan to use the greenway for photography. These findings pave the way for a well-informed approach to the construction and promotion of the North Asheboro Greenway, ensuring it aligns with the varied preferences and interests of the North Asheboro community it aims to serve.



Select Response:
 "Photography."

TOP 5 GREENWAY ROUTING PREFERENCES

People were asked about their top five preferences for the greenway route. Most important was connecting to future greenways and trails (74%), showing a desire for a linked network. Next is access to parks (70%), highlighting the importance of nature and recreation. Many also want the route to follow or have access to Haskett Creek (53%), showing appreciation for natural water features. Respondents also value connections to schools along the way (22%), emphasizing educational access. There is also a preference for the most effective route (18%), showing a practical approach to the greenway’s design. In contrast, only 7 percent prefer the most direct route, and 5 percent selected “other,” specifying a preference for close access to restaurants.

#1 Provide connections to future greenways and trails

#2 Provide access to parks and recreational areas

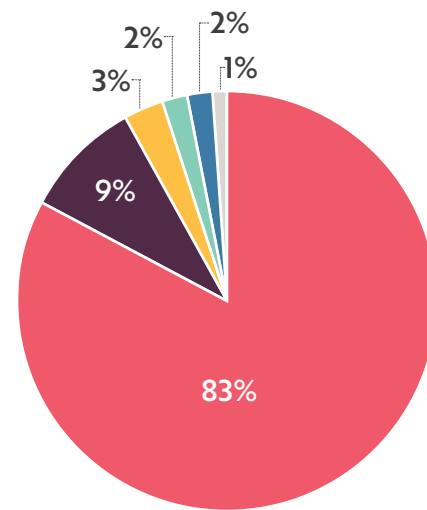
#3 Route along or provide access to Haskett Creek

#4 Provide connections to schools along the corridor

#5 Most cost-effective route

PRIMARY MODE OF TRANSPORTATION

The survey uncovered the diverse commuting habits of respondents in relation to work and school. The predominant mode of transportation is driving alone in a car, selected by 83 percent of respondents. A smaller group, comprising 9 percent, marked that they work from home and do not have a regular commute, while 3 percent engage in carpooling. A sustainable approach to commuting is represented by the 5 percent who either walk (2%), bike (1%), or use alternative modes of transportation (2%). Respondents who chose “other” clarified that they are retired, showcasing the variety of life stages and circumstances among survey participants.

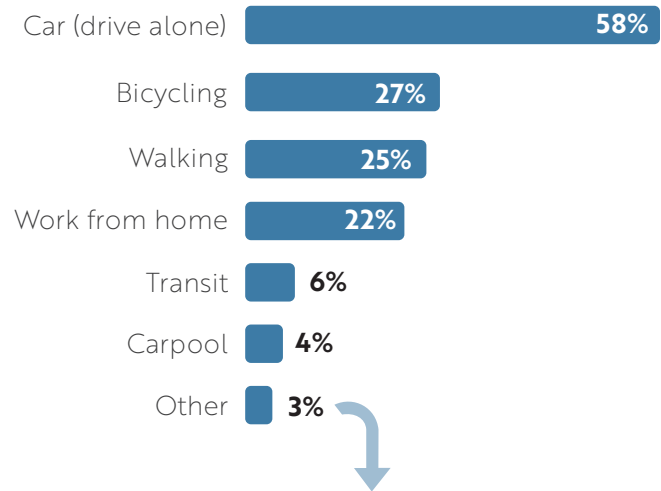


- Car (drive alone)
- Walking
- Work from home
- Other
- Carpool
- Bicycling

DESIRED MODES OF TRANSPORTATION IN THE FUTURE

The survey findings reveal diverse preferences among respondents regarding their future commuting modes for work or school. The majority, comprising 58 percent, express a preference for driving as their primary mode of transportation. Biking is a popular choice at 27 percent, followed by walking at 25 percent, and working from home at 22 percent.

In terms of shared transportation, 6 percent of respondents express an interest in using transit, while 4 percent prefer carpooling. An additional 3 percent indicated that they do not commute to work or school because they are retired.



Select Response:

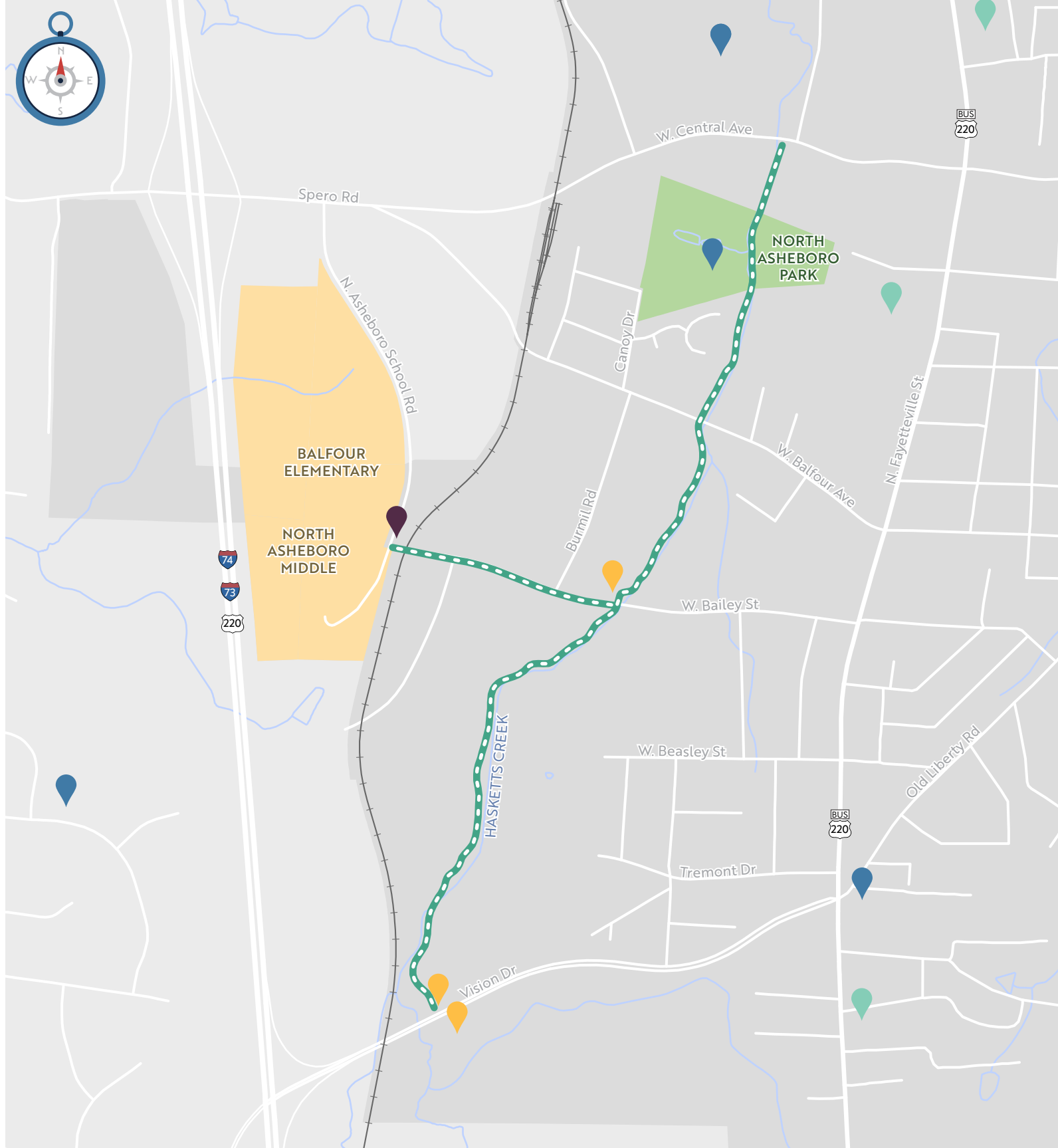
"Retired."

WHAT WOULD INCREASE TRAIL USAGE OR BRING NEW USERS

Respondents express a strong desire for a greenway project in Asheboro. Key themes include the need for safety, scenic routes, and connections to other trails. Respondents highlight the importance of a well-lit and patrolled environment, emphasizing security. They also stress the need for cleanliness, well-marked trails, and information about local flora and fauna. The length of the greenway is a significant concern, with calls for a minimum 7-mile trail to attract more cyclists. Access, parking, and promotion are highlighted, with suggestions such as a social media campaign and promotion on City-owned vehicles. Respondents want a space that feels safe, pet-friendly, and suitable for various activities, emphasizing the potential for community engagement, development, and connectivity. There are calls for additional features like water fountains, guided walks, and kids programming, demonstrating a desire for a multifaceted and inclusive greenway experience.

"My friends and I sometimes drive over 2 hours to other towns to ride our bikes on their greenway. When we go, we also go shopping and find a great place to eat. It would be awesome to have a place close to home to enjoy. For riding bikes, a minimum 7-mile trail would be the best. 1.8 is a great start especially for walking. A longer trail would be needed to attract more cyclists."

-Survey Respondent



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Community Survey: Desired Greenway Destinations

LEGEND

- Preliminary Study Corridor
- Recreation Destinations
- School Destinations
- Shopping Destinations
- Other Destinations
- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County

0 0.25 0.5 Mile

INTERACTIVE MAPPING QUESTION #1: DESIRED GREENWAY DESTINATIONS

Survey participants were tasked with identifying preferred destinations accessible from the proposed North Asheboro Greenway. These destinations were classified into distinct categories, encompassing recreational spots, educational institutions, shopping centers, and miscellaneous options. The results, along with noteworthy comments, are detailed below.

CATEGORY	DESCRIPTION
Recreational Destinations	<ul style="list-style-type: none"> • North Asheboro Park • Hasketts Creek north of W. Central Ave • Asheboro Racquet and Swim Club
School Destinations	<ul style="list-style-type: none"> • North Asheboro Middle School
Shopping Destinations	<ul style="list-style-type: none"> • Businesses along Vision Dr and W Bailey St
Other Destinations	<ul style="list-style-type: none"> • Locations along N Fayetteville St

“Connect to other sidewalks and plan to add shade trees and clear connections to those adjacent sidewalks.”

-Survey Respondent

“I hope there is future planning for the extension crossing down past Vision Drive. Maybe some interaction with the train track area to push you down to the Presnell Street area.”

-Survey Respondent

“This proposal needs to include MORE ground not just a small little mile.”

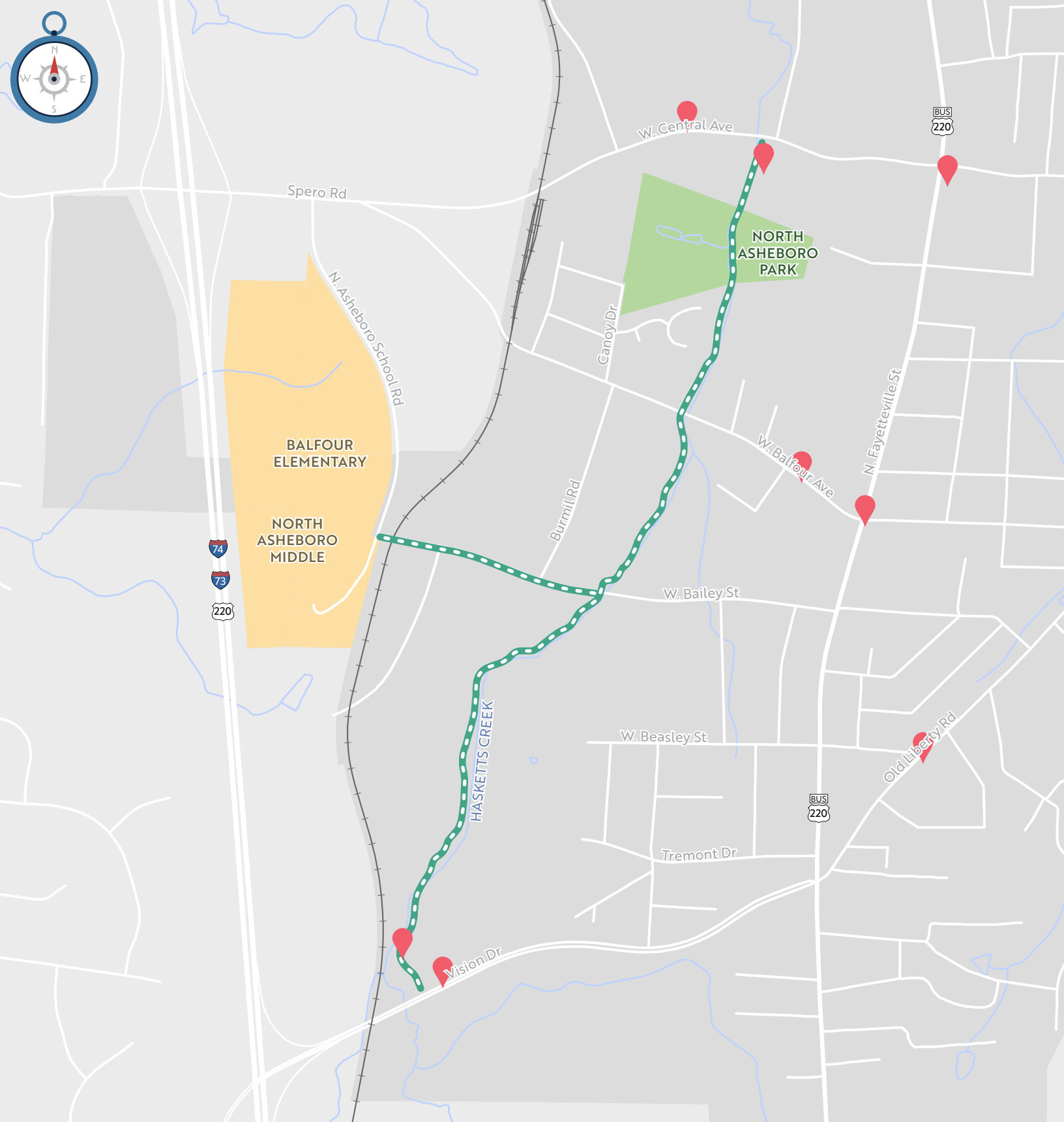
-Survey Respondent

“I would want to connect to a park with a playground.”

-Survey Respondent

“I would like there to be an entryway onto the greenway from Dave’s Mountain.”










-Survey Respondent



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Community Survey: Desired Infrastructure Improvements

LEGEND

-  Preliminary Study Corridor
-  Desired Infrastructure Improvement Location
-  Railroad
-  Roadway
-  School
-  Park/Conserved Land
-  Water
-  Asheboro City Limits
-  Randolph County

0 0.25 0.5 Mile

INTERACTIVE MAPPING QUESTION #2: DESIRED INFRASTRUCTURE IMPROVEMENTS

Survey respondents were assigned the task of pinpointing areas needing enhanced bicycle or pedestrian infrastructure. The identified locations on the map include W. Central Ave, N. Fayetteville St, W. Balfour Ave, Old Liberty Rd, and Vision Dr. Comments underscored the necessity for sidewalks, crosswalks, and links to Technimark Plant 2 off of Commerce Pl. Additionally, some respondents emphasized the preference for active transportation infrastructure connections to Downtown Asheboro. Further insights from additional comments are highlighted below.

"Sidewalks and crossings are needed, and connections up to Technimark Plant 2 would be great."

-Survey Respondent

"I often see people walking along the side of Old Liberty Rd and really think this area would benefit from a bike lane or sidewalk area."

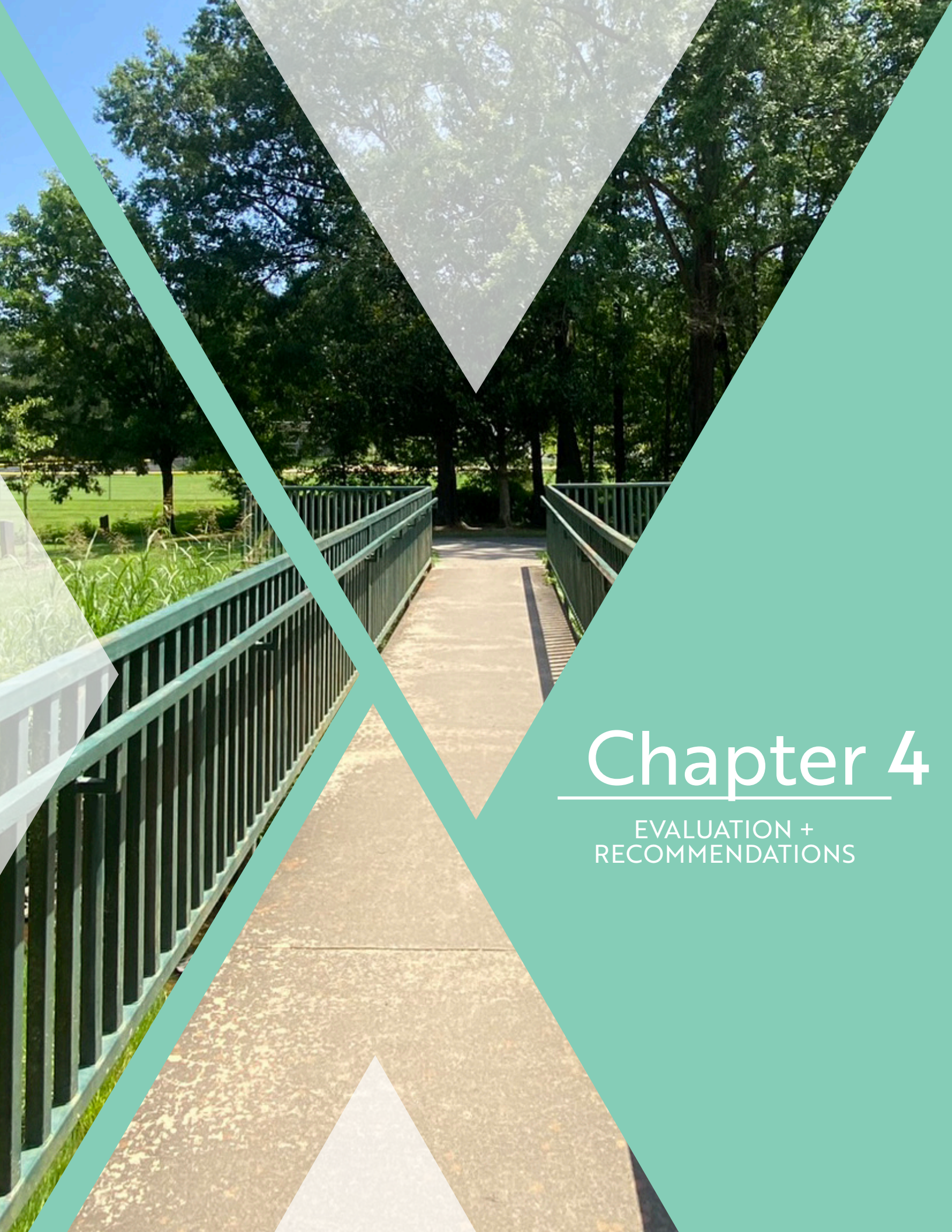
-Survey Respondent

"Need to continue much farther to connect to downtown."

-Survey Respondent

"Balfour Rd to Fayetteville."

-Survey Respondent



Chapter 4

EVALUATION +
RECOMMENDATIONS

Overview

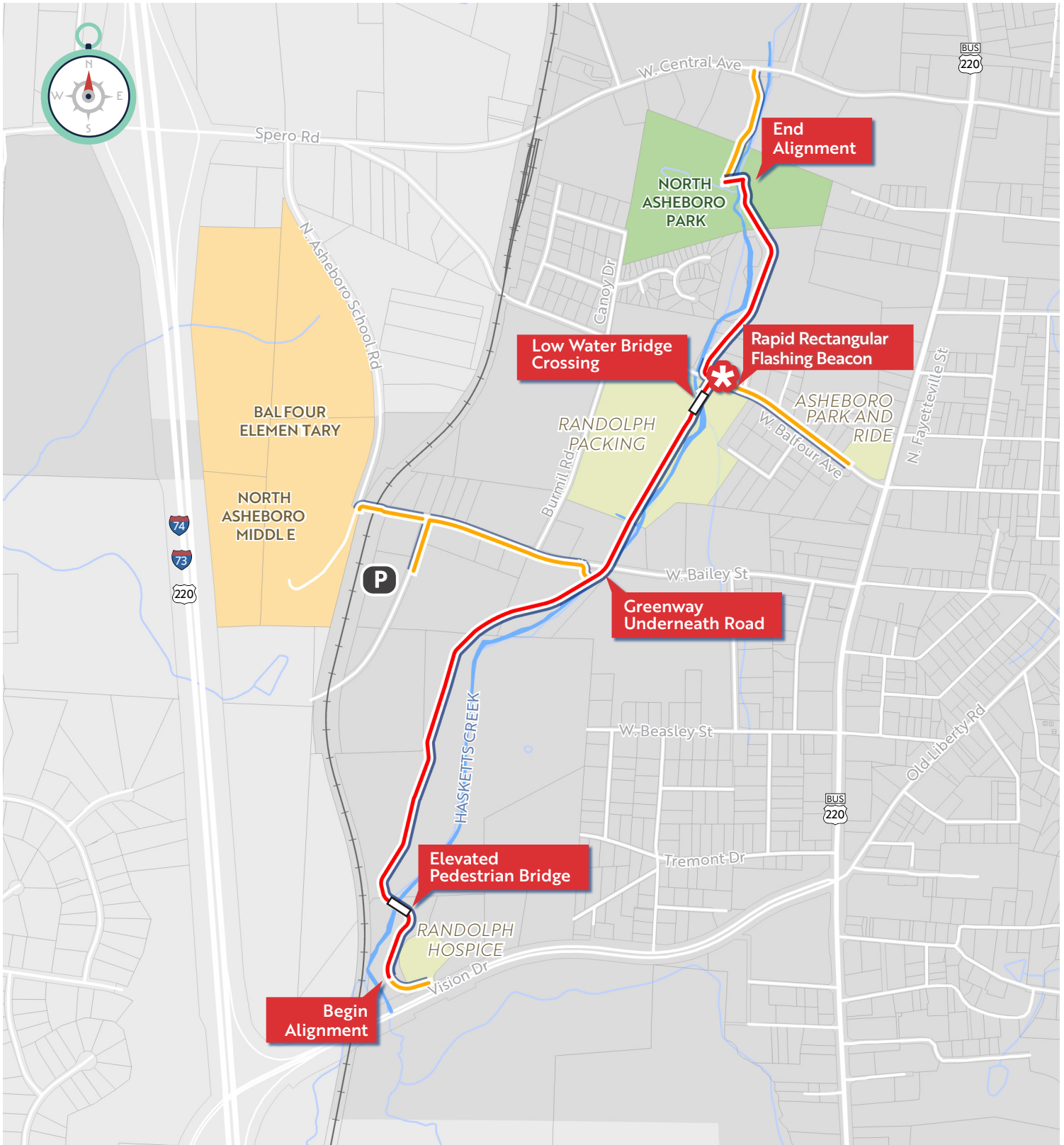
Recommendations for the North Asheboro Greenway will provide users of all ages and abilities safe, comfortable and direct travel and recreation choices from North Asheboro Park to Vision Drive. Recommendations were developed based on community and stakeholder input, a review of existing conditions, key destinations and connections identified through the planning process. A prioritization process for each segment was also included to then devise overall route alternatives for the study corridor. This chapter outlines the overall route alternatives considered, discusses evaluation criteria, recommends routes, and provides typical section and trail amenity recommendations.

ALIGNMENT ALTERNATIVE EVALUATION

Overall route alternatives were developed using various combinations of the segment alternatives presented in the previous chapters. The following pages detail the two route alternatives developed for this study and describe the overall route experience, anticipate length, summarize high-cost items, and provide an estimated 2024 construction cost.







NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

ALIGNMENT ALT. A

0' 1,000' 2,000'

LEGEND

Existing Conditions

- +— Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Greenway Alternatives (Color Varies)

- Alignment Alternative
- Connector Alternative
- Ⓟ Potential Trailhead
- ⊠ Pedestrian Bridge
- ⊠ Pedestrian Signal

Alignment Alternative A

SEGMENT NUMBERS (4•7•12•16•22a•18b•26•30)

Beginning in the vicinity of the Randolph Hospice Center near Vision Drive, this alignment alternative runs north following the existing sewer easement before ramping up to the first elevated bridge crossing over Hasketts Creek. The greenway continues, utilizing a short boardwalk section to span the remainder of the floodplain and poor soils before promptly returning to a trail on grade condition. The trail moves north following the toe-of-slope of a large hill for approximately half a mile before diving underneath West Bailey Street. A connector trail along West Bailey Street would provide access to a parcel identified as suitable for a trailhead and parking lot, as well as a future connection to the Balfour Elementary School and North Asheboro Middle School. The main alignment moves north along the existing sewer easement on the parcel owned by Randolph Packing before utilizing a short low water crossing bridge to span Hasketts Creek to the east. An at-grade crossing is provided on West Balfour Avenue, and a connector trail located on the north side of the street would provide access to the Asheboro Park and Ride. The greenway alignment would move north through several private properties before terminating within North Asheboro Park over the existing greenway bridge. In a future phase, the main line will continue north past West Central Avenue. This study has identified and mapped the two possible scenarios.

ALIGNMENT SNAPSHOT:

Length = 1.48 miles

Low Water Crossings = 1

Elevated Bridge Crossings = 1

Rectangular Rapid Flashing Beacon = 1

Main Alignment Private Parcel Impacts = 10

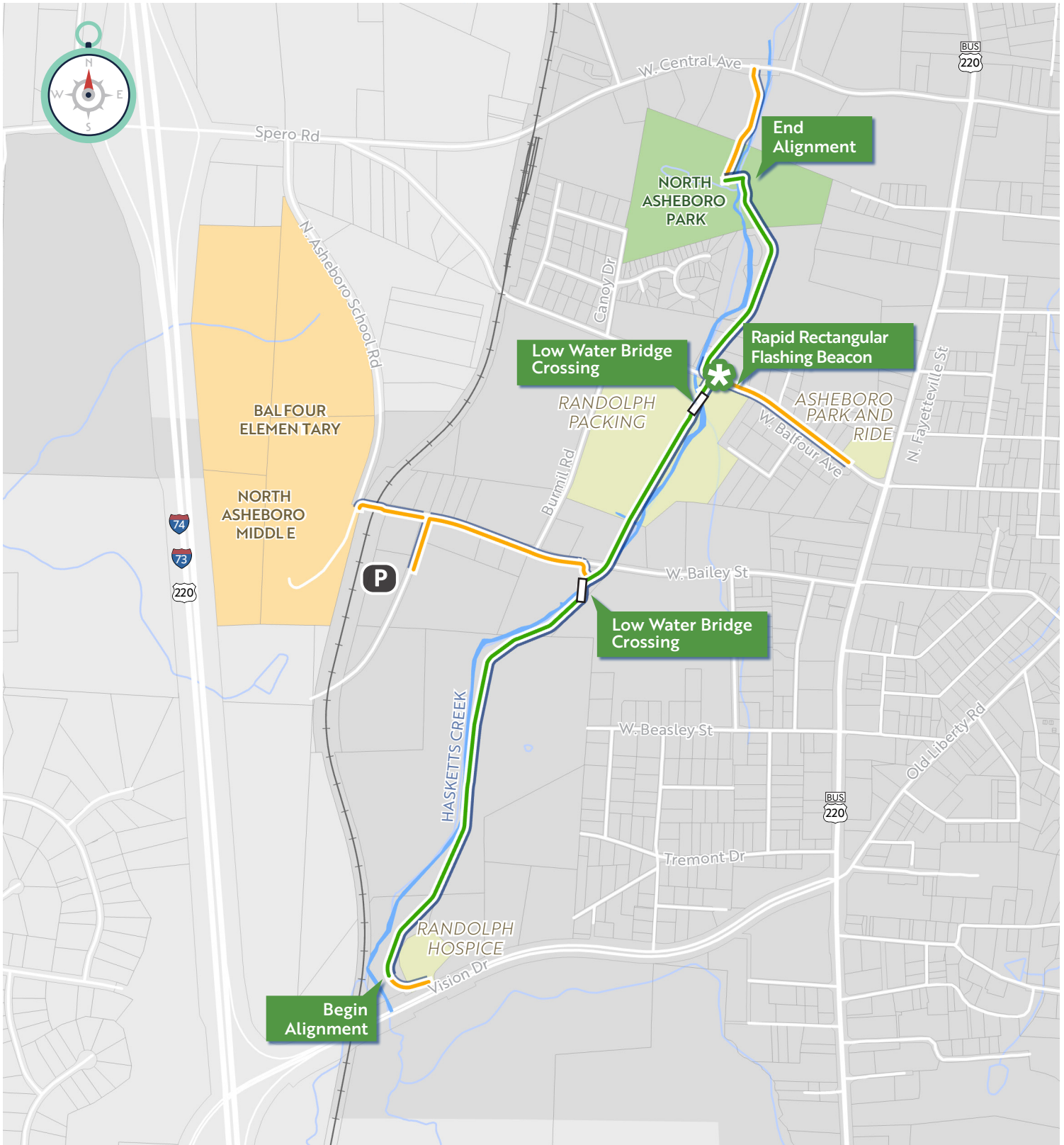
PROS:

- Utilizes undeveloped parcels in the floodplain on the western side of Hasketts Creek.
- Low water bridge crossings are less costly than other alternatives.
- Connections to Balfour Elementary School, North Asheboro Middle School, and the Asheboro Park and Ride are possible.

CONS:

- Impacts to private parcels are numerous.
- Flood model impacts to private parcels will need to be evaluated in detailed design.
- Low water crossing will require frequent maintenance after typical storm events.
- Construction access will be limited to the southern portion of the trail from West Bailey Street.

ESTIMATED 2024 CONSTRUCTION COST: \$3,015,000



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

ALIGNMENT ALT. B

LEGEND

Existing Conditions

- +— Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Greenway Alternatives (Color Varies)

- Alignment Alternative
- Connector Alternative
- Ⓟ Potential Trailhead
- ▭ Pedestrian Bridge
- ⊕ Pedestrian Signal

0' 1,000' 2,000'

Alignment Alternative B

SEGMENT NUMBERS (4•6•8•11•12•16•22A•18B•26•30)

Beginning in the vicinity of the Randolph Hospice Center near Vision Drive, this alignment alternative runs north following the existing sewer easement through privately owned property on the eastern side of Hasketts Creek before utilizing a low water crossing back to the western side. The alignment then dives underneath West Bailey Street, and a connector trail along West Bailey Street would provide access to a parcel identified as suitable for a trailhead and parking lot, as well as a future connection to the Balfour Elementary School and North Asheboro Middle School. The main alignment moves north along the existing sewer easement on the parcel owned by Randolph Packing before utilizing a short low water crossing bridge to span Hasketts Creek to the east. An at-grade crossing is provided on West Balfour Avenue, and a connector trail located on the north side of the street would provide access to the Asheboro Park and Ride. The greenway alignment would move north through several private properties before terminating within North Asheboro Park over the existing greenway bridge. In a future phase, the main line will continue north past West Central Avenue.

ALIGNMENT SNAPSHOT:

Length = 1.42 miles

Low Water Crossings = 2

Rectangular Rapid Flashing Beacon = 1

Main Alignment Private Parcel Impacts = 9

PROS:

- Close to existing sewer easement on the eastern side of Hasketts Creek.
- Construction access will be less difficult than other alternatives.
- Low water bridge crossings are less costly than other alternatives.
- Connections to Balfour Elementary School, North Asheboro Middle School, and the Asheboro Park and Ride are possible.

CONS:

- Impacts to private parcels are numerous, stringing together alignment through multiple owners will be difficult.
- Flood model impacts to private parcels will need to be evaluated in detailed design.
- Low water crossings will require frequent maintenance after typical storm events.
- Steep embankments on the east bank of Hasketts Creek, south of West Bailey Street, may require extensive and costly grading and wall construction.

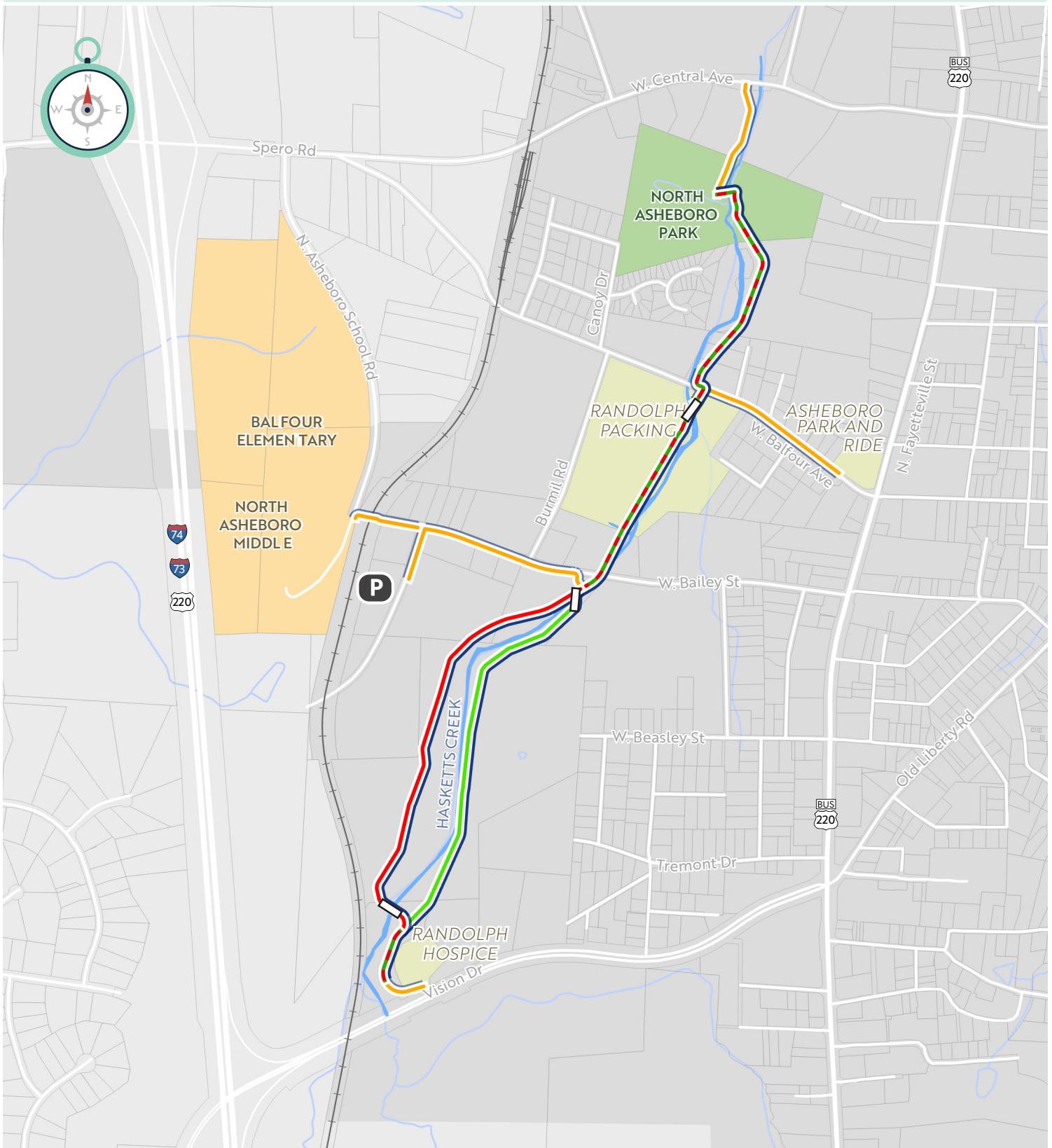
ESTIMATED 2024 CONSTRUCTION COST: \$2,095,000



SUMMARY OF EVALUATION CRITERIA

The evaluation criteria used to supplement the decision-making process are listed below. These criteria were workshopped with the Working Group to identify the most appropriate alignments. The matrix produced is a qualitative assessment tool utilized to evaluate and recommend a preferred alignment to further pursue design.

CRITERION	DESCRIPTION
Physical Feasibility	<i>The ability to successfully engineer and permit each alternative is a critical consideration for determining realistic options for the route alternative.</i>
Cost Effectiveness	<i>The magnitude of the total life-cycle cost for each alternative (including design, construction and ongoing maintenance) is a significant factor in determining which alternative to implement.</i>
Property Impacts	<i>Real estate acquisition plays a major role in project cost and schedule. The ability of the route alternatives to utilize publicly-owned properties, existing easements, public ROW, and limit impacts to privately property owners is considered.</i>
Community Priorities	<i>To ensure consistency with public preferences and existing plans, goals identified in previous planning efforts and feedback from public engagement/stakeholder outreach activities are utilized to evaluate the route alternative.</i>
Funding Opportunities	<i>Given the importance of securing funding from a variety of potential sources, the diversity, total amount, and likelihood of receiving funding available to each alternative is considered.</i>
Environmental Impacts	<i>The ability of each alternative to minimize impacts to streams, wetlands, and other jurisdictional features (including associated buffers, floodplain elevations, and other environmental factors) during construction and operation of the proposed facility is also considered.</i>
Desired Connectivity	<i>The magnitude of the disruption of vehicular traffic by the ultimate design of each route alternative and associated temporary impacts during the construction process is considered.</i>
Programming Impacts	<i>The magnitude of the disruption to the current park programming operations by the design of and during the construction process for each bridge alternative is considered.</i>
Implementation Timeframe	<i>The amount of time it takes to plan, fund, design, and ultimately construct each route alternative is important to consider, especially in conjunction with community priorities, as to how long is a tolerable time to wait for project completion.</i>
Accessibility	<i>Convenience of use and accommodation for users of all ages and abilities is a significant consideration to ensure the ultimate route alternative is a community amenity designed for use by individuals regardless of ability.</i>
Staff Support	<i>The depth of support from elected officials and agencies for each route alternative as well as whether there is a clear project sponsor to champion the route alternative through implementation, is an important factor for ensuring successful project completion.</i>
Placemaking + User Experience	<i>The potential for route alternative(s) to provide economic development and redevelopment, neighborhood stability and improvement, as well as promoting healthy and active lifestyles are also considered</i>



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

ALIGNMENT ALTERNATIVES

LEGEND

Existing Conditions

- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Greenway Alternatives (Color Varies)

- Alignment Alternative A
- Alignment Alternative B
- Connector Alternative
- Ⓟ Potential Trailhead
- ▭ Pedestrian Bridge

0' 1,000' 2,000'

Alignment Alternative Decision Matrix

SCORING METHODOLOGY

This decision matrix is a qualitative assessment tool utilized by the study team to incorporate feedback from the project working group. In this matrix the two alignment alternatives which were developed in the previous section of this study are further evaluated here against one-another in accordance with the evaluation criteria described on the previous spread. Each alignment is assigned a qualitative ranking which varies from most desirable, neutral, to least desirable, and was workshopped with the working group. Based on this feedback, a recommended route can be identified as those that best align with the priorities of the steering committee and public.

CRITERION	ALTERNATIVE A	ALTERNATIVE B
Physical Feasibility	<i>Least desirable</i>	<i>Most desirable</i>
Cost Effectiveness	<i>Least desirable</i>	<i>Neutral</i>
Property Impacts	<i>Neutral</i>	<i>Neutral</i>
Community Priorities	<i>Least desirable</i>	<i>Neutral</i>
Funding Opportunities	<i>Neutral</i>	<i>Most desirable</i>
Environmental Impacts	<i>Most desirable</i>	<i>Most desirable</i>
Desired Connectivity	<i>Most desirable</i>	<i>Most desirable</i>
Programming Impacts	<i>Neutral</i>	<i>Neutral</i>
Implementation Timeframe	<i>Least desirable</i>	<i>Neutral</i>
Accessibility	<i>Neutral</i>	<i>Neutral</i>
Staff Support	<i>Neutral</i>	<i>Most desirable</i>
Placemaking + User Experience	<i>Most desirable</i>	<i>Neutral</i>

Scoring key:

<i>Least desirable</i>	<i>Neutral</i>	<i>Most desirable</i>
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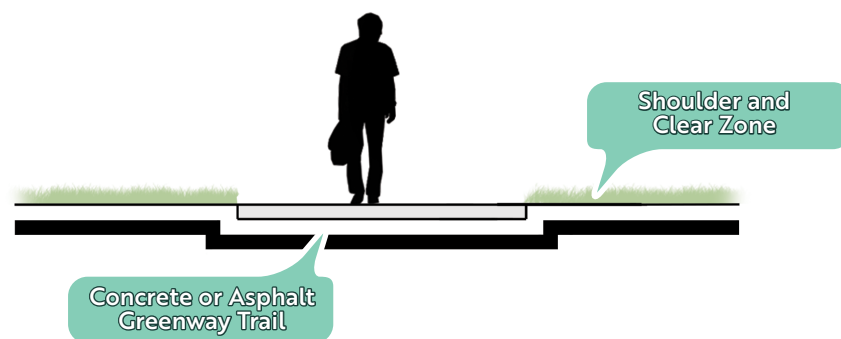
Greenway Typical Sections

TRAIL ON GRADE

Paved trail surfaces such as asphalt or concrete offer great accessibility to accommodate users of all ages and abilities. Asphalt pavement tends to be the most popular and cost effective for paved trails. Concrete pavement is more durable, but costs more than asphalt pavement. As such, concrete trails are typically more common in urban settings (where projected user volumes are high or the trail may be subject to vehicular loading more often) or in areas subject to heavy flooding forces that may cause damage to the trail such as boardwalk approaches and within the floodway.

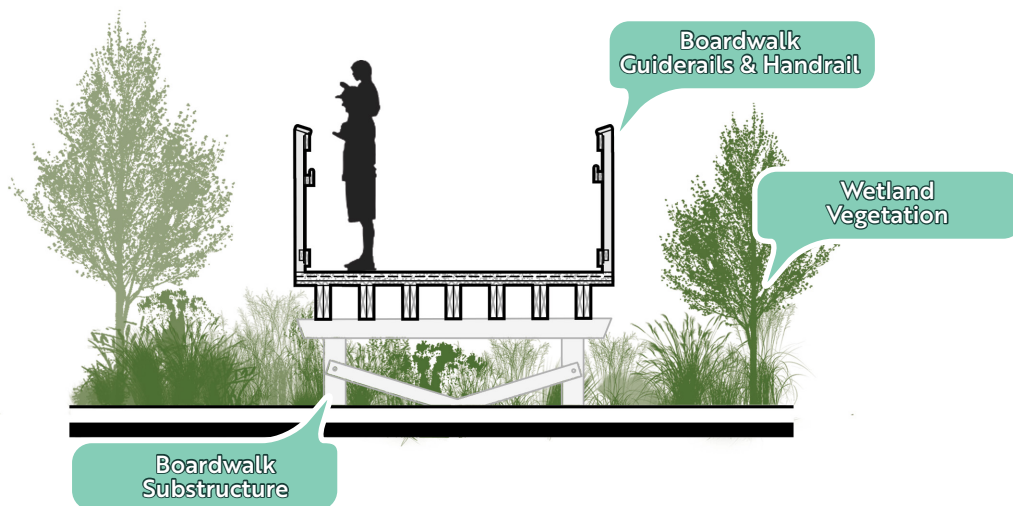
Paved trails shared by cyclists and pedestrians need to be wide enough to accommodate both user groups and allow for passing while also minimizing conflict and maximizing safety. For this reason a minimum 10 ft trail width is recommended, areas with continued and intense use may be as wide as 16 ft. In addition, pavement on grade will typically contain a minimum 2 ft grass shoulder.

This shoulder area increases comfortability for users when the trail is adjacent to steep slopes, acts as a recovery zone for bicycle users, and serves as an informal pull-off area for users needing to take a break or yield to other individuals.



BOARDWALK

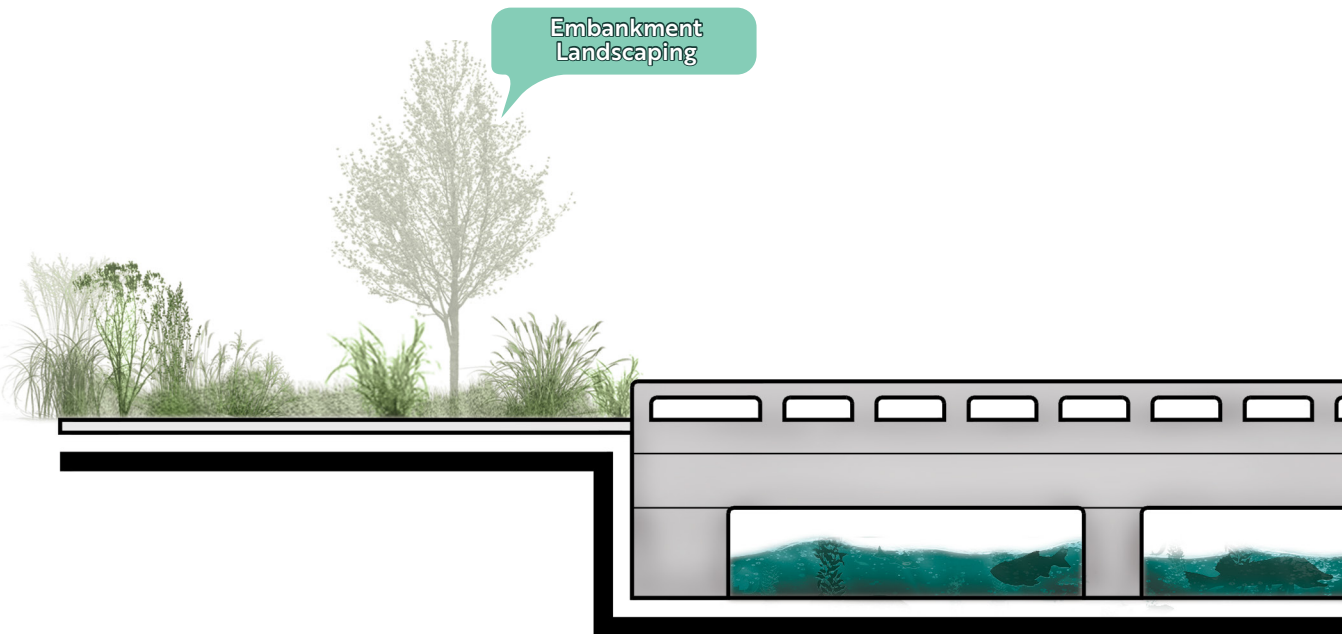
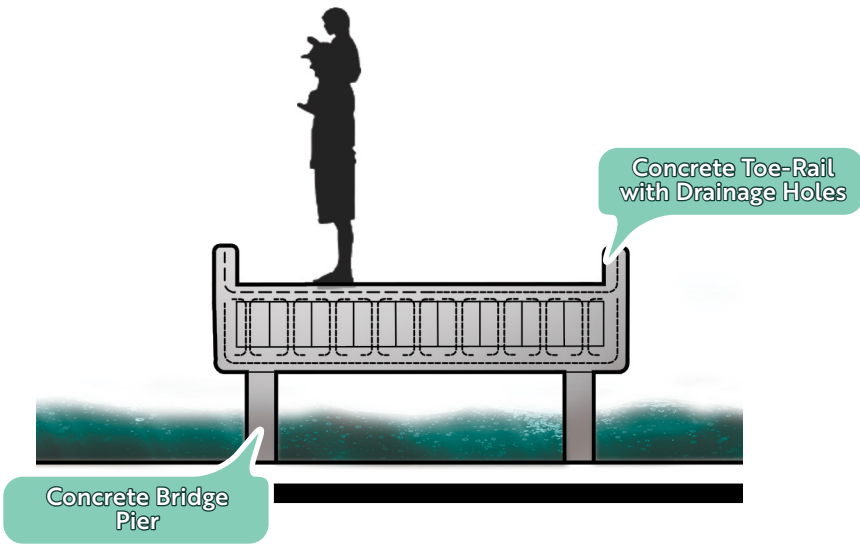
A minimum 10 ft clear width elevated boardwalk is recommended in areas where the trail crosses wetlands or in areas of steep cross slope topography to limit grading and need for retaining walls. Boardwalks can also help preserve mature trees. The deck surface should be concrete which provides greater friction to reduce the risks of slips and falls and reduces long-term maintenance burdens compared to those associated with other materials such as timber.



A minimum 10 ft clear width elevated boardwalk is recommended in areas where the trail crosses wetlands or in areas of steep cross slope topography to limit grading and need for retaining walls. Boardwalks can also help preserve mature trees. The deck surface should be concrete which provides greater friction to reduce the risks of slips and falls and reduces long-term maintenance burdens compared to those associated with other materials such as timber.

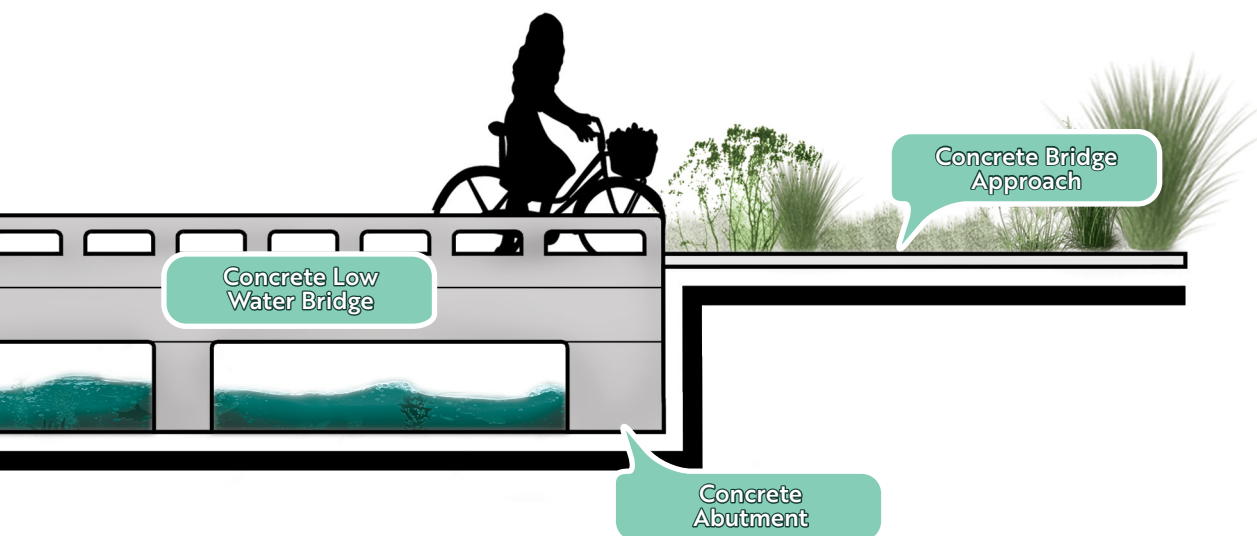
Timber safety rails and hand rails are shown with a timber pile substructure system. Boardwalk substructure design and materials will vary depending upon specific site conditions and geotechnical recommendations.

In addition, boardwalks serve as elevated viewing platforms. The flexibility with this element allows for placemaking zones to be integrated into the trail system. For instance, by strategically widening at particular areas, boardwalks can accommodate seating areas, overlooks and other zones for people to stop or gather.



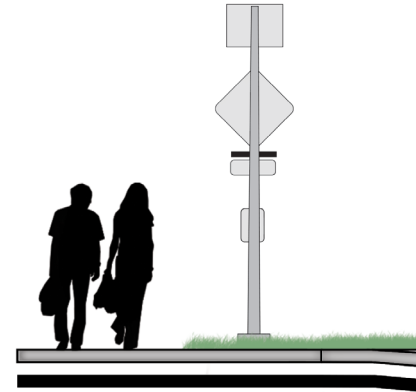
LOW WATER CROSSING

Low water crossings offer an opportunity to cross a stream with minimal environmental impact. A low water crossing is designed at the same grade of the greenway to allow normal stream flow underneath and be over-topped during seasonal flooding events. To withstand flooding impacts and prolong the useful life of the bridge, low water crossings are typically designed of concrete. The crossing is most often placed above both the waterway and the 100-year floodplain and typically does not include railings but may feature a raised or stained edge or a small toe-rail to provide a visual warning. The crossing may also be wider than the standard trail width. Narrow grooves or channels may be cut into the concrete to allow water flow through the bridge and to improve drainage.



MID-BLOCK CROSSING WITH RAPID RECTANGULAR FLASHING BEACON

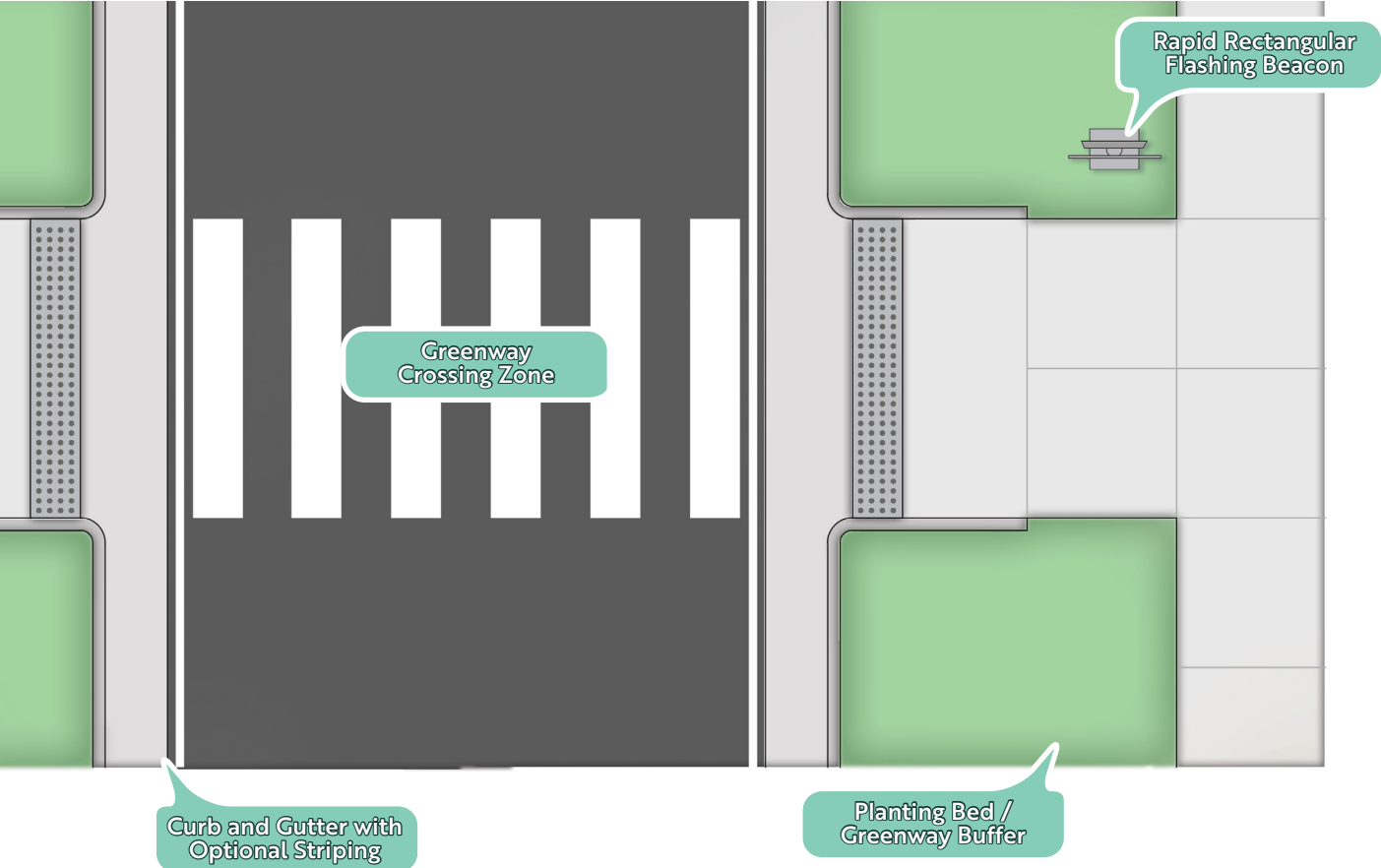
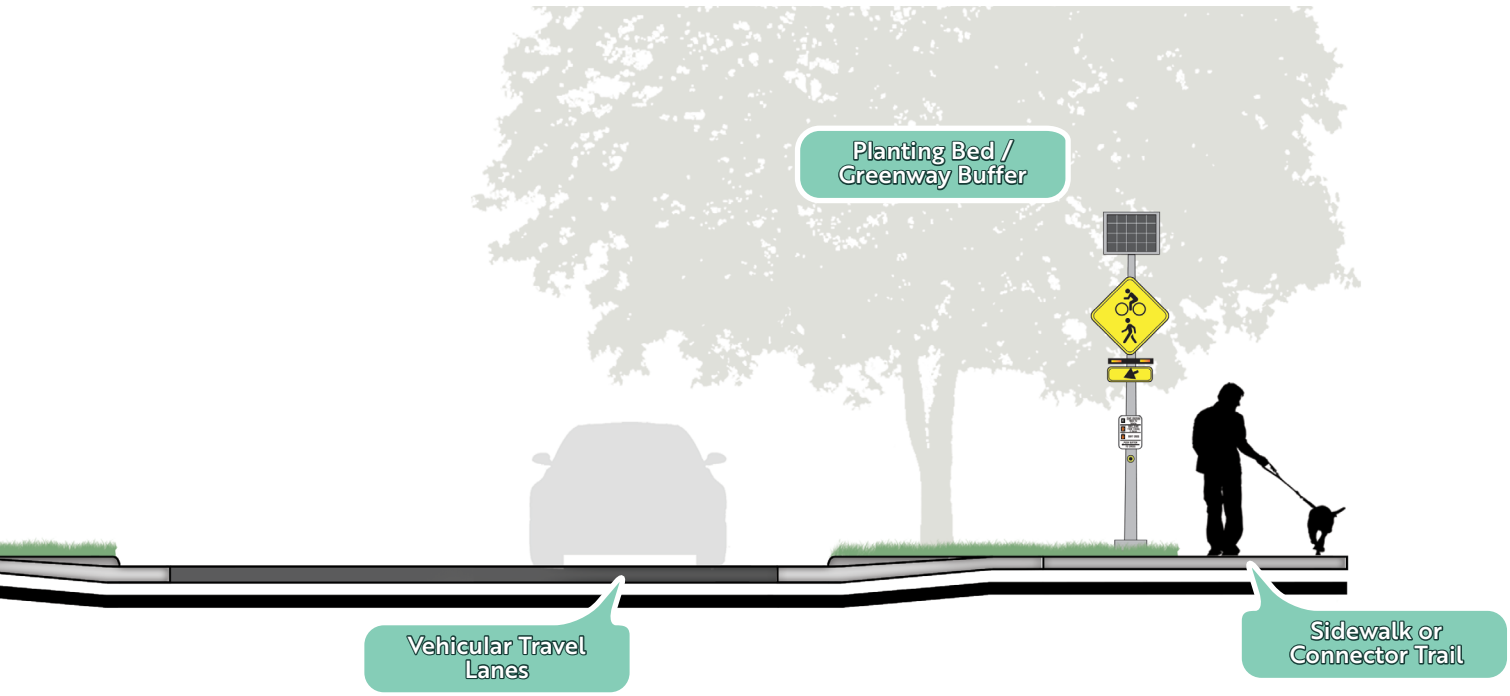
A mid-block crosswalk is a designated place for pedestrians and greenway users to cross a road between intersections. Mid-block crosswalks are often placed in locations that allow people to cross at locations such as schools, parks, and business districts, or at uncontrolled intersections. High-visibility crosswalk markings, such as bar pairs, continental, and ladder striping are recommended to alert motorists of bicycle and pedestrian crossing points across roadways. Inlay or thermoplastic tape is also recommended for highly reflective crosswalk markings. High-visibility mid-block crosswalks should be accompanied by Manual on Uniform Traffic Control Devices (MUTCD) pedestrian warning and advance yield signs W11-2, W16-7P, and R1-6 to alert motorists of a crossing.



A Rectangular Rapid Flash Beacon (RRFB) is a pedestrian-activated signal used in combination with pedestrian or trail crossing warning signage to improve safety at uncontrolled, marked crosswalks. The device includes two rectangular-shaped yellow indicators, each with an LED-array-based light source, that flash with high frequency when activated. RRFBs should be accompanied by MUTCD pedestrian warning and advance yield signs W11-2 and W16-7P to alert motorists of a crosswalk.

RRFBs are placed on both ends of a crosswalk. If the crosswalk contains a pedestrian refuge island or other type of median, an RRFB should be placed to the right of the crosswalk and on the median (instead of the left side of the crosswalk). RRFBs typically draw power from standalone solar panel units but may also be wired to a traditional power source.

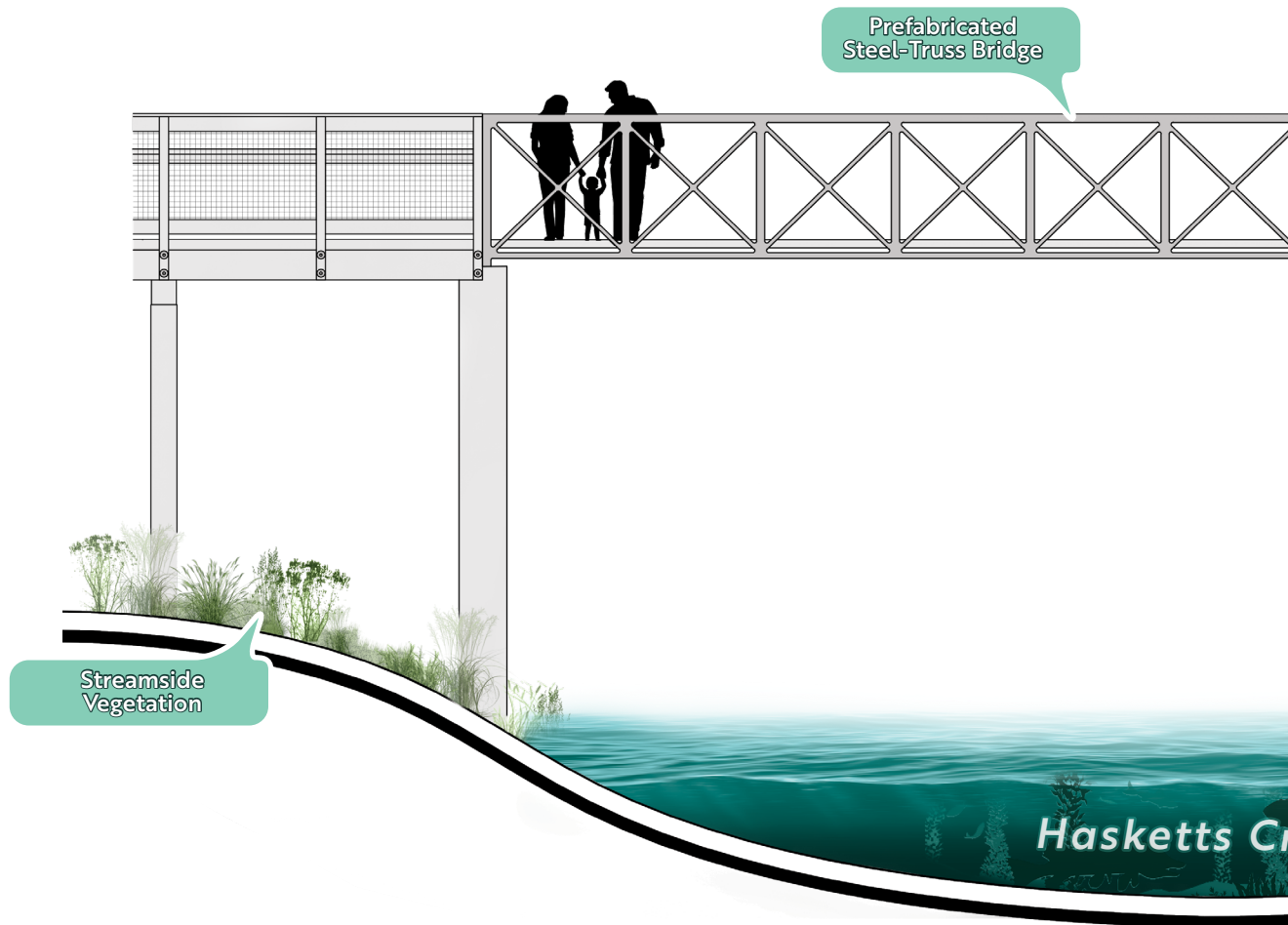




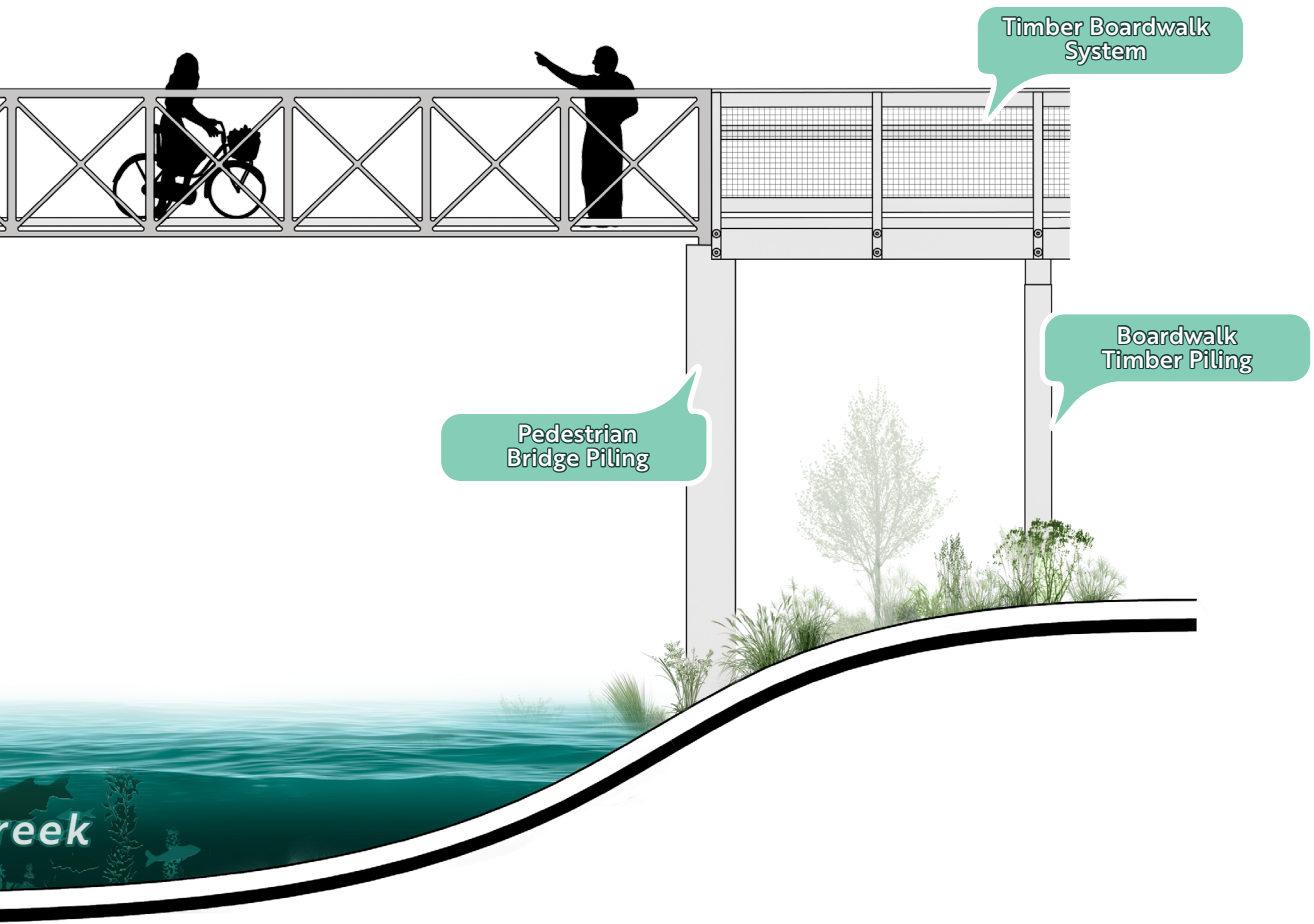
ELEVATED PEDESTRIAN BRIDGE

The pedestrian bridge span used for this feasibility study consisted of the general design elements shown in the cross section below. Please note that this drawing is for reference only and is not to scale. Specifics regarding the bridge crossing are subject to change pending detailed design/implementation.

A minimum 10 ft clear width bridge is recommended. Prefabricated steel truss bridges are a common, cost-effective bridge type in this application and are the recommended bridge type for this typical section. Corten / weathering steel is a finish which should be considered for its ability to blend well with natural surroundings and its minimal maintenance requirements as compared to those for painted finishes.



The deck surface should be concrete which provides greater friction to reduce the risks of slips and falls and reduces long-term maintenance burdens compared to those associated with other materials such as timber. Bridge substructure design and materials may vary depending upon bridge design type, specific site conditions, and geotechnical recommendations



The background is a photograph of a dirt path winding through a lush green forest. The path is covered in fallen leaves and dappled sunlight. Overlaid on the image are several blue geometric shapes: a large 'X' shape formed by two intersecting diagonal lines, and several semi-transparent white triangles pointing towards the center. The text 'Chapter 5' is underlined and 'IMPLEMENTATION' is in all caps below it.

Chapter 5
IMPLEMENTATION

Implementation

OVERVIEW

Recommendations outlined in the Asheboro Greenway feasibility study represent a significant investment in a recreational based amenity that will positively impact how both residents and visitors travel and experience Haskett's Creek and the beginnings of the Asheboro Greenway system. A key output of this study are the project cut sheets and cost estimates, which are essential to establishing project implementation scenarios.

Successful implementation will require a coordinated, consistent effort with a wide range of partners. Some of the key agencies and partners include Asheboro City Council, NC State Parks, NCDOT, Randolph County, the Piedmont Triad RPO, private partners, local advocacy organizations, and community members.

STRATEGY

Destination Based Phasing

One of the ways this corridor can be implemented is through the prioritization of greenway segments through destination based phasing. Greenway segments that connect to destinations with existing amenities, of which provide users parking such as the Asheboro Park, can serve as low hanging fruit to establish a well-used and highly accessible starting point for the greenway corridor.

Corridor Phasing

The corridor main line could also be prioritized as the primary implementation focus. Once established, connections to destinations such as the Asheboro Park and Ride, and the Asheboro School system can be coordinated with stakeholders and implemented at a later date.

Funding Availability

Establishing the trail alignment through funding availability may be the most critical aspect when considering an implementation strategy. Funds can be appropriated through capital improvement requests, grant applications with funding matches, as well as other means, to establish a strategy towards achieving a built system.

Private Development Coordination

Development can also aid in establishing key pieces of greenway corridors which run through privately held land. Coordination on these segments between private and public interests can and should be leveraged for the good of the greenway system, and often certain costs such as shared permitting and construction access can be split amongst parties.

PROJECT COST ESTIMATE DESCRIPTION

In addition to understanding if a project is feasible from a technical perspective, understanding project cost is an equally important component to any feasibility study. Having this information enables communities to make informed decisions about whether or not to proceed with the project and may influence funding strategies. There are several types of costs to consider when establishing a project budget including, but not limited to, the following:

Baseline Construction Cost

Baseline construction costs for the current year of 2024 were generated using quantity takeoffs and calculations based on the preliminary design concepts.

Survey / Design Services

Costs were estimated for survey and design services based on project size, design elements, anticipated permitting required, and other activities related to funding source requirements.

Escalated Construction Costs

To account for inflation, the baseline costs were projected into the future to a fiscal year of probable construction.

Project Contingency

An overall project contingency of 5% of the estimated construction cost is added to help account for unknowns that may require additional funding to address.

Construction Engineering & Inspection Services (CEI)

A requirement for many state and federal funding sources, CEI services typically range from 9% to 12% of the estimated construction cost.

IMPLEMENTATION PHASING

This study recommends implementing alternative B in phases, starting with Phase One, the segment connecting North Asheboro Park to W. Bailey Street. Phase Two could be implemented at a later date.

RECOMMENDED ROUTE CUT SHEET

Cut sheet for the recommended route are based on the four prioritized implementation phases proposed in this study. The cut sheet provided here includes descriptive project information (i.e., project length, roadway crossings, and trail connections), potential ROW impacts, and planning level cost estimates for recommended **Alignment Alternative B**.

PROJECT SNAPSHOT

Location:

Haskett’s Creek, between Vision Drive and W. Central Ave.

Jurisdictions:

City of Asheboro, Randolph County

Facility Type(s):

Shared Use Path, Low Water Concrete Bridge, Boardwalk, Buffered Shared Use Path, At-Grade Signalized Pedestrian Crossing

Main Alignment Total Length:

1.45 miles

Structures:

Two, +/-70’ low water bridge crossings over Haskett’s Creek

At-Grade Road Crossings:

One, Rapid Rectangular Flashing Beacon

Trail Connections:

North Asheboro Park
 Asheboro Park and Ride
 Asheboro Schools
 Randolph Hospice

POTENTIAL REAL ESTATE ACQUISITION

Permanent Easement Required for Main Alignment : 9 Privately Owned Parcels

PERMITTING REQUIREMENTS

NCDOT Temporary Driveway
 NCDOT Easement and Trail Agreement
 NCDOT Pedestrian Signal Agreement
 NCDEQ Erosion Control
 Railroad Easement Agreement
 FEMA 401/404

Main Alignment Estimated Construction Cost		
	2024 Baseline	2030 Build Year
Construction Cost	\$2,095,000	\$3,380,000
CEI Services		\$340,000
Survey/Design Services Cost		\$200,000
Permanent Easement Cost		\$45,000
Total Budget Estimate		\$3,965,000

* Costs associated with real estate acquisition to be determined during design process and are not included in this estimate.

**Detailed cost information is located in Appendix.



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY ALIGNMENT ALT. B

0' 1,000' 2,000'

LEGEND

Existing Conditions

- Railroad
- Roadway
- School
- Park/Conserved Land
- Water
- Asheboro City Limits
- Randolph County
- Parcel of Interest

Greenway Alternatives (Color Varies)

- Implemented Phase One
- Future Phase Two
- Future Connector Phase
- Ⓟ Potential Trailhead
- Pedestrian Bridge
- ⊕ Pedestrian Signal

Implementation Partners

Achieving success in the development of the North Asheboro Greenway relies on collaboration with community partners and stakeholders at the local, regional, and state levels. Implementation will require both individual and coordinated efforts by all project stakeholders. The following partners were identified:

- Municipal Partners
 - » City of Asheboro
 - City Council
 - Planning Board
 - City Departments
- County + Regional Partners:
 - » Randolph County
 - » Piedmont Triad Regional Planning Organization (RPO)
 - » Transit Agencies
- State Partners
 - » NCDOT Division 8
 - » NCDOT Integrated Mobility Division (IMD)
 - » NCDOT Rail Division
- Community Partners:
 - » Piedmont Legacy Trails
 - » Norfolk Southern
 - » Local Businesses
 - » Landowners
 - » Developers
 - » Randolph County Tourism Development Authority
 - » Asheboro/Randolph Chamber



Partner Roles

Key roles in the implementation of this plan are outlined on the following pages.

MUNICIPAL PARTNERS

CITY OF ASHEBORO

The City of Asheboro, as the lead planning agency, has a critical role in the implementation of the North Asheboro Greenway. Partners at the municipal level include the Asheboro City Council, Planning Board, and City departments.

CITY COUNCIL

The Asheboro City Council, which includes the Mayor, establishes policies, which are implemented and administered by City departments. The City Council holds ultimate responsibility for adopting this plan, establishing recommended policies, and supporting the necessary action steps for plan implementation. The City Council has a broader legislative role and can accept, reject, or modify the recommendations of the Planning Board. By adopting the Plan, the City Council expresses their commitment to expanding bicycle and pedestrian infrastructure and programs in Asheboro, as well as their intent to support the efforts of other key partners, including City departments and NCDOT.

PLANNING BOARD

Members of the City of Asheboro Planning Board are appointed, and they may have expertise in transportation, land use planning, architecture, engineering, or other related fields. Their role is to provide technical advice and recommendations on land use and development issues. The Planning Board is also responsible for laying the groundwork for recommended policies and providing essential support for the action steps necessary to bring the plan's recommendations to life. They also express their intent to support the efforts of other key partners, such as City departments and NCDOT.

CITY DEPARTMENTS

Various municipal departments in Asheboro take the lead or provide support for the development of active transportation projects. When leading a project, municipal staff assume the central role of coordinating project development, engaging the community, shaping policies, devising funding strategies, and overseeing maintenance.

City departments involved in the implementation of the North Asheboro Greenway include the Planning and Zoning, Cultural and Recreation Services, Engineering, Police, Public Works, Street Maintenance, and Water Resources departments. The Planning and Zoning Department oversees zoning, development services, and long-range planning. The Cultural and Recreation Services Department manages the planning, design, and maintenance of both existing and future parks, while also providing recreation services and programs. The Engineering Department provides technical assistance and services to City departments, manages utility easements, and advances public works projects. The Asheboro Police Department is responsible for enforcing laws and maintaining public safety within the City of Asheboro, and collaborating with other state and regional law enforcement agencies. The Public Works Department is responsible for the maintenance and repair of City-owned buildings, water and sewer systems, and grounds. The Street Maintenance Department is responsible for repairing and cleaning City streets and sidewalks. Finally, the Water Resources Department is responsible for ensuring clean drinking water and treating wastewater before it is discharged into Hasketts Creek.

As the project leader, the City of Asheboro has numerous key responsibilities for development and implementation of the North Asheboro Greenway. These include:

- Lead development of the North Asheboro Greenway through land and easement acquisition, design, construction, and maintenance.
- Coordinate with NCDOT, Randolph County, Piedmont Triad RPO, and private sector partners on funding opportunities and project phasing.
- Coordinate with NCDOT on STIP project development to incorporate viable greenway segments into roadway improvements.
- Amend local plans to incorporate feasibility study recommendations and final recommended route alternative.
- Develop a plan for law enforcement and emergency response activities on the greenway, including regular patrols and necessary equipment and training.

COUNTY + REGIONAL PARTNERS

RANDOLPH COUNTY

Randolph County regulates zoning and development within unincorporated areas of the County, develops long-range plans for transportation and land use, and coordinates with municipalities and state agencies on the implementation of parks, recreation, and transportation projects. The Randolph County Sheriff's Office is responsible for law enforcement in unincorporated areas of the County and works with municipal and state law enforcement agencies to maintain public safety and reduce crime. While the proposed North Asheboro Greenway lies within the jurisdiction of the City of Asheboro, Randolph County can support the project by adopting a resolution of support and considering potential connections to the greenway in future transportation and park planning efforts. Key roles of Randolph County as a project partner may include:

- Adopt a Resolution of Support for the North Asheboro Greenway Feasibility Study and amend local plans to incorporate study recommendations.
- Coordinate with the City of Asheboro and neighboring municipalities on developing connections across jurisdictional boundaries.

PIEDMONT TRIAD REGIONAL PLANNING ORGANIZATION

The Piedmont Triad Regional Planning Organization (RPO), in cooperation with NCDOT, develops long-range local and regional multi-modal transportation plans, provides a forum for public participation in the transportation planning process, and provides transportation-related information to local governments and other interested organizations and persons. The RPO also ranks and prioritizes projects submitted to the Strategic Transportation Prioritization (SPOT), which is the methodology NCDOT uses to develop the State Transportation Improvement Program (STIP). As supporting partners of this planning effort in the region, Piedmont Triad RPO is responsible for the following roles in project implementation:

- Coordinate with NCDOT to incorporate study recommendations into the City of Asheboro CTP and other local plans.
- Assist the City of Asheboro in facilitating project development and coordination between jurisdictions and non-profit partners along the North Asheboro Greenway corridor.
- Coordinate with NCDOT on STIP project development to incorporate viable greenway segments into roadway improvements.

TRANSIT AGENCIES

Transit service is provided in the study area by Piedmont Authority for Regional Transportation (PART), which runs Route 10, the Randolph County Express. This route connects the North Carolina Zoo to Downtown Greensboro, and includes a stop at a park-and-ride lot at N Fayetteville St and W Balfour Ave. Additionally, a local bus loop service is proposed on N Fayetteville St by the Regional Coordinated Area Transportation System (RCATS). Transit agencies with service in the project area can support the project by locating stops close to greenway connections and permitting bicycles on board. Key roles of PART and RCATS as project partners may include:

- Coordinate with the City of Asheboro, NCDOT, and other partners on developing a sidepath connection from the PART park-and-ride lot to the North Asheboro Greenway.
- Ensure that all existing and future transit vehicles are equipped with bike racks to accommodate bicycles on board.

STATE PARTNERS

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT)

NCDOT allocates federal and state funding and establishes policies for transportation improvements in communities across North Carolina. Every two years, NCDOT develops the STIP, which identifies projects that will receive funding during a 10-year period. NCDOT policies, such as Complete Streets provide guidance and oversight for permitting and implementing active transportation projects. The Complete Streets Policy, adopted in August 2019, requires NCDOT to consider and incorporate multimodal facilities in the design and improvement of the state's transportation projects. According to the Complete Streets Policy, if an active transportation facility is included in an adopted local plan, the municipality will not be held responsible for the cost.

As the lead state agency responsible for allocating funding, policy guidance, administering the Complete Streets Policy, and approving activities along NCDOT-maintained roadway corridors, NCDOT plays a critical role in the implementation of the North Asheboro Greenway. NCDOT divisions actively engaged in project development include Division 8, the Integrated Mobility Division (IMD), and the Rail Division. In addition, NCDOT IMD may be influential in helping Asheboro City Schools administer a Safe Routes to School Program to develop encouragement and safety programs for students walking and biking to school.

The North Asheboro Greenway largely follows the Hasketts Creek corridor, but crosses NCDOT-maintained roadways including W Balfour Ave and W Bailey St. In the current (as of this writing) 2024-2033 STIP there are no projects programmed on roadways that cross the greenway corridor, but roadway widening is proposed on N Fayetteville St in STIP projects W-5708L and R-5956A. NCDOT should continue to coordinate with the City of Asheboro, Asheboro City Schools, Randolph County, Piedmont Triad RPO, and other local stakeholders on project design and implementation to ensure roadway projects in the study area provide safe multimodal accommodations and connections to existing and planned active transportation facilities.

Coordination between partners and property owners along the corridor will also be crucial in securing land for the greenway. Infrastructure recommendations along NCDOT-maintained roadways require review and approval by NCDOT Division 8 prior to implementation. IMD may also play a role as it works with other business units of the NCDOT as well as local municipalities to develop and design active transportation projects, and the Rail Division is a partner in ensuring safety and efficient operations of railroad corridors and crossings. Specific roles of NCDOT as a project partner may include.

- Provide technical assistance to municipal, county, and regional partners on Complete Streets Policy, STI, and other state funding opportunities.
- Coordinate with City of Asheboro on any required encroachment agreements and Control of Access approval to construct trail segments within NCDOT ROW.

- Provide guidance and technical assistance on shared use path design.

COMMUNITY PARTNERS

PIEDMONT LEGACY TRAILS

Piedmont Legacy Trails is a trails collective that works to advance the vision of a regional greenway and trail network across the 12-county Piedmont Triad region, including Randolph County, the first county to sign a resolution of support for Piedmont Legacy Trails. Their responsibilities include collaborating with representatives from jurisdictions across the region to support trail planning and maintenance efforts, coordinating branding and marketing, and elevating the Piedmont Triad region as a trails destination. Key responsibilities of Piedmont Legacy Trails and other non-profit partners may include:

- Coordinate with the City of Asheboro, Randolph County, and regional agencies on developing funding opportunities, project phasing, and building public support for the North Asheboro Greenway.
- Provide guidance and technical assistance on trail design standards.

NORFOLK SOUTHERN

Norfolk Southern is the owner of the railroad tracks and the corresponding right-of-way that parallel the North Asheboro Greenway corridor, serving as a vital freight transportation link for industrial users in Asheboro. The railroad assumes a role in fostering secure mobility throughout its infrastructure in the City. To uphold a commitment to safety, Norfolk Southern upkeeps crossing systems, ensuring efficient operations and the ability of the community to cross its tracks to reach destinations including North Asheboro Middle School and Balfour Elementary School. Furthermore, Norfolk Southern is a crucial partner in the development of secure railroad crossings that accommodate bicyclists and pedestrians. Partner roles of Norfolk Southern include:

- Coordinate with the City of Asheboro, Asheboro City Schools, NCDOT, and other project partners on potential impacts of nearby greenway development on railroad infrastructure, and potential future greenway connections across the railroad tracks at W Bailey St.
- Provide guidance and technical assistance on railroad crossing design standards.

LOCAL BUSINESSES

Local businesses near the North Asheboro Greenway may serve as key destinations and potential generators of bicycle and pedestrian travel along the corridor. As a result, they may have the resource capacity to advance phases of the greenway project and make the case for increased investment in active transportation infrastructure within the region. Local businesses can also offer incentives for employees and customers to use the greenway through commuter or customer benefits programs.

- Coordinate with the City of Asheboro, NCDOT, and other partners along the project corridor to develop planned greenway segments and connector trails.
- Promote greenway development and usage within the community and advocate for trail connections.

LANDOWNERS

Landowners play a key role in the development of the North Asheboro Greenway where it crosses privately-owned land. Supportive landowners adjacent to the project corridor may be asked to consider providing or selling an easement to permit construction of the greenway.

- Coordinate with the City of Asheboro, NCDOT, and other partners along the project corridor to provide easements or property for planned greenway segments and connector trails.
- Coordinate with the City of Asheboro, NCDOT, and other partners along the project corridor to identify, design, and implement access control measures.

DEVELOPERS

Private developers can have a significant impact on the development of bicycle and pedestrian facilities within a community. They are often required by municipal ordinances such as the Subdivision Ordinance to construct planned sidewalks, sidepaths, greenways, and on-street bicycle facilities within the municipal limits. It is essential for City planning staff to collaborate with developers, offering guidance on requirements and processes, as well as the design standards for both bicycle and pedestrian facilities. Developers should be prepared to include these facilities or provide easements in future projects, which will contribute to the expansion of Asheboro's active transportation network. Key roles of developers include the following:

- Coordinate with the City of Asheboro, NCDOT, and other partners along the project corridor to develop planned greenway segments and connector trails as a part of new residential or commercial developments.

RANDOLPH COUNTY TOURISM DEVELOPMENT AUTHORITY

The Randolph County Tourism Development Authority (TDA), also known as the Heart of North Carolina Visitors Bureau and Visit the Heart of NC, works to promote tourism and economic growth within Randolph County. The TDA operates visitor centers on Interstates 73/74 in Seagrove. Key roles of the TDA include the following:

- The Randolph County TDA should partner with City staff to explore economic development and tourism opportunities along the North Asheboro Greenway.

ASHEBORO/RANDOLPH CHAMBER

The Asheboro/Randolph Chamber works to promote economic growth and quality of life within Asheboro and Randolph County. The Chamber is headquartered in Downtown Asheboro and advocates for infrastructure development, community health and wellbeing, and tourism and recreation. Key roles of the Chamber include the following:

- The Asheboro/Randolph Chamber should partner with City staff to explore economic development and tourism opportunities along the North Asheboro Greenway.

Action Plan

The following table provides a summary of action steps for the City of Asheboro and project partners to implement the North Asheboro Greenway over a 10-year planning horizon. Estimated timeframe durations for the steps are categorized into short-term, medium-term, long-term, and ongoing steps. These categories are described below.

TIME FRAME	EXPLANATION
Short-Term	The action item could be initiated in the near future within 2-4 years.
Medium-Term	The action item could be initiated within the next 4-8 years.
Long-Term	The action item could be initiated within the next 8+ years.
Ongoing	The action item does not have an end date. It may be currently under progress and will continue to be implemented.

TASK #	ACTION	LEAD	PARTNERS	TIME FRAME
1	Adopt the <i>North Asheboro Greenway Feasibility Study</i> . This action allows the study to become an official planning document and demonstrates an intent to support project implementation.	City of Asheboro City Council	Piedmont Triad RPO, Randolph County, NCDOT IMD, NCDOT Division 8	Short-Term
2	Update the Asheboro Comprehensive Transportation Plan (CTP) to include study recommendations and the preferred alignment for the North Asheboro Greenway.	NCDOT Transportation Planning Division, City of Asheboro, Piedmont Triad RPO	NCDOT IMD, NCDOT Division 8, Randolph County	Short-Term
3	Adopt a resolution of support for the North Asheboro Greenway.	Randolph County Board of Commissioners, Piedmont Legacy Trails	City of Asheboro, Local community groups and advocacy organizations	Short-Term
4	Coordinate with City of Asheboro Cultural and Recreation Services and park users on the design of the greenway through North Asheboro Park to connect to existing walking paths and minimize impacts to the disc golf course.	City of Asheboro	Randolph County, Local community groups and advocacy organizations	Short-Term
5	Coordinate with NCDOT Division 8 on the design of the project corridor. Design plans should be guided by the recommendations developed through this study.	City of Asheboro, NCDOT Division 8	NCDOT IMD, Randolph County, Piedmont Triad RPO	Short-Term

TASK #	ACTION	LEAD	PARTNERS	TIME FRAME
6	Coordinate with PART and RCATS on a sidepath connection to the park-and-ride lot at W Balfour Ave to support multimodal travel on existing and planned bus service.	City of Asheboro, PART, RCATS	NCDOT IMD, NCDOT Division 8, Randolph County, Piedmont Triad RPO	Short-Term
7	Develop a grant procurement and fundraising plan using cost estimates developed through this study to identify steps in securing funding for project segments. Funding opportunities include grants from state and federal partners and private foundations; establishing a fundraising program; local sources including capital improvement programs, bonds, and developer-built trails.	City of Asheboro	Randolph County, NCDOT IMD, NCDOT Division 8, Piedmont Triad RPO	Short-Term
8	Develop a community engagement plan to guide project development of the North Asheboro Greenway.	City of Asheboro	Randolph County, NCDOT IMD, NCDOT Division 8, Piedmont Triad RPO	Short-Term
9	Develop a plan for law enforcement agencies and emergency response activities on the greenway, including access points, regular patrols, and necessary equipment and training.	City of Asheboro, Randolph County	NCDOT IMD, NCDOT Division 8, Local community groups and advocacy organizations	Short-Term
10	Develop a branding and wayfinding plan for the North Asheboro Greenway.	City of Asheboro	Randolph County, NCDOT IMD, NCDOT Division 8, Piedmont Legacy Trails	Short- to Medium-Term
11	Coordinate with PART and RCATS on existing and planned bus service to ensure transit accessibility to greenway users by installing bicycle racks on transit vehicles.	City of Asheboro, PART, RCATS	NCDOT IMD, NCDOT Division 8, Randolph County, Piedmont Triad RPO	Short- to Medium-Term
12	Consider future modifications to land development and subdivision ordinances to require dedication of easements for or construction of planned greenways and other bicycle and pedestrian facilities and connections.	City of Asheboro	NCDOT Division 8, NCDOT IMD, Randolph County	Medium- to Long-Term

TASK #	ACTION	LEAD	PARTNERS	TIME FRAME
13	Coordinate with Asheboro City Schools and NCDOT on potential future school connections to the North Asheboro Greenway from North Asheboro Middle School, Balfour Elementary School, and Early Childhood Development Center.	City of Asheboro	NCDOT IMD, NCDOT Division 8, NCDOT Rail Division, Randolph County, Norfolk Southern	Medium- to Long-Term
14	Develop a formalized Maintenance Plan for the North Asheboro Greenway that outlines maintenance roles and responsibilities. Annual budgets should also set aside funding for maintenance activities.	City of Asheboro	Randolph County, NCDOT IMD, NCDOT Division 8	Medium- to Long-Term
15	Coordinate with NCDOT and Piedmont Triad RPO on prioritizing the North Asheboro Greenway corridor to submit through the NCDOT SPOT submittal process.	City of Asheboro, NCDOT IMD, NCDOT Division 8, Piedmont Triad RPO,	Randolph County	Ongoing
16	Coordinate with NCDOT Division 8 on future STIP projects proposed along or across the project corridor to ensure that the greenway may be developed through future roadway improvement projects.	City of Asheboro, Piedmont Triad RPO, NCDOT Division 8, NCDOT IMD	Randolph County	Ongoing
17	Develop a landowner outreach program to coordinate with developers and landowners as development opportunities arise along the project corridor. The program should include strategies for acquiring easements from willing landowners and working with developers to coordinate access to the trail and/or build planned segments that may be constructed outside of NCDOT ROW.	City of Asheboro	NCDOT IMD, NCDOT Division 8, Randolph County, Piedmont Triad RPO	Ongoing
18	Coordinate with developers to construct or dedicate easements for planned greenways and other bicycle and pedestrian facilities during the rezoning process.	City of Asheboro	NCDOT Division 8, NCDOT IMD, Randolph County	Ongoing
15	Coordinate with community groups and advocacy organizations to strengthen regional support for the North Asheboro Greenway.	City of Asheboro	Randolph County, Piedmont Legacy Trails, Local community groups and advocacy organizations	Ongoing

TASK #	ACTION	LEAD	PARTNERS	TIME FRAME
19	Coordinate with the Randolph County Tourism Development Authority and Asheboro/Randolph Chamber to explore tourism and economic development opportunities along the North Asheboro Greenway.	City of Asheboro	Asheboro/Randolph Chamber, Randolph County Tourism Development Authority, Randolph County, Piedmont Triad RPO	Ongoing

Funding Resources

The Bipartisan Infrastructure Law (BIL) authorized \$1.2 trillion for transportation and infrastructure spending, with \$550 billion of that figure going toward new investments and programs, while the Inflation Reduction Act (IRA) provides \$700 billion in incentives, grants, and loans to support new infrastructure investments in the areas of clean energy, transportation, and the environment. These historic investments in infrastructure provide new and expanded opportunities for the planning, design, and construction of the North Asheboro Greenway project. There are several Federal, state, local, and private funding programs that have been instrumental in the successful development of bicycle and pedestrian networks in North Carolina communities and can be leveraged to provide the necessary funding to plan, design, and construct the North Asheboro Greenway. The City, Piedmont Triad RPO, and County may want to pursue technical assistance grants from the Rivers, Trails, and Conservation Assistance Program offered by the National Park Service. This grant in particular can be used to aid in selection of grant opportunities and preparation of applications.

FEDERAL FUNDING OPPORTUNITIES

The Federal government provides significant funding for active transportation which it distributes through Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs) as well as through discretionary grant programs.

Federal funding opportunities that Asheboro can pursue to construct the North Asheboro Greenway include a Safe Streets for All (SS4A) implementation grant, the Active Transportation Infrastructure Investment Program (ATIIP), Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Carbon Reduction Program, and the Recreational Trails Program.

STATE FUNDING OPPORTUNITIES

There are several state programs to support the development and construction of multi-use paths, greenways, sidewalks, bike lanes and improve crossings. NCDOT, North Carolina Department of Natural and Cultural Resources (NCDNCR), and North Carolina Department of Commerce (NCDOC) are the primary state agencies that fund bicycle and pedestrian planning, infrastructure, and programs. The North Carolina Department of Health and Human Services (DHHS), North Carolina Department of Environmental Quality (NCDEQ), and the North Carolina Department of Agriculture administer discretionary grant programs focusing on public health and community development, when funding is available.

State funding opportunities that Asheboro can pursue to construct the North Asheboro Greenway include the Great Trails Program Fund and Parks and Recreation Trust Fund (PARTF). The City can work with the RPO to submit the North Asheboro Greenway project for state funding through the NCDOT Strategic Transportation Prioritization (SPOT) process in a future submittal period.

LOCAL FUNDING OPPORTUNITIES

While Federal and even state funding can support high-cost projects, local funding is often ideal for supporting the delivery of specific components of greenway projects or as a match for Federal funding programs. Municipalities often plan for funding of bicycle and pedestrian facilities through their Capital Improvement Program (CIP). Local funding is often necessary to supplement Federal and state funding.

There are a few local funding and implementation opportunities that the Asheboro can pursue, including Capital Improvement Program (CIP) funds, municipal bonds, and developer-built trails.

Developing Public/Private Partnerships with employers and other private entities could also help advance the project.

Please see **Appendix A** for a comprehensive list of funding opportunities.

FEDERAL FUNDING PRIORITIES

To compete for discretionary grant programs, it is important to align with the priorities and goals of the awarding agency. The North Asheboro Greenway involves various elements that enhance its competitiveness for discretionary funding and align with the merit and evaluation criteria for funding programs outlined in this memorandum.

EQUITY

USDOT discretionary grant programs under the current administration aim to reduce transportation-related disparities and adverse community and health impacts. The Justice40 initiative embodies this commitment to equity. Justice40 mandates that 40% of the overall benefits of certain Federal investments, including clean transportation, flow to disadvantaged communities that are marginalized, underserved, or overburdened by pollution. Several funding programs have less stringent or no match requirements for projects located in disadvantaged communities. The North Asheboro Greenway aligns with this priority by serving census tracts that have higher than median Transportation Disadvantage Index (TDI) scores and provide connectivity for tracts identified as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST).

SAFETY

One of USDOT's strategic goals for FY 22 to FY 26 is to make the transportation system safer for all people and advance a future without transportation-related serious injuries and fatalities. The National Roadway Safety Strategy (NRSS) outlines a comprehensive approach that communities can take to significantly reduce injuries and deaths on roadways, using a Safe System Approach that supports safer roads, safer speeds, safer people, safer vehicles, and post-crash care. The North Asheboro Greenway aligns with this priority by providing a separated facility and safe road and rail crossings to improve multimodal access to daily destinations, including North Asheboro Park, schools, and several residential communities.

SUSTAINABILITY AND RESILIENCY

Climate change presents a significant and growing risk to transportation infrastructure. USDOT is working to tackle the climate crisis by ensuring that transportation plays a significant role in the solution. This includes substantially reducing greenhouse gas emissions and transportation-related pollution and building more resilient and sustainable transportation systems to benefit and protect communities from the impacts of climate change. The North Asheboro Greenway aligns with this priority by reducing greenhouse gas emissions through increased bicycle and pedestrian travel and providing opportunities to improve water quality and improve stormwater management through the design process.

ECONOMIC COMPETITIVENESS AND OPPORTUNITY

This priority aims to grow an inclusive and sustainable economy and invest in transportation systems to provide American workers and businesses reliable and efficient access to resources, markets, and good-paying jobs. Several Federal discretionary grant programs aim to promote greater public and private investments in land-use productivity, including rural main street revitalization or locally driven density decisions that support equitable commercial and mixed-income residential development. The North Asheboro Greenway aligns with this priority by connecting industrial employment centers and residential areas, including new apartments proposed adjacent that may include affordable housing.

MOBILITY AND ACCESSIBILITY

This priority aims to improve mobility and community connectivity and address gaps in the existing network, remove physical barriers for individuals by reconnecting communities to direct, affordable transportation options; and include transportation features that increase accessibility for non-motorized travelers. Projects that improve mobility are viewed favorably for several transportation grant programs. The North Asheboro Greenway aligns with this priority by improving bicycle and pedestrian connectivity to existing transit routes and a park and ride lot, thereby enhancing first- and last-mile transit connectivity for residential neighborhoods along the corridor.

INNOVATION AND TRANSFORMATION

USDOT is investing in purpose-driven research and innovation to meet the challenges of the present and modernize a transportation system of the future that serves everyone today and in the decades to come. There are opportunities to incorporate innovative stormwater infrastructure such as green stormwater infrastructure and to use innovative construction methods such as top-down construction in environmentally sensitive areas.

POWER OF PARTNERSHIPS

One critical step in obtaining funding for the North Asheboro Greenway is building consensus and developing partnerships. Strong partnerships and broad support are a cornerstone of successful grant applications and are often invaluable to project teams for the provision of data and information that supports grant applications, sources of match funding, demonstration of broad-based community support to agencies awarding funding, and the provision of technical assistance during project development. Potential partners and supporters for the North Asheboro Greenway may include, but are not limited to:

- State agencies including NCDOT, NC Department of Natural and Cultural Resources, NC Department of Commerce, NC Wildlife Resources Commission, NC Department of Environmental Quality, and NC Department of Health and Human Services
- Piedmont Triad Regional Council
- Randolph County Tourism Development Authority
- Norfolk Southern
- BikeWalk NC
- Asheboro/Randolph Chamber of Commerce
- Randolph County Cycling Club
- Healthy Communities Randolph County
- Great Trails State Coalition
- Piedmont Legacy Trails
- Developers for new developments along the corridor

Safety

While it is important for a greenway or trail to be connected, functional, and scenic, it must be safe above all else to attract and retain users and serve its intended purpose. Personal safety, both real and perceived, heavily influences a greenway user's decision to use a facility and a community's decision to embrace a greenway. Design that encourages safety must address both perceived safety issues (i.e. feeling safe or fear of crime) and actual safety threats (i.e. infrastructure failure and criminal acts). Greenway safety can be achieved through a variety of strategies including design, equity, maintenance, enforcement, and activation.

DESIGN

Safety is a key factor influencing greenway design, with numerous design strategies available to create a facility that looks and feels both comfortable and safe. Crime Prevention Through Environmental Design (CPTED) is a multidisciplinary approach to design of public space that incorporates numerous strategies to discourage crime. Some considerations include maximizing visibility while on the trail and minimizing hidden areas, including lighting at parking areas and trailheads, maintaining a clear zone of at least 10 feet between the greenway and wooded areas, establishing a clear separation between private property and the greenway, and placing clearly marked informational and directional signage along the greenway. It is also important that access points along the trail have clear emergency exit routes and contact information.

EQUITY

Applying an equity lens to the design of greenways acknowledges the different ways people experience public space and the potential for discrimination based on many factors, including but not limited to age, race, gender, physical ability, and socioeconomic status. Intentional public engagement with disadvantaged populations can inform the design, operations, and programming of a greenway to ensure everyone feels safe and welcome, cultivating a sense of collective ownership over the space and increasing its use.

MAINTENANCE

Physical obstructions to the greenway, including cracked or heaved pavement, tree root damage, overgrowth, and debris accumulation, can pose safety hazards for greenway users and impair accessibility. Establishing regular and effective maintenance practices to keep the greenway clear and accessible helps prevent slips and falls for trail users. Additional guidance on maintenance is included below.

ENFORCEMENT

The presence of law enforcement can be a deterrent to crime on greenways and trails and can help some greenway users feel safe while on the trail. Local law enforcement and emergency personnel should be prepared, trained, and able to access the greenway to respond in the event of an emergency, and should be included in the greenway design process. The trail and its access points should be designed to accommodate emergency response vehicles from the Asheboro Police Department and other agencies. Emergency call boxes, cameras, and lighting can be installed to improve user safety on the trail and at trailheads. Specialized vehicles, equipment, and training can be provided to ensure enforcement agencies are well-prepared to respond and have a plan for regular patrols on the greenway.

ACTIVATION

The concept of “eyes on the street,” coined by Jane Jacobs, holds that the presence of other people in a public space creates a natural surveillance and crime prevention network, helping greenway users feel more safe while on the trail. Increasing the usage of greenways through activation and programming strategies increases the visibility of the trail and its users, contributing to a safety in numbers effect. Holding regular events and festivals to draw people to the trail, supporting social programs such as neighborhood watch groups and fitness clubs, and providing cultural programming can help foster a sense of place and usage, discouraging criminal activity and improving safety for all.



Including lighting at key places on the greenway, including trailheads, parking areas, and underpasses, can improve visibility and safety.

Maintenance

The long-term success of the greenway is contingent upon effective maintenance practices. Consistently maintaining greenways and trails has the effect of reducing costs over time and enhancing the trail user experience compared to neglected paths that require costly rehabilitation efforts. Furthermore, proper maintenance practices extend the lifespan of greenways, foster positive relationships with neighboring landowners, and cultivate a strong sense of community stewardship.

To achieve these benefits, this plan advocates for a comprehensive approach to maintenance, centered around the development of a well-defined maintenance plan. The maintenance plan should prioritize funding and allocate responsibilities among different jurisdictions and organizations involved. It is imperative that this plan be reviewed and updated on an annual basis to incorporate lessons learned, adapt to evolving operational policies and standards, and align with changing maintenance goals.

Key considerations for a greenway maintenance plan include:

- Understanding of the anticipated needs of the greenway system and assessing the capacity of staff to meet those maintenance needs.
- Development of a facility inventory to understand the routine and substantial maintenance needs of greenway signs, amenities, bridges, culverts, and pavement conditions.
- Estimation of baseline maintenance costs accounting for necessary maintenance activities such as mowing, edging, landscaping, trash removal, debris clearing, lighting, drainage, seasonal maintenance needs, sealcoating, repaving, patching, and bridge repair.
- Consideration of labor costs based on which maintenance tasks can be completed in-house versus contracted out.
- Assessment of available technologies to collect data on facility conditions and facilitate maintenance functions.
- Development of a methodology to prioritize annual maintenance needs based on facility conditions and available funding.
- Consideration of emergency services including designated ingress/egress locations, mile-marker signage along the facility for location identification, and emergency notification systems.



Regular maintenance is critical to a successful greenway

BUDGETING FOR ROUTINE GREENWAY MAINTENANCE

Some of the factors which greenway operators should consider when budgeting for future trail maintenance could include:

- Trail surface material
- Number of visitors
- Number and type of amenities like bathrooms, trash cans, lawns, or special plantings
- Number and length of structures such as bridges or boardwalks
- Frequency of flooding events

According to a 2022 study by the Rails to Trails Conservancy (RTC), the maintenance costs of multi-use trails have not been well documented. Greenways in suburban and rural areas with asphalt or concrete pavement reported annual per mile maintenance costs of between \$679 for a trail with low amenities and volunteer maintenance support to as much as \$7,819 for a trail with a large number of visitors, restrooms, and dedicated staff maintenance support.

SAMPLE MAINTENANCE TASK	TASK TYPE	RECOMMENDED FREQUENCY
Tree / Bush trimming	Routine	On-Going / Annually
Mowing		
Trail sweeping		
Signage / Map / Kiosk Updates / Replacement		
Trash removal / Litter clean-up		
Planting, pruning, landscaping		
Flooding repairs		
Repainting / Restriping		
Minor patching		
Minor bridge repairs		
Lighting replacement		
Bollard locks / Replacement		
Pest management		
Greenway and sidepath sealcoating	Minor Repairs	Every 5 Years
Greenway and sidepath resurfacing:	Major Reconstruction	
• Asphalt		Every 10-15 Years
• Concrete		Every 20 Years
• Boardwalk		Every 10 Years (longer for concrete decking)
Complete greenway and sidepath replacement, regrading, and resurfacing	Major Reconstruction	Every 20 Years

Source: Best Practices in Trail Maintenance: A Manual by the Ohio River Greenway, Purdue University



APPENDICES

Appendix A: Funding Resources

Appendix B: Design Resources

Appendix C: Community Engagement

Appendix D: Cost Estimates

Appendix A: Funding Resources

The Bipartisan Infrastructure Law (BIL) authorized \$1.2 trillion for transportation and infrastructure spending, with \$550 billion of that figure going toward new investments and programs. Additionally, the Inflation Reduction Act (IRA) provides \$700 billion in incentives, grants, and loans to support new infrastructure investments in the areas of clean energy, transportation, and the environment. These historic investments in infrastructure provide new and expanded opportunities to fund the construction of the North Asheboro Greenway. The following Federal, state, local, and private funding programs have been instrumental in the successful development of bicycle and pedestrian networks in North Carolina communities. This section includes information on funding programs known at the time of publication; funding amounts, cycles, and programs may change over time. All discretionary grant programs are reimbursement-based unless otherwise stated.

FEDERAL FUNDING OPPORTUNITIES

North Carolina communities have partnered with Federal agencies to obtain funding for the design and construction of multi-use paths, greenways, sidewalks, bike lanes, and improved crossings. The Federal government provides significant funding for active transportation which it distributes through Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs) as well as through discretionary grant programs. The City of Asheboro falls within the Piedmont Triad Rural Planning Organization boundaries.

The BIL authorizes transportation funding for highway, transit, rail, bicycle and pedestrian, and safety programs and infrastructure through fiscal year (FY) 2026. Federal Highways Administration (FHWA) administers BIL funding for surface transportation projects. FHWA distributes funding to the North Carolina Department of Transportation (NCDOT) and to Local Government Agencies (LGAs) through the Locally Administered Projects Program (LAPP). Communities wishing to access Federal funding must submit their candidate projects to their MPO or RPO, who then enter them into the NCDOT's Strategic Transportation Investment (STI) Mobility Formula. This formula ranks projects and identifies those for funding in the State Transportation Improvement Program (STIP). These funds require a 20% match from the LGA. Federal transportation funds for bicycle and pedestrian projects are primarily distributed through four programs: Transportation Alternatives (TA), Congestion Mitigation & Air Quality (CMAQ)*, Recreational Trails Program, (RTP), and Highway Safety Improvement Program (HSIP).

** Since Randolph County is not located in maintenance or non-attainment areas, this source of funding is not directly available for use by this Project. However, NCDOT may transfer CMAQ funds to other state apportionments, including Surface Transportation Block Grant Program, Highway Safety Improvement Program, Carbon Reduction Program, and Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT).*

STATE + REGIONALLY ADMINISTERED FEDERAL FUNDING

Transportation funding, apportioned by Congress, using enabling legislation such as the former Fixing America's Surface Transportation (FAST) Act and current BIL, flows from USDOT and its departments to State DOTs and both rural and metropolitan planning organizations. Federal funding often follows a formula, which provides USDOT with a blueprint for distribution of funding amongst the states. States and RPOs/MPOs must distribute allocated funds.

TRANSPORTATION ALTERNATIVES (TA)

Transportation Alternatives (TA) provides Federal funds for community-based projects that expand travel choices and enhance the transportation experience by integrating modes and improving the

cultural, historic, and environmental aspects of our transportation infrastructure. In North Carolina, NCDOT administers TA funds and allocates funding to Program-eligible projects through STI. NCDOT has created a bicycle and pedestrian scoping guidance document for local governments that have received TA funding. The Bike/Ped Project Scoping Guidance for Local Governments (link below) provides an overview of the four scoping tools used for locally managed, Federally-funded transportation projects in North Carolina. The document provides guidance on the project delivery process, scoping, identifying project risks, and project cost estimation.

- **Total Funding:** \$7.2 billion (FY22-26)
- **Application Deadline/Cycle:** Varies based on MPO/RPO administering funding
- **Project Awards:** minimum \$100,000
- **Match Requirements:** 20%
- **Eligible Applicants:** MPOs, RPOs, local governments, nonprofits, tribal governments, regional transportation authorities, transit agencies
- **Eligible Projects:** Construction/planning/design of on-road or off-road trails for bicyclists and pedestrians; infrastructure projects for improving non-driver access to public transportation and enhanced mobility; community improvement activities; refurbishment of historic transportation facilities such as the conversion and use of abandoned railroad corridors for trails; recreational trails program; environmental mitigation; streetscape improvements; safe routes to school projects.

https://www.fhwa.dot.gov/environment/transportation_alternatives/

<https://connect.ncdot.gov/projects/BikePed/Documents/BikePed%20Project%20Scoping%20Guidance%20for%20Local%20Governments.pdf>

RECREATIONAL TRAILS PROGRAM (RTP)

The BIL reauthorized the RTP in FYs 22-26 as a set aside from the Transportation-Alternatives Program under the Surface Transportation Block Grant. The program funds state agencies to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The allocation of the total RTP budget to each state is based on a formula, mandated by law, which apportions half of the total funds equally among all states with the other half distributed in proportion to the estimated amount of non-highway recreational fuel use in each state. In North Carolina, NCDOT's Division of Parks and Recreation and State Trails Program manages these funds with a goal of helping citizens, organizations, and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking, and horseback riding to river trails and off-highway vehicle trails.

- **Total Annual Funding:** \$1.49 million (FY23)
- **Application Deadline/Cycle:** Annual – February
- **Project Awards:** \$10,000 to \$100,000
- **Match Requirement:** 25%
- **Eligible Applicants:** Local Governments, government agencies, nonprofit agencies
- **Eligible Projects:** New trail/greenway construction or renovation; trailhead or trail markers; purchase of tools to construct/renovate greenway; land acquisition for trails; planning, legal, environmental, and permitting costs (up to 10% of grant amount)

Due to the high cost of construction relative to the available project awards through RTP, this funding could support land acquisition or the addition of trail markers along the North Asheboro Greenway.

<https://trails.nc.gov/trail-grants/apply-grant>

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The purpose of the North Carolina Highway Safety Improvement Program (HSIP) is to provide a continuous and systematic procedure that identifies and reviews specific traffic safety concerns throughout the state. The goal of the HSIP process is to reduce the number of traffic crashes, injuries, and fatalities by reducing the potential for these incidents on public roadways. USDOT provides this core Federal aid program through annual allocations, which vary from year to year. States must spend at least 15% of HSIP funds on biking and walking safety when bicyclist and pedestrian fatalities are 15% or more of traffic fatalities; at the time of this publication bicyclist and pedestrian fatalities in North Carolina exceed this threshold. NCDOT uses a set of criteria called safety warrants to identify locations that need improvements. NCDOT then evaluates these locations, designated as potentially hazardous locations, using crash analyses, field investigations, and other tools to develop safety recommendations and implement countermeasures.

<https://safety.fhwa.dot.gov/hsip/reports/pdf/2020/nc.pdf>

<https://connect.ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx>

https://www.nhtsa.gov/sites/nhtsa.gov/files/2023-10/NC_FY24HSP-tag.pdf

LAND AND WATER CONSERVATION FUND (LWCF)

Congress established the Land and Water Conservation Fund in 1964 to create parks and open space; protect wilderness, wetlands, and refuges; preserve habitat; and enhance outdoor recreational opportunities. In 2020, the Great American Outdoors Act included a provision to permanently fund the LWCF using royalties from offshore oil and natural gas. Sixty percent of LWCF funding is allocated to the National Park Service, and the remaining forty percent of the funds are allocated to states and local governments according to a national formula for outdoor recreation development and land acquisition by local governments and state agencies. In North Carolina, the program is administered by the Department of Natural and Cultural Resources. A project must be located on a single site.

- **Application Deadline/Cycle:** Annual
- **Project Awards:** up to \$500,000
- **Match Requirements:** 50%
- **Eligible Applicants:** North Carolina counties and incorporated municipalities, Federally recognized Native American tribes
- **Eligible Projects:** LWCF grants can be used to acquire land for a public park; to develop outdoor recreation and support facilities; or a combination of both.

NORTH CAROLINA LAND & WATER FUND (NCLWF)

Created by the General Assembly in 1996, the NCLWF, formerly known as Clean Water Management Trust Fund, aims to conserve North Carolina's streams, rivers, and open space. This funding, distributed through the North Carolina Department of Natural and Cultural Resources (NCDNCR), improves water quality, sustains ecological diversity, and protects open space and cultural resources by funding projects to acquire lands, construct trails, preserve open space, restore the habitat for fish, wildlife, and other species, and enhance the filtering of stormwater runoff to reduce pollutants from entering water supplies. The NCLWF also funds mini grants of up to \$50,000 for transaction, property management, and stewardship costs associated with the donation of property or a permanent conservation agreement; applications for mini-grants are reviewed three times a year. All NCLWF funded projects must sign a permanent conservation agreement.

- **Application Deadline/Cycle:** February/March - Annual
- **Project Awards:** up to \$500,000

- **Match Requirements:** Not required, but encouraged for scoring
- **Eligible Applicants:** North Carolina counties and incorporated municipalities
- **Eligible Projects:** restoration of degraded lands and waterbodies, land acquisition, innovative stormwater, and planning projects

<https://nclwf.nc.gov/apply>

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

The Community Development Block Grant Program, authorized by Title I of the Housing and Community Development Act of 1974, provides annual grants on a formula basis to states, cities, and counties to develop viable urban communities by providing decent housing, suitable living environments, and expanding economic opportunities for low- and moderate-income persons. CDBG funds are allocated at the Federal level by HUD and at the state level by the NC Department of Commerce. All municipalities are eligible to receive State CDBG funds except for entitlement communities, which receive funds directly from HUD. Randolph County is eligible to receive State CDBG funding.

https://www.hud.gov/program_offices/comm_planning/communitydevelopment

CARBON REDUCTION PROGRAM

The BIL establishes the Carbon Reduction Program (CRP), which provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO₂) emissions from on-road highway sources. Federal funds for the Carbon Reduction Program flow to NCDOT then through the MPOs/RPOs through a competitive call for projects. A state may transfer up to 50% of CRP funds to any other apportionment of the state including National Highway Performance, Program, Surface Transportation Block Grant Program, Highway Safety Improvement Program, Congestion Mitigation and Air Quality Improvement (CMAQ) Program, National Highway Freight Program, and Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Formula Program. Title 23 of US code requires each state to apportion 65% of CRP funds based on population and can choose how to obligate the remaining 35%.

- **Total Funding:** \$6.4 billion (FY22-26)
- **Application Deadline/Cycle:** March – Annual
- **Project Awards:** minimum \$100,000
- **Match Requirements:** 20%
- **Eligible Applicants:** Municipalities, county governments, and public transit agencies
- **Eligible Projects:** projects that reduce transportation emissions, including transportation alternatives such as the planning, design, and construction of on-road and off-road trail facilities

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

<https://www.ptrc.org/services/regional-planning/transportation/clean-transportation>

SAFE ROUTES TO SCHOOL (SRTS)

Safe Routes to School (SRTS) is an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school. The goals of the program are to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make bicycling and walking to school safer and more appealing, thereby encouraging a healthy and active lifestyle from an early age; and to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution within the area surrounding (approximately 2

miles) primary and middle schools (grades K-8). The Bipartisan Infrastructure Law (BIL) codified SRTS at 23 U.S.C. 208 and expanded eligibility to kindergarten through 12th grade. Two types of projects are eligible for funding – infrastructure projects (engineering improvements) and non-infrastructure activities (such as enforcement, education, encouragement, and program evaluation activities). For Infrastructure projects, SRTS projects can be funded through TA Set-Aside funding. In North Carolina, SRTS non-infrastructure activities funds are administered by NCDOT’s Integrated Mobility Division through a competitive application process to fund projects ranging from one to three years.

- **Application Deadline/Cycle:** February – Annual
- **Project Awards:** \$50,000 to \$500,000 per project.
- **Match Requirements:** IMD will fund as many projects as possible at 100% of the cost. However, it is anticipated that some applicants may be asked to provide a local match if there is a significant demand for available program funds.
- **Eligible Applicants:** Municipalities, county agencies, Regional Transportation Authorities and Regional Transportation Planning Organizations, Natural Resource or Public Land Agency, School Districts, Tribal Governments, and nonprofits organizations that oversee the administration of local transportation safety programs
- **Eligible Projects:** Activities consisting of Education, Encouragement and Evaluation within 2 miles of a public or private K-12 school

DISCRETIONARY GRANTS

The competitive, discretionary grant programs outlined in this section can provide millions of dollars toward the North Asheboro Greenway’s planning, design, and construction costs. These programs are competitive and require applicants to submit forms, project narratives, and benefit-cost analyses (BCAs) for construction projects; and encourage the submittal of supplemental materials and letters of support. The completion of a BCA involves the quantification and comparison of a project’s expected costs and benefits according to USDOT-determined method. The result is a Benefit-Cost Ratio (BCR). USDOT considers a project to be cost effective when the BCR is 1.0 or greater. Transparency in the assumptions and data used to complete the analysis, and documentation of a data sources in the BCA is essential to receiving construction funding from discretionary programs. Federal discretionary grant applications should emphasize how the project aligns with a program’s merit criteria as well as the following USDOT priorities and strategic goals:

- **Equity:** USDOT aims to reduce inequities across transportation systems and the communities they affect, and to support and engage people and communities to promote safe, affordable, accessible, and multimodal access to opportunities and services while reducing transportation-related disparities, adverse community impacts, and health effects. Justice40 embodies this commitment to equity. Justice40 mandates that 40% of the overall benefits of certain Federal investments, including climate change and clean transportation, flow to disadvantaged communities that are marginalized, underserved, or overburdened by pollution.
- **Safety:** One of USDOT’s strategic goals for FY 22 to FY 26 is to make the transportation system safer for all people and advance a future without transportation-related serious injuries and fatalities. The National Roadway Safety Strategy (NRSS) outlines a comprehensive approach that communities can take to significantly reduce injuries and deaths on roadways, using a Safe System Approach that supports safer roads, safer speeds, safer people, safer vehicles, and post-crash care.
- **Climate and Sustainability:** Climate change presents a significant and growing risk to transportation infrastructure. USDOT is working to tackle the climate crisis by ensuring that transportation plays a significant role in the solution. This includes substantially reducing greenhouse gas emissions and transportation-related pollution and building more resilient and sustainable transportation systems to benefit and protect communities.
- **Innovation and Transformation:** USDOT is investing in purpose-driven research and innovation to meet the challenges of the present and modernize a transportation system of the future that

serves everyone today and in the decades to come.

- **Economic Strength and Global Competitiveness:** This priority aims to grow an inclusive and sustainable economy, invest in the transportation system to provide American workers and businesses reliable and efficient access to resources, markets, and good-paying jobs. One of the priorities of the Federal government is the promotion of diversity and inclusion in the workforce. Executive Order 14035 on Diversity, Equity, Inclusion, and Accessibility (DEIA) in the Federal Workforce provided agencies with information, resources, and a methodology to assess the state of DEIA and give a framework to promote DEIA practices.
- **Rural Opportunities to Use Transportation for Economic Success (ROUTES):** This initiative prioritizes the needs of rural America by supporting rural transportation policy and equitable access for communities that face challenges related to safety, mobility, and economic development, addressing disparities in rural transportation infrastructure by developing user-friendly tools and information, aggregating DOT resources, and providing direct technical assistance to better connect rural communities with funding, financing, and outreach resources available.

REBUILDING AMERICAN INFRASTRUCTURE WITH SUSTAINABILITY AND EQUITY (RAISE)

This program, formerly known as TIGER and BUILD, and now as Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants, awards funding to invest in road, rail, transit, and port projects that promise to achieve national objectives and have a significant local or regional impact. Since the eligibility requirements of RAISE allow project sponsors at the State and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional DOT programs. Historically, annual appropriations largely funded this program, however the BIL included \$7.5 billion in supplemental funding between FY 22 and 26. Since the program's inception, USDOT has awarded over \$14 billion to projects in all 50 states and several US territories.

- **Total Funding:** \$2.3 billion (FY 23) with set asides for Areas of Persistent Poverty and Historically Disadvantaged Communities
- **Application Deadline/Cycle:** February - Annual
- **Project Awards:**
 - » **Planning Projects:** No minimum
 - » **Capital Projects:** Minimum \$1 million (rural); minimum \$5 million (urban)
- **Match Requirement:** 20%– Federal share may increase in rural areas, Areas of Persistent Poverty, and Historically Disadvantaged Communities
- **Eligible Applicants:** State/local governments; multijurisdictional entity or group of entities; tribal government; transit agency.
- **Eligible Projects:** Capital projects (highway, intermodal, surface transportation, infrastructure, culvert replacement or stormwater runoff) and Planning (preparation for eligible surface transportation capital projects)
- **Merit Criteria:** Safety; Environmental Sustainability; Quality of Life; Mobility and Community Connectivity; Economic Competitiveness and Opportunity; State of Good Repair; Partnership and Collaboration; Innovation

<https://www.transportation.gov/RAISEgrants/about>

ACTIVE TRANSPORTATION INFRASTRUCTURE INVESTMENT PROGRAM (ATIIP)

Among the new discretionary grants created through the BIL is the Active Transportation Infrastructure Investment Program (ATIIP). This program will support the development of walking and biking infrastructure that connects to accessible, affordable, and safe active transportation networks, allowing people to reach destinations within a community and travel between communities. The BIL authorized \$200 million annually for the ATIIP, and of that \$45 million was allocated by the FY23 Omnibus Appropriations Act for the first round of funding. USDOT has not yet released the NOFO for

ATIIP.

- **Total Annual Funding:** \$45 million (FY23)
- **Application Deadline/Cycle:** TBD – Annual
- **Project Awards:** Projects seeking Planning & Design grants must have planning & design costs of at least \$100,000 to be eligible; Projects seeking Construction grants must have total costs of at least \$15 million to be eligible.
- **Match Requirements:** 20% or more
- **Eligible Applicants:** Local/regional government, state, tribe
- **Eligible Projects:** Projects that support active transportation networks connecting destinations.
- **Merit Criteria:** TBD

<https://www.railstotrails.org/policy/funding/active-transportation-infrastructure-investment-program/>

SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT PROGRAM

The BIL established this program, which funds regional, local, and tribal initiatives to prevent roadway deaths and serious injuries. The program supports the development of a comprehensive safety action plan (Action Plan) that identifies the most significant roadway safety concerns in a community and the implementation of projects and strategies to address roadway safety issues. Action Plans are the foundation of the SS4A grant program. Applicants can either receive Planning and Demonstration Grant (to complete a safety action plan) or Implementation Grants (to implement projects/strategies identified in an Action Plan). SS4A requires an eligible Action Plan be in place before applying to implement projects and strategies. Piedmont Triad Regional Council was awarded \$500,000 in FY23 to develop a comprehensive safety action plan.

- **Total Funding:** \$5 billion (FY22-26)
- **Application Deadline/Cycle:** Annual – Fall
- **Project Awards:** \$100,000-\$10,000,000 (Planning & Demonstration Grants) and \$2,500,000-\$25,000,000 (Implementation Grants)
- **Match Requirements:** 20%
- **Eligible Applicants:** Counties, cities, towns, transit agencies, MPOs, tribal governments
- **Eligible Projects:**
 - » **Planning and Demonstration Grants:** Develop a comprehensive Action Plan; conduct supplemental safety planning to enhance an Action Plan; conduct demonstration activities to inform the development of, or an update to, an Action Plan
 - » **Implementation Grants:** Fund projects and strategies identified in an Action Plan; planning, design, and development activities for projects and strategies identified in Action Plan; must have an existing Action Plan to receive Implementation Grant funding.

<https://www.transportation.gov/grants/SS4A>

RURAL AND TRIBAL ASSISTANCE PILOT PROGRAM

The BIL created the Rural and Tribal Assistance Pilot Program, which makes \$10 million available over five years to provide states, local governments, and tribal governments in rural areas with funding to support early-stage development assistance for rural and tribal infrastructure projects. This program awards grants for either the hiring of staff or the procurement of expert firms to provide financial, technical, and legal assistance; assistance with development-phase activities; and information regarding innovative financing best practices and case studies. The first NOFO makes \$3.4 million available for the first two fiscal years to eligible applicants on a first-come, first-served basis.

- **Total Funding:** \$10 million (FY22-26)
 - **Application Deadline/Cycle:** September – Annual
 - **Project Awards:** up to \$360,000
 - **Match Requirements:** N/A
 - **Eligible Applicants:** State, local government, Federally-recognized tribe
 - **Eligible Projects:**
 - » Financial services, such as revenue forecasting and economic assessments
 - » Technical services, such as feasibility studies, environmental review and permitting, preliminary engineering and design, funding application assistance, and public engagement
 - » Legal services, such as statutory and regulatory framework analysis and procurement support
- <https://www.transportation.gov/buildamerica/RuralandTribalGrants>

COMMUNITY CHANGE GRANTS

The Community Change Grant program administered by the Environmental Protection Agency seeks to fund community-driven investments for change, specifically projects that involve strong collaborations to achieve sustained impacts related to climate resilience, pollution reduction, community health, economic prosperity, and community strength. A successful project will implement Climate Action Strategies that build the resilience of communities and reduce greenhouse gas emissions, reduce quantifiable health-harming pollutants to improve public health, conduct robust community engagement, develop strategies to increase investments to residents in disadvantaged communities, reach priority populations, and ensure that projects are integrated to achieve maximum benefits.

- **Total Annual Funding:** \$2 billion
 - » **Track 1 (Community Driven Investments for Change):** \$1.96 billion
 - » **Track 2 (Meaningful Engagement for Equitable Governance):** \$40 million
- **Application Deadline/Cycle:** November 21, 2024 (rolling)
- **Project Awards:**
 - » **Track 1 (Community Driven Investments for Change):** \$10-20 million
 - » **Track 2 (Meaningful Engagement for Equitable Governance):** \$1-3 million
- **Match Requirements:** N/A
- **Eligible Applicants:** Partnership between two community-based nonprofit organizations (CBOs); Partnership between CBO and either a Federally-recognized tribe, local government, or institution of higher education
- **Eligible Projects:** Climate resiliency/adaptation; Mitigating climate/health risks from urban heat islands, extreme heat and wildfire events; Community-led air pollution monitoring, prevention and remediation; Investments in low- and zero-emission and resilient technologies/ infrastructure; Workforce development to supports the reduction of GHG emissions; Facilitating engagement of disadvantaged communities in State and Federal advisory groups, workshops, rulemakings, and other public processes.

NATIONAL ENDOWMENT FOR THE ARTS OUR TOWN PROGRAM

Our Town is the National Endowment for the Arts' creative placemaking grants program. Through project-based funding, the NEA supports projects that integrate arts, culture, and design activities into efforts that strengthen communities by advancing local economic, physical, and/or social outcomes. These projects require a partnership between a local government entity and nonprofit organization, one of which must be a cultural organization; and should engage in partnership with other sectors (such as agriculture and food, economic development, education and youth, environment and energy, health, housing, public safety, transportation, and workforce development). Cost share/matching

grants range from \$25,000 to \$150,000, with a minimum cost share/match equal to the grant amount.

<https://www.arts.gov/grants/our-town>

STATE FUNDING OPPORTUNITIES

There are several state programs to support the development and construction of multi-use paths, greenways, sidewalks, bike lanes and improve crossings. NCDOT, North Carolina Department of Natural and Cultural Resources (NCDNCR), and North Carolina Department of Commerce (NCDOC) are the primary state agencies that fund bicycle and pedestrian planning, infrastructure, and programs. The North Carolina Department of Health and Human Services (DHHS), North Carolina Department of Environmental Quality (NCDEQ), and the North Carolina Department of Agriculture administer discretionary grant programs focusing on public health and community development, when funding is available.

Discretionary state grants promote alignment with both statewide goals and initiatives. While these are similar to Federal priorities and strategies, they are distinct to North Carolina and include the following:

- **North Carolina Executive Order 80:** *North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy:* <https://governor.nc.gov/documents/files/executive-order-no-80-north-carolinas-commitment-address-climate-change-and-transition-clean-energy/open>
- **North Carolina Executive Order 246:** *North Carolina's Transformation to a Clean, Equitable Economy:* <https://governor.nc.gov/executive-order-no-246/open>
- **NC Moves 2050 Plan:** <https://www.ncdot.gov/initiatives-policies/Transportation/nc-2050-plan/ncmoves2050/Pages/default.aspx>
- **Great Trails State Plan:** <https://www.ncdot.gov/divisions/integrated-mobility/multimodal-planning/great-trails-state/Pages/default.aspx>
- **Statewide Transportation Improvements Program (STIP):** <https://connect.ncdot.gov/projects/planning/pages/state-transportation-improvement-program.aspx>
- **Strategic Highway Safety Plan (FY 24-FY 26):** <https://www.nhtsa.gov/document/north-carolina-fy2024-2026-highway-safety-plan>
- **NC Clean Transportation Plan:** <https://www.ncdot.gov/initiatives-policies/environmental/climate-change/Pages/ncctp-executive-summary-final-report.aspx>

GREAT TRAILS PROGRAM FUND

The Great Trails State Program, funded with \$12.5 million each year for two years, will be a competitive grant program for new trail development and extension of existing trails, including paved trails, greenways, and natural surface trails for biking, hiking, walking, equestrian use, and paddling. The North Carolina Department of Natural and Cultural Resources (NCDNCR) will administer the funds. Eligible applicants will include municipalities or counties, regional councils of government, other public authorities, and nonprofit organizations. Eligible uses for funds will include planning, design, and related environmental assessment or permitting, land and easement acquisition, trail construction, trail structures (such as bridges), trail amenities (such as trailhead parking, signage, etc.), and maintenance, and can be used as matching funds for federal or other non-state grants. The fund will require a minimum of a 25% flexible match, including cash, in-kind services, or donation of assets. Grants awarded will be limited to \$500,000 per project.

- **Total Annual Funding:** \$25 million (FY24-25)

- **Application Deadline/Cycle:** Annual – TBD
- **Project Awards:** up to \$500,000
- **Match Requirements:** 25% flexible match (including cash, in-kind services, or donation of assets)
- **Eligible Applicants:** Municipalities/counties, regional governments, public authorities, nonprofit organizations
- **Eligible Projects:** Planning; design; environmental assessment or permitting and review; land or easement acquisition; trail construction; trail structures (bridges); trail amenities like trailhead parking, and signage; maintenance; matching funds for other Federal or non-state grants.
- **Merit Criteria:** TBD

The North Asheboro Greenway could use Great Trails State Program funding as a match for any Federal funding it applies for, or to fund activities like environmental review and property acquisition. This would demonstrate commitment to the project on a local and state level, strengthening applications for competitive Federal funding.

<https://greattrailsstatecoalition.org/latest/#:~:text=The%20North%20Carolina%20General%20Assembly's,outdoor%20recreation%20in%20American%20history>

PARKS AND RECREATION TRUST FUND (PARTF)

Since 1994, the North Carolina parks and Recreation Trust Fund (PARTF) awards matching grants to local governments for parks, public beach access, and improvements to state parks. The program helps local governments reach their park and public access goals and improve the quality of life in their communities. Funding for PARTF is allocated annually, and the Parks and Recreation Authority, a citizen board appointed by the Governor, President Pro Tempore of NC Senate, and Speaker of the NC House of Representatives select grant recipients and allocate the funding. The projects must be located on a single site, and the applicant must own or have at least a 25-year signed lease or easement for the property where the PARTF facility will be located.

- **Total Funding:** \$8.5 million (FY24)
- **Application Deadline:** Annual – May
- **Project Awards:** up to \$500,000
- **Match Requirements:** 50%
- **Eligible Applicants:** North Carolina counties and incorporated municipalities. Public authorities, as defined by GS 159-7, are also eligible if they are authorized by N.C. general statutes to acquire land and develop recreation facilities for public use.
- **Eligible projects:** Land acquisition; construction or renovation of facilities for a linear or non-linear public park; must be located on a single site and applicant must own or have at least a 25-year signed lease/easement for the property.

<https://www.ncparks.gov/about-us/grants/parks-and-recreation-trust-fund>

POWELL BILL FUNDS

The primary purpose of Powell Bill funds is to resurface municipal streets, but municipalities can also use this program to plan, construct, and maintain bike paths, greenways, or sidewalks. Each municipality receives annual funding based on a formula set by NC General Statute 136-41.1 – 136-41.4 with 75% of the funds based on population and 25% based on the number of municipality-maintained street miles. Eligible uses of Powell Bill funds can include maintaining, repairing, constructing, reconstructing, or widening of any street or public thoroughfare including bridges, drainage, and curb and gutter.

<https://www.ncampo.org/documents/NCAMPO/Presentations2015/Toolkit-330/OverviewPowellBillProgram.pdf>

STRATEGIC TRANSPORTATION INVESTMENTS (STI)

The Strategic Transportation Investments law, passed in 2013, establishes the Strategic Mobility Formula, which allocates available funding based on data-driven scoring and local input. NCDOT, working collaboratively with MPOs and RPOs, uses the Strategic Mobility Formula to develop the State Transportation Improvement Program (STIP), which identifies projects that will receive funding during a 10-year period. The STIP is state and federally mandated and updated by NCDOT every two years. The Strategic Mobility Formula groups projects in three categories: Division Needs, Regional Impact, and Statewide Mobility.

FUNDING CATEGORY	FUNDING DISTRIBUTION	OVERVIEW
Division Needs	30%	NCDOT’s 14 transportation divisions share funding in this category equally. Project scores are based 50% on data and 50% on rankings by MPOs and RPOs and the NCDOT Divisions.
Regional Impact	30%	Projects on this level compete within regions made up of two NCDOT Divisions with funding based on population. Project scores are based 70% on data and 30% on rankings by MPOs and RPOs and the NCDOT Divisions.
Statewide Mobility	40%	Projects in this category are of statewide significance and are based 100% on data.

NCDOT programs independent bicycle and pedestrian projects in the Division Needs category. Eligible bicycle and pedestrian projects submitted for prioritization must be included in a locally adopted plan and have a minimum project cost of \$100,000. Eligible activities include right-of-way acquisition, design, and construction. Additionally, the Statewide Transportation Investments (STI) law prohibits the use of state funding for bicycle and pedestrian projects, requiring municipalities to provide the 20% match for Federally-funded projects.

Bicycle and Pedestrian STI Prioritization: Qualitative Scoring

Local input points represent 50% of the scoring for bicycle and pedestrian projects. MPOs and RPOs assign 25% of local input points, which are determined by municipal and county project priorities and public comment. NCDOT Division Engineers assign the remaining 50% of the local input points.

Bicycle and Pedestrian STI Prioritization: Quantitative Scoring

CRITERIA	MEASURE	DIVISION NEEDS (50%)
Safety	(Number of crashes x 40%) + (Crash severity x 20%) + (Safety risk x 20%) + (Safety benefit x 20%)	20%
Accessibility / Connectivity	Points of Interest pts + Connection pts + Route pts	15%
Demand / Density	# of households and employees per square mile near project	10%
Cost Effectiveness	(Safety + Accessibility / Connectivity + Demand / Density) / Cost to NCDOT	5%

Project Bundling

Project sponsors can bundle multiple bicycle and pedestrian projects to better compete with other projects submitted in the Division Needs category. NCDOT allows bundled projects across various geographies and project types. Projects do not have to be contiguous or related, and projects can fall within a single municipality or across multiple jurisdictions. Bundled projects must have one project manager, a TAP eligible entity.

Incidental Bicycle and Pedestrian Facilities with Roadway Projects

NCDOT's Complete Streets Policy update, adopted in 2019, requires NCDOT to consider and incorporate multimodal facilities in the design and improvement of all transportation projects in North Carolina. The adopted Comprehensive Transportation Plan (CTP), which may include and/or reference locally adopted plans for public transportation, bicycle and pedestrian facilities, and greenways, is considered the controlling plan for the identification of non-motorized facilities to be evaluated as part of a roadway project. These facilities will be included as part of a proposed roadway project, and NCDOT is responsible for the full cost of the project. Bicycle, pedestrian, and transit facilities incidental to a roadway project where a need has been identified through the project scoping process but not identified in an adopted plan may also be included in a roadway project pursuant to this policy; inclusion of these incidental facilities requires the local jurisdiction to share the incremental cost of constructing the improvements based on population thresholds.

<https://connect.ncdot.gov/projects/BikePed/Pages/Complete-Streets.aspx>

STATEWIDE PROJECTS FUNDS

- **Small Construction Funds:** These funds were established in 1985 to fund small projects in and around cities and towns that could not be funded in the Statewide Transportation Improvement Program (STIP). Funds are allocated equally to each of 14 Transportation Divisions. Funds can be used on a variety of transportation projects for municipalities, counties, businesses, schools, and industries throughout the State. Funds projects up to \$250,000 per fiscal year, unless otherwise approved by the Secretary of Transportation. Right-of-way and utility relocations should be provided and accomplished at no cost to NCDOT. Funding requests should be submitted to the Division Engineer providing technical information such as location, improvements being requested, and project timeline.
- **Statewide Contingency Funds:** These funds were created for statewide rural or small urban highway improvements and related transportation enhancements to public roads/public facilities, industrial access roads, and spot safety projects. The President Pro Tempore of the Senate, the Speaker of the House, and the Secretary of Transportation sponsor project requests from this fund. \$12 million in funds are administered by the Secretary of Transportation. Requests can be submitted from municipalities, counties, businesses, schools, citizens, legislative members, and NCDOT staff. Request should include a clear description and justification of the project.
- **Economic Development Funds:** These funds were created to expedite transportation projects that promote commercial growth as well as either job creation or job retention. \$2500 per job (new & retained) allowed unless waived by the Secretary of Transportation. Funds projects up to \$400,000 per fiscal year, unless otherwise approved by the Secretary of Transportation. New access roads must be approved by NCDOT and serve multiple property owners or government owned property; roads will become part of the State Highway System or serve as public roads maintained by a government agency.
- **High Impact / Low-Cost Funds:** This program provides funds complete low-cost projects with high impacts to the transportation system including intersection improvement projects, minor widening projects, and operational improvement projects. Funds are allocated equally to each of 14 Transportation Divisions. Each Division is responsible for selecting their own scoring criteria for determining projects funded in this program. At a minimum, Divisions must consider all of the following in developing scoring formulas: (1) The AADT of a roadway and whether the proposed

project will generate additional traffic. (2) Any restrictions on a roadway. (3) Any safety issues with a roadway. (4) The condition of the lanes, shoulders, and pavement on a roadway. (5) The site distance and radius of any intersection on a roadway. Funds projects up to \$1.5 million per fiscal year, unless otherwise approved by the Secretary. Projects are expected to be under contract within 12 months of funding approval by the BOT.

<https://connect.ncdot.gov/projects/planning/Economic%20Development/Small%20Project%20Fund%20Request.docx>

SPOT SAFETY PROGRAM

The Spot Safety Program is used to develop smaller improvement projects to address safety and potential safety and operational issues. The program is funded with state funds and currently receives approximately \$9 million per fiscal year. Other monetary sources (such as Small Construction or Contingency funds) can assist in funding Spot Safety projects, however, the maximum allowable contribution of Spot Safety funds per project is \$400,000. A Safety Oversight Committee (SOC) reviews and recommends Spot Safety projects to the Board of Transportation (BOT) for approval and funding. Criteria used by the SOC to select projects for recommendation to the BOT include, but are not limited to, the frequency of correctable crashes, severity of crashes, delay, congestion, number of signal warrants met, effect on pedestrians and schools, division and region priorities, and public interest.

<https://connect.ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx>

LOCAL FUNDING OPPORTUNITIES

While Federal and even state funding can support high-cost projects, local funding is often ideal for supporting the delivery of specific components of greenway projects or as a match for Federal funding programs. Municipalities often plan for funding of bicycle and pedestrian facilities through their Capital Improvement Program (CIP). Local funding is often necessary to supplement Federal and state funding and can come in various forms.

BONDS

Towns can propose bonds to protect open space corridors and build greenway networks, as has been seen in Wake County, City of Raleigh, City of Wilmington, Town of Chapel Hill, and City of Greenville. For example, Wake County successfully passed a \$120 million Parks, Greenways, Recreation and Open Space Bond in 2018. Successful bond campaigns require a well-defined plan with specific projects supported by the community. Bond campaigns should be well organized with a community's public affairs department and thoroughly coordinated across all internal departments. Public outreach during the campaign is essential to educate residents about the benefits of infrastructure investment and to understand which projects garner the highest community support.

DEVELOPER BUILT TRAILS

North Carolina communities can require developers to dedicate land for greenways and recreational areas, open space, streets, and sidewalks through local land use and development ordinances. For example, the Town of Cary built its first greenway 40 years ago, now has over 80 miles of greenway trails, and requires developers to set aside important open space providing trail connectivity, wildlife habitat corridors, and water quality protection. Cary requires developers to dedicate land that can be used for public park and/or greenway development to serve the recreational needs of residents.

DEVELOPMENT AGREEMENTS

Development agreements are legislative land use tools that allows local governments to negotiate binding contractual agreements with private property owners that vest developers' rights while allowing for a jurisdiction to obtain community benefits. Development agreements can secure enhanced public amenities in exchange for expanded land use entitlements beyond those that could otherwise be secured through conditional rezoning or regulatory tools like site plans and subdivision approvals. In 2005, the North Carolina General Assembly enacted Part 3D of North Carolina General Statute (NCGS) 160A, Article 9 that authorized municipalities and counties to enter into these agreements to facilitate larger scale development projects that include the implementation of public infrastructure projects. NCGS 16D Article 10, enacted in 2019, expanded options for development agreements to allow them to be used for smaller projects, and allowing provisions to be incorporated into zoning conditions.

PUBLIC/PRIVATE PARTNERSHIPS

Public private partnerships (P3s) are long-term contractual agreements between a public agency and a private entity to design, build, finance, operate and/or maintain infrastructure projects. This allows for greater private participation in the delivery of projects and allows private partners to share in the risks for design, construction, finance, and long-term operation of facilities. P3s give public entities access to private capital, technology, and expertise; and can accelerate project delivery, encourage innovation, and allow partners to manage projects more efficiently. However, they require substantial up-front administrative costs and procurement may involve complicated financial and legal issues. P3s and may not deliver the best value as compared to traditional or other alternative delivery methods.

Partnerships engender a spirit of cooperation, civic pride, and community participation. The key to the involvement of private partners is to make a compelling argument for their participation. For example, specific segments of a greenway may make critical connections to employment centers or potential partners' place of business, which would incentivize private participation in its design and construction. Furthermore, signage at trail heads or interpretive signage along greenway systems can incentivize private participation through name recognition for corporate partners. One example of a public/private partnership in North Carolina that has leveraged funding for trail construction is in Greensboro. The City of Greensboro is leading North Carolina in leveraging public-private partnerships to complete their Downtown Greenway Loop. Through the Action Greensboro Foundation, the project has raised over \$10 million in private funds by working with foundations and private donors. This money leverages over \$21 million in local and Federal funds.

CAPITAL IMPROVEMENT PROGRAM (CIP)

A Capital Improvement Program (CIP) is one element in a municipality's long-term planning process. It is a bridge between the municipality's Comprehensive Plan and short-term planning for infrastructure and operations. A Capital Improvement Program analyzes major facility and equipment needs, establishes priorities, estimates fiscal resources, and schedules the development of funded projects. For example, the City of Raleigh funds parks, greenways, and active transportation facilities through the city's Capital Improvement Program. The Parks, Recreation and Cultural Resources Department's CIP primary sources of funding come from Parks and Recreation Bonds, Facility Fees, General Fund (Tax Base), grants, and donations.

MUNICIPAL SERVICE DISTRICTS (MSD)

Municipal Service Districts provide an equitable method for funding special improvements to public

right-of-way areas because property owners share in the cost. For example, the Town of Morrisville uses Municipal Service Districts in several neighborhoods to perform pavement, curb and gutter, and sidewalk enhancements and repairs on the public streets throughout neighborhoods in the MSD.

PRIVATE FUNDING OPPORTUNITIES

With few exceptions, private grant awards are often smaller than previously mentioned opportunities. Private grant funding is also ideal for the delivery of specific components of greenway projects and can often be used to supplement Federal and state funding.

GOLDEN LEAF FOUNDATION

The Golden LEAF Foundation is a nonprofit organization established in 1999 to receive a portion of North Carolina's funding received from the 1998 Master Settlement Agreement with cigarette manufacturers. Golden LEAF works to increase economic opportunity in North Carolina's rural and tobacco-dependent communities through leadership in grantmaking, collaboration, innovation, and stewardship as an independent and perpetual foundation. Golden LEAF's grantmaking focuses on the following priorities: Job creation and economic investment; workforce preparedness; agriculture; and community competitiveness, capacity, and vitality. Golden LEAF has two standard programs open to eligible entities seeking grants: Open Grants Program and Economic Catalyst Program. These programs complement other ongoing initiatives of the Foundation, such as the Community-Based Grants Initiative.

Open Grants Program: The Open Grants Program process is open to all governmental entities and 501(c)(3) organizations that propose projects in Golden LEAF's priority areas. This program is for economic development projects aligned with the Golden LEAF priority areas. Most awards in the Open Grants Program will be for \$200,000 or less.

Economic Catalyst Program: The Economic Catalyst process is open to governmental entities and 501(c)(3) organizations with projects that will create jobs at risk without Golden LEAF funding. Grants include funds for public infrastructure, job training, upfit for buildings owned by governmental or nonprofit entities, or equipment acquisition where the building or equipment will be leased or sold at fair-market value to a company creating jobs. Grants are available only for projects that include a specific company's commitment to create full-time jobs in NC.

Community-Based Grants Initiative: Each year, the Golden LEAF Foundation invites organizations from counties from a different Prosperity Zone to participate in the Community-Based Grant Initiative (CBGI). The process is competitive, but organizations from all counties within the Prosperity Zone will have an opportunity to apply. The CBGI identifies projects with the potential to have a significant impact. It is a focused process with grants targeted toward investments in the building blocks of economic growth. Projects must address economic development, agriculture, workforce preparedness, infrastructure, and capital costs necessary to create health care jobs. County managers serve a key role in the process. Each county manager will submit a slate of up to four projects for consideration. Applicants must be 501(c)(3) organizations or governmental entities, such as county and municipal governments, community colleges, or universities. Golden Leaf limits awards to no more than three projects per county and will total no more than \$1.5 million per county.

AARP COMMUNITY CHALLENGE

The AARP Community Challenge provides small grants to fund quick-action projects that can help communities become more livable for people of all ages. AARP accepts applications for projects that

improve public spaces, housing, transportation, civic engagement, coronavirus recovery, diversity, and inclusion, and more. Project types include those that provide permanent physical improvements in the community, temporary demonstrations that lead to long-term change, and innovative programming or services. The program is open to 501(C)(3), 501(C)(4) and 501(c)(6) nonprofits and government entities. Grants can range from several hundred dollars for smaller, short-term activities to several thousand or tens of thousands of dollars for larger projects.

- **Total Funding:** \$3.6 million
- **Grant Deadline/Cycle:** March – Annual
- **Project Awards:** \$500 to \$50,000
- **Match Requirements:** N/A
- **Eligible Applicants:** Governments and nonprofit organizations
- **Eligible Projects:** Projects that improve public spaces, transportation, and inclusion that provide permanent physical improvements in the community and innovative programming or services.

Additionally, AARP has introduced a Capacity Building Microgrant program, which provides \$2,500 to either conduct a walk audit to enhance pedestrian safety and walkability or to start/grow a community garden. The Capacity Building Microgrant is better suited to fund amenities after the construction of the greenway.

<https://www.aarp.org/livable-communities/community-challenge/>

NATIONAL ASSOCIATION OF REALTORS PLACEMAKING GRANTS

The National Association of Realtors (NAR) funds placemaking and smart growth grants to make communities better places to live by transforming unused or underutilized sites into welcoming destinations accessible to everyone in a community.

Smart Growth Grants: Smart Growth grants can fund visioning sessions, community workshops, and placemaking visioning for meaningful transportation projects and issues. These community planning activities would align with the intent of the greenway feasibility study and contribute to intentional and thoughtful collection of public input over the course of the development of the North Asheboro Greenway.

Placemaking Grants: Placemaking Grants fund the creation of new, outdoor public spaces and destinations in a community. This program funds amenities such as street furniture, paint, signage, materials, landscaping, murals, site preparation, and artist fees. A state or local REALTOR® association must submit applications, and grants provide up to \$5,000 per award.

<https://realtorparty.realtor/community-outreach/>

PEOPLE FOR BIKES COMMUNITY GRANT PROGRAM

The People For Bikes Community Grant Program supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride. People For Bikes accepts grant applications from non-profit organizations with a focus on bicycling, active transportation, or community development; city or county agencies or departments, and state or Federal agencies working locally. People For Bikes focuses most grant funds on bicycle infrastructure projects, such as bike paths, lanes, trails and bridges, mountain bike facilities, bike parks and pump tracks, BMX facilities, and end-of-trip facilities such as bike racks, bike parking, bike repair stations and bike storage. Advocacy projects funded through the program include open street events and campaigns to increase investment in bicycle infrastructure. People For Bikes accepts requests for funding up to \$10,000. People For Bikes does not require a specific percentage match, but they will not consider requests in which the grant funding would amount to 50% or more of the project budget.

<https://www.peopleforbikes.org/grant-guidelines>

TWO FOR THE TRAILS (ATHLETIC BREWING COMPANY)

Athletic Brewing Company provides funding to protect and restore trails, waterways, beaches, parks, and urban areas in need of maintenance.

- **Total Funding:** \$2 million annually
- **Grant Deadline/Cycle:** Summer – Annual
- **Project Awards:** up to \$50,000
- **Match Requirements:** 20%
- **Eligible Applicants:** Any registered LLC with an environmental cleanup project.
- **Eligible Projects:** Projects that restore trails and outdoor recreation facilities.

This funding could support the maintenance of the North Asheboro Greenway following its construction.

<https://athleticbrewing.com/pages/two-for-the-trails-application>

TECHNICAL ASSISTANCE PROGRAMS

The following Technical Assistance Programs can be leveraged to provide additional design and technical expertise to assist with obtaining funding and providing additional resources during the design and construction process.

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM (RTCA)

The National Parks Service (NPS) Rivers, Trails, and Conservation Assistance (RTCA) Program supports community-led natural resource conservation and outdoor recreation projects across the nation. Although RTCA is not a traditional funding program, NPS staff provide planning, design and technical expertise for trails and outdoor recreation projects. Depending on the scale of the project, RTCA can invest up to four years of planning and project development assistance. Eligible entities include community groups, nonprofit organizations, tribes, and government agencies. Technical assistance services include:

- Define project vision and goals.
- Set priorities and build consensus.
- Inventory and map community resources.
- Identify funding strategies.
- Identify and analyze key issues and opportunities.
- Design community outreach, participation, and partnerships plans.
- Create project management and strategic action plans.
- Develop concept plans for trails, parks, and natural areas.

<https://www.nps.gov/orgs/rtca/index.htm>

BUILDING BLOCKS FOR SUSTAINABLE COMMUNITIES

Local land use decisions, such as transportation options, housing type and location, stormwater management, and issues of equity, all have direct impacts on the health and environment of our communities. Founded in 2011, the Building Blocks for Sustainable Communities program collaborates with local communities across the US including tribes and territories, to develop smart growth

solutions and strategies in ways that benefit human health and the environment. The program uses an inclusive and locally-led process that strengthens local capacity, facilitates partnerships, and creates a path forward to achieve community-identified goals.

EPA staff and EPA-hired consultant teams deliver the Building Blocks for Sustainable Communities technical assistance program. Each technical assistance project spans a period of roughly eight months, including inclusive public engagement through a two-day workshop, the involvement of relevant decision-makers and potential public and private sector partners, and a report outlining the workshop process and specific next steps generated that the community could take to achieve its goals. The workshop focuses on the issues and priorities determined by the community.

The application for Building Blocks consists of a two-page letter of interest that outlines the issue(s) the community wishes to address. The most recent call for letters closed in 2020. Between 6 and 56 communities are selected each year to receive technical support through Building Blocks for Sustainable Communities depending on the funding available.

<https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities>

GREENING AMERICA'S COMMUNITIES

Greening America's Communities (formerly known as Greening America's Capitals) is an EPA program to help cities and towns develop an implementable vision of environmentally friendly neighborhoods that incorporate innovative green infrastructure and other sustainable design strategies. EPA provides design assistance to help support sustainable communities that protect the environment, economy, and public health and to inspire local and state leaders to expand this work elsewhere.

EPA funds a team of designers to visit each community to produce schematic designs and exciting illustrations intended to catalyze or complement a larger planning process for the pilot neighborhood. Additionally, these pilots are often the testing ground for citywide actions, such as changes to local codes and ordinances to better support environmentally sustainable growth and green infrastructure. The design team and EPA, along with partners from other Federal agencies, also help city staff develop specific implementation strategies. Every year, 5 cities are selected for design assistance through Greening America's Communities.

<https://www.epa.gov/smartgrowth/greening-americas-communities>

Appendix B: Design Resources

Below are several design resources that may be used to inform design decisions for bicycle and pedestrian facilities. Organizations such as the Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), National Association of City Transportation Officials (NACTO), and North Carolina Department of Transportation (NCDOT) offer general guidelines and project-specific tools to help professionals make design decisions. These guidelines promote flexibility to ensure context-sensitive applications.

AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES

The AASHTO Guide for the Development of Bicycle Facilities is the authoritative national standard for bikeway design. The document provides guidance to designers and planners by referencing a recommended range of design values and describing alternative design approaches. The guide provides information on how to accommodate bicycle travel and operations in most environments. Sufficient flexibility is permitted to encourage designs that are sensitive to local context and incorporate the needs of bicyclists, pedestrians, and motorists.

https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf



AASHTO GUIDE FOR THE PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES

The AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities provides guidance for pedestrian facilities along streets and highways. The primary audiences for this manual are planners, roadway designers, and transportation engineers, whom make decisions on a daily basis that affect pedestrians. The guide focuses on identifying effective measures for accommodating pedestrians on public rights-of-way, and it recognizes the effect that land use planning and site design have on pedestrian mobility and addresses these topics as well.

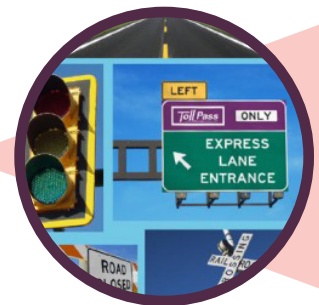
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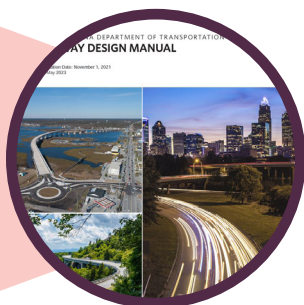


MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

The Manual on Uniform Traffic Control Devices for Streets and Highways, or MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. The MUTCD is published by the Federal Highway Administration (FHWA) and is a compilation of national standards for all traffic control devices, including road markings, roadway signs, and traffic signals.

<https://mutcd.fhwa.dot.gov/>

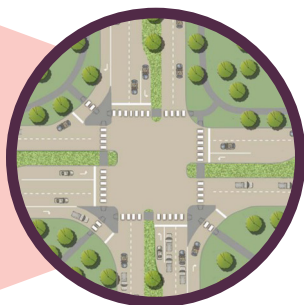




NCDOT ROADWAY DESIGN GUIDE

The North Carolina Department of Transportation (NCDOT) Roadway Design Guide defines standards for roadways owned and maintained by NCDOT, including typical sections for roadways. Typical sections establish design elements that emphasize safety, mobility, complete streets, and accessibility for multiple modes of travel. Typical sections also provide guidelines for comprehensive transportation planning, project planning, and project design activities.

<https://connect.ncdot.gov/projects/Roadway/pages/roadway-design-manual.aspx>



NCDOT COMPLETE STREETS IMPLEMENTATION GUIDANCE

The North Carolina Department of Transportation (NCDOT) Complete Streets Implementation Guide is designed to assist NCDOT staff engineers, project managers and designers in implementing the Complete Streets Policy adopted by the Board of Transportation in August 2019. This document provides comprehensive guidance for incorporating a complete streets approach into NCDOT's planning, programming, design, and maintenance processes.

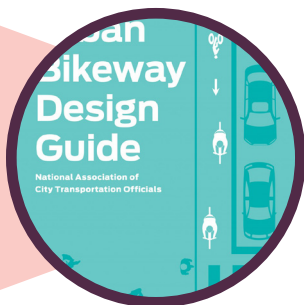
<https://connect.ncdot.gov/projects/BikePed/Pages/Complete-Streets.aspx>



NACTO URBAN STREETS DESIGN GUIDE

The Urban Street Design Guide charts the principles and practices of the nation's foremost engineers, planners, and designers working in cities today. A blueprint for designing 21st century streets, the guide unveils the toolbox and the tactics cities use to make streets safer, more livable, and more economically vibrant. The Guide outlines both a clear vision for complete streets and a basic road map for how to bring them to fruition.

<https://nacto.org/publication/urban-street-design-guide/>



NACTO URBAN BIKEWAY DESIGN GUIDE

The NACTO Urban Bikeway Design Guide provides cities with state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists. Design treatments included in the guide offer required, recommended, and optional design elements to address the complexity of individual streetscape situations. In August 2013, the FHWA issued a memorandum officially supporting the use of this document. All of the NACTO Urban Bikeway Design Guide treatments are in use internationally and in many cities around the US.

<https://nacto.org/publication/urban-bikeway-design-guide/>

NACTO URBAN STREET STORMWATER GUIDE

The Urban Street Stormwater Guide advances the discussion about how to design and construct sustainable streets. The guide provides cities with national best practices for sustainable stormwater management in the public right-of-way, including core principles about the purpose of streets, strategies for building inter-departmental partnerships around sustainable infrastructure, technical design details for siting and building bioretention facilities, and a visual language for communicating the benefits of such projects. The guide sheds light on effective policy and programmatic approaches to starting and scaling up green infrastructure, provides insight on innovative street design strategies, and proposes a framework for measuring performance of streets comprehensively.

<https://nacto.org/publication/urban-street-stormwater-guide/>



FHWA SMALL TOWN & RURAL MULTIMODAL NETWORKS

The Federal Highway Administration (FHWA) Small Town and Rural Multimodal Networks applies existing national design guidelines in a rural setting and highlights small town and rural case studies. It addresses challenges that are specific to rural areas and focuses on opportunities to make improvements despite the geographic, fiscal, and other challenges that many rural communities face. It also includes several design concepts applicable to National Scenic and Historic Trails.

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/



FHWA BIKEWAY SELECTION GUIDE

A resource to help transportation practitioners consider the trade-offs relating to the selection of bikeway types. The document builds upon other FHWA resources that promote design flexibility and support connected, safe, and comfortable bicycle networks. The Bikeway Selection Guide outlines a process for identifying the desired bikeway type and assessing and refining potential options based on real-world conditions and decision-making factors. This process is intended to accelerate the delivery of high-quality multimodal projects that improve safety for everyone and meet the transportation needs of people of all ages and abilities.

<https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-07/fhwasal8077.pdf>



FHWA SEPARATED BIKE LANE PLANNING AND DESIGN GUIDE

The Separated Bike Lane Planning and Design Guide outlines planning considerations for separated bike lanes and provides a menu of design options covering typical one and two-way scenarios. It highlights different options for providing separation, while also documenting intersection treatments and mid-block design considerations for driveways, transit stops, accessible parking, and loading zones. Case studies within the guide highlight best practices and lessons learned.

https://nacto.org/wp-content/uploads/2016/05/2-4_FHWA-Separated-Bike-Lane-Guide-ch-5_2014.pdf





PENNSYLVANIA TRAIL DESIGN & DEVELOPMENT PRINCIPLES: GUIDELINE FOR SUSTAINABLE, NON-MOTORIZED TRAILS

This document compiles the best practices and guidelines for the planning, design, construction, and management of trails. Techniques are presented for developing trails that create desirable and enjoyable experiences for trail users. These techniques employ sustainable design elements and construction practices that allow the trail to make use of natural systems so that the trail remains both physically and environmentally sustainable.

<https://www.americantrails.org/resources/pennsylvania-trail-design-development-principles>



BEST PRACTICES IN TRAIL MAINTENANCE: A MANUAL BY THE OHIO RIVER GREENWAY

This manual is intended for practical use by trail maintenance managers. It will also be useful for policy makers who are tasked with anticipating and planning for maintenance budget and personnel needs. The recommendations included in this manual were chosen, in part, to facilitate widespread adoption by other trail operators. They are cost-effective solutions that require minimal technological or financial commitments. It also provides guidance for trail construction and design where a maintenance issue can best be resolved by constructing new trail segments.

<https://www.railstotrails.org/resourcehandler.ashx?name=best-practices-in-trail-maintenance-a-manual-by-the-ohio-river-greenway&id=21221&fileName=Best%20Practices%20in%20Trail%20Maintenance.pdf>



FHWA ACHIEVING MULTIMODAL NETWORKS: APPLYING DESIGN FLEXIBILITY AND REDUCING CONFLICTS

This publication is resource for practitioners seeking to build multimodal transportation networks. It highlights ways that planners and designers can apply the design flexibility found in current national design guidance to address common roadway design challenges and barriers. It focuses on reducing multimodal conflicts and achieving connected networks so that walking and bicycling are safe, comfortable, and attractive options for people of all ages and abilities.

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/

RAILS TO TRAILS CONSERVANCY (RTC) RAIL WITH TRAILS: BEST PRACTICES AND LESSONS LEARNED

This updated USDOT Rails-with-Trails: Lessons Learned report documents how the state of the practice, perspectives, and context for rails-with-trails have evolved since the first report in 2002 and includes updated effective practices. Best practices are based on extensive research into existing and planned rails with-trails that involved interviews with railroad officials and trail managers; a literature review of previous rail-with-trail studies; a review of trail planning guidance documents; and input from various railroad and trail professionals.

https://www.fhwa.dot.gov/environment/recreational_trails/publications/rwt2021/

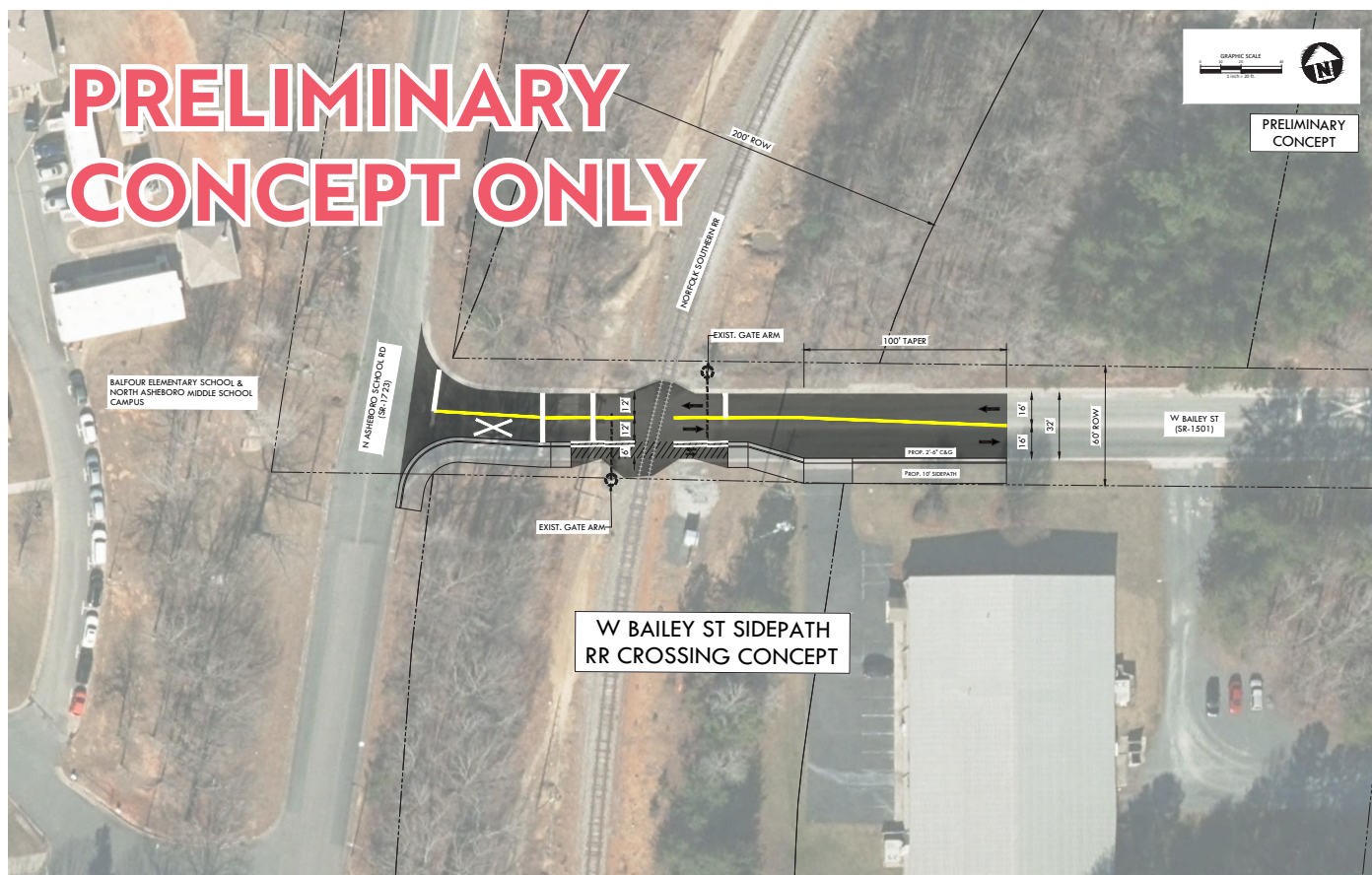


ADA STANDARDS FOR ACCESSIBLE DESIGN

This guide explains requirements in the current editions of the Americans with Disabilities Act (ADA) Standards issued by the Department of Justice (DOJ) and the Department of Transportation (DOT). It provides the scoping and technical requirements for new construction and alterations resulting from the adoption of revised 2010 Standards in the final rules for Title II and Title III.

https://www.ada.gov/2010ADASTandards_index.htm





W. BAILEY ST SIDEPATH RAILROAD CROSSING PRELIMINARY CONCEPT

At the railroad crossing of W. Bailey St, coordination with NCDOT Rail Division identified a potential treatment to include a 6 ft wide crosswalk on the shoulder of the roadway. This concept utilizes the existing rail crossing arms to protect trail users while minimizing costs associated with signal relocation and roadway improvements. This design is preliminary, and additional coordination with Norfolk Southern will be required during the design process.

Appendix C: Community Engagement

Included on the following pages are materials from community engagement efforts throughout the duration of the study.

Attachments:

- Working Group Meeting #1
- Working Group Meeting #2
- Working Group Meeting #3
- Working Group Meeting #4
- Public Meeting
- Community Survey
- Landowner Engagement Materials

WORKING GROUP MEETING #1

- **Introductions**
- **Study Area, Purpose, + Content**
- **Group Discussion: Defining Project Success**
- **Schedule**
 - Community Engagement + Stakeholders
- **Study Considerations**
- **Preliminary Route Alignment**
 - Group Discussion: Mapping Assessment
- **Next Steps**

McADAMS PROJECT TEAM

- Nia Rodgers**
Bicycle + Pedestrian Project Manager
- Andrew Hicking**
Bicycle + Pedestrian Practice Lead
- Kathryn Zeringue**
Senior Bicycle + Pedestrian Planner
- Christopher Normile**
Planner I
- Haley Nafissi**
Planner III
- Jimmy Prestwood**
Bicycle + Pedestrian Engineer
- Jeromy Wegzyn**
Bicycle + Pedestrian Designer III

Working Group

Name	Organization	Title
Jim Rich	Asheboro A3	
TBD	Asheboro City Schools	
Linda Brown	Asheboro/Randolph Chamber	President
Trevor Nuttall	City of Asheboro	Community Development Director
Justin Luck	City of Asheboro	Planning and Zoning Administrator
Jonathan Sermon	City of Asheboro Cultural and Rec	Cultural and Recreation Director
Jimmy Cagle	City of Asheboro Facilities Maintenance	Facilities Maintenance Director
Pearson Parks	City of Asheboro Public Works	Utility Inspections Supervisor
Michael Rhoney	City of Asheboro Water Resources	Water Resources Director
Kelly Heath	Elected official	Asheboro City Council
Amber Scarlett	Heart of NC Visitor's Bureau	Director
Joseph Furstenberg	NC DOT IMD	Project Manager
Mary Joan Pugh	Randolph County	Randolph County Trails Coordinator
Sam Varner	Randolph County	Wellness Administrator



STUDY AREA & PURPOSE

STUDY AREA LIMITS

- Project Endpoints:**
- Vision Drive
 - North along Haskett Creek to West Central Avenue

Connection:
North Asheboro Middle School

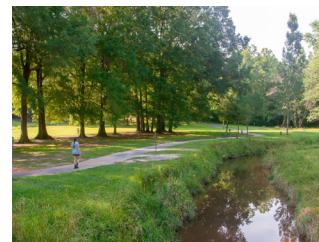
STUDY PURPOSE

- Evaluate the potential route scenarios of the corridor alignment, on both sides of the creek, at major road crossings, and at the railroad crossing at West Bailey Street.
- The study will also recommend appropriate bike and pedestrian connections to the schools, park or other destinations.

N. Asheboro Greenway FEASIBILITY STUDY CONTENT STANDARDS

STUDY CONTENT STANDARDS

- Introduction
- Study Considerations + Alternatives Development
- Community Involvement
- Evaluation + Recommendations
- Implementation
- Appendices
 - Funding Resources
 - Design Resources
 - Cost Information
 - Community Engagement
 - SPOT Scoring Resources



Credit: Piedmont Trails

N. Asheboro Greenway FEASIBILITY STUDY PROJECT SUCCESS



Credit: Piedmont Trails

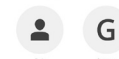
DISCUSSION:

"What does success look like for the N. Asheboro Greenway Feasibility Study?"

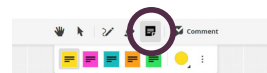
N. Asheboro Greenway FEASIBILITY STUDY CONCEPT BOARD

1. Click on link in chat box
<https://app.conceptboard.com/board/zco6-ansm-ox50-gzpx-kg19>

2. Select Guest Access



3. Select "post it note" to share your input.



N. Asheboro Greenway FEASIBILITY STUDY SCHEDULE + ENGAGEMENT



N. Asheboro Greenway FEASIBILITY STUDY WORKING GROUP

WORKING GROUP

Role
The Working Group will attend four (4) meetings where they will provide support, guidance, and oversight of progress for the Feasibility Study.

- Meetings**
1. Project Kick-Off + Study Considerations (September, in person)
 2. Alternatives Development (October/ November, virtual)
 3. Evaluation & Recommendations (December, virtual)
 4. Implementation (February, virtual)



N. Asheboro Greenway FEASIBILITY STUDY COMMUNITY ENGAGEMENT

Stakeholder + Public Engagement Plan

Purpose
To inform community on the project, the planning process and understand public priorities for using and connecting to the greenway.

- Components:**
- Working Group Meetings
 - Community Survey
 - Web based
 - PDF for in person circulation
 - Communications support
 - Public Meeting
 - Private Landowner Meetings (half day)
 - Stakeholder Meetings (4)
 - NCDOT Rail and Norfolk Southern
 - Asheboro City Schools
 - NCDOT Division 8
 - City Staff



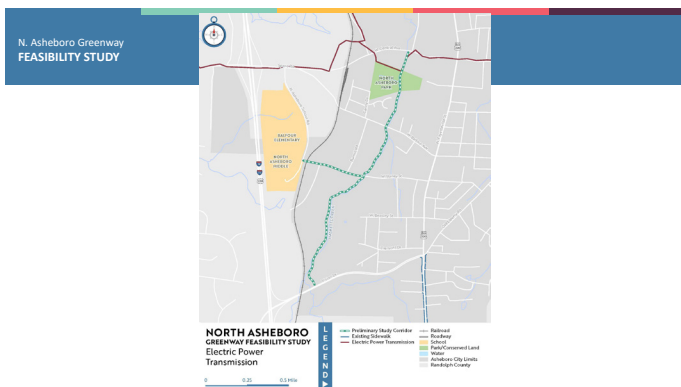
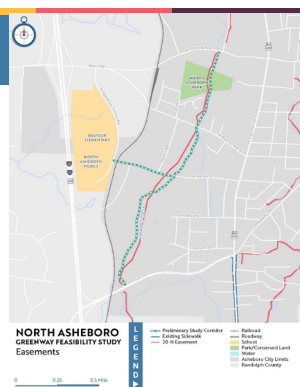
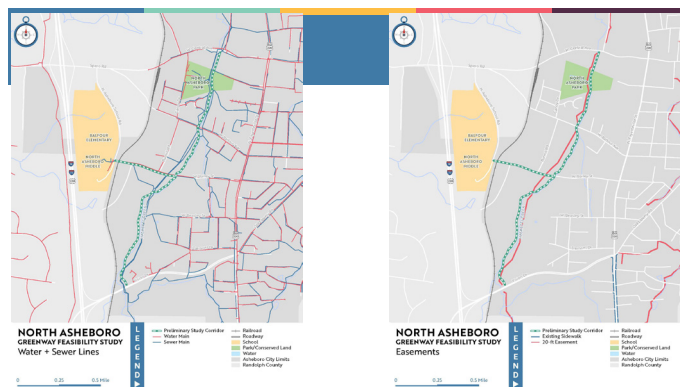
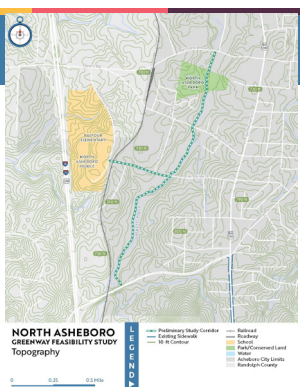
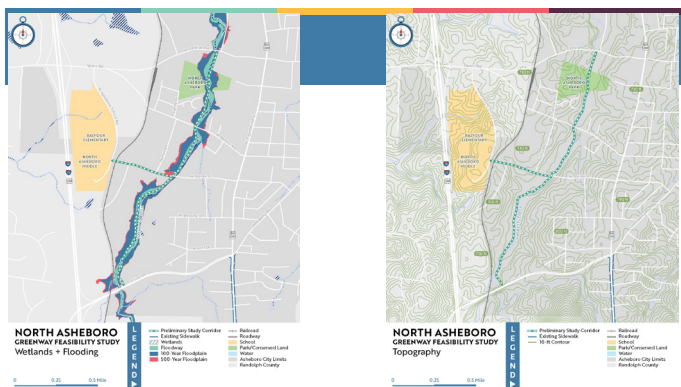
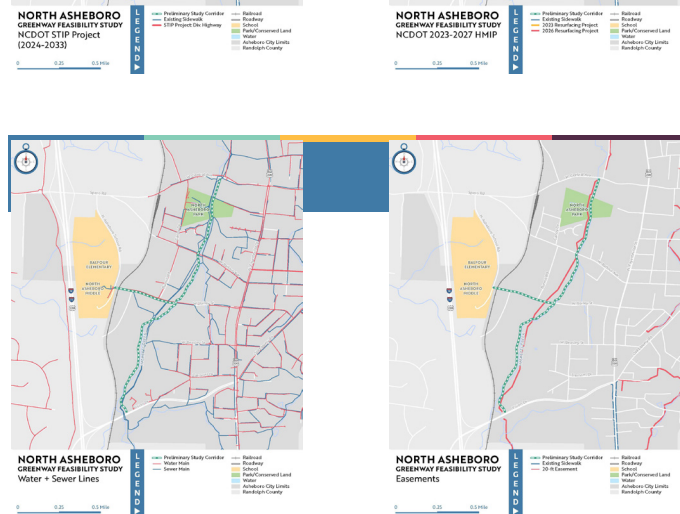
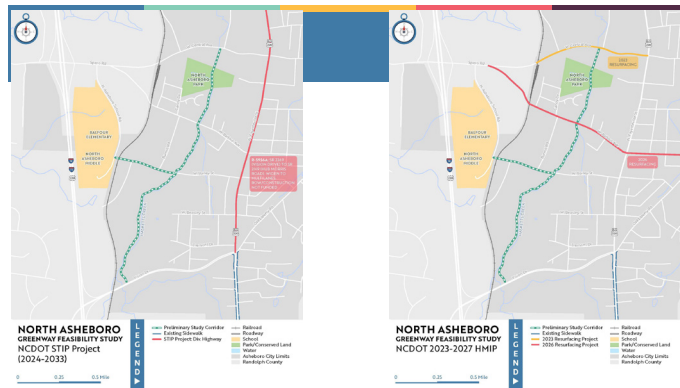
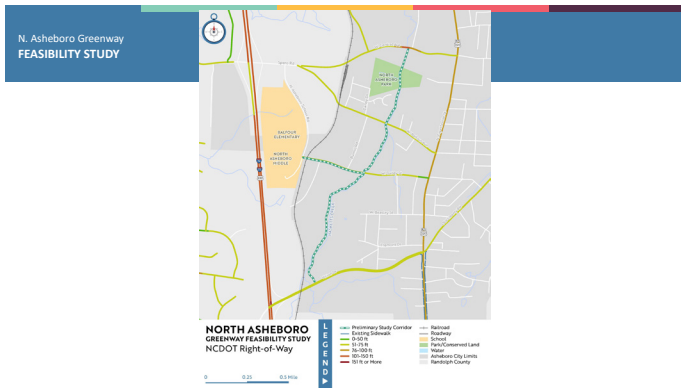
N. Asheboro Greenway FEASIBILITY STUDY Study Considerations

PLANS + POLICIES

- Randolph County**
- Unified Development Ordinance
 - Hazard Mitigation Plan
 - Flood Insurance Study
 - Growth Management Plan
 - Deep River Trail Conceptual Plan
 - Strategic Plan
- City of Asheboro**
- Land Development Plan
 - Zoning Ordinance
 - Subdivision Ordinance
 - Comprehensive Pedestrian Transportation Plan
- Piedmont Triad RPO**
- Piedmont Triad Climate Resiliency Tool Kit

- NCDOT**
- Great Trails State Plan
 - 2024-2033 STIP
 - Complete Streets Policy
 - NCDOT Bridge Policy





N. Asheboro Greenway FEASIBILITY STUDY

Study Considerations

Site Visit – Existing Conditions

Overhead power lines and steep topography near Vision Drive

Sewer easement near Vision Drive

W Bailey Street bridge over Hasketts Creek

N. Asheboro Greenway FEASIBILITY STUDY

Study Considerations

Site Visit – Existing Conditions

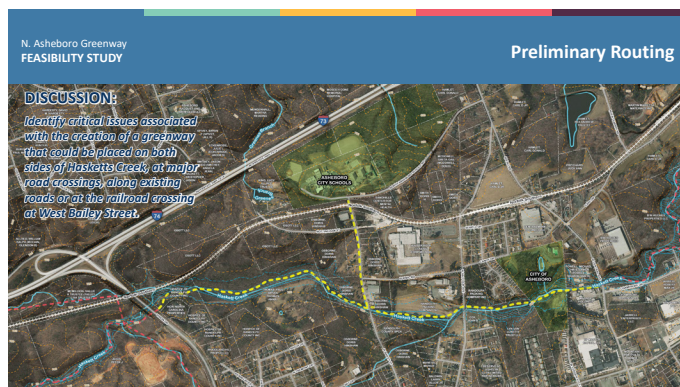
W Bufour Ave bridge at Hasketts Creek

Hasketts Creek through North Asheboro Park

W Central Ave bridge at Hasketts Creek

Sewer line under W Bufour Ave bridge

Transmission Lines along Hasketts Creek

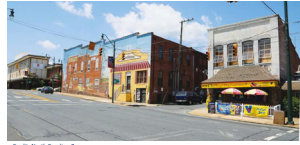


N. Asheboro Greenway
FEASIBILITY STUDY

NEXT STEPS + QUESTIONS

NEXT STEPS

- Working Group Meeting #2
- Public Survey
- Alternatives Development
- Landowner + Stakeholder Engagement



Credit: North Carolina Zoo

QUESTIONS?

Nia Rodgers
Bicycle + Pedestrian Project Manager, McAdams
rodgers@mcadamsco.com

WORKING GROUP MEETING #2

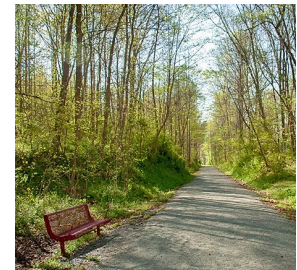
N. Asheboro Greenway
FEASIBILITY STUDY

Working Group Meeting #2
November 29, 2023

N. Asheboro Greenway
FEASIBILITY STUDY

AGENDA

- Project Schedule
- Public Engagement + Stakeholder Input to Date
- Community Survey Results
- Route Alternatives
- Opportunities + Constraints
- Decision Matrix Methodology
- Safety + Trails
- Next Steps



Credit: Liberty Park

N. Asheboro Greenway
FEASIBILITY STUDY

SCHEDULE



N. Asheboro Greenway
FEASIBILITY STUDY

ENGAGEMENT + STAKEHOLDER INPUT

SCHOOL COORDINATION

- > **Bailey Street Connection:**
 - o Locate path on south side of street due to right-of-way (ROW) conditions.
 - o May propose narrowing road (travel lanes) at rail crossing to accommodate an at-grade pedestrian crossing and pedestrian safety arms.
 - o A bridge overpass should be explored. An additional study is required to assess ROW and cost estimates.

- > **Interests + Concerns:**
 - o Impacts to drop off and pick-up
 - o Affects on bus traffic
 - o Concerns with public access and school safety
 - o Concerns with / Coordination on other roadway improvements to take place

N. Asheboro Greenway FEASIBILITY STUDY **ENGAGEMENT + STAKEHOLDER INPUT**



N. Asheboro Greenway FEASIBILITY STUDY **ENGAGEMENT + STAKEHOLDER INPUT**

PENDING COORDINATION

- > **Stakeholders:**
 - o NCDOT Division 8 - December
 - o NCDOT Rail Division - December
 - o City of Asheboro staff
 - o Piedmont Triad Regional Council
- > **Key Landowner Follow-up TBD**

N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

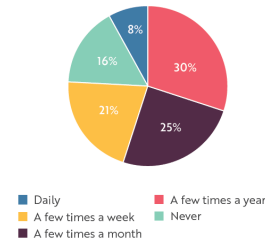
SURVEY FINDINGS

- Survey Period: October 18 – November 13, 2023
- The survey contained three sections:
 - Project-specific questions
 - Interactive mapping questions
 - Optional demographic questions
- 232 Participants
- 2,929 Responses
- 206 Comments



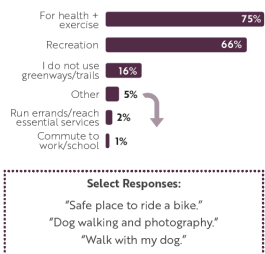
N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

HOW FREQUENTLY RESPONDENTS USE GREENWAYS + TRAILS



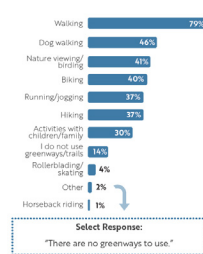
N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

HOW RESPONDENTS CURRENTLY USE GREENWAYS + TRAILS



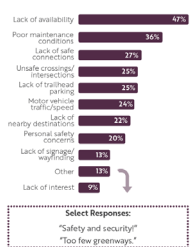
N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

CURRENT ACTIVITIES ALONG GREENWAYS + TRAILS



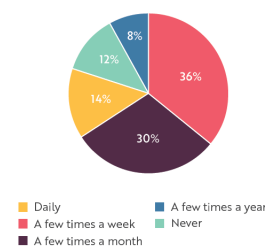
N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

DISCOURAGING FACTORS



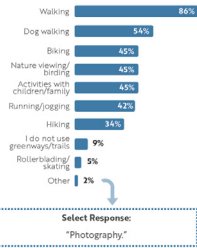
N. Asheboro Greenway FEASIBILITY STUDY **COMMUNITY SURVEY**

ANTICIPATED FUTURE GREENWAY USE



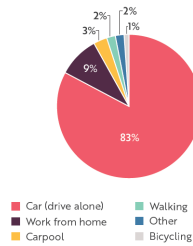
N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

FUTURE ACTIVITIES ALONG THE GREENWAY



N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

PRIMARY MODE OF TRANSPORTATION



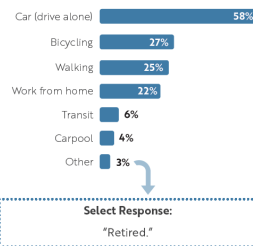
N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

TOP 5 GREENWAY ROUTING PREFERENCES

- #1 Provide connections to future greenways and trails
- #2 Provide access to parks and recreational areas
- #3 Route along or provide access to Haskett Creek
- #4 Provide connections to schools along the corridor
- #5 Most cost-effective route

N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

DESIRED MODES OF TRANSPORTATION IN THE FUTURE



N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

DESIRED GREENWAY DESTINATIONS

CATEGORY	DESCRIPTION
Recreational Destinations	North Asheboro Park Haskett Creek north of W. Central Ave
School Destinations	Asheboro Recreational and Tennis Club North Asheboro Middle School
Shopping Destinations	Businesses along Vision Dr and W. Bailey St
Other Destinations	Locations along W. Fayetteville St

Survey Responses:

- "Connect to other sidewalks and plan to add shade trees and clean connections to those adjacent sidewalks." - Survey Respondent
- "I hope there is future planning for the extension crossing down past Vision Drive. Maybe some interaction with the trail track area to push you down to the Pennell Street area." - Survey Respondent
- "This proposal needs to include MORE ground not just a small little." - Survey Respondent
- "I would like to connect to a park with a playground." - Survey Respondent
- "I would like there to be an entryway onto the greenway from Dove's Mountain." - Survey Respondent

N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

DESIRED INFRASTRUCTURE IMPROVEMENTS

The identified locations on the map include W. Central Ave, N. Fayetteville St, W. Ballfour Ave, Old Liberty Rd, and Vision Dr.

- Survey Responses:
- "Sidewalks and crossings are needed, and connections up to Technimark Plant 2 would be great." - Survey Respondent
 - "I often see people walking along the side of Old Liberty Rd and really think this area would benefit from a bike lane or sidewalk area." - Survey Respondent
 - "Need to continue much further to connect to downtown." - Survey Respondent
 - "Ballfour Rd to Fayetteville." - Survey Respondent

N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

SEGMENT ALTERNATIVES

Preliminary Segment and Route Alignment Evaluation

- Site Investigation + desktop evaluation
 - Identify what works – and what doesn't
 - Consider / respond to public survey responses
- Work with willing landowners
- Remove infeasible segments from consideration
- Combine most feasible segments into preliminary route
- Build basis for recommendations and communication with elected officials and the public

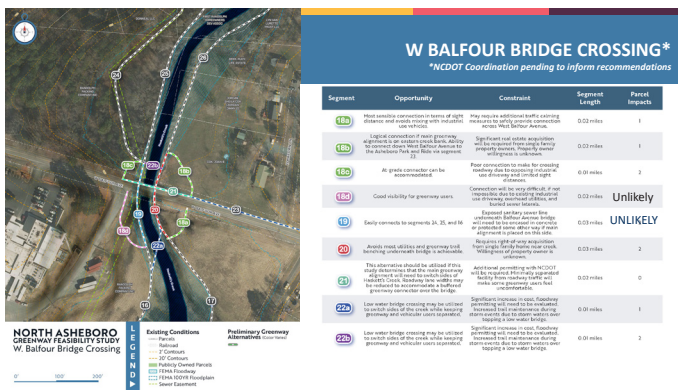
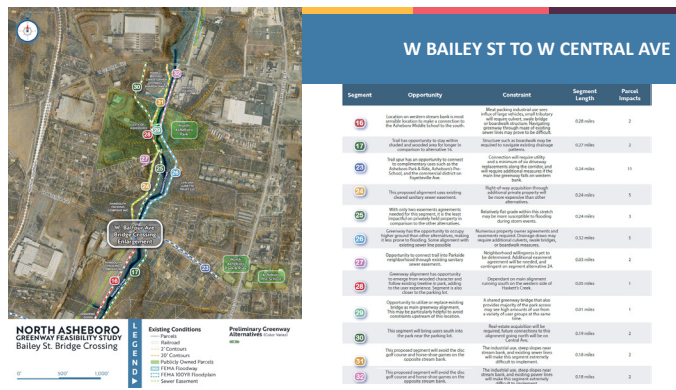
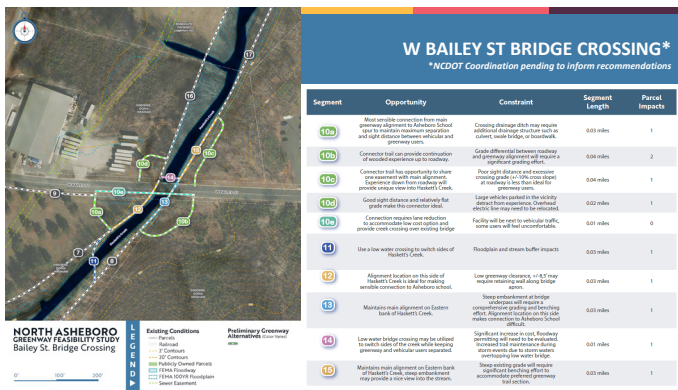


N. Asheboro Greenway Feasibility Study COMMUNITY SURVEY

VISION DR TO W BAILEY ST



Segment	Opportunity	Constraint	Segment Length	Percent Impacts
1	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Additional crossing and trail construction required to connect to existing sidewalks and trails.	0.15 miles	2
2	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Relatively high cost compared to other segments.	0.07 miles	2
3	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.07 miles	1
4	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	A new segment alignment will cut through the existing sidewalk and trail network.	0.10 miles	2
5	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Additional crossing and trail construction required to connect to existing sidewalks and trails.	0.21 miles	2
6	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.15 miles	2
7	This segment follows a bridge crossing over the creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.08 miles	4
8	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
9	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
10	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
11	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
12	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
13	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
14	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
15	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
16	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
17	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
18	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
19	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2
20	Greenway follows the existing path of an old creek bed, which provides a natural barrier between the north and south portions of the site.	Requires bridge and additional utility work.	0.17 miles	2



N. Asheboro Greenway FEASIBILITY STUDY DECISION MATRIX Route Evaluation Criteria

Physical Feasibility & Constructability

The ability to successfully engineer, permit, and maintain each alternative is a critical consideration for determining feasible options for the route alternatives.



Desired Connectivity

To maximize use of the facility, determine which route alternatives connect key origins and destinations identified by the public and other stakeholders.



Community Priorities

To ensure consistency with public preferences and existing plans, goals identified in previous planning efforts and feedback from public engagement/stakeholder outreach activities are utilized to evaluate the route alternative.



Cost

The magnitude of the total life-cycle cost for each alternative (including design, construction and ongoing maintenance) is a significant factor in determining which alternative to implement.



N. Asheboro Greenway FEASIBILITY STUDY DECISION MATRIX Route Evaluation Criteria

Environmental Impacts

The ability of each alternative to minimize impacts to streams, wetlands and other jurisdictional features (including associated buffers, floodplain elevations, and other environmental factors) during construction and operation of the proposed facility.



Accessibility + User Experience

Convenience of use and accommodation for users of all ages and abilities to ensure the recommended route is a community amenity designed for universal use.



N. Asheboro Greenway FEASIBILITY STUDY DECISION MATRIX Route Evaluation Criteria

Property Impacts

Real estate acquisition can play a major role in project cost and schedule. The extent to which route alternatives utilize publicly-owned properties, existing easements, and public ROW and limit impacts to privately-owned parcels is considered.



Potential Funding Opportunities

Diversity of funding options from a variety of potential sources, available funds, and project competitiveness for each route alternative is considered.



N. Asheboro Greenway FEASIBILITY STUDY **DECISION MATRIX**
Route Evaluation Criteria

Economic Development + Placemaking

The potential ability of route alternatives to drive tourism, contribute to the local economy, and establish the surrounding area as one that promotes healthy, active lifestyles is considered.



Leadership Support

The depth of support from governmental agencies, elected officials, and local advocates for each route alternative to champion the project through development and implementation is considered.



N. Asheboro Greenway FEASIBILITY STUDY **DECISION MATRIX**
Route Evaluation Criteria

Traffic Impacts

The magnitude in which the design of each route alternative impacts vehicular traffic and associated temporary impacts during construction is considered.



Implementation Timeframe

The estimated timeframe to prioritize, fund, design, and construct each route alternative is considered, especially in conjunction with community priorities for project completion.



N. Asheboro Greenway FEASIBILITY STUDY **DECISION MATRIX**
Route Evaluation Criteria

Physical Feasibility + Constructability	Desired Connectivity	Community Priorities	Cost	Environmental Impacts	Accessibility + User Experience
Property Impacts	Potential Funding Opportunities	Placemaking	Leadership Support	Traffic Impacts	Implementation Timeframe

N. Asheboro Greenway FEASIBILITY STUDY **DECISION MATRIX**
Route Evaluation Criteria

ROUTE ALTERNATIVE SELECTION CRITERIA	NORTH ASHEBORO GREENWAY FEASIBILITY STUDY	
	ROUTE 1	ROUTE 2
Physical Feasibility & Constructability		
Desired Connectivity		
Community Priorities		
Cost		
Environmental Impacts		
Accessibility + User Experience		
Property Impacts		
Potential Funding Opportunities		
Placemaking		
Leadership Support		
Traffic Impacts		
Implementation Timeframe		

EXAMPLE

N. Asheboro Greenway FEASIBILITY STUDY **SAFETY + TRAILS CPTD**

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTD)

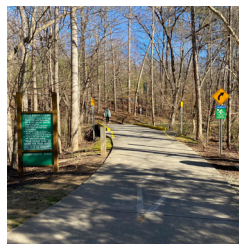
Physical Design

- Maximize visibility on the trail and minimize hidden areas.
- Include lighting at parking areas and trailheads.
- Maintain the trail regularly to keep up a cared-for appearance.
- Establish clear separation between private property and the greenway.
- Clearly marked informational and directional signage along the greenway.

Planning and Programming

- Support social programs to solve local problems (e.g. neighborhood watch, walking and fitness affinity groups)
- Support cultural programming on trails to build relationships among neighbors
- Provide neighborhood and community connectivity with physical trail connections or shared programming

Find more information at
<https://www.cpted.net/>



N. Asheboro Greenway FEASIBILITY STUDY **SAFETY + TRAILS STUDIES**

AMERICAN TOBACCO TRAIL, DURHAM, NC 2012-2014

- Less than 0.5% of area (within a 10-minute walk) crimes on the trail.
- Over 86% of respondents perceive the trail to be safe.
- Social Justice as it Pertains to Safety on the American Tobacco Trail (2015). [http://www.triangletrails.org/pdfs/ATT_report_finaldraft_6_5_15\[2\].pdf](http://www.triangletrails.org/pdfs/ATT_report_finaldraft_6_5_15[2].pdf)

LOWER BOOKER TRAIL, DRY CREEK TRAIL, BOLIN CREEK TRAIL PHASE II, CHAPEL HILL, NC 2005

- No impact in two of the three areas, small increase in third area.
- Greenways and Crime on Nearby Properties: An Investigation of Reported Crimes Along Three Greenways (2005). https://cdr.lib.unc.edu/concern/masters_papers/fn1070818

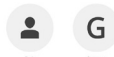
GREENWAYS MECKLENBURG COUNTY, NC 2001-2003

- Greenway-adjacent properties had lower crime rates than nearby areas 75% of the time.
- A 1997 study found crime on the Mallard Creek Greenway and adjacent properties was nearly half that of the surrounding police district, and only 12.7% of the countywide crime rate.
- Connect Buncombe Draft Plan for Public Review (2012). Accessed from Buncombe County: <https://www.buncombecounty.org/common/parks/MasterPlan/7-Safety.pdf>

N. Asheboro Greenway FEASIBILITY STUDY **CONCEPT BOARD**

1. Click on link in chat box
<https://app.conceptboard.com/board/hzis-dcyt-uoit-4yts-9kaf#>

2. Select Guest Access



3. Select "post it note" to share your input.



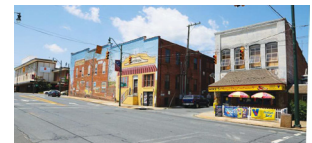
N. Asheboro Greenway FEASIBILITY STUDY **NEXT STEPS + QUESTIONS**

NEXT STEPS

- Landowner + Stakeholder Engagement
- Public Meeting (Dec. 12)
- Route Review (Homework!)
- Working Group Meeting #3 (Evaluations + Recommendations)

QUESTIONS?

Nia Rodgers
 Bicycle + Pedestrian Project Manager, McAdams
rogers@mcadamsco.com




Credit: North Carolina Zoo

WORKING GROUP MEETING #3

N. Asheboro Greenway FEASIBILITY STUDY

Working Group Meeting #3
March 14, 2024



N. Asheboro Greenway FEASIBILITY STUDY

AGENDA

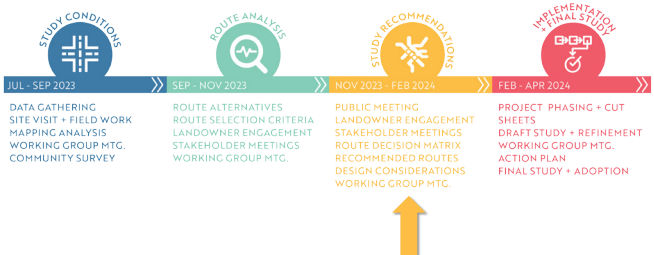
- Project Schedule
- Stakeholder and Public Engagement Updates
- Route Alternatives
- Recommended Route
- Preliminary Construction Cost Estimate
- Implementation and Funding Strategy Overview
- Next Steps



Credit: Larry Phillips

N. Asheboro Greenway FEASIBILITY STUDY

SCHEDULE




N. Asheboro Greenway FEASIBILITY STUDY

STAKEHOLDER AND PUBLIC ENGAGEMENT

PUBLIC MEETING (December 12, 2023, 4:00-6:00 pm at the City of Asheboro Public Works Building)

- Desire for multiple access points should be provided, with parking and access control measures such as gates or bollards.
- A connection across Vision Dr should be considered to provide a trailhead.
- Attendees expressed concern with user safety due to the remote nature of the greenway corridor, and suggested lighting, security cameras, emergency call boxes, and police patrols.
- Route preferences were varied; Residents with properties close to the greenway prefer a route farther from their homes, while property owners who do not live near the greenway prefer a route that is closer to nearby residents and the North Asheboro Park.
- Non-residential landowners expressed concerns with liability in the event of greenway users trespassing on their property.
- Some adjacent parcels have sold recently and may be developed, potentially incorporating the greenway as a connection.



N. Asheboro Greenway FEASIBILITY STUDY

STAKEHOLDER AND PUBLIC ENGAGEMENT

- **ASHEBORO CITY SCHOOLS (November, 7th 2023)**
 - Discussion of trail location on south side of W. Bailey Street due to right-of-way (ROW) conditions.
 - Discussion of proposed road narrowing (travel lanes) or lane modifications at rail crossing to accommodate an at-grade pedestrian crossing and pedestrian safety arms.
 - Discussion that a bridge overpass at the rail could be explored but would be costly.
 - Discussion of potential trail extension onto campus along the west side of the drive and connecting with a sidewalk to either the bus drop off or the main office entry
- **SCHOOL INTERESTS AND CONCERNS**
 - Impacts to drop off and pick-up
 - Affects on bus traffic
 - Concerns with public access and school safety
 - Concerns with / Coordination on other roadway improvements to take place
 - *In follow-up correspondence the school advised that the board was not supportive of the trail extending onto the campus*

N. Asheboro Greenway FEASIBILITY STUDY

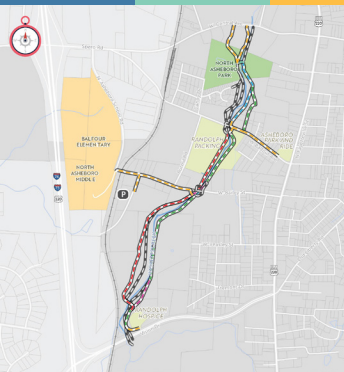
STAKEHOLDER AND PUBLIC ENGAGEMENT

- **NC DOT DIVISION 8 (December 11, 2023)**
 - NCDOT prefers to maintain roadway lanes at a minimum of 12 ft, with 11 ft lanes acceptable in constrained locations.
 - Existing roadway bridges over Hasketts Creek on W. Bailey St and W. Balfour Ave are not ideal for accommodating a multi-use trail due to limited available width, a need for physical separation, and drainage.
 - Proposed sidepath on W. Bailey St would likely require curb and gutter with a minimum 2 ft landscaped strip to separate the path from the roadway.
- **NC DOT RAIL DIVISION (December 14, 2023)**
 - Railroads typically only allow shared use path crossings within the railroad right-of-way to be 6 ft wide to encourage bicyclists to dismount and walk across. A new at-grade crossing is not likely to be approved by the railroad.
 - The path would have to route around the existing gate arms and maintain a minimum distance of 5.5 ft from the existing flashers.
 - Flagging service must be provided when doing construction work within a railroad corridor and should be provided by the contractor.

N. Asheboro Greenway FEASIBILITY STUDY

STAKEHOLDER AND PUBLIC ENGAGEMENT

- **CITY OF ASHEBORO STAFF (January 17, 2024)**
 - The City expects improvements to North Asheboro School Rd to be submitted for a future STIP project, potentially including pedestrian improvements that could connect to the greenway.
 - A trailhead could be located on Nottingham St if a feasible location at the southern end of the greenway corridor near Vision Dr cannot be found.
 - Segments of the greenway within North Asheboro Park should be designed to minimize impacts to the disc golf course, which is popular with local residents.
 - The police department does not have specialized equipment to access the greenway and may need to use patrol vehicles along the corridor.
- **PIEDMONT TRIAD RPO (February 14, 2023)**
 - Updated Comprehensive Transportation Plans for the City of Asheboro and Randolph County will be developed in the near future and will likely cover a 10-year planning horizon.
 - The Strategic Prioritization (SPOT) process is the main funding avenue through the RPO, but there is opportunity to increase grant writing capacity at a regional level.
 - The P7.0 prioritization process is ongoing, and the RPO would not be able to submit the North Asheboro Greenway project for scoring until a future prioritization phase begins.



SEGMENT ALTERNATIVES Summary

- **Segment Alternatives**
 - Main Line Alternatives (Various Colors)
 - Removed from Consideration (Grey)
 - Connector Alternatives (Orange)

SEGMENT ALTERNATIVES Summary

SEGMENTS REMOVED FROM CONSIDERATION

- Segment 1: Removed due to anticipated increased cost, implementation hurdles (including additional required geotechnical and hydraulic study) and permitting constraints in comparison to other alternatives, and due to potentially creating an isolated trail endpoint. However, segment 1 could be considered in the future to extend future sections of the three river trail connection towards downtown Ashboro and the Lurline Mountains.
- Segment 2: Removed due to cost, implementation hurdles (including additional required geotechnical and hydraulic study) and permitting constraints in comparison to other alternatives.
- Segment 3: Removed due to concerns of increased flooding events which would increase the frequency of trail maintenance.
- Segments 10 and 10A: Removed due to existing topography constraints and poor sight distance at roadway crossing location.
- Segment 10C: Removed due to conflicts with existing vehicular parking and apparent utility relocation.
- Segment 14: Removed due to a significant cost and maintenance increase for this low-water crossing.

SEGMENT ALTERNATIVES Summary

SEGMENTS REMOVED FROM CONSIDERATION

- Segments 10 and 10A: Removed due to existing topography constraints and poor sight distance at roadway crossing location.
- Segment 10C: Removed due to conflicts with existing vehicular parking and apparent utility relocation.
- Segment 14: Removed due to a significant cost and maintenance increase for this low-water crossing.

SEGMENT ALTERNATIVES Summary

SEGMENTS REMOVED FROM CONSIDERATION

- Segments 16 and 18: Removed due to existing driveway and utilities (water, gas, and electric) in the area. Large amounts of truck traffic make integrating bicycle and pedestrian here undesirable.
- Segment 19 and 20: Removed due to bridge clearance restrictions (less than 8' 10") and exposed existing sewer lines.
- Segment 21: Removed due to infeasibility of reallocating roadway space to accommodate bicycles and pedestrians in a safe and comfortable manner.
- Segments 22A, 2A, and 2B: Removed due to lack of support from private property owners.

SEGMENT ALTERNATIVES Summary

SEGMENTS REMOVED FROM CONSIDERATION

- Segments 24, 25, 28, and 29: Removed due to lack of support from private property owners.
- Segment 31: Removed due to conflicts with electric transmission towers and insufficient room at top of stream bank.

Segment 17 has also been removed

N. Ashboro Greenway FEASIBILITY STUDY

ROUTE ALTERNATIVES Typical Drawings

- Elevated Bridge Crossing
- Elevated Boardwalk
- Asphalt Trail
- Example Low Water Bridge Crossing
- Rapid Rectangular Flashing Beacon

ROUTE ALTERNATIVES Alternative A

- Alternative Snapshot
 - Total Main Line Length: 1.55 miles
 - One Low Water Crossing = 60ft
 - One Elevated Bridge Crossing = 70ft
 - Boardwalk Trail = 280ft
 - Rectangular Rapid Flashing Beacon Crossing
 - Main Alignment Private Parcel Impacts = 10

Approximate Main Line Costs

2024 Construction Cost = \$3,180,000
 2030 Construction Cost = \$4,260,000
 CEI Services = \$425,000
 Survey & Design Services = \$250,000
 Permanent Easement Cost = \$46,000
Total Approximate Cost = \$4,982,000

**Note: costs associated do not include construction easement acquisition, but do include 50% contingency

ROUTE ALTERNATIVES Alternative B

- Alternative Snapshot
 - Total Main Line Length = 1.68 miles
 - Two Low Water Crossings, Totaling = 110ft
 - Rectangular Rapid Flashing Beacon Crossing
 - Main Alignment Private Parcel Impacts = 9

Approximate Main Line Costs

2024 Construction Cost = \$2,520,000
 2030 Construction Cost = \$3,380,000
 CEI Services = \$340,000
 Survey & Design Services = \$200,000
 Permanent Easement Cost = \$45,000
Total Approximate Cost = \$3,965,000

**Note: costs associated do not include construction easement acquisition, but do include 50% contingency

ROUTE ALTERNATIVES Connections

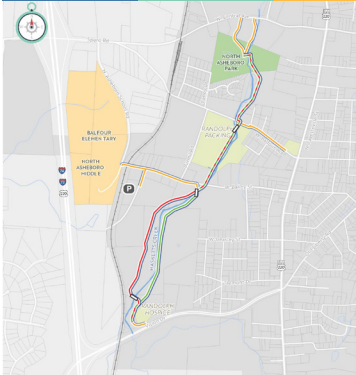
- Connection Trail Snapshot
 - Asheboro Park to W. Central Ave.
 - Asheboro Park and Ride (W. Balfour Ave.)
 - Asheboro City Schools (W. Bailey St.)
 - Randolph Hospice
 - Total Length = 0.71 miles

Approximate Connector Trail Costs

2024 Construction Cost = \$1,840,000
 2030 Construction Cost = \$2,460,000
 CEI Services = \$250,000
 Survey & Design Services = \$150,000
Total Cost = \$2,860,000

**Note: costs associated do not include ROW acquisition, but does include 50% contingency

ROUTE ALTERNATIVES Decision Matrix



Criteria	Alternative A	Alternative B
Physical Feasibility	Least desirable	Most desirable
Cost Effectiveness	Least desirable	Neutral
Property Impacts	Least desirable	Neutral
Community Priorities	Least desirable	Neutral
Existing Opportunities	Neutral	Most desirable
Environmental Impacts	Most desirable	Most desirable
Distal Connectivity	Most desirable	Most desirable
Programming Impacts	Neutral	Neutral
Implementation Timeline	Least desirable	Neutral
Accessibility	Neutral	Neutral
Staff Support	Neutral	Most desirable
Permeability + User Experience	Most desirable	Neutral

Scoring key:
 Least desirable (Red) Neutral (Yellow) Most desirable (Green)

RECOMMENDED ROUTE

ALTERNATIVE COMPARISON NOTES

- CONSTRUCTABILITY**
 - Alternative A will be more difficult to construct due to site access constraints to implement elevated bridge crossing.
 - Flood study will need to be done to evaluate floodway impacts on private parcels.
- MAINTENANCE**
 - About the same between alternatives, low water crossings will require regular maintenance.
- OVERALL COST**
 - Alternative B is Less expensive than Alternative A by approximately **20%**

COST CONSIDERATIONS

- Costs for Easements or Land Acquisition
- Costs for Field Survey / Engineering Design / Geotechnical Investigations / Permitting
- Construction Engineering + Inspections Costs (typically 10-12% of construction cost)
- Construction Cost Escalation (typically 5% or more per year out to build year)
- Overall Project Contingency (typically 5-10% depending on unknowns)
- **Will be added in study report to estimate overall project budgets based on anticipated build year**

IMPLEMENTATION APPROACHES

DESTINATION BASED PHASING

- North Asheboro Park to Asheboro Park and Ride
- North Asheboro Park to Asheboro School System and Parking Lot Spur

CORRIDOR PHASING

- Main Alignment followed by connections to destinations
- Additional connections to Vision Dr and West Central Ave. to be phased in when region outside this project's corridor is studied

FUNDING AVAILABILITY

- Determine available funds and structure implementation based on grant requirements

PRIVATE DEVELOPMENT COORDINATION

- Fund sections of greenway as private development connects to main alignment
 - Possible to share permitting NCDOT / FEMA packages this way or absorb cost

IMPLEMENTATION PARTNERS

KEY AGENCIES & PARTNERS

- Regional Partners**
 - Piedmont Triad Regional Planning Organization (RPO)
 - Transit Providers (PART, RCATS)
- County Partners**
 - Randolph County
 - Randolph County Tourism Development Authority
 - Asheboro/Randolph Chamber
- State Partners**
 - NCDOT (Division 8, Integrated Mobility Division, and Rail Division)
 - NC Division of Parks and Recreation (State Trails)

Non-Profit Partners

- Piedmont Legacy Trails
- BikeWalk NC

Private Sector Partners

- Norfolk Southern Railroad
- Local Businesses
- Landowners
- Developers

IMPLEMENTATION FUNDING

State and Regional Federal Funding

- Transportation Alternatives (TA)
- Recreational Trails Program (RTP)
- Highway Safety Program
- Land and Water Conservation Fund (LWCF)**
- Community Development Block Grants (CDBG)
- Carbon Reduction Program

Discretionary Grants

- Rebuilding American Infrastructure with Sustainability & Equity (RAISE)
- Active Transportation Infrastructure Investment Program (ATIP)**
- Safe Streets and Roads for All (\$54A) Grant
- Rural and Tribal Assistance Pilot Program
- Community Change Grants
- National Endowment for the Arts Our Town Program

Considerations for Each

- Application Deadline Timeframes
- Project Award Amounts
- Match Requirements
- Eligibility

IMPLEMENTATION FUNDING

State

- Great Trails Program**
- Parks and Recreation Trust Fund (PARTF)**
- Powell Bill Funds
- Strategic Transportation Investments (STIP)**
- Statewide Projects Funds
- Spot Safety Program

Local

- Bonds
- Developer Built Trails**
- Development Agreements
- Public/Private Partnerships
- Capital Improvement Program (CIP)**
- Municipal Service Districts (MSD)

Private

- Golden Leaf Foundation
- AARP Community Challenge
- National Association of Realtors Placemaking Grants
- People for Bikes Community Grant Program
- Two for the Trails (Athletic Brewing Company)

Technical Assistance Programs

- Greening America's Communities
- Building Blocks for Sustainable Communities
- Rivers, Trails, and Conservation Assistance Programs**


NEXT STEPS + QUESTIONS

NEXT STEPS

- Landowner Engagement, letters to be sent out to property owners
- Tourism Board Coordination
- Project Cut Sheets
- Draft Project Study
- Working Group Meeting #4

QUESTIONS?

Nia Rodgers
 Bicycle + Pedestrian Project Manager, McAdams
 rogers@mcadamsco.com



Credit: North Carolina Zoo

WORKING GROUP MEETING #4

At the final Working Group meeting for the North Asheboro Greenway Feasibility Study, the project team presented a draft of the final feasibility study document.

PUBLIC MEETING



NORTH ASHEBORO GREENWAY FEASIBILITY STUDY

Your voice matters!

Please join us at the drop-in style public meeting to learn more about the project and to share your input.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: [Redacted]
Address: [Redacted]
Email: [Redacted]

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
No preference, open to options

Please tell us why:
[Blank lines]

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

concern for safety & ability to patrol multiple access points w/ parking limited light pollution (if trail lighted)

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: [Redacted]
Address: [Redacted]
Email: [Redacted]

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
#8, #1, #25, #30, #23

Please tell us why:
We are divided on route 9. We feel that #9 has a built-in population that is more likely to use it i.e. NAMS Cross-country, field trips, etc. I say proximity doesn't guarantee use.

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

I would like to extend to the (future) Catholic Church for parking / playground purposes.

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: [Redacted]
Address: [Redacted]
Email: [Redacted]

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
Prefer Trail #26

Please tell us why:
Further away from Parkside neighborhood due to the increase in noise, traffic & increase crime! We need safety also in this project due criminal activity pedestrian walking - to feel safe using this trail!

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

Not against it we need progress in Asheboro! We need restrictions on hours of operation, Bikes & speed bumps on the entrance of North Asheboro City Park. Due to the increase traffic in the future! Fines for people using 3 wheel or Motor Bikes! Nighting Post w/ Camera's to feel safe & help Law Enforcement identify Criminals or discourage Vandalism at Park and in Near By Neighborhoods!

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



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Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: [Redacted]
Address: [Redacted]
Email: [Redacted]

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
[Blank lines]

Please tell us why:
[Blank lines]

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

[Blank lines]

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: _____
Address: _____
Email: _____

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
No preference - anywhere where I can walk in peace and beauty.

Please tell us why:

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

Having a greenway/walking path is a great idea! Asheboro needs several of these. Safety is a concern; need surveillance cameras, lights, regular police patrol, emergency notification devices, etc.

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: _____
Address: _____
Email: _____

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
No preference

Please tell us why:
I would use any route

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

Put up a gate so it can be locked by 9pm we get alot of cars racing + squalling of whes 12, 1, 2, 15 there a way we get the lights to go out by 11pm. They are sometimes on till 1am
Glad to hear about side walks
Thank you for all your hard work

Please drop your completed form in the box or hand it to the project team before you leave.

Asheboro Public Works | December 12, 2023 | 4:00 PM - 6:00 PM



PUBLIC MEETING COMMENT FORM
North Asheboro Greenway Feasibility Study



Thank you for attending the public meeting. Your input is incredibly valuable to this project.

Please type or print the following information. All questions are optional and personal information will not be distributed.

Name: _____
Address: _____
Email: _____

Which trail segments (see presentation boards) or type of trail alignment do you prefer?
ALL PROPOSED WILL BE O.K.

Please tell us why:
NO PREFERENCE TO WHICH SIDE OF CREEK OR CROSSINGS REQ'D

Use the space below to provide additional comments, support for or objection to the project, or feedback on the meeting:

BETTER SECURITY AT NORTH ASHEBORO CITY PARK TENNIS COURT LIGHTING ERRATIC. PEOPLE/VEHICLES IN PARK AFTER DARK. SECURITY VEHICLE GATE.

Please drop your completed form in the box or hand it to the project team before you leave.

COMMUNITY SURVEY

VIEWS

361

PARTICIPANTS

232

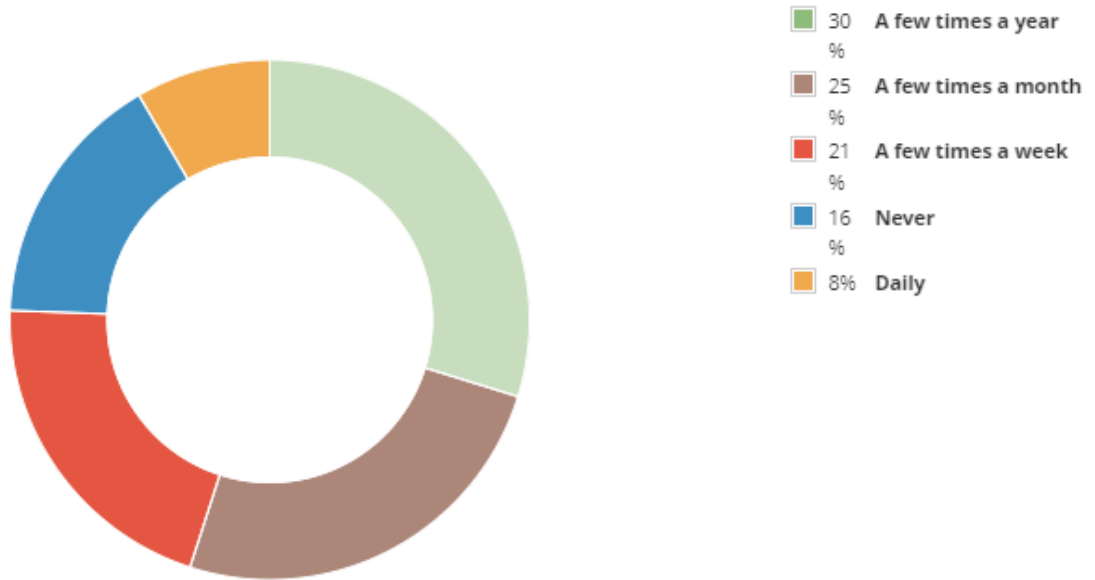
RESPONSES

2,929

COMMENTS

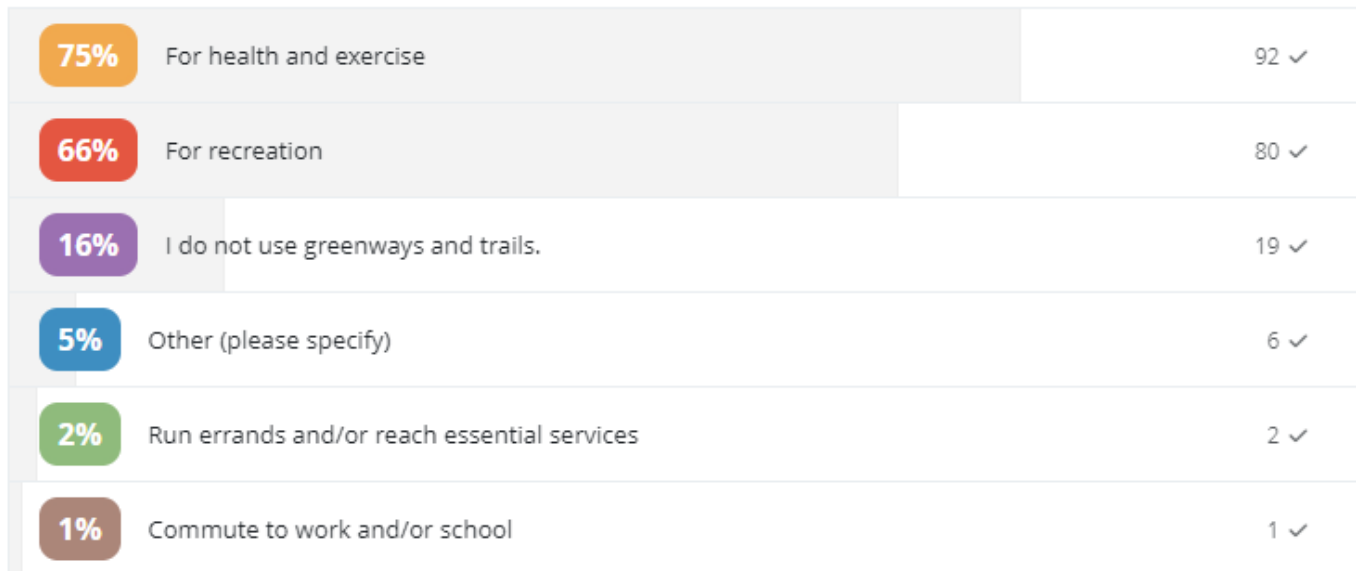
206

1. How frequently do you use greenways and trails?



131 respondents

2. How do you currently use greenways and trails? *Select all that apply.*



122 Respondents

3. What activities do you participate in along greenways and trails? *Select all that apply.*

79%	Walking	95 ✓
46%	Dog Walking	55 ✓
41%	Nature Viewing/Birding	49 ✓
40%	Biking	48 ✓
37%	Running/Jogging	44 ✓
37%	Hiking	44 ✓
30%	Activities with Children/Family	36 ✓
14%	I do not use greenways and trails.	17 ✓
4%	Rollerblading/Skating	5 ✓
2%	Other (please specify)	2 ✓
1%	Horseback Riding	1 ✓

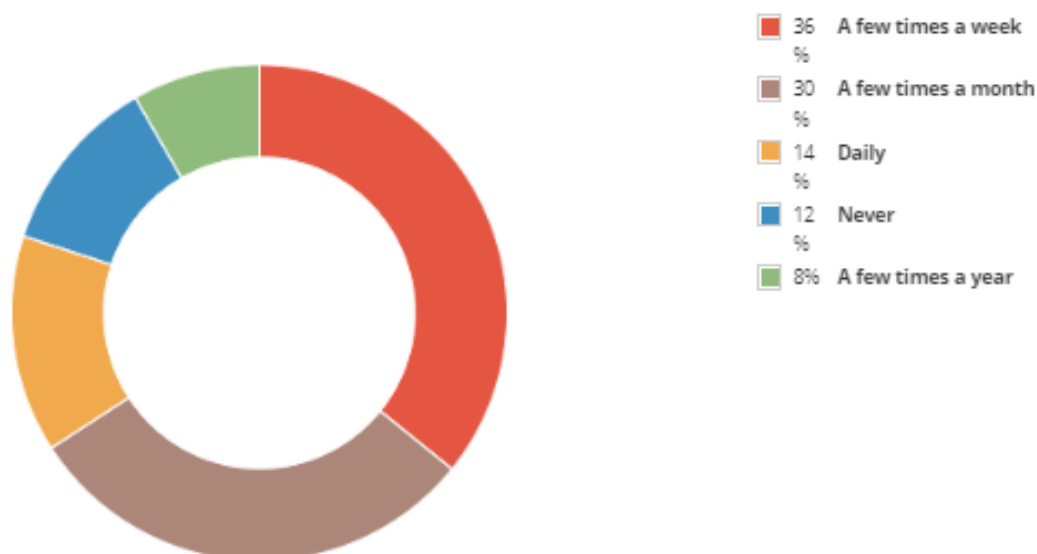
120 Respondents

4. What factors discourage you from using greenways and trails? *Select all that apply.*



118 Respondents

5. How frequently would you use the proposed segment of the North Asheboro Greenway once it is constructed?



120 respondents

6. What activities would you participate in along the proposed segment of the North Asheboro Greenway once it is constructed? *Select all that apply.*

86%	Walking	102 ✓
54%	Dog Walking	64 ✓
45%	Biking	53 ✓
45%	Nature Viewing/Birding	53 ✓
45%	Activities with Children/Family	53 ✓
42%	Running/Jogging	50 ✓
34%	Hiking	40 ✓
9%	I do not use greenways and trails.	11 ✓
5%	Rollerblading/Skating	6 ✓
2%	Other (please specify)	2 ✓
0%	Horseback Riding	0 ✓

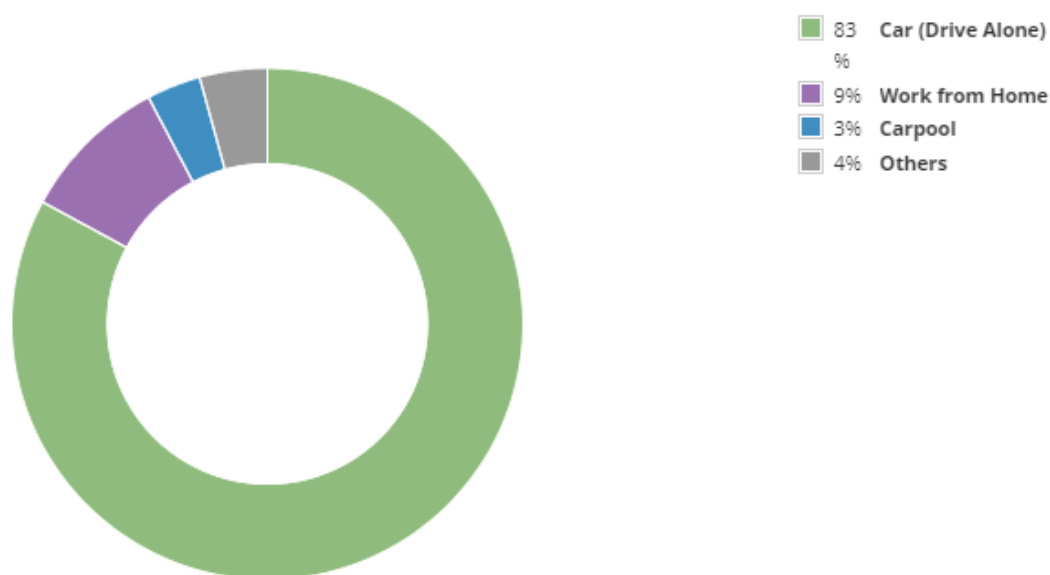
118 Respondents

7. What are your five (5) most important routing preferences for the proposed segment of the North Asheboro Greenway? Select up to five (5) routing preferences.

74%	Provide connections to future greenways and trails	86 ✓
70%	Provide access to parks and recreational areas (North Asheboro Park)	81 ✓
53%	Route along or provide access to Haskett Creek	61 ✓
22%	Provide connections to schools along the corridor (North Asheboro Middle School and Balfour Elementary School)	26 ✓
18%	Most cost-effective route	21 ✓
16%	Provide access to commercial areas near the trail	19 ✓
16%	Provide access to neighborhoods/residential areas	18 ✓
9%	Route adjacent to roadways along the corridor	11 ✓
8%	Provide access to large employers near the trail	9 ✓
7%	Most direct route	8 ✓
5%	Other (please specify)	6 ✓

116 Respondents

8. What is your primary mode of transportation for commuting to work and/or school?



117 respondents

9. Now consider your desired commute in the future. Which modes would you like to use?

Select all that apply.

58%	Car (Drive Alone)	69 ✓
27%	Bicycling	32 ✓
25%	Walking	29 ✓
22%	Work from Home	26 ✓
6%	Transit	7 ✓
4%	Carpool	5 ✓
3%	Other (please specify)	4 ✓

118 Respondents

10. What do you think would increase trail usage or bring new users to the North Asheboro Greenway?

Marketing the project more.

6 months ago

Building the greenway in such a way that it can easily be connected, expanded or integrated in the future to a wider greenway network around Asheboro. It would be an amazing way to spur development, investment and connectivity for citizens to engage with each other as well as local businesses. Greenways are a great way to bring together Asheboro's unique and distinct neighborhoods to create a positive identity and fabric.

6 months ago

Ok to use near sewer access if the smell is kept away. Make it scenic and easy access and nice path.

6 months ago

Easy access

6 months ago

Easier access and availability

6 months ago

No

6 months ago

Communicating that the trail is available and ensuring safety for those using it.

6 months ago

Safe space and multiple trails and activities to do.

6 months ago

A safe space where everyone feels comfortable. A connection to Dave's Mountain Neighborhood.

6 months ago

Continued length of the trail, I love going to Jamestown and riding bikes or walking with my wife because of the length of the trails

6 months ago

A loop design instead of straight line. Most greenway use is for recreation/exercise not specific travel.

6 months ago

Cleanliness of the trail.

Markers to ensure people know they're on the trail.

Informational signs about the kind of animals/plants one will find in a certain area along with information about them.

6 months ago

My friends and I sometimes drive over 2 hours to other towns to ride our bikes on their Greenway. When we go , we also go shopping and find a great place to eat. It would be awesome to have a place close to home to enjoy. For riding bikes, a minimum 7 mile trail would be the best. 1.8 is a great start especially for walking. A longer trail would be needed to attract more cyclists.

6 months ago

Easy access, multiple stops (benches, water fountains, etc). Ensuring it is well lit and feels safe.

6 months ago

Connections to parks and eventually downtown. Scenic routes along parks or creeks if possible.

6 months ago

Easy walkability. Small gardens or natural areas to stop and see.

6 months ago

Interpretative signs

Guided walks

Kids programming

6 months ago

Constant cleaning / keeping them safe

6 months ago

Advertisement and making sure people know it's there.

6 months ago

Ease of access and good upkeep.

6 months ago

Not to put it in the middle of the city. Especially the north side.

6 months ago

Accessibility

6 months ago

To feel safe on the trail. To know there are security features along the way

6 months ago

Just having a Greenway is enough

6 months ago

Wide trails with sight clearance; enough for individuals to share between those on foot, runners and bicyclists. Keeping trails free of garbage (perhaps volunteer groups to help) perhaps signage indicating areas of low cellular signal in case someone has an emergency, and indicate same on route maps. Attractive planning, showing off the natural beauty of the area. Safety concern - concealed trail cams spaced out to record footage in case of "incidents" and/or injuries. A sign of the times, unfortunately. As a woman in her 60's, walking alone has become a worry for me.

6 months ago

Updating the park

6 months ago

Basically advertising it here and available for use

6 months ago

Other activities along trail or at ends - food, drinks, recreation

6 months ago

Bring the trail farther south. Or increase the trail plan

6 months ago

Fixing roads!! We do not need to spend more money on useless things!

6 months ago

install water fountains at certain points

6 months ago

Scenic, well lit where possible, nice facilities, benches etc

6 months ago

Well maintained and safe.
Lots of visual interest.

6 months ago

It would be nice if put some quiz along the trail

6 months ago

Easy access, safe trails

6 months ago

Building it!

6 months ago

Promotion

6 months ago

A nice paved scenic route

6 months ago

Safe area, good trail surface, and longer trail that what we currently have in Asheboro. I drive to Creekside Park instead of using Asheboro parks due to limited trail length.

6 months ago

Availability. Ease of access.

6 months ago

Asheboro homeless community will love it and it will not be used in the way it's intended

6 months ago

More trails, better upkeep of trails, and keeping them safe for family use

6 months ago

A nice, safe, paved surface free from speeding traffic.

6 months ago

Social media campaign. Easy access to greenway through neighborhoods and the park.

6 months ago

Actively promoting it to the community. Today 10/31 is the first I've ever heard of these plans and I think most of the community does not know about it.

6 months ago

Longer mileage

6 months ago

Easy access and marketing so residents know that it's open and where it is.

6 months ago

Longer good quality safe trails

6 months ago

Future plans of additional trails/greenways would be a plus. For cyclists, this is a very short section, however, as things evolve, this could become a much bigger and better project as long as land access is available.

6 months ago

If the trail was scenic (trees, near creek) & shaded, as well as paved

6 months ago

Build it away from schools. It's unnecessary to have such private areas near schools.

7 months ago

Maybe promote the Greenway on city garbage trucks as this is a way for almost everyone to know about the Greenway since Garbage trucks travel every street. And maybe bring back bike patrols for city police to patrol the trail for safety. And maybe something unique that will draw people to the Greenway such as access areas to the creek for maybe gold panning?

7 months ago

We need to educate our Asheboro community about cycling in general. I'm not saying people need to be super friendly, but the Asheboro community does not know the meaning of sharing the road. Ashebor does not promote ANYTHING at all about the zoo, maybe this greenway can eventually connect in some way around the zoo or can be zoo related. I really hope this greenway happens, so many families could benefit from spending a day walking and taking their children in a safe place designed for walking or riding their little bikes, or skates.

7 months ago

More public outdoor spaces and connecting those places with a greenway would improve community connectedness. Asheboro has so little free public parks and spaces that the citizens have to go walk in the graveyard for exercise. We need a space to walk long and short distances in a safe environment, away from traffic.

7 months ago

I believe tying it into the North Asheboro Park will really increase its use. Having some good parking space and a location for bathrooms for my children would really help out. Enough space to have a safe passage for bicyclist and walkers together would help make it feel usable at all times.

7 months ago

Pretty greenway in an accessible area

7 months ago

Plenty of trailhead parking, safe environment,

7 months ago

Pet friendly, and well kept trails.

7 months ago

Plenty of shade in the warmer seasons, easy parking, wide enough multi use path for everyone to feel comfortable with their activity of choice, future connections, ability to walk to shops

7 months ago

Clean, safe and clearly marked greenway with benches

7 months ago

Historical landmarks/postings on the trail. Cleanliness. Too many parts of Asheboro are dirty, this greenway must remain clean.

7 months ago

Providing security during operational hours. Seriously, I can't imagine anyone using this when it's so randomly placed north of town.

7 months ago

Beautiful scenery
Visiting breweries
Events
Number one

7 months ago

Having a safe place to bike that is longer than what is currently available locally.

7 months ago

It would be wonderful to have one nearby. Would go all the time

7 months ago

5k,

7 months ago

having greenways long enough for bike rides, maybe even some mountain bike trails in a few locations as well just like the watershed trails in Greensboro that are off of the Yadkin-Atlantic Greenway

7 months ago

Keeping it well lit at night and having people patrol the area for illicit activity

7 months ago

Accessibility and parking

7 months ago

Safety and nice routes

7 months ago

By building, and others! Along with better public transit possibilities and sidewalk infrastructure

7 months ago

None. This is a waste of time and taxpayers money. Too many pet projects already with millions spent at our expense

7 months ago

Asheboro needs a safe place to ride bikes that allows enough time that driving your bikes to the trail is worthwhile. At this time, few of the trails in the city allow for biking. The trail needs to be SAFE...

7 months ago

Simply developing a trail. Connecting it to other trails would increase its usage.

7 months ago

Building it!

7 months ago

11. Please provide any additional comments or feedback for the North Asheboro Greenway Feasibility Study.

I look forward to utilizing it, my family and I love greenways and especially love a well created/planned one.

6 months ago

I hope this works out as there really aren't any good trails in the area and the little path at North Asheboro Park is too short and needs repair from all the roots.

6 months ago

Waste of my tax \$

6 months ago

I support these kinds of projects in our community.

6 months ago

I don't think parents would let kids walk a greenway/trail to school. Also don't know why you'd need a greenway to get to the park to then walk or do the exercise opportunities. North Asheboro needs more revitalization in business and clean up of existing neighborhoods. That should be the focus.

6 months ago

We are so glad this might be coming. We currently have to drive to Archdale, Jamestown, or Greensboro.

6 months ago

Please start a Greenway in Asheboro, we commute to Greensboro, High Point and Uwharrie forrest right now for walking.

6 months ago

Adding some bridges and a bit of wild landscaping every so often would be wonderful.

6 months ago

Consideration for Greenway to be adjacent to zoo area. More population in adjacent area adding to ease of location, potentially used more frequently.

6 months ago

We don't have sidewalks on all of our streets. we have neglected playgrounds. Please address the existing problems before creating new projects.

6 months ago

I feel a trail would be a great asset for the community if designed properly. It would bring in revenue for the businesses in the city and provide a safe place for walking and cycling while minimalizing the risk of accidents that come with cycling or walking/ jogging on the public streets.

6 months ago

Greenway access to the new sportsplex complex would be a positive move in the future. Also consider multi use trails at the sportsplex for walking, hiking and biking. Nearby examples of how this can be executed are the Watershed trails in Greensboro and Rich Fork Preserve in High Point.

6 months ago

Would really love to see this come to fruition! We lived in High Point previously, (now Asheboro residents for 8 years) and used the trails there for nature activities and safe areas for kids getting comfortable riding bikes

6 months ago

Great idea

6 months ago

I don't live in North Asheboro but I do live in Asheboro and would love to have an easy safe place to visit and walk my dog or go for a long walk.

6 months ago

We don't need more green space as much as we need services for the poor, mentally ill and addicted. This will just be another place for them to congregate, or become a nightmare to secure, placing an increased burden on police.

6 months ago

My family just moved to the North Asheboro area and have been really impressed with the available sidewalks. We would love to see more trails and space for our recreation created close to our home.

6 months ago

Do not spend any money on this. You need to build sidewalks along US 64 business/Dixie Drive for the people that walk along that route. D. Luther Hollingsworth

6 months ago

I think money would be used better elsewhere. Such as raises or to possibly lower taxes.

6 months ago

Providing easily accessible greenspaces as well as bike paths, and usable sidewalks is a proven way to attract new residents, businesses, and provides a much safer way for the community to go about their day. Much more of this is needed in this town.

6 months ago

I think this is a marvelous and much-needed attraction.

6 months ago

Cameras for protecting the greenway users

6 months ago

Please continue to look for other greenway possibilities in the city

6 months ago

See above comment! We need roads and existing side walks fixed. People use them for all uses, recreational, ways to work or school. Fix what we already have!!

6 months ago

It is very good that more trails are built to be able to walk with the family and exercise and at the same time in a safe environment

6 months ago

This is an amazing idea than can be expanded upon going forward too!!

6 months ago

I think this would be a great decision to increase the credibility of Asheboro.

6 months ago

Randolph needs more large parks and greenways

6 months ago

I drive to Archdale and Jamestown to use their trails weekly. Would love something in my hometown.

6 months ago

I think this will be really important for the community. I am local to Asheboro, but I commute to other counties to nature walk and walk my dog. I have local friends who also go outside the county to do the same. I would use this 5 days a week if we had a nice long trail with a good surface and it felt safe.

6 months ago

Would like to see this. Need a safe space

6 months ago

There are other departments in the city that need raises to compete with surrounding departments of other municipalities instead of supporting this employees need proper compensation and to be cared about instead of treated like we are replaceable because we are not!

6 months ago

I would love for there to be a greenway here in Asheboro, it would add so much for the community

6 months ago

This is a great project for Asheboro. This successful endeavor should be a catalyst for other parts of the city.

6 months ago

I feel like greenways throughout Asheboro would greatly enhance the community. As a former Greensboro resident and frequent Emerald Isle visitor, I use/used the greenways and parks on almost a daily basis. It's definitely disappointing here to not have safe (from traffic) areas to bike, walk, and run with my family. We have actually transported our bikes to GSO to ride on the weekends! I also think proximity to neighborhoods and businesses in the area would increase usage beyond those using the pathways for fitness.

6 months ago

I love my community and I always support it 100% and I would love for it to be better! Thank you for actually considering this.

7 months ago

I think going to other cities to see how much use a greenway gets and also taking note of the importance of how the greenway connects people to businesses. It would be lovely to get on a greenway, walk a while, grab a coffee, go to a playground, and enjoy being outside among neighbors.

7 months ago

We hope to see you fast action taking on projects like this as some people in our local community get tired of long-winded hopes for things like this that are community need. The concept really encourages healthy lifestyle and getting outdoors. I'm excited to see that Randolph county wants to make a push for more greenways and blue ways.

7 months ago

Really excited for this & hope everything pans out!

7 months ago

I live in North Asheboro and am looking forward to this project coming to fruition.

7 months ago

Maybe get some business sponsorship. Please don't increase property taxes again.

7 months ago

I absolutely love this idea and think trails are a hugely important part of communities! Asheboro is a fantastic size for a bikeable, walkable city and planning now will make it a green, cool, accessible and desirable place to live and work.

7 months ago

Should be longer

7 months ago

Make it a serious penalty for the homeless to camp out near the greenway so as to keep them away and to keep the public safe.

7 months ago

Why are you spending money on something like this when we have streets that need repaving so badly?!?! Geeze. Get your heads out of your asses and take care of what we have first!

7 months ago

I like the idea of having bike trails throughout as long as they are monitored and safe.

7 months ago

Add pull up bars and work out type stuff along the way

7 months ago

As someone who works over in the Northgate area, I'd love to be able to walk it on my lunch for health reasons

7 months ago

Asheboro NEEDS a greenway badly. There are NO safe roads to ride a bike on or even walk really. Drivers do not pay attention here. It's safer to cross a street in Greensboro than here in asheboro.

7 months ago

I would love a safe place near my home to take my dog for a walk. I think it is definitely time for Asheboro to create a greenway and/or some walking paths and trails that are safe

7 months ago

Please build it and others

7 months ago

SHUT IT DOWN

7 months ago

Love the idea, just hope the community supports this (from a usage standpoint) as often times people choose not to use the municipal spaces because they do not feel safe or it is not in close proximity. The North Asheboro greenway would not be close for us, but if we have a nice place to ride bikes, that is a game changer as today you either drive to Greensboro or Franklinville/Ramseur.

7 months ago

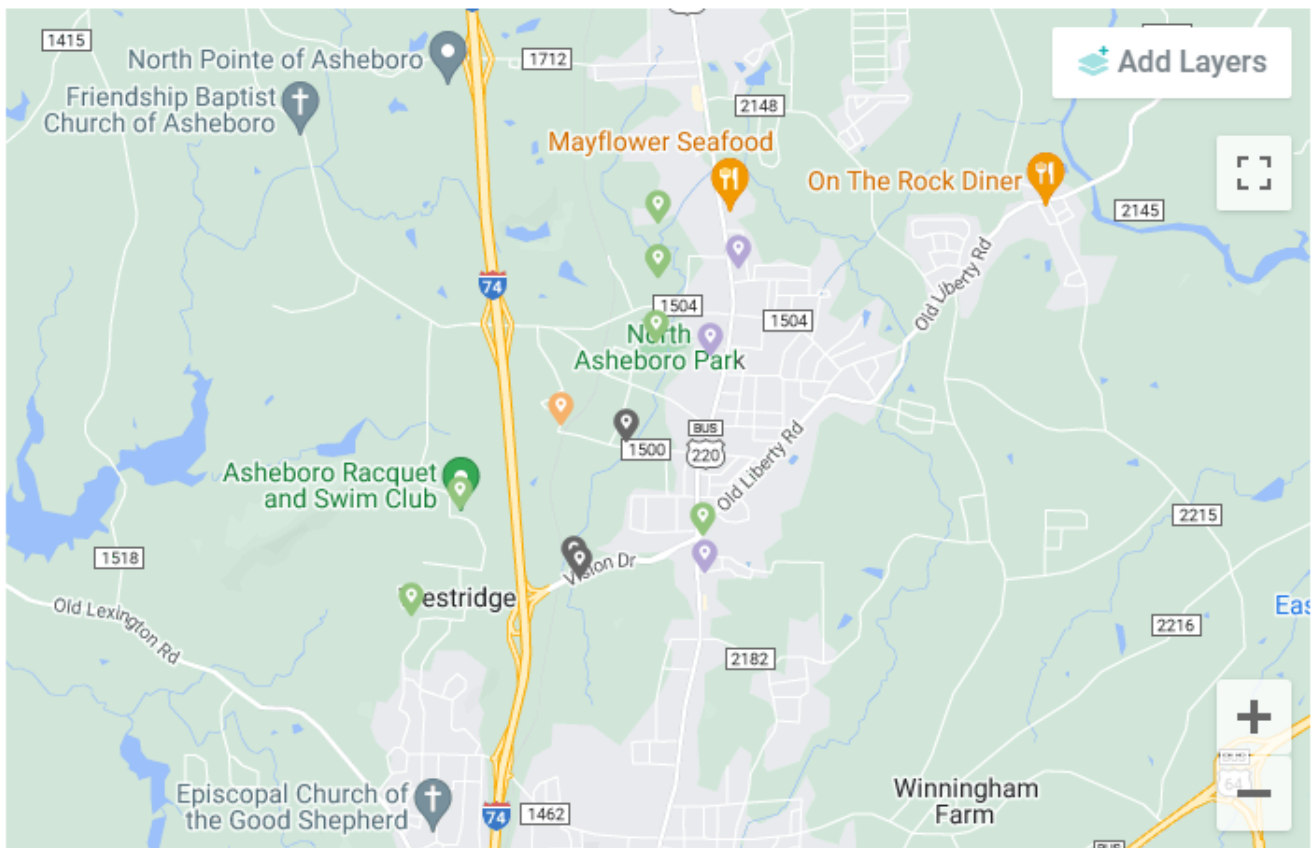
Asheboro/Randolph County are far behind many other cities/counties across the nation in having trails/greenways in place. The longer it takes to get started, the harder it will be to do without invoking eminent domain (which is not likely to happen). Outdoor green spaces are a huge factor in enhancing quality of life.

7 months ago

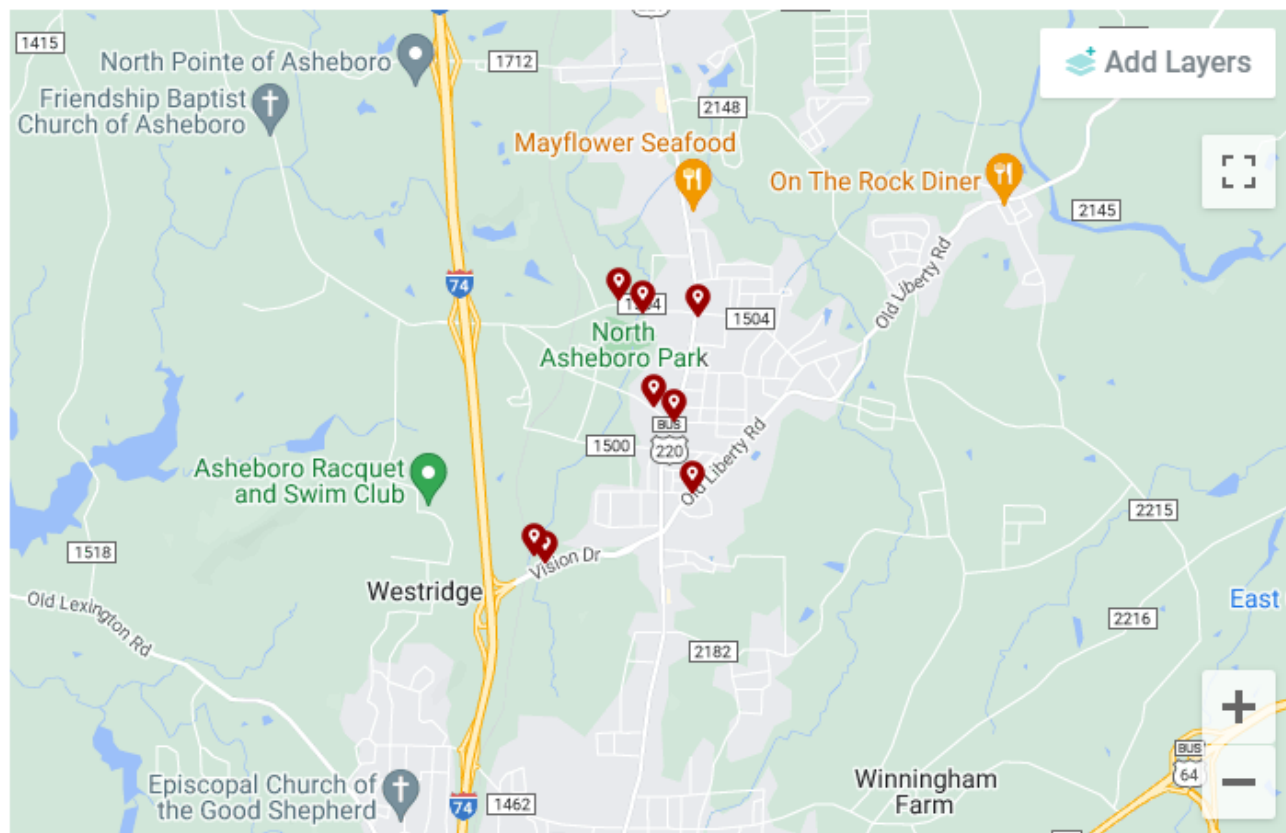
Please Asheboro Build Greenways!!!

7 months ago

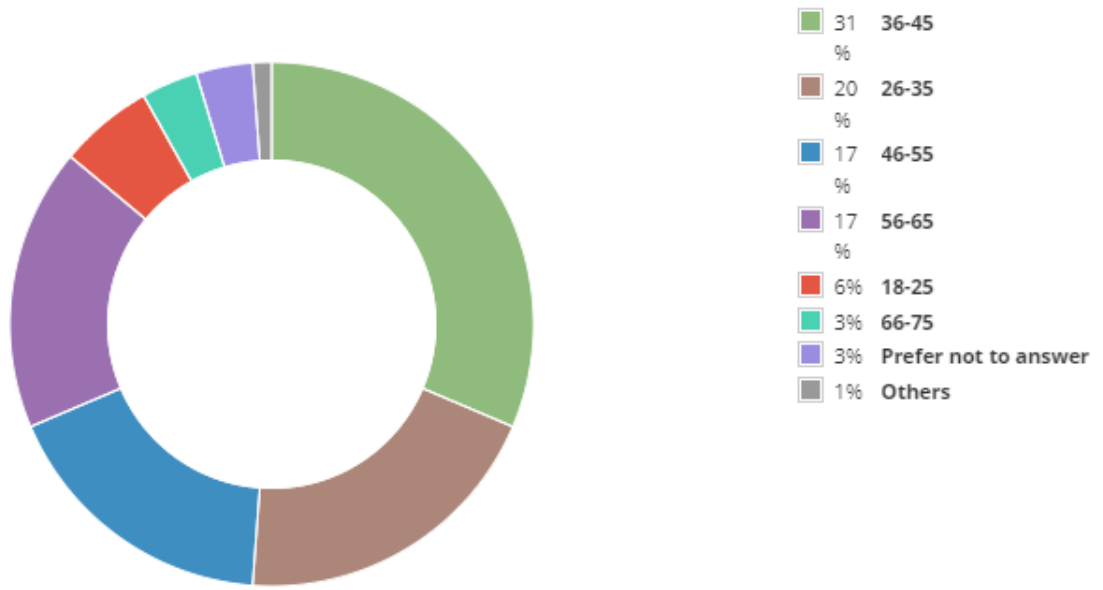
Mark destinations that you would like to access via the proposed North Asheboro Greenway corridor. *Please note: The preliminary study corridor is represented by the green line. The preliminary route shown in the map illustrates the general study area and does not reflect the exact route that may be recommended.*



Mark areas (streets, intersections, neighborhoods, etc.) that need the most pedestrian and bicycle infrastructure improvements along the proposed North Asheboro Greenway corridor. Please note: The preliminary study corridor is represented by the green line. The preliminary route shown in the map illustrates the general study area and does not reflect the exact route that may be recommended.

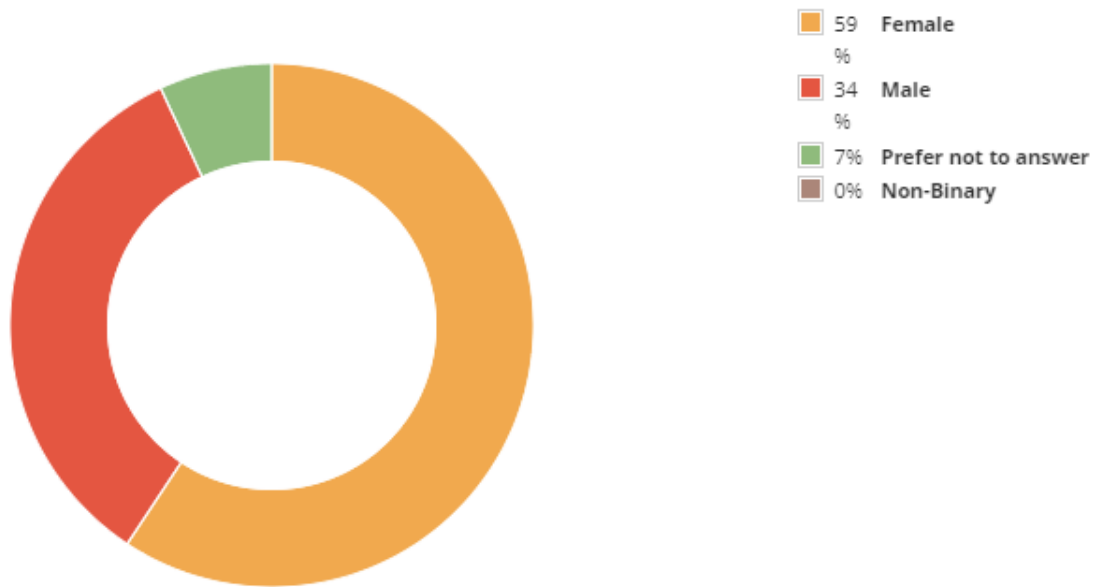


What is your age?



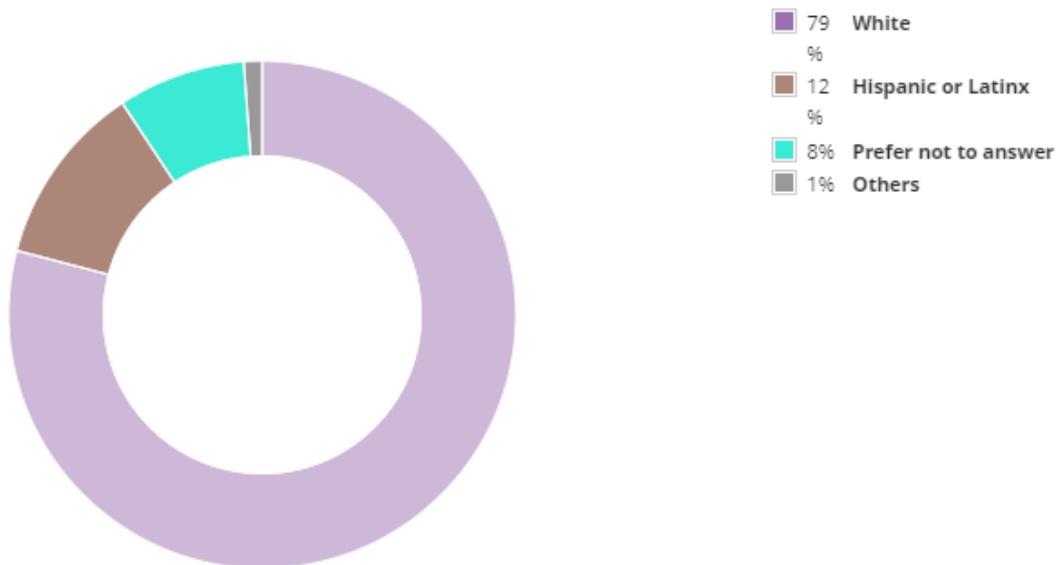
86 respondents

What is your gender?



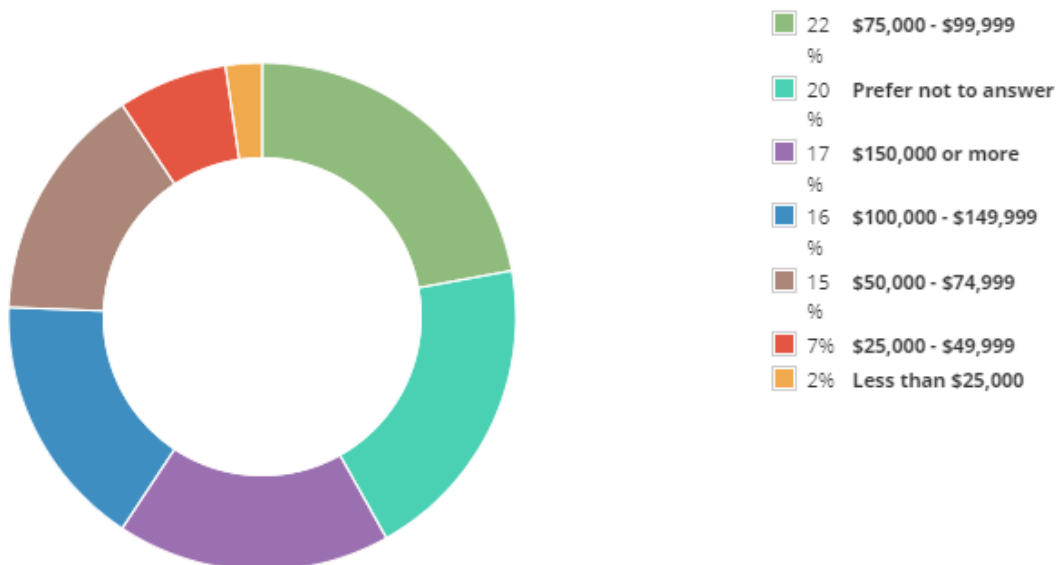
86 respondents

What is your race/ethnicity?



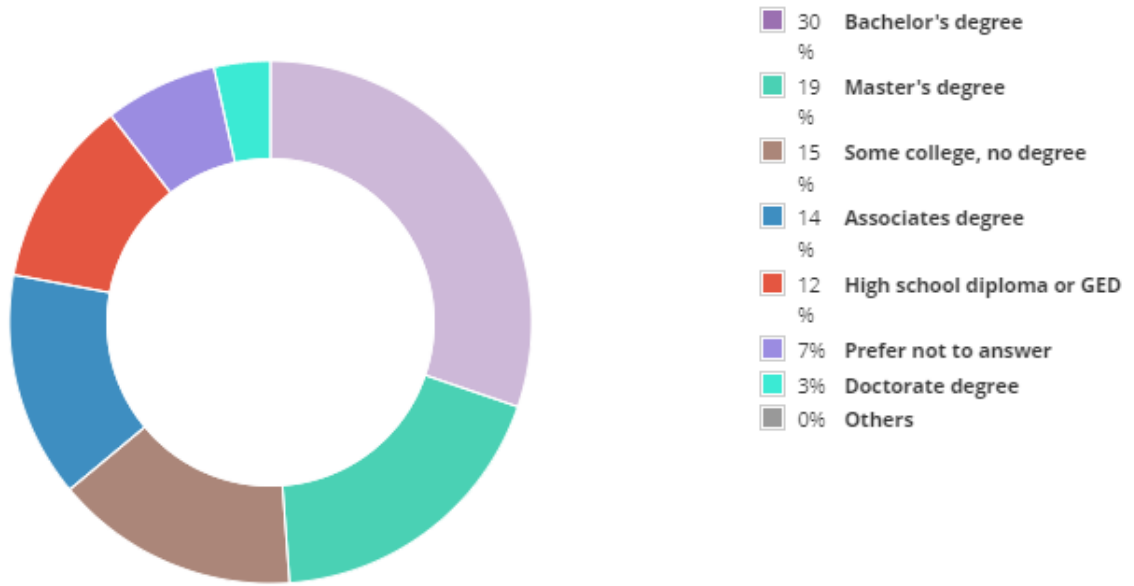
86 respondents

What is your annual household income?



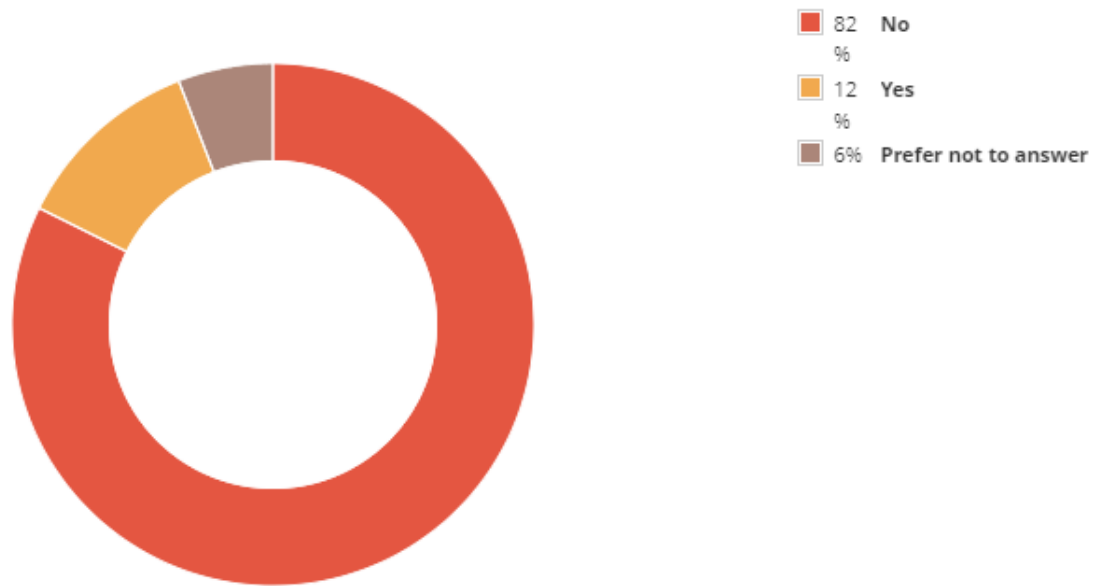
86 respondents

What is the highest level of education you have completed?



86 respondents

Do you have a disability?



85 respondents

What is your relationship to Asheboro? *Select all that apply.*

91%	I live in Asheboro	78 ✓
51%	I own property in Asheboro	44 ✓
45%	I work in Asheboro	39 ✓
26%	I visit/spend time in Asheboro	22 ✓
7%	I own a business in Asheboro	6 ✓
2%	Other (please specify)	2 ✓

86 Respondents

LANDOWNER ENGAGEMENT MATERIALS



August 15, 2023

Current Resident / Owner
address
address

Dear Property Owner,

This letter is to inform you that the City of Asheboro is in the early stages of a feasibility study examining the potential for a trail to be constructed along a portion of Hasketts Creek in northern Asheboro (see enclosed map). You are receiving this letter because you own property in the area of study. As a property owner, it is important to me that you are aware of this planning effort and able to directly contact me should you have any questions or concerns as we begin the study. With this letter, I am providing my contact information and I hope that you will feel free to reach out to me.

In the next several weeks, the city will be requesting public input, including from landowners, regarding the desirability of the trail, but I wanted to ensure that you received notice in advance.

Should the project be determined to be feasible following the study, the city will seek to work only with landowners willing to grant any necessary easements for the trail.

I am available to speak with you about the study by phone, email, or in-person at any time that is convenient for you. The study is expected to take 9-12 months to complete. More information may be found on the Planning and Zoning Department webpage located at asheboronc.gov.

Thank you,

Justin T. Luck
Planning & Zoning Administrator
146 N. Church St.
Asheboro, NC 27203
336-626-1201 x 2392
jluck@ci.asheboro.nc.us

Comments received by the City in response to landowner engagement materials were generally positive, with a few key themes outlined below:

- Concerns with increased traffic associated with a connector to the park and ride lot on W. Balfour Ave.
- A new apartment development adjacent to the study area expressed a desire to include a connection to the greenway alignment on preliminary site plans.
- Several owners expressed concerns with liability for potential issues occurring on the greenway.
- Questions regarding where trail users will park to use the greenway.
- Several parcels in the study area may be sold or redeveloped in the near future.

Appendix D: Cost Estimates

**ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study
SEGMENT SUMMARY**

Segment	Segment Length (mi.)	Cost
3	0.07	\$163,000
4	0.08	\$86,000
6	0.15	\$127,000
7	0.68	\$1,651,000
8	0.43	\$295,000
9	0.37	\$586,000
11	0.03	\$309,000
12	0.04	\$213,000
16	0.28	\$247,000
18A	0.05	\$100,000
18B	0.06	\$115,000
22A	0.03	\$387,000
23	0.25	\$503,000
26	0.31	\$316,000
27	0.28	\$186,000
30	0.03	\$0
31	0.19	\$261,000
32	0.18	\$189,000
34	0.08	\$215,000



Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

ROUTE SUMMARY

ROUTE B

Segment	Segment Length (mi.)	Cost
4	0.08	\$86,000.00
6	0.15	\$127,000.00
8	0.43	\$295,000.00
11	0.03	\$309,000.00
12	0.04	\$213,000.00
16	0.28	\$247,000.00
18B	0.06	\$115,000.00
22A	0.03	\$387,000.00
26	0.31	\$316,000.00
30	0.03	\$0.00
Alternative Total	1.45	\$2,095,000.00

ROUTE B CONNECTIONS

3	0.07	\$163,000.00
9	0.37	\$586,000.00
18A	0.05	\$100,000.00
23	0.25	\$503,000.00
32	0.18	\$189,000.00
34	0.08	\$215,000.00
Connection Total	0.99	\$1,756,000.00

Total Length		2.44	
Total Cost	\$		3,851,000.00



Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 3						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 5,500.00	\$ 5,500.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	440	SY	\$ 4.00	\$ 1,760.00
520	1121000000-E	AGGREGATE BASE COURSE	170	TON	\$ 45.00	\$ 7,650.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	50	TON	\$ 140.00	\$ 7,000.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 3	1	LS	\$ 80,000.00	\$ 80,000.00

SUBTOTAL \$124,660.00

CONTINGENCY @ 30% \$37,398.00

CONSTRUCTION COST SAY \$163,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 4						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 2,700.00	\$ 2,700.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	540	SY	\$ 4.00	\$ 2,160.00
520	1121000000-E	AGGREGATE BASE COURSE	210	TON	\$ 45.00	\$ 9,450.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	60	TON	\$ 140.00	\$ 8,400.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 4	1	LS	\$ 20,000.00	\$ 20,000.00

SUBTOTAL \$65,460.00

CONTINGENCY @ 30% \$19,638.00

CONSTRUCTION COST SAY \$86,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 6						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 4,200.00	\$ 4,200.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	990	SY	\$ 4.00	\$ 3,960.00
520	1121000000-E	AGGREGATE BASE COURSE	390	TON	\$ 45.00	\$ 17,550.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	110	TON	\$ 140.00	\$ 15,400.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	10	TON	\$ 750.00	\$ 7,500.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 6	1	LS	\$ 30,000.00	\$ 30,000.00

SUBTOTAL \$97,610.00

CONTINGENCY @ 30% \$29,283.00

CONSTRUCTION COST SAY \$127,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 7						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 60,000.00	\$ 60,000.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	3950	SY	\$ 4.00	\$ 15,800.00
520	1121000000-E	AGGREGATE BASE COURSE	1470	TON	\$ 45.00	\$ 66,150.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	410	TON	\$ 140.00	\$ 57,400.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	25	TON	\$ 750.00	\$ 18,750.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		PREFABRICATED PEDESTRIAN BRIDGE (12' WIDE)	70	LF	\$ 4,750.00	\$ 332,500.00
SP		BOARDWALK (10' WIDE, TIMBER PILES, CONCRETE DECKING)	280	LF	\$ 1,500.00	\$ 420,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 7	1	LS	\$ 280,000.00	\$ 280,000.00

SUBTOTAL \$1,269,600.00

CONTINGENCY @ 30% \$380,880.00

CONSTRUCTION COST SAY \$1,651,000

Notes:

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Prepared By: BTB Date: 1/10/2024
 Checked By: JAP Date: 1/10/2024
 McAdams Project No: NCD22015.03 Greensboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 8						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 10,400.00	\$ 10,400.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	2810	SY	\$ 4.00	\$ 11,240.00
520	1121000000-E	AGGREGATE BASE COURSE	1090	TON	\$ 45.00	\$ 49,050.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	300	TON	\$ 140.00	\$ 42,000.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	20	TON	\$ 750.00	\$ 15,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 8	1	LS	\$ 80,000.00	\$ 80,000.00

SUBTOTAL \$226,690.00

CONTINGENCY @ 30% \$68,007.00

CONSTRUCTION COST SAY \$295,000

Notes:

1. Cost opinion does not include costs for easement or ROW acquisition.
2. Cost opinion does not include engineering, geotech, design survey, or construction administration.
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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 9						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 21,000.00	\$ 21,000.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	180	SY	\$ 4.00	\$ 720.00
520	1121000000-E	AGGREGATE BASE COURSE	70	TON	\$ 45.00	\$ 3,150.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	20	TON	\$ 140.00	\$ 2,800.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
846	2549000000-E	2'-6" CONCRETE CURB & GUTTER	175	LF	\$ 35.00	\$ 6,125.00
848	2760000000-N	6" CONCRETE DRIVEWAY	3	EA	\$ 7,500.00	\$ 22,500.00
SP	4457000000-N	TEMPORARY TRAFFIC CONTROL	1	LS	\$ 10,000.00	\$ 10,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		6" CLASS B CONCRETE (REINFORCED)	2350	SY	\$ 90.00	\$ 211,500.00
SP		AT-GRADE CROSSING	1	EA	\$ 10,000.00	\$ 10,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 9	1	LS	\$ 30,000.00	\$ 30,000.00
SP		RAILROAD IMPROVEMENTS (W BAILEY ST)	1	LS	\$ 110,000.00	\$ 110,000.00

SUBTOTAL \$450,545.00

CONTINGENCY @ 30% \$135,163.50

CONSTRUCTION COST SAY \$586,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 11						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 10,900.00	\$ 10,900.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	150	SY	\$ 4.00	\$ 600.00
520	1121000000-E	AGGREGATE BASE COURSE	60	TON	\$ 45.00	\$ 2,700.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	20	TON	\$ 140.00	\$ 2,800.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		LOW WATER CROSSING BRIDGE (10' WIDE, CONCRETE DECKING)	50	LF	\$ 3,750.00	\$ 187,500.00
SP		COMPREHENSIVE GRADING, SEGMENT 11	1	LS	\$ 10,000.00	\$ 10,000.00

SUBTOTAL \$237,250.00

CONTINGENCY @ 30% \$71,175.00

CONSTRUCTION COST SAY \$309,000

Notes:

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 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 12						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 7,300.00	\$ 7,300.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP	8847000000-E	GENERIC RETAINING WALL ITEM	810	SF	\$ 120.00	\$ 97,200.00
SP		6" CLASS B CONCRETE (REINFORCED)	330	SY	\$ 90.00	\$ 29,700.00
SP		COMPREHENSIVE GRADING, SEGMENT 12	1	LS	\$ 10,000.00	\$ 10,000.00

SUBTOTAL \$163,200.00

CONTINGENCY @ 30% \$48,960.00

CONSTRUCTION COST SAY \$213,000

Notes:

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 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 16						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 8,600.00	\$ 8,600.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	1830	SY	\$ 4.00	\$ 7,320.00
520	1121000000-E	AGGREGATE BASE COURSE	710	TON	\$ 45.00	\$ 31,950.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	190	TON	\$ 140.00	\$ 26,600.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	15	TON	\$ 750.00	\$ 11,250.00
SP	2474000000-N	DRAINAGE	1	LS	\$ 5,000.00	\$ 5,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 16	1	LS	\$ 80,000.00	\$ 80,000.00

SUBTOTAL \$189,720.00

CONTINGENCY @ 30% \$56,916.00

CONSTRUCTION COST SAY \$247,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 18A						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 3,200.00	\$ 3,200.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
846	2549000000-E	2'-6" CONCRETE CURB & GUTTER	255	LF	\$ 35.00	\$ 8,925.00
SP	4457000000-N	TEMPORARY TRAFFIC CONTROL	1	LS	\$ 5,000.00	\$ 5,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		6" CLASS B CONCRETE (REINFORCED)	340	SY	\$ 90.00	\$ 30,600.00
SP		COMPREHENSIVE GRADING, SEGMENT 18A	1	LS	\$ 10,000.00	\$ 10,000.00

SUBTOTAL \$76,725.00

CONTINGENCY @ 30% \$23,017.50

CONSTRUCTION COST SAY \$100,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 18B						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 3,800.00	\$ 3,800.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	370	SY	\$ 4.00	\$ 1,480.00
520	1121000000-E	AGGREGATE BASE COURSE	150	TON	\$ 45.00	\$ 6,750.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	40	TON	\$ 140.00	\$ 5,600.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
SP	4457000000-N	TEMPORARY TRAFFIC CONTROL	1	LS	\$ 5,000.00	\$ 5,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		PAVEMENT MARKINGS	1	LS	\$ 2,500.00	\$ 2,500.00
SP		MID-BLOCK CROSSING (WITH RFB)	1	EA	\$ 30,000.00	\$ 30,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 18B	1	LS	\$ 10,000.00	\$ 10,000.00

SUBTOTAL \$87,880.00

CONTINGENCY @ 30% \$26,364.00

CONSTRUCTION COST SAY \$115,000

Notes:

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Prepared By: BTB Date: 2/2/2024
 Checked By: JAP Date: 2/2/2024
 McAdams Project No: NCD22015.02 Asheboro

Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 22A						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 13,700.00	\$ 13,700.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	130	SY	\$ 4.00	\$ 520.00
520	1121000000-E	AGGREGATE BASE COURSE	50	TON	\$ 45.00	\$ 2,250.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	20	TON	\$ 140.00	\$ 2,800.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		LOW WATER CROSSING BRIDGE (10' WIDE, CONCRETE DECKING)	60	LF	\$ 3,750.00	\$ 225,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 22A	1	LS	\$ 30,000.00	\$ 30,000.00

SUBTOTAL \$297,020.00

CONTINGENCY @ 30% \$89,106.00

CONSTRUCTION COST SAY \$387,000

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Asheboro Feasibility Study

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 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 23						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 18,000.00	\$ 18,000.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	130	SY	\$ 4.00	\$ 520.00
520	1121000000-E	AGGREGATE BASE COURSE	50	TON	\$ 45.00	\$ 2,250.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	20	TON	\$ 140.00	\$ 2,800.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
846	2549000000-E	2'-6" CONCRETE CURB & GUTTER	1225	LF	\$ 35.00	\$ 42,875.00
848	2760000000-N	6" CONCRETE DRIVEWAY	5	EA	\$ 7,500.00	\$ 37,500.00
SP	4457000000-N	TEMPORARY TRAFFIC CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		PAVEMENT MARKINGS	1	LS	\$ 2,500.00	\$ 2,500.00
SP		6" CLASS B CONCRETE (REINFORCED)	1640	SY	\$ 90.00	\$ 147,600.00
SP		AT-GRADE CROSSING	4	EA	\$ 10,000.00	\$ 40,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 23	1	LS	\$ 20,000.00	\$ 20,000.00
SP		DRAINAGE IMPROVEMENTS	1	LS	\$ 25,000.00	\$ 25,000.00
SP		SIGNAGE	1	LS	\$ 5,000.00	\$ 5,000.00

SUBTOTAL \$386,795.00

CONTINGENCY @ 30% \$116,038.50

CONSTRUCTION COST SAY **\$503,000**

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Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 26						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 11,100.00	\$ 11,100.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	1520	SY	\$ 4.00	\$ 6,080.00
520	1121000000-E	AGGREGATE BASE COURSE	590	TON	\$ 45.00	\$ 26,550.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	160	TON	\$ 140.00	\$ 22,400.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	10	TON	\$ 750.00	\$ 7,500.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 26	1	LS	\$ 150,000.00	\$ 150,000.00

SUBTOTAL \$242,630.00

CONTINGENCY @ 30% \$72,789.00

CONSTRUCTION COST SAY \$316,000

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Asheboro Feasibility Study

Project Location: Asheboro, NC
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 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 31						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 9,100.00	\$ 9,100.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	1240	SY	\$ 4.00	\$ 4,960.00
520	1121000000-E	AGGREGATE BASE COURSE	480	TON	\$ 45.00	\$ 21,600.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	130	TON	\$ 140.00	\$ 18,200.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	10	TON	\$ 750.00	\$ 7,500.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 30	1	LS	\$ 120,000.00	\$ 120,000.00

SUBTOTAL \$200,360.00

CONTINGENCY @ 30% \$60,108.00

CONSTRUCTION COST SAY \$261,000

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Asheboro Feasibility Study

Project Location: Asheboro, NC
 Project Description: 10' Paved Trail Mainline
 Client: Asheboro
 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 32						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 6,500.00	\$ 6,500.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
SP	1115000000-E	GEOTEXTILE FOR PAVEMENT STABILIZATION	1150	SY	\$ 4.00	\$ 4,600.00
520	1121000000-E	AGGREGATE BASE COURSE	450	TON	\$ 45.00	\$ 20,250.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	120	TON	\$ 140.00	\$ 16,800.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	10	TON	\$ 750.00	\$ 7,500.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 31	1	LS	\$ 70,000.00	\$ 70,000.00

SUBTOTAL \$144,650.00

CONTINGENCY @ 30% \$43,395.00

CONSTRUCTION COST SAY \$189,000

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Asheboro Feasibility Study

Project Location: Asheboro, NC
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 Client Project No.

ENGINEER'S OPINION OF PROBABLE COST OF CONSTRUCTION - Feasibility Study

SEGMENT 34						
Section	Item Code	Item Description	Quantity	Unit	Unit Price	Cost
800	0000100000-N	MOBILIZATION	1	LS	\$ 7,400.00	\$ 7,400.00
801	0000400000-N	CONSTRUCTION SURVEYING	1	LS	\$ 10,000.00	\$ 10,000.00
520	1121000000-E	AGGREGATE BASE COURSE	100	TON	\$ 45.00	\$ 4,500.00
610	1503000000-E	ASPHALT CONC INTERMEDIATE COURSE, TYPE 119.0C	10	TON	\$ 150.00	\$ 1,500.00
610	1519000000-E	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	10	TON	\$ 140.00	\$ 1,400.00
620	1575000000-E	ASPHALT BINDER FOR PLANT MIX	5	TON	\$ 750.00	\$ 3,750.00
846	2549000000-E	2'-6" CONCRETE CURB & GUTTER	420	LF	\$ 35.00	\$ 14,700.00
SP	4457000000-N	TEMPORARY TRAFFIC CONTROL	1	LS	\$ 5,000.00	\$ 5,000.00
SP	6133000000-N	EROSION CONTROL	1	LS	\$ 9,000.00	\$ 9,000.00
SP		PAVEMENT MARKINGS	1	LS	\$ 2,500.00	\$ 2,500.00
SP		6" CLASS B CONCRETE (REINFORCED)	560	SY	\$ 90.00	\$ 50,400.00
SP		MID-BLOCK CROSSING	1	EA	\$ 15,000.00	\$ 15,000.00
SP		COMPREHENSIVE GRADING, SEGMENT 34	1	LS	\$ 10,000.00	\$ 10,000.00
SP		DRAINAGE IMPROVEMENTS	1	LS	\$ 25,000.00	\$ 25,000.00
SP		SIGNAGE	1	LS	\$ 5,000.00	\$ 5,000.00

SUBTOTAL \$165,150.00

CONTINGENCY @ 30% \$49,545.00

CONSTRUCTION COST SAY \$215,000

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