



Preferred Alternative Technical Recommendation

APRIL 9, 2026

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Overview

At the completion of the Triangle Bikeway Feasibility study in 2022, four areas between Durham and Raleigh - Wade Avenue Corridor, crossing of I-40 at Lake Crabtree, RTP, and the NC-54 Corridor— required additional analysis and stakeholder engagement to determine the final alignment. This memorandum summarizes the alternatives development and evaluation process for these areas during the early design phase of the Triangle Bikeway - East project, including technical recommendations for the Preferred Alternative in each segment, to inform the decision-making process.

Public and Stakeholder Feedback for Triangle Bikeway - East

Throughout the development of the Triangle Bikeway project, stakeholders and the public have been meaningfully engaged to help shape the project. Overall, the project has received public and stakeholder support and enthusiasm.

TRIANGLE BIKEWAY FEASIBILITY AND IMPLEMENTATION STUDY (2020-2022)

The following five themes reflect the most consistent priorities, concerns, and opportunities, as it relates to alternative selection and evaluation, were identified by stakeholders and the public during the Triangle Bikeway Feasibility and Implementation Study, completed in 2022.

1. Access and Community Connectivity

- Prioritize equitable access and ensure the corridor serves underserved communities and job centers.
- Ensure the facility accommodates all ages and abilities, not just experienced cyclists.
- Strengthen connections to major community destinations, parks, neighborhoods, and employment hubs.

2. Regional Mobility and Network Integration

- Strong desire for seamless connections to existing greenways, local trail systems, the RTP trail network, and park-and-ride lots.
- Emphasis on multimodal integration with transit routes, bus rapid transit, commuter rail, and the Regional Transit Center.
- Broad support for using or paralleling the I-40 corridor to create a direct, efficient commuter route.
- Openness to a hybrid alignment (I-40 + parallel roads) if it ensures overall route directness.

3. User Experience, Facility Design, and Amenities

- Clear preference for separated, protected, bicycle and pedestrian facilities.
- Preference for walking accommodations along the entire corridor and for physical separation between pedestrians and bicyclists.
- Desire to reduce conflicts between trail users and motorists and concerns about bicycle and pedestrian safety at major intersections.
- Interest in establishing the bikeway as a regional greenway spine that integrates multiple local systems.

4. Environmental Considerations

- Need to account for environmental constraints and planned highway improvements along the I-40 corridor.

- Concerns about impacts to Umstead State Park, the New Hope River Waterfowl Impoundment, and other sensitive natural areas.

5. Cost, Funding, and Implementation

- Interest in selecting an alternative with the shortest feasible construction timeline.
- Questions about funding sources, long-term maintenance, and overall project costs.
- Concern about financial impacts on residents and communities.

EARLY DESIGN PROCESS (2024-2026) FOR TRIANGLE BIKEWAY – EAST

The following summarizes the main themes identified in the design phase of Triangle Bikeway East Project identified by stakeholders and the public from December 2025 to February 2026. For more detailed information on the Public Engagement Results and Alignment Alternatives Survey, please see "Engagement Summary Report Phase 2: Triangle Bikeway East Design Project"

Public input for Triangle Bikeway - East in January and February 2026 continued to emphasize a strong desire for a wide, comfortable, and separated facility that provides a safe, low-stress travel experience, with clear preferences for physical separation between bicyclists and pedestrians, good visibility, and minimal delay at roadway crossings. Feedback consistently highlighted the importance of strong regional connectivity - particularly to transit, the airport, major employment centers, and the region's existing greenway network - and underscored the need for thoughtful design. Participants also called for a bikeway that functions as a true regional mobility corridor, supporting both commuting and recreation, while providing intuitive links to nearby destinations such as parks, commercial areas, and community amenities.

Alternatives Analysis Methodology

Utilizing feedback received from stakeholders and the public alongside technical analysis of each of the alignments under consideration, each alternative is evaluated for eight key factors. Each factor is assigned a weight based on its relevance to conditions within the overall Bikeway corridor, and each alternative is scored for its impact on a five-point scale based upon overall favorability, as follows:

- 5 – Alternative is highly favorable
- 4 – Alternative is favorable
- 3 – Alternative is neutral
- 2 – Alternative is unfavorable
- 1 – Alternative is highly unfavorable

The following is a brief description of the key factors and supporting information for how their weights were assigned. These factors are grouped into Major Factors, Moderate Factors, and Minor Factors based upon their relative weights.

MAJOR FACTORS

- **Connectivity / Route Efficiency / Destinations Served:** Evaluates connections to local destinations and other transportation facilities. Alternatives are scored relative to each other to highlight differences between the alternatives in the segment under consideration. This factor is weighted at **30 percent**.
- **Construction Cost** evaluates the relative construction cost of the alternatives and is weighted at **20 percent**.

MODERATE FACTORS

- **Typical Section:** Evaluates is how much of the alternative contains the desired 16-foot Separated Use Path. An alternative must contain 50 percent or more of this width to gain a neutral score (3) with values diverging as the percentages move toward the extremes. This factor is weighted at **10 percent**.
- **Conflict Points / Crossing Safety:** Evaluates at-grade crossings and potential safety risks based upon interactions between Bikeway users and motorists. This factor is weighted at **15 percent**.
- **Constructability Considerations:** Evaluates maintenance of traffic on adjacent facilities as well as ease of construction and construction access. A highly favorable score (5) would have no impact on traffic operations. Shoulder closures on non-interstate facilities are deemed favorable (4), single lane closures on multi-lane facilities are deemed neutral (3), interstate shoulder closures and road closures on surface streets are deem unfavorable (2), and interstate impacts greater than shoulder closures are deemed highly unfavorable (1). This factor is weighted at **10 percent**.

MINOR FACTORS

- **Structure Maintenance:** Evaluates the long-term maintenance needs of structures, based on linear feet (LF) of boardwalks, to differentiate the more desirable alternative outside of cost and constructability considerations. While bridges and retaining walls are anticipated to be used in Triangle Bikeway, they require minimal maintenance when compared to boardwalk facilities and thus are not heavily considered for scoring. In cases where there is a significant discrepancy (>5x) in bridge lengths or anticipated retaining wall use, this factor may be considered in scoring. In most cases, an alternative must have 1,000 feet or less

of boardwalk to earn a neutral score (3); no boardwalk structures to earn a highly favorable score (5), and over 2,000 feet of boardwalk to earn a highly unfavorable score (1). This factor is weighted at **5 percent**.

- **Real Estate Considerations:** Evaluates both the temporary and permanent impacts on private property. This factor is weighted at **5 percent**.
- **Environmental / Permitting Considerations:** Evaluates the human and natural environmental impacts and is intended to differentiate alternatives with lower schedule impacts and/or mitigation costs. This factor is weighted at **5 percent**.

The following factors evaluate the alternatives solely against one another: **Construction Cost, Real Estate Considerations, Connectivity / Route Efficiency / Destinations Served, Conflict Points / Crossing Safety, and Environmental / Permitting Considerations**. In general, a neutral score (3) is achieved if there is little to no difference (less than 20 percent) between the Alternatives, a 1.5x difference results in a 4/2 score, and a 2x difference results in a 5/1 score.

NC-54 Alternatives Alignment Area

Triangle Bikeway – East consists of two alternatives between TW Alexander Drive and Park Offices Drive:

- **Alternative 1** begins at the existing sidepath on TW Alexander Drive (south of the bridge over I-40) and continues south as a shared use path along the east side of TW Alexander Drive (generally following the alignment of the existing sidepath) to NC-54. The route then turns east along the north side of NC-54, crosses over the Triangle Expressway on the existing roadway bridge, and continues to the existing traffic signal at Park Offices Drive. The route then crosses to the south side of NC-54 at the existing traffic signal and continues east over Burdens Creek before ending at the southwest corner of the Rodbell Street/NC-54 intersection.
- **Alternative 2** begins at the existing sidepath on TW Alexander Drive (south of the bridge over I-40), continues south as a shared use path along the east side of TW Alexander Drive (generally following the alignment of the existing sidepath) and crosses NC-54 at the existing traffic signal, The route then turns east along the south side of NC-54 and crosses over the Triangle Expressway on the existing roadway bridge. The route continues east along the south side of NC-54 and crosses over Burdens Creek before ending at the southwest corner of the Rodbell Street/NC-54 intersection.

A map of these alternatives can be found on the following page.



Public and Stakeholder Feedback

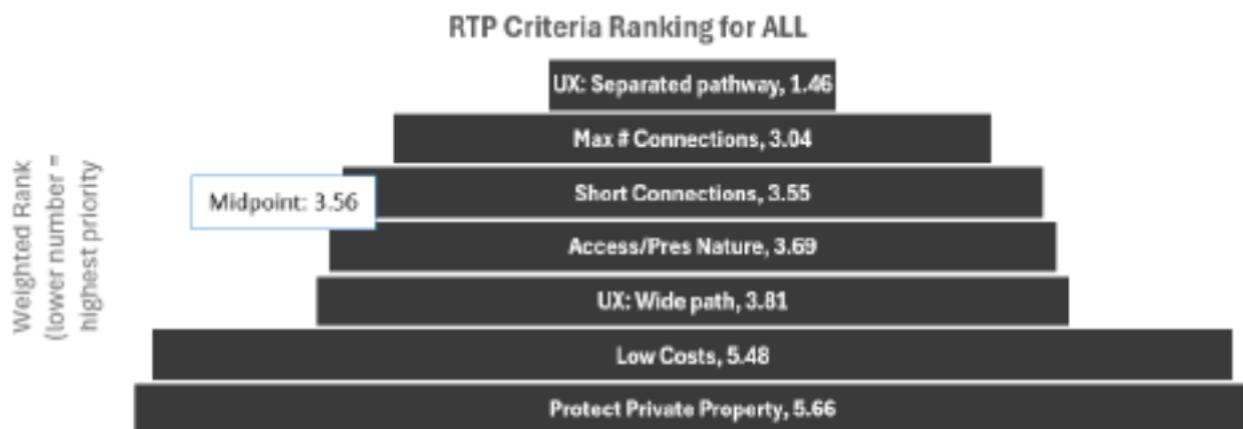
PUBLIC INPUT DURING TRIANGLE BIKEWAY STUDY (2020-2022)

During the development of the Triangle Bikeway Study, completed in 2022, feedback from the **City of Durham** emphasized the following:

- Preference for routing the bikeway along NC-54, which is prioritized for bicycle and pedestrian facility enhancements.
- Shared use paths along both sides of NC-54 would minimize unsafe intersections and crossings.
- Providing access to the bikeway on both sides of I-40 and NC-54 interchange is critical.
- Consider multi-modal connections between the Triangle Bikeway, GoDurham transit routes, and the proposed GoTriangle commuter rail line.
- Consider connections between the Triangle Bikeway corridor and the City’s greenway network.

PUBLIC INPUT DURING EARLY DESIGN PROCESS (2024-2026)

Public survey respondents were asked to rank a set of criteria to help identify top priorities for selecting a preferred alternative in the RTP Area, as shown in the chart below. The lower the rank score, the higher the priority.



The following summarizes other input and comments from the public for the NC-54 area:

- Many comments favored routing closer to NC-54, neighborhoods, or existing greenways rather than directly paralleling the interstate.
- Desired connections are clustered around the RTP campus and mixed-use areas along NC-54.
- Several commenters asked to minimize at-grade delay and highlighted long signal cycles and safety risks.
- Emphasis on smooth pavement, gentle grades, and avoidance of narrow boardwalk sections along constrained segments.

STAKEHOLDER INPUT DURING EARLY DESIGN PROCESS (2024-2026)

On November 4, 2024, the design team facilitated a site visit with stakeholders including Research Triangle Foundation, City of Raleigh, NCDOT, Wake County, and CAMPO to confirm the alternatives under consideration and obtain early feedback to inform alternative development. Subsequently, the project team met with stakeholders

including City of Durham, Durham County, Wake County, Central Pines Regional Council, RTF, GoTriangle, and TWTPo on January 16, 2026 to share conceptual alignment alternatives and results of initial alternatives evaluation and collect input (including through a post-meeting survey). A summary of the feedback received is provided below:

Alternative 1

- **NC-54 Crossings:** Concerns were raised about the location and safety of crossing NC-54, with a question of why a new crossing at Park Office Drive is proposed instead of using the existing HAWK crossing further west. TWTPo suggested incorporating countermeasures to slow vehicles.
- **Retaining Wall:** Comment that NCDOT does not allow retaining walls in the public right-of-way for private development, and that a public wall would require municipal maintenance. The wall must meet a 2:1 requirement for height and distance from the roadway.

Alternative 2

- **Traffic Storage:** A question was raised regarding whether 200 feet of vehicle storage at NC-54 would be sufficient.
- **Design:** A request was made to review the proposed boardwalk section in more detail, noting that the current NCDOT district engineer has not yet reviewed this portion of the design.
- **Guardrail Separation:** Comment from NCDOT that widening the MUP over the culvert places the path within the deflection zone of the guardrail.
- **Environmental Impacts:** Desire to limit impact to Burdens Creek and other natural areas through construction and future land use.
- Two survey respondents (NCDOT and Go Triangle) prefer this alternative for implementation

Both Alternatives

- **NC-54 Crossing:** Desire for adequate signal timing at the existing crossing for students to cross.
- **Physical Separation on Bridge:** Desire for greater separation between the bikeway and travel lanes on the bridge. Suggested using a concrete barrier instead of a guardrail.
- **Separation from Curb:** Need to include retaining walls and maintain a 4 ft utility strip between the path and back of curb.

Evaluation Factor Preference

- GoTriangle prioritizes at-grade crossing considerations, structures, and cost considerations
- NCDOT prioritizes traffic considerations, at grade crossing considerations, and connectivity/destinations served
- TWTPo prioritizes connectivity/destinations served, environmental considerations, and constructability considerations

Alternatives Analysis

The following describes how each alternative scored for each of the eight key factors and supporting information for how their scores were assigned. Please refer to **Alternatives Analysis Methodology** in the Overview section for details on the methodology.

TYPICAL SECTION

Alternative 1	Alternative 2
14-foot Shared Use Path	14-foot Shared Use Path 14-foot Clear Width Boardwalk
Score: 1 - Highly Unfavorable	Score: 1 - Highly Unfavorable

- Neither Alternative as currently presented in this section utilizes the desired 16-foot separated use path and thus both are scored as highly unfavorable. This factor is not a differentiator in this segment.
- Should the wider 16-foot separated use path be desired, neither alternative has a clear advantage/disadvantage over the other.

STRUCTURE MAINTENANCE

Alternative 1	Alternative 2
Widen existing 6-foot-wide sidewalk on NC-54 bridge over Triangle Expressway to 16-foot-wide SUP (requires removal of center turn lane, maintains widths of existing travel lanes) +/- 250 LF Retaining Wall (Max Height = 10 feet)	Widen existing 6-foot-wide sidewalk on NC-54 bridge over Triangle Expressway to 16-foot-wide SUP (requires removal of center turn lane, maintains widths of existing travel lanes) +/- 140 LF Boardwalk over Tributary to Burdens Creek
Score: 5 – Highly Favorable	Score: 4 - Favorable

- Alternative 1 scores as highly favorable because it possesses no boardwalk structures.
- Alternative 2 scores as favorable because while it does have one boardwalk, the short length of this structure is still desirable.

REAL ESTATE CONSIDERATIONS

Alternative 1	Alternative 2
The bikeway remains within the existing right-of-way for 90% of the Alternative 1 alignment. 1 parcel requires permanent easement / right-of-way <ul style="list-style-type: none"> • Grifols Therapeutics Inc 7 parcels require temporary construction easements <ul style="list-style-type: none"> • Grifols Therapeutics Inc • Boxyard RTP LLC • Frontier Hub LLC 	The bikeway remains within the existing right-of-way for 90% of the Alternative 2 alignment. 1 parcel requires permanent easements / right-of-way <ul style="list-style-type: none"> • Grifols Therapeutics Inc 6 parcels require temporary construction easements <ul style="list-style-type: none"> • Grifols Therapeutics Inc • Raptorium LLC

Alternative 1	Alternative 2
<ul style="list-style-type: none"> University Of North Carolina Health Care System Wilmington Trust Company 	<ul style="list-style-type: none"> University Of North Carolina Health Care System Wilmington Trust Company
Score: 3 - Neutral	Score: 3 - Neutral

- Both Alternatives are anticipated to have similar right of way considerations; this factor is not a differentiator.

CONNECTIVITY / ROUTE EFFICIENCY / DESTINATIONS SERVED

Alternative 1	Alternative 2
<p>Length = 1.15 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> Existing sidepath on TW Alexander Drive bridge over I-40 Boxyard RTP/Frontier RTP Bus stop/shelter at Boxyard RTP <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> Research Triangle High School (via existing signalized mid-block crossing) HUB RTP (via existing signalized crossing at Rodbell Street) 	<p>Length = 1.15 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> - Existing sidepath on TW Alexander Drive bridge over I-40 - Research Triangle High School - Bus stop/shelter at Research Triangle High School <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> - Boxyard RTP/Frontier RTP (via existing signalized mid-block crossing) - HUB RTP (via existing signalized crossing at Rodbell Street)
Score: 3 - Neutral	Score: 3 - Neutral

- Both Alternatives are anticipated to have similar connectivity within this segment. While Alternative 2 does not provide a direct connection to Boxyard RTP, the existing HAWK signal is available to make that connection.

CONFLICT POINTS / CROSSING SAFETY

Alternative 1	Alternative 2
<p>1 Total Driveway</p> <ul style="list-style-type: none"> 1 Driveway on TW Alexander Drive 0 Driveways on NC-54 <p>2 Total Street Crossings</p> <ul style="list-style-type: none"> Park Offices Drive West (Unsignalized - 3 lanes) NC-54 at Park Offices Drive East (Signalized - 5 lanes) 	<p>4 Total Driveways</p> <ul style="list-style-type: none"> 1 Driveway on TW Alexander Drive 3 Driveways on NC-54 <p>1 Total Street Crossing</p> <ul style="list-style-type: none"> NC-54 at TW Alexander Drive (Signalized - 5 lanes) <p>Utilizing the existing width of the NC-54 bridge over Triangle Expressway requires lane modifications</p>

Alternative 1	Alternative 2
<p>Utilizing the existing width of the NC-54 bridge over Triangle Expressway requires lane modifications (specifically removal of the center turn lane) to accommodate the bikeway. Based on a traffic analysis, 200 feet of left turn lane storage will be provided at TW Alexander Drive signalized intersection.</p> <p>A 450-foot lane taper is utilized to on either end of the bridge to transition back to existing lane configurations. When comparing No-Build (2055) to Build (2055) traffic conditions, delays are expected to be equivalent, indicating that the geometric modification to the intersection is not expected to adversely affect operations of this intersection.</p> <p>Requires addition of pedestrian signal upgrades to existing traffic signal at Park Offices Drive to cross NC-54, no additional traffic signals required.</p>	<p>(specifically removal of the center turn lane) to accommodate the bikeway. Based on a traffic analysis, 200 feet of left turn lane storage will be provided at TW Alexander Drive signalized intersection.</p> <p>A 450-foot lane taper is utilized to on either end of the bridge to transition back to existing lane configurations. When comparing No-Build (2055) to Build (2055) traffic conditions, delays are expected to be equivalent, indicating that the geometric modification to the intersection is not expected to adversely affect operations of this intersection.</p> <p>Utilizes existing pedestrian signal at TW Alexander Drive traffic signal to cross NC-54, no additional traffic signals required.</p>
<p>Score: 2 - Unfavorable</p>	<p>Score: 3 - Neutral</p>

- Both Alternatives are anticipated to have similar impacts for this factor.
- Alternative 1 impacts fewer overall crossings, however it includes the unsignalized crossing of the 3-lane section at Park Offices Drive West.

CONSTRUCTABILITY CONSIDERATIONS

Alternative 1	Alternative 2
<p>Construction access from existing roadways (outside lane closures required)</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> • Aerial power distribution lines (+/- 4 anticipated pole relocations) • Underground fiber optic/telecom lines • Gas line • Water line (+/- 1 anticipated hydrant relocation) • Storm sewer (+/- 3 anticipated catch basin relocations) • Sanitary sewer 	<p>Construction access from existing roadways (outside lane closures required)</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> • Aerial power distribution lines (+/- 1 anticipated pole relocation) • Underground fiber optic/telecom lines • Gas line • Water line (+/- 2 anticipated hydrant relocations) • Storm sewer (+/- 5 anticipated catch basin relocations) • Sanitary sewer
<p>Score: 3 – Neutral</p>	<p>Score: 4 - Favorable</p>

- Both Alternatives in this section require similar lane shifts on NC-54 to accommodate construction near TW Alexander Drive and relatively similar utility considerations.
- Alternative 2 scores as favorable due to the more advantageous cross slopes on the existing I-885 bridge for widening the existing sidewalks relative to Alternative 1.

ENVIRONMENTAL / PERMITTING CONSIDERATIONS

Alternative 1	Alternative 2
<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> • Burdens Creek <p>Minimal tree clearing is anticipated</p> <p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT / City of Durham Traffic Signal Divisions Coordination • NC Turnpike Authority Coordination • Erosion Control Permit • Floodplain Development Permit • 401/404 Permit • Private Utility Coordination • Adjacent Landowners/Businesses Coordination • GoTriangle Coordination • Owner / Maintainer of Existing Sidepath Coordination 	<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> • Tributary to Burdens Creek • Burdens Creek <p>Minimal tree clearing is anticipated</p> <p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT / City of Durham Traffic Signal Divisions Coordination • NC Turnpike Authority Coordination • Erosion Control Permit • Floodplain Development Permit • 401/404 Permit • Private Utility Coordination • Adjacent Landowners/Businesses Coordination • GoTriangle Coordination • Owner / Maintainer of Existing Sidepath Coordination
Score: 3 - Neutral	Score: 3 - Neutral

- Both Alternatives are anticipated to have similar impacts within this segment with respect to this factor and are scored as neutral.

CONSTRUCTION COST

Alternative 1	Alternative 2
\$4,993,000	\$4,727,000
Score: 3 - Neutral	Score: 3 - Neutral

- Although costs are anticipated to be approximately 5 percent higher in Alternative 1, they are still within the range to be scored as neutral.
- This factor is not a differentiator within this segment.

Scoring Summary / Preferred Alternative Recommendation

Alternative 2 scores slightly higher (2.95) than Alternative 1 (2.75) as shown in the following summary table:

Evaluation Factor	Weight	Alternative 1	Alternative 2
Typical Section	10%	1	1
Structure Maintenance	5%	5	4
Real Estate Considerations	5%	3	3
Connectivity / Route Efficiency / Destinations Served	30%	3	3
Conflict Points / Crossing Safety	15%	2	3
Constructability Considerations	10%	3	4
Environmental / Permitting Considerations	5%	3	3
Construction Cost	20%	3	3
Total	100%	2.75	2.95

While both alternatives have very similar characteristics within this corridor, it is recommended that **Alternative 2** be selected as the preferred alternative for the NC-54 Corridor for the following reasons:

- Provides a more convenient typical section for widening the existing sidewalk over I-885.
- Upgrades an existing route that serves as a more direct, safe route to Research Triangle High School.
- Routing Bikeway along the south side of NC-54 will provide for a better user experience and comfort due to existing tree cover.

RTP Alternatives Alignment Area

Three alternatives were analyzed between Rodbell Street and Slater Road based upon information collected during the Triangle Bikeway Study as well as subsequent stakeholder and public engagement. A summary of those alignments is as follows:

- Alternative 1** begins at Rodbell Street and continues east as a shared use path along the south side of NC-54. The route then crosses over Davis Drive via a pedestrian bridge and continues east on the south side of NC-54 to the future site of the Triangle Mobility Hub. Utilizing a proposed traffic signal at the Triangle Mobility Hub it crosses to the north side of NC-54, passes under the railroad bridge, and continues east across South Miami Boulevard to Slater Road. The route continues east along the north side of Slater Road, crossing Page Road before crossing to the south side of Slater Road near the intersection with Emperor Boulevard. The bikeway then continues along the south side of Emperor Boulevard to the existing traffic signal at Slater Road. The route crosses Emperor Boulevard at the intersection and ends on the north side of Slater Road.
- Alternative 2** begins at Rodbell Street and continues east as a shared use path along the south side of NC-54. The route then crosses over Davis Drive via a pedestrian bridge and continues east on the south side of NC-54 to the future site of the Triangle Mobility Hub. It then turns south along the railroad line in a power transmission easement to Corbett Street. The bikeway continues south along the east side of Corbett Street as a two-way cycle track for bicyclists and utilizes the existing sidewalk for pedestrians until the intersection with Lafferty Street. The route then continues as a shared use path to Hopson Street, where it turns east along the north side of Hopson Street, utilizing the existing shared use path under the railroad bridge, and continuing to the intersection with South Miami Boulevard/Page Road. The route then heads south along the west side of South Miami Boulevard to the existing traffic signal at Emperor Boulevard. The bikeway then turns east along the south side of Emperor Boulevard and continues to the existing traffic signal at Slater Road. The route crosses Slater Road at the intersection and ends on the north side of Slater Road.
- Alternative 3** begins at Rodbell Street and continues east as a shared use path along the south side of NC-54. The route then turns south and continues along the west side Davis Drive (following the alignment of an existing sidepath), before crossing to the east side at the existing traffic signal at Select Drive. The route continues east on the south side of Select Drive, passes along the south side of the future site of the Triangle Mobility Hub in a power transmission easement to Corbett Street. The bikeway continues south along the east side of Corbett Street as a two-way cycle track for bicyclists and utilizes the existing sidewalk for pedestrians until the intersection with Lafferty Street. The route then continues as a shared use path to Hopson Street, where it turns east along the north side of Hopson Street, utilizing the existing shared use path under the railroad bridge, and continuing to the intersection with South Miami Boulevard/Page Road. The route continues east along the north side of Page Road to the existing traffic signal at Slater Road. The bikeway crosses Page Road and continues along the south side of Slater Road to Emperor Boulevard. The bikeway then continues along the south side of Emperor Boulevard to the existing traffic signal at Slater Road. The route crosses Emperor Boulevard at the intersection and ends on the north side of Slater Road.

Alternative 3 was removed from further consideration due to private property acquisition challenges, and on March 20, 2026, representatives from CAMPO, TWTP, RTF, Wake County, City of Durham, Durham County, and NCDOT identified a fourth alternative (Alternative 4), which is comprised of segments of Alternatives 2 and 3.

- **Alternative 4** begins at Rodbell Street and continues east as a shared use path along the south side of NC-54. The route then crosses over Davis Drive via a pedestrian bridge and continues east on the south side of NC-54 to the future site of the Triangle Mobility Hub. It then turns south along the railroad line in a power transmission easement to Corbett Street. The bikeway continues south along the east side of Corbett Street as a two-way cycle track for bicyclists and utilizes the existing sidewalk for pedestrians until the intersection with Lafferty Street. The route then continues as a shared use path to Hopson Street, where it turns east along the north side of Hopson Street, utilizing the existing shared use path under the railroad bridge, and continuing to the intersection with South Miami Boulevard/Page Road. The route continues east along the north side of Page Road to the existing traffic signal at Slater Road. The bikeway crosses Page Road and continues along the south side of Slater Road to Emperor Boulevard. The bikeway then continues along the south side of Emperor Boulevard to the existing traffic signal at Slater Road. The route crosses Emperor Boulevard at the intersection and ends on the north side of Slater Road.

A map of these alternatives can be found on the following page.

Public and Stakeholder Feedback

PUBLIC INPUT DURING TRIANGLE BIKEWAY STUDY (2020-2022)

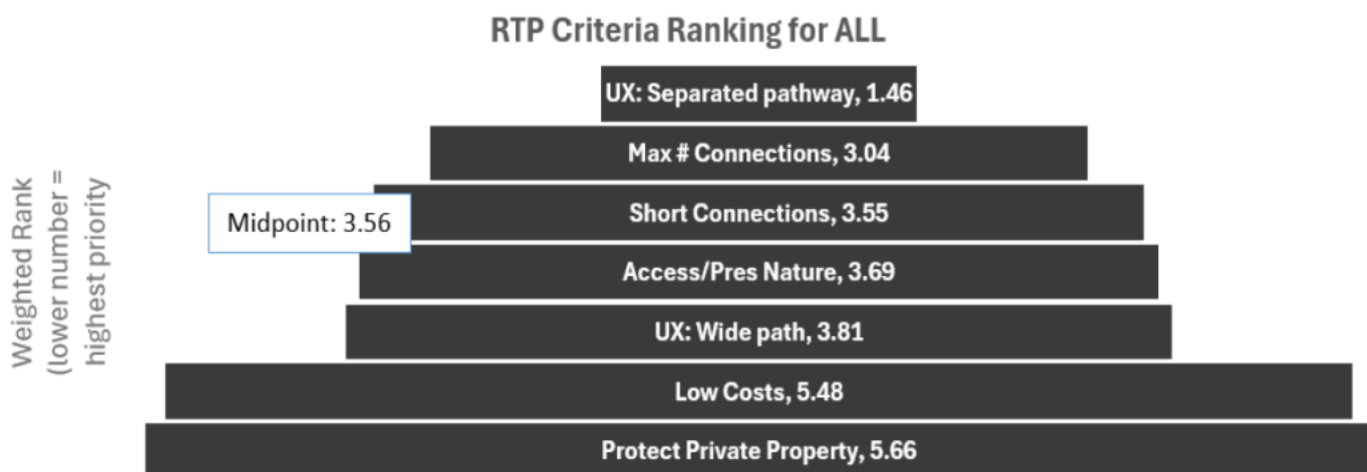
During the development of the Triangle Bikeway Study, completed in 2022, feedback from the **City of Durham** emphasized the following:

- Preference for routing the bikeway along NC-54, which is prioritized for bicycle and pedestrian facility enhancements.
- Shared use paths along both sides of NC-54 would minimize unsafe intersections and crossings.
- Providing access to the bikeway on both sides of I-40 and NC-54 interchange is critical.
- Consider multi-modal connections between the Triangle Bikeway, GoDurham transit routes, and the proposed GoTriangle commuter rail line.
- Consider connections between the Triangle Bikeway corridor and the City's greenway network.

PUBLIC INPUT DURING EARLY DESIGN PROCESS (2024-2026)

Public survey respondents were asked to rank a set of criteria to help identify top priorities for selecting a preferred alternative in the RTP Area, as shown in the chart following the map. The lower the rank score, the higher the priority.





- The following summarizes other input and comments from the public for the RTP area:
- Many commenters stressed the importance of minimizing delay and stops through RTP, noting that frequent signals, driveway conflicts, or indirect routing would undermine the corridor’s effectiveness as a transportation facility.
- Several comments emphasized that the RTP corridor should provide a clear, legible alignment, avoiding unnecessary meanders that increase distance and reduce the corridor’s usefulness for commuting.
- Commenters desired connections are around the planned RTP Mobility Hub, existing transit stops, and existing greenways and regional trails.

STAKEHOLDER INPUT DURING EARLY DESIGN PROCESS (2024-2026)

On November 4, 2024, the design team facilitated a site visit with stakeholders including Research Triangle Foundation, City of Raleigh, NCDOT, Wake County, and CAMPO to confirm the alternatives under consideration and obtain early feedback to inform alternative development. Subsequently, the project team met with stakeholders including City of Durham, Durham County, Wake County, Central Pines Regional Council, RTF, GoTriangle, and TWTPo on January 16, 2026 to share conceptual alignment alternatives and results of initial alternatives evaluation and collect input (including through a post-meeting survey). A summary of the feedback received is provided below:

Alternative 1

- **Crossings:** Question about if a traffic control device is anticipated at the mid-block crossing west of the rail bridge.
- **Safety / Visibility:** Concern was raised that visibility for traffic on Emperor Boulevard is already limited due to roadway curvature. Shifting the stop bar back could further reduce sight lines and worsen operational and safety conditions.

Alternative 2

- **New Right Turn Lane:** There is a project to install a southbound right turn lane from Miami Blvd onto Hopson Road.
- **Connectivity:** Question about whether there will be direct access between the southwest corner of Davis Drive and the proposed boardwalk/bridge, or if an alternative route would be required to cross Davis Drive.

- **Crossings:** Questions were raised about anticipated bridge usage and whether it warrants a grade-separated crossing.
- **Duke Energy Easement:** A question was asked about coordinating with Duke Energy about an easement for Bikeway.
- **Trail Purpose:** A question was asked about whether the Bikeway is a greenway or meant to facilitate transportation.
- **Length:** Some concern was raised about the additional length of Alternative 2 for cyclists traveling through the RTP area compared to Alternative 1.
- One survey respondent (GoTriangle) prefers this alternative for implementation.

Alternative 3

- **Length:** Some concern was raised about the additional length of Alternative 3 for cyclists traveling through the RTP area compared to Alternative 1.

Evaluation Factor Preference

- GoTriangle prioritizes at-grade crossing considerations, structures, and cost considerations
- NCDOT prioritizes traffic considerations, at grade crossing considerations, and connectivity/destinations served
- TWTPD prioritizes connectivity/destinations served, environmental considerations, and constructability considerations

Additional Fidelity Feedback

Due to Alternative 3's impact on the Fidelity Parcel, a separate meeting was held with representatives from Fidelity, RTF, CAMPO, and the design team to discuss the three alternatives under consideration in this segment. This meeting was held January 26, 2026. The following information was collected in that meeting:

- Fidelity is supportive of Triangle Bikeway and is supportive of the concepts shown in Alternatives 1 and 2.
- Due to concerns with campus safety, parking, and future plans for their parcel, Fidelity is not supportive of Alternative 3.

Alternatives Analysis

The following describes how each alternative scored for each of the eight key factors and supporting information for how their scores were assigned. **Alternative 3 has been replaced with Alternative 4 (a hybrid of Alternatives 2 and 3) for scoring consideration.** Please refer to **Alternatives Analysis Methodology** in the Overview section for details on the methodology.

TYPICAL SECTION

Alternative 1	Alternative 2	Alternative 4
14-foot Shared Use Path	14-foot Shared Use Path	14-ft Shared Use Path
14-foot Clear Width Shared Use Boardwalk	14-foot Clear Width Shared Use Boardwalk	14-ft Clear Width Shared Use Boardwalk
14-foot Clear Width Shared Use Pedestrian Bridge	14-foot Clear Width Shared Use Pedestrian Bridge	14-ft Clear Width Shared Use Pedestrian Bridge
	10-foot Two-Way Cycle Track w/ Separated 5-foot Exist. Sidewalk	10-ft Two-Way Cycle Track w/ Separated 5-ft Exist. Sidewalk
	10-foot Exist. Shared Use Path	10-ft Exist. Shared Use Path
Score: 1 - Highly Unfavorable	Score: 1 - Highly Unfavorable	Score: 1 - Highly Unfavorable

- Neither of the three alternatives possess the desired 16' separated use path in this segment. For this reason, all three alternatives are scored as highly unfavorable for this factor.
- Alternatives 2 and 4 include a roughly 0.3-mile-long section of 15' separated use path along Corbett Street.

STRUCTURE MAINTENANCE

Alternative 1	Alternative 2	Alternative 4
+/- 160 LF Shared Use Pedestrian Bridge over Davis Drive (14-foot Clear Width, Single Span)	+/- 160 LF Shared Use Pedestrian Bridge over Davis Drive (14-foot Clear Width, Single Span)	+/- 160 LF Shared Use Pedestrian Bridge over Davis Drive (14' Clear Width, Single Span)
2 Boardwalks (+/- 210 LF) for bridge approaches	2 Boardwalks (+/- 210 LF) for bridge approaches	2 Boardwalks (+/- 210 LF) for bridge approaches
+/- 1,650 LF Retaining Wall (Max Height = 10 feet)	+/- 1,005 LF Retaining Wall (Max Height = 8 feet)	+/- 1,541 LF Retaining Wall (Max Height = 10')
Score: 4 - Favorable	Score: 4 - Favorable	Score: 4 - Favorable

- All three alternatives possess the same number of boardwalk structures and all structures are associated with the grade separated crossing of Davis Drive.
- Retaining wall needs are fairly equivalent across alternatives and maintenance of those structures is not considered to be a differentiator within this segment.

- The anticipated length of boardwalk for the grade separated crossing is relatively short, and for that reason all three alternatives are scored as favorable for this factor.
- As design progresses, an at-grade crossing of Davis Drive with Triangle Bikeway is being studied. Should the design progress in that direction, it will not affect the scoring of this factor as it is not a differentiator between alternatives.

REAL ESTATE CONSIDERATIONS

Alternative 1	Alternative 2	Alternative 4
<p>The bikeway remains within the existing right-of-way for 75% of the alternative 1 alignment.</p> <p>10 parcels require permanent easement / right-of-way</p> <ul style="list-style-type: none"> • Wilmington Trust Company • FMR RTP LLC • Highwoods Realty Limited Partnership • Coastal Federal Credit Union • GG Candour House LP • Prepi Bright Horizons IC LLC • Imperial Center Building Owner LLC • Bliss Hospitality LLC/Sherd Group LLC <p>14 parcels require temporary construction easements</p> <ul style="list-style-type: none"> • Wilmington Trust Company • FMR RTP LLC • Research Triangle Foundation of North Carolina • MM Fowler INC • Highwoods Realty Limited Partnership • Coastal Federal Credit Union • GG Candour House LP • Prepi Bright Horizons IC LLC 	<p>The bikeway remains within the existing right-of-way for 50% of the alternative 2 alignment.</p> <p>21 parcels require permanent easement / right-of-way</p> <ul style="list-style-type: none"> • Wilmington Trust Company • FMR RTP LLC • Research Triangle Foundation of North Carolina • Davis Park Townhomes Homeowners Association Inc • Alta Davis Park Owner LLC • New Communications of the Carolinas Inc • Svasti Holdings LLC • TS Creekstone LLC • Spirit Master Funding VII LLC • Duke Energy Corporation • Alidade Bradford LLC • Durham Royal LLC • Liberty Property Limited Partnership • SCG 4400 Emperor Boulevard Owner LP • LC Industries for the Blind Inc • Research Triangle Regional Public Transportation Authority • Bliss Hospitality LLC/Sherd Group LLC 	<p>The bikeway remains within the existing right-of-way for 50% of the Alternative 4 alignment.</p> <p>20 parcels require permanent easements / right-of-way</p> <ul style="list-style-type: none"> • Wilmington Trust Company • FMR RTP LLC • Research Triangle Foundation of North Carolina • Davis Park Townhomes Homeowners Association INC • Alta Davis Park Owner LLC • New Communications of the Carolinas INC • Svasti Holdings LLC • TS Creekstone LLC • Archland Property LLC • Petula Prolix Development CO • Imperial Point III LLC • Crown Danbury Associates LLC • Imperial Center Building Owner LLC • Bliss Hospitality LLC/Sherd Group LLC <p>23 parcels require temporary construction easements</p> <ul style="list-style-type: none"> • Wilmington Trust Company • FMR RTP LLC

Alternative 1	Alternative 2	Alternative 4
<ul style="list-style-type: none"> Imperial Center Building Owner LLC Bliss Hospitality LLC/Sherd Group LLC 	<p>23 parcels require temporary construction easements</p> <ul style="list-style-type: none"> Wilmington Trust Company FMR RTP LLC Research Triangle Foundation of North Carolina Davis Park Townhomes Homeowners Association INC Alta Davis Park Owner LLC New Communications Of The Carolinas INC Svasti Holdings LLC TS Creekstone LLC Spirit Master Funding VII LLC Duke Energy Corporation Alidade Bradford LLC Durham Royal LLC Liberty Property Limited Partnership SCG 4400 Emperor Boulevard owner LP LC Industries for the Blind INC Research Triangle Regional Public Transportation Authority Bliss Hospitality LLC/Sherd Group LLC 	<ul style="list-style-type: none"> Research Triangle Foundation of North Carolina Davis Park Townhomes Homeowners Association Inc Alta Davis Park Owner LLC New Communications of the Carolinas Inc Svasti Holdings LLC TS Creekstone LLC Archland Property LLC Petula Prolix Development Co Imperial Point III LLC Crown Danbury Associates LLC Prepi Brighton Hall IC LLC Imperial Center Building Owner LLC Bliss Hospitality LLC/Sherd Group LLC
<p>Score: 4 - Favorable</p>	<p>Score: 2 – Unfavorable</p>	<p>Score: 2 – Unfavorable</p>

- Alternative 1 requires the fewest number of permanent and temporary easements of the three alternatives under consideration in this segment. For that reason, it is scored as favorable for this factor.
- Alternatives 2 and 4 have very similar needs with respect to temporary and permanent easements. Both Alternatives have approximately twice the needed easements as Alternative 1. For that reason, those alternatives as scored as unfavorable for this factor.

CONNECTIVITY / ROUTE EFFICIENCY / DESTINATIONS SERVED

Alternative 1	Alternative 2	Alternative 4
<p>Length = 2.00 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> • Bus stop/shelter at Rodbell Street • Bus stop/shelter at New Millenium Way • Future Triangle Mobility Hub • Candour House Apartments • Various business/employers along Slater Road • Bus stop/shelter at Candour House Apartments • Sheraton Imperial Hotel <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> • Various businesses/restaurants on Page Rd (via existing signalized crossing at Page Road/Slater Road intersection) 	<p>Length = 2.84 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> • Bus stop/shelter at Rodbell Street • Bus stop/shelter at New Millenium Way • Future Triangle Mobility Hub • Davis Park Townhomes / Alta Davis Apartments • Various business/employers along Hopson Road • Various business/employers along South Miami Boulevard • Various business/employers along Emperor Boulevard • GoTriangle Regional Transit Center Building • Sheraton Imperial Hotel <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> • Various businesses/restaurants on Page Rd (via existing signalized crossing at Page Road/Slater Road intersection) 	<p>Length = 2.57 Miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> • Bus stop/shelter at Rodbell Street • Existing sidepath on Davis Drive • Future Triangle Mobility Hub • Davis Park Townhomes / Alta Davis Apartments • Various business/employers along Hopson Road • Various business/restaurants along Page Road • Various business/employers along Slater Road • Bus stop/shelter on Slater Road • Sheraton Imperial Hotel <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> • Candour House Apartments (via existing signalized crossing at Page Road/Slater Road intersection)
Score: 4 - Favorable	Score: 2 - Unfavorable	Score: 3 - Neutral

- All Alternatives presented provide equal connectivity to the planned Triangle Mobility Hub Site.
- Alternative 1 is the shortest and most direct of the three routes under consideration. This route also makes numerous connections to the more heavily developed Slater Road corridor. For these reasons, this alternative is scored as favorable.
- Alternative 2 is the longest route of the Alternatives under consideration. This route makes a connection to the Davis Park/Alta Davis residential community that Alternative 1 does not, but makes fewer direct connections to Imperial Center and the surrounding area by following Emperor Boulevard. For this reason, this alternative is scored as unfavorable.

- Alternative 4 is roughly 30 percent longer than Alternative 1 and is the middle of the three in terms of length. While unfavorable for length, this route is balanced by making the most connections of the three. By connecting to the Davis Park/Alta Davis residential community similar to Alternative 2 and by making direct connections to Imperial Center and the surrounding areas by following Page Road and Slater Road, this alternative is scored as neutral for this factor.

CONFLICT POINTS / CROSSING SAFETY

Alternative 1	Alternative 2	Alternative 4
<p>7 Total Driveways</p> <ul style="list-style-type: none"> 3 Driveways on NC-54 4 Driveways on Slater Road 0 Driveways on Emperor Boulevard <p>10 Total Street Crossings</p> <ul style="list-style-type: none"> Rodbell Street (Signalized - 3 lanes) New Millenium Way (Unsignalized - 3 lanes) Select Drive (Unsignalized - 3 lanes) NC-54 (Signalized - 5 lanes) South Miami Boulevard (Signalized - 6 lanes) Creekstone Drive (Unsignalized - 2 lanes) Terrace Pine Drive (Unsignalized - 2 lanes) Page Road (Signalized - 5 lanes) Slater Road (Unsignalized w/ proposed RRFB - 2 lanes) Emperor Boulevard (Signalized - 4 lanes) <p>Utilizes proposed signalized intersection at future Triangle Mobility Hub to cross NC-54.</p> <p>Requires addition of pedestrian signal upgrades to existing traffic signals at South Miami Boulevard/NC-54/Slater Road</p>	<p>20 Total Driveways</p> <ul style="list-style-type: none"> 3 Driveways on NC-54 2 Driveways on Corbett Street 6 Driveways on Hopson Road 2 Driveways on South Miami Boulevard 7 Driveways on Emperor Boulevard <p>6 Total Street Crossings</p> <ul style="list-style-type: none"> Rodbell Street (Signalized - 3 lanes) New Millenium Way (Unsignalized - 3 lanes) Select Drive (Unsignalized - 3 lanes) Hopson Road (Signalized - 5 lanes) South Miami Boulevard (Signalized - 5 lanes) Slater Road (Signalized - 3 lanes) <p>Requires removal of pocket right turn lane on South Miami Boulevard. Anticipate additional traffic analysis may be required from NCDOT.</p> <p>Requires addition of pedestrian signal upgrades to existing traffic signals at South Miami Boulevard/Emperor Boulevard intersection and Emperor Boulevard/Slater Road intersection.</p>	<p>18 Total Driveways</p> <ul style="list-style-type: none"> 3 Driveways on NC-54 2 Driveways on Corbett Street 6 Driveways on Hopson Road 3 Driveways on Page Road 4 Driveways on Slater Road 0 Driveways on Emperor Boulevard <p>6 Total Street Crossings</p> <ul style="list-style-type: none"> Rodbell Street (Signalized - 3 lanes) New Millenium Way (Unsignalized - 3 lanes) Select Drive (Unsignalized - 3 lanes) South Miami Boulevard (Signalized - 5 lanes) Page Road (Signalized - 5 lanes) Emperor Boulevard (Signalized - 4 lanes) <p>Requires addition of pedestrian signal upgrades to existing traffic signal at Emperor Boulevard/Slater Road intersection.</p>

Alternative 1	Alternative 2	Alternative 4
intersection and Emperor Boulevard/Slater Road intersection.		
Score: 2 - Unfavorable	Score: 3 - Neutral	Score: 3 - Neutral

- All three alternatives will require pedestrian signal upgrades within this segment. Those impacts are viewed as similar and thus are not a differentiator for the alternatives within this segment.
- While Alternative 1 interacts with 60 -70 percent fewer driveways when compared to Alternative 2 and Alternative 4, it interacts with roughly 60 percent more travel lanes than both alternatives when considering street crossings. This includes the only crossing of NC-54 of the three alternatives in front of the Mobility Hub site as well as the only six-lane crossing of all three alternatives at S. Miami Boulevard. For these reasons, this alternative is scored as unfavorable for this factor.
- Alternatives 2 and 4 have very similar characteristics when looking at the total number of crossings. Alternative 4 has two fewer driveway crossings than Alternative 4 but does include the four-lane crossing of Emperor Boulevard that Alternative 2 does not. These factors are viewed as nearly equivalent, but the total number of crossings remains relatively high. For these reasons, both these alternatives are scored as neutral for this factor.

CONSTRUCTABILITY CONSIDERATIONS

Alternative 1	Alternative 2	Alternative 4
Construction access from existing roadways (outside lane closures required)	Construction access from existing roadways (outside lane closures required)	Construction access from existing roadways (outside lane closures required)
Construction of pedestrian bridge over Davis Drive requires night operations / road closure to set beams	Construction of pedestrian bridge over Davis Drive requires night operations / road closure to set beams.	Construction of pedestrian bridge over Davis Drive requires night operations / road closure to set beams.
Abutment modification under railroad bridge requires coordination with railroad, anticipate required flagging operations	Utilities present include: <ul style="list-style-type: none"> • Aerial power distribution lines/light poles (+/- 7 anticipated pole relocations) • Underground power distribution lines • Underground fiber optic/telecom lines • Gas line- Water line (+/- 1 anticipated hydrant relocation) 	Utilities present include: <ul style="list-style-type: none"> • Aerial power distribution lines/light poles (+/- 12 anticipated pole relocation) • Underground power distribution lines • Underground fiber optic/telecom lines • Gas line • Water line (+/- 8 anticipated hydrant relocations)
Lane closures required for reconfiguration of median and curb line on eastern leg of Slater Road/Page Road intersection.		
Utilities present include:		

Alternative 1	Alternative 2	Alternative 4
<ul style="list-style-type: none"> • Aerial power distribution lines/light poles (+/- 6 anticipated pole relocations) • Underground power distribution lines • Aerial power transmission lines • Underground fiber optic/telecom lines • Gas line- Water line (+/- 3 anticipated hydrant relocations) • Storm sewer (+/- 17 anticipated catch basin relocations) • Sanitary sewer 	<ul style="list-style-type: none"> • Storm sewer (+/- 13 anticipated catch basin relocations) • Sanitary sewer 	<ul style="list-style-type: none"> • Storm sewer (+/- 5 anticipated catch basin relocations) • Sanitary sewer
Score: 2 - Unfavorable	Score: 4 - Favorable	Score: 4 - Favorable

- All three alternatives have similar construction methods with respect to impacts on existing traffic (outside lane closures required).
- Further analysis will be performed to determine if an at-grade crossing of Davis Drive is achievable in subsequent phases of the project. This crossing is similar across all alternatives, and thus the traffic impacts of that construction are not viewed as a differentiator for this selection.
- While the specific utility impacts across the three alternatives vary, the total number of impacts are viewed as similar and thus utility impacts are not viewed as a differentiator for this segment.
- The primary differentiator in this segment is viewed to be the construction required for Bikeway to pass beneath the railroad bridge that crosses NC-54 in Alternative 1. Alternatives 2 and 4 utilize the existing multi-use path beneath the railroad along Hopson Road to make this crossing and do not require this coordination/construction. For this reason, Alternative 1 is scored as unfavorable for this factor, while Alternatives 2 and 4 are scored as favorable.

ENVIRONMENTAL / PERMITTING CONSIDERATIONS

Alternative 1	Alternative 2	Alternative 4
Jurisdictional features to be crossed include: <ul style="list-style-type: none"> • Tributary to Burdens Creek Tree clearing is anticipated in areas where the bikeway departs from existing roadway right-of-way	Jurisdictional features to be crossed include: <ul style="list-style-type: none"> • Tributary to Burdens Creek Tree clearing is anticipated in areas where the bikeway departs from existing roadway right-of-way	Jurisdictional features to be crossed include: <ul style="list-style-type: none"> • Tributary to Burdens Creek Tree clearing is anticipated in areas where the bikeway departs from existing roadway right-of-way

Alternative 1	Alternative 2	Alternative 4
<p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT / City of Durham Traffic Signal Divisions Coordination • Railroad Encroachment Agreement • Erosion Control Permit • 401/404 Permit • Private Utility Coordination • Duke Energy Encroachment Agreement • Adjacent Landowners/Businesses Coordination • Future Triangle Mobility Hub Site Design Coordination • GoTriangle Coordination • Owner / Maintainer of Existing Sidepath Coordination 	<p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT / City of Durham Traffic Signal Divisions Coordination • Railroad Coordination (Encroachment Agreement not anticipated if utilizing existing SUP within railroad right-of-way as shown) • Erosion Control Permit • 401/404 Permit • Private Utility Coordination • Duke Energy Encroachment Agreement • Adjacent Landowners/Businesses Coordination • Future Triangle Mobility Hub Site Design Coordination • GoTriangle Coordination • Owner / Maintainer of Existing Sidepath Coordination 	<p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT / City of Durham Traffic Signal Divisions Coordination • Railroad Coordination (Encroachment Agreement not anticipated if utilizing existing SUP within railroad right-of-way as shown) • Erosion Control Permit • 401/404 Permit • Private Utility Coordination • Duke Energy Encroachment Agreement • Adjacent Landowners/Businesses Coordination • Future Triangle Mobility Hub Site Design Coordination • GoTriangle Coordination • Owner / Maintainer of Existing Sidepath Coordination
Score: 1 – Highly Unfavorable	Score: 5 – Highly Favorable	Score: 5 – Highly Favorable

- The primary difference between these alternatives is the railroad coordination and railroad permitting. That coordination is anticipated to add more than six months of time to Alternative 1 when compared to Alternatives 2 and 4. For that reason, Alternative 1 is scored as highly unfavorable for this factor while Alternatives 2 and 4 are scored as highly favorable.

CONSTRUCTION COST

Alternative 1	Alternative 2	Alternative 4
\$14,492,000	\$16,249,000	\$16,063,000
Score: 3 - Neutral	Score: 3 - Neutral	Score: 3 - Neutral

- The cost of all three alternatives are within 20 percent of the lowest cost alternative (Alternative 1).
- While a difference exists between the alternatives, it is not viewed as a differentiator in this segment and thus all alternatives score as neutral for this factor.

Scoring Summary / Preferred Alternative Recommendation

Alternative 4 scores slightly higher (3.00) than Alternative 1 (2.85) and higher than Alternative 2 (2.70) as shown in the following summary table:

Evaluation Factor	Weight	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Typical Section	10%	1	1		1
Structure Maintenance	5%	4	4		4
Real Estate Considerations	5%	4	2		2
Connectivity / Route Efficiency / Destinations Served	30%	4	2		3
Conflict Points / Crossing Safety	15%	2	3		3
Constructability Considerations	10%	2	4		4
Environmental / Permitting Considerations	5%	1	5		5
Construction Cost	20%	3	3		3
Total	100%	2.85	2.70		3.00

Alternative 4 is recommended for selections as the preferred alternative for the RTP Alternatives Alignment Area for the following reasons:

- Utilizes the existing multi-use path beneath the railroad along Hopson Road for a key constructability and permitting advantage compared to the next highest scoring alternative
- Provides the most connectivity for users when compared to Alternatives 1 and 2.
- Creates a safe and enjoyable user experience that maximizes connections to Triangle Mobility Hub, a mix of residential and commercial areas, and existing bicycle and pedestrian connections while maintaining a relatively direct path.

Lake Crabtree Alternatives Alignment Area

Triangle Bikeway – East consists of two alternatives between Lake Crabtree County Park and Old Reedy Creek Road:

- **Alternative 1** begins at the eastern edge of the Aviation Parkway right-of-way and continues east as a separated use path along the south side of the I-40 right-of-way. The route then crosses over I-40 via a proposed pedestrian bridge. The route continues east along the north side of the I-40 right-of-way, crosses Haleys Branch via an elevated boardwalk, and climbs to Old Reedy Creek Road. The route ends with a mid-block crossing just north of the Old Reedy Creek bridge over I-40.
- **Alternative 2** begins at the eastern edge of the Aviation Parkway right-of-way and continues east as a separated use path along the south side of the I-40 right-of-way. The route crosses Lake Crabtree via an elevated boardwalk and climbs to Old Reedy Creek Road. The route reconfigures the existing Old Reedy Creek Road bridge over I-40 and ends with a mid-block crossing just north of said bridge.

A map of these alternatives can be found on the following page.



Public and Stakeholder Feedback

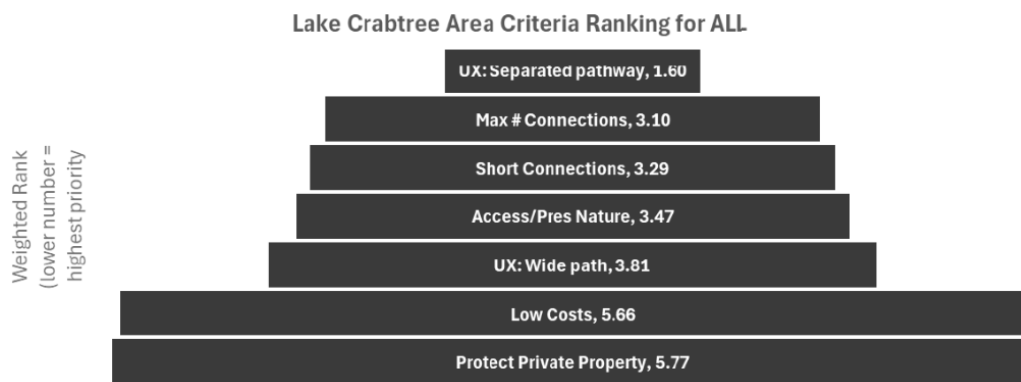
PUBLIC INPUT DURING TRIANGLE BIKEWAY STUDY (2020-2022)

During the development of the Triangle Bikeway Study, completed in 2022, feedback from the **Town of Cary** emphasized the following:

- Consider connections between the Triangle Bikeway corridor and the Town’s greenway network.
- Consider multi-modal connections between the Triangle Bikeway and GoCary routes along Weston Parkway.
- Consider routing opportunities within new developments. Parcels along Aviation Pkwy and Airport Blvd are slated for redevelopment.
- Old Reedy Creek Rd bridge replacement may provide an opportunity for crossing I-40.
- Consider public safety concerns of routing the bikeway near the Water Treatment Plant along I-40.

PUBLIC INPUT DURING EARLY DESIGN PROCESS (2024-2026)

Public survey respondents were asked to rank a set of criteria to help identify top priorities for selecting a preferred alternative in the Lake Crabtree Area, as shown in the chart below. The lower the rank score, the higher the priority.



The following summarizes other input and comments from the public for the Lake Crabtree area:

- Respondents prioritized a physically separated and full width facility and desire to maximize connectivity and avoid at-grade crossings.
- Desired connections include direct links to Lake Crabtree County Park, Umstead State Park and the Old Reedy Creek trailhead, Black Creek Greenway, Cary’s greenway system, and RDU Airport (with secure bike parking)
- There is strong support to keep the bikeway away from I-40 where feasible due to noise, air quality, and user experience; a preference for greener, shaded alignments through/near parks and existing greenways.
- Many respondents would like to preserve and enhance existing park resources, including maintaining mountain bike/gravel trail access, protecting natural areas around Lake Crabtree and Umstead State Park, and integrating the Bikeway with existing trails rather than displacing them.

STAKEHOLDER INPUT DURING EARLY DESIGN PROCESS (2024-2026)

Alternative 1

- **Cost:** Concerns about the high construction cost of the alternative.
- **User Experience:** concern about relatively steep grades for bicyclists in a corridor with vehicle exhaust

Alternative 2

- **Coordination with STIP Project:** If NCDOT replaces the bridge as part of STIP Project I-5966, there may be a betterment calculation to determine the local share of construction costs associated with placing Bikeway on the replacement structure. NCDOT noted that the approach fills and end bent locations will need to stay outside of the I-5966 widening footprint.
- **Connectivity:** Number of potential access points to RDU's new recreation and wellness district are both beneficial and something that will require monitoring as development progresses.
- **Bridge Access:** Concerns about whether larger vehicles, especially Wake Stone construction vehicles, would be able to cross the bridge easily, especially during construction.
- **Safety:** Concerns and desire to separate vehicular traffic and Bikeway users along the Old Reedy Creek Road Bridge
- **Real Estate Considerations:** Stakeholders noted that any work involving RDU Airport Authority property will require RDU's approval. NC Parks advocates for no impacts to Umstead Park land, even for temporary construction easements

Evaluation Factor Preference

- Go Triangle prioritizes constructability considerations, cost, and connectivity/destinations served.
- NC State Parks prioritizes environmental considerations, connectivity/destinations served, and at-grade crossing considerations
- NCDOT prioritizes structures, traffic considerations, and utility considerations
- Town of Cary prioritizes connectivity/destinations served, const considerations, and constructability considerations.

Alternatives Analysis

The following describes how each alternative scored for each of the eight key factors and supporting information for how their scores were assigned. Please refer to **Alternatives Analysis Methodology** in the Overview section for details on the methodology.

TYPICAL SECTION

Alternative 1	Alternative 2
16-foot Separated Use Path 16-foot Clear Width Separated Use Boardwalk 16-foot Clear Width Separated Use Bridge	16-foot Separated Use Path 16-foot Clear Width Separated Use Boardwalk 7-foot Pedestrian Zone + Sharrows on Old Reedy Creek Bridge over I-40
Score: 5 – Highly Favorable	Score: 5 – Highly Favorable

- Both Alternatives 1 and 2 use the desired 16-foot separated use path along 90 percent or more of their lengths, and therefore are both scored as highly favorable.

STRUCTURE MAINTENANCE

Alternative 1	Alternative 2
+/- 240 LF Separated Use Pedestrian Bridge over I-40 (16-foot Clear Width, 2-Span) Accommodates future NCDOT projects that will widen I-40 4 Boardwalks (+/- 2,630 LF) over various tributaries, Haleys Branch, and steep topography; approximately 350 LF is expected to require the use of driven steel pipe piles due to unsupported lengths +/- 185 LF Retaining Wall (Max Height = 3 feet)	Reconfigure shoulder widths on existing Old Reedy Creek Road bridge over I-40 to accommodate a 7-foot pedestrian zone and retain 10-foot shared lanes for bicyclists. If future NCDOT projects replace existing bridge, additional width could be added to provide dedicated space for bicyclists. 4 Boardwalks (+/- 2,060 LF) over various tributaries, Lake Crabtree, and steep topography
Score: 1 – Highly Unfavorable	Score: 2 – Unfavorable

- Alternative 1 has approximately 25 percent more boardwalk length than Alternative 2 and requires the use of driven steel pipe piles due to higher unsupported lengths resulting in a score of highly unfavorable.
- All of Alternative 2’s boardwalk is supported on driven timber piles and is generally closer to the ground surface than the boardwalks present in Alternative 1, however due to the length of boardwalk required, this alternative is scored unfavorable.

REAL ESTATE CONSIDERATIONS

Alternative 1	Alternative 2
<p>The bikeway remains within the existing right-of-way for 100% of the Alternative 1 alignment</p> <p>0 parcel requires permanent easement / right-of-way</p> <p>2 parcels require temporary construction easements</p> <ul style="list-style-type: none"> Raleigh Durham International Airport 	<p>The bikeway remains within the existing right-of-way for 100% of the Alternative 2 alignment</p> <p>0 parcel requires permanent easement / right-of-way</p> <p>3 parcels require temporary construction easements</p> <ul style="list-style-type: none"> Raleigh Durham International Airport Wake County Town Of Cary
Score: 5 – Highly Favorable	Score: 5 – Highly Favorable

- Neither Alternative 1 nor Alternative 2 require permanent easements, resulting in scores of highly favorable for both alternatives.

CONNECTIVITY / ROUTE EFFICIENCY / DESTINATIONS SERVED

Alternative 1	Alternative 2
<p>Length = 1.19 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> Lake Crabtree County Park (requires coordination with proposed RDU development project) <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> Umstead State Park Black Creek Greenway (via existing Old Reedy Creek Bridge) 	<p>Length = 1.23 miles</p> <p>Direct connections made include:</p> <ul style="list-style-type: none"> Lake Crabtree County Park (requires coordination with proposed RDU development project) Black Creek Greenway (requires coordination with Town of Cary) <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> Umstead State Park
Score: 2 – Unfavorable	Score: 4 – Favorable

- Alternative 1’s connectivity to Lake Crabtree County Park is not as desirable as Alternative 2’s, resulting in a score of unfavorable for Alternative 1 and favorable for Alternative 2.

CONFLICT POINTS / CROSSING SAFETY

Alternative 1	Alternative 2
<p>0 Total Driveways</p> <p>1 Total Street Crossing</p> <ul style="list-style-type: none"> Old Reedy Creek Road (Mid-Block, Unsignalized - 2 lanes) 	<p>0 Total Driveways</p> <p>1 Total Street Crossing</p> <ul style="list-style-type: none"> Old Reedy Creek Road (Mid-Block, Unsignalized - 2 lanes) <p>No significant traffic impacts anticipated</p>

Alternative 1	Alternative 2
<p>Requires adjustment of I-40 typical section to accommodate center bent of proposed pedestrian bridge in median</p> <ul style="list-style-type: none"> No additional traffic signals or traffic signal modifications required 	<ul style="list-style-type: none"> No additional traffic signals or traffic signal modifications required
Score: 5 – Highly Favorable	Score: 4 – Favorable

- Old Reedy Creek Road is the only at-grade crossing in the Lake Crabtree area and is not unique to either alternative.
- Alternative 2 has a lower score (favorable) than Alternative 1 due to potential safety concerns for the shared road concept proposed at the Old Reedy Creek Road Bridge crossing.

CONSTRUCTABILITY CONSIDERATIONS

Alternative 1	Alternative 2
<p>Construction access from existing roadways; Construction of pedestrian bridge over I-40 requires night operations, lane closures to construct center bent and temporary closures of I-40 to set the beams/panels</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> Aerial power distribution lines (+/- 7 anticipated guy wire relocations) Underground fiber optic/telecom lines Petroleum pipeline 	<p>Construction access from existing roadways</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> Aerial power distribution lines (+/- 7 anticipated guy wire relocations) Underground fiber optic/telecom lines Petroleum pipeline
Score: 2 – Unfavorable	Score: 5 – Highly Favorable

- Alternative 1 is scored as unfavorable due to anticipated shoulder closures on I-40 associated with the construction of the median bent for the new pedestrian bridge.
- Alternative 2 is scored as highly favorable for this factor as no traffic impacts are anticipated during construction.

ENVIRONMENTAL / PERMITTING CONSIDERATIONS

Alternative 1	Alternative 2
<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> Haleys Branch Tributaries to Lake Crabtree <p>*Significant tree clearing is required for the length of the bikeway in this section.</p> <p>Anticipated coordination/permitting needs include:</p>	<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> Haleys Branch Tributaries to Lake Crabtree <p>*Significant tree clearing is required for the length of the bikeway in this section.</p> <p>Anticipated coordination/permitting needs include:</p>

Alternative 1	Alternative 2
<ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT Future Widening Projects Coordination • Erosion Control Permit • Floodplain Development Permit • 401/404 Permit • NRCS / NC Dam Safety Coordination • Private Utility Coordination • Adjacent Landowners Coordination • RDU Coordination (including development project coordination) • Town of Cary Coordination 	<ul style="list-style-type: none"> • NCDOT Encroachment Agreement • NCDOT Future Widening Projects Coordination • Erosion Control Permit • Floodplain Development Permit • 401/404 Permit • NRCS / NC Dam Safety Coordination • Private Utility Coordination • Adjacent Landowners Coordination • RDU Coordination (including development project coordination) • Town of Cary Coordination
Score: 3 – Neutral	Score: 3 – Neutral

- Alternatives 1 and 2 have similar impacts and therefore both are scored as neutral.

CONSTRUCTION COST

Alternative 1	Alternative 2
\$13,859,000	\$8,226,000
Score: 2 – Unfavorable	Score: 4 – Favorable

- Alternative 1 is approximately 70 percent more costly than Alternative 2. This cost differential is driven by the new bridge construction required for Alternative 1.

Scoring Summary / Preferred Alternative Recommendation

Alternative 2 scores significantly higher (4.1) than Alternative 1 (2.9). A summary table of the factors is below:

Evaluation Factor	Weight	Alternative 1	Alternative 2
Typical Section	10%	5	5
Structure Maintenance	5%	1	2
Real Estate Considerations	5%	5	5
Connectivity / Route Efficiency / Destinations Served	30%	2	4
At-Grade Crossings / Safety	15%	5	4
Constructability Considerations	10%	2	5
Environmental / Permitting Considerations	5%	3	3
Construction Cost	20%	2	4
Total	100%	2.9	4.10

Alternative 2 is recommended to be selected as the preferred alternative for the Lake Crabtree Area for the following reasons:

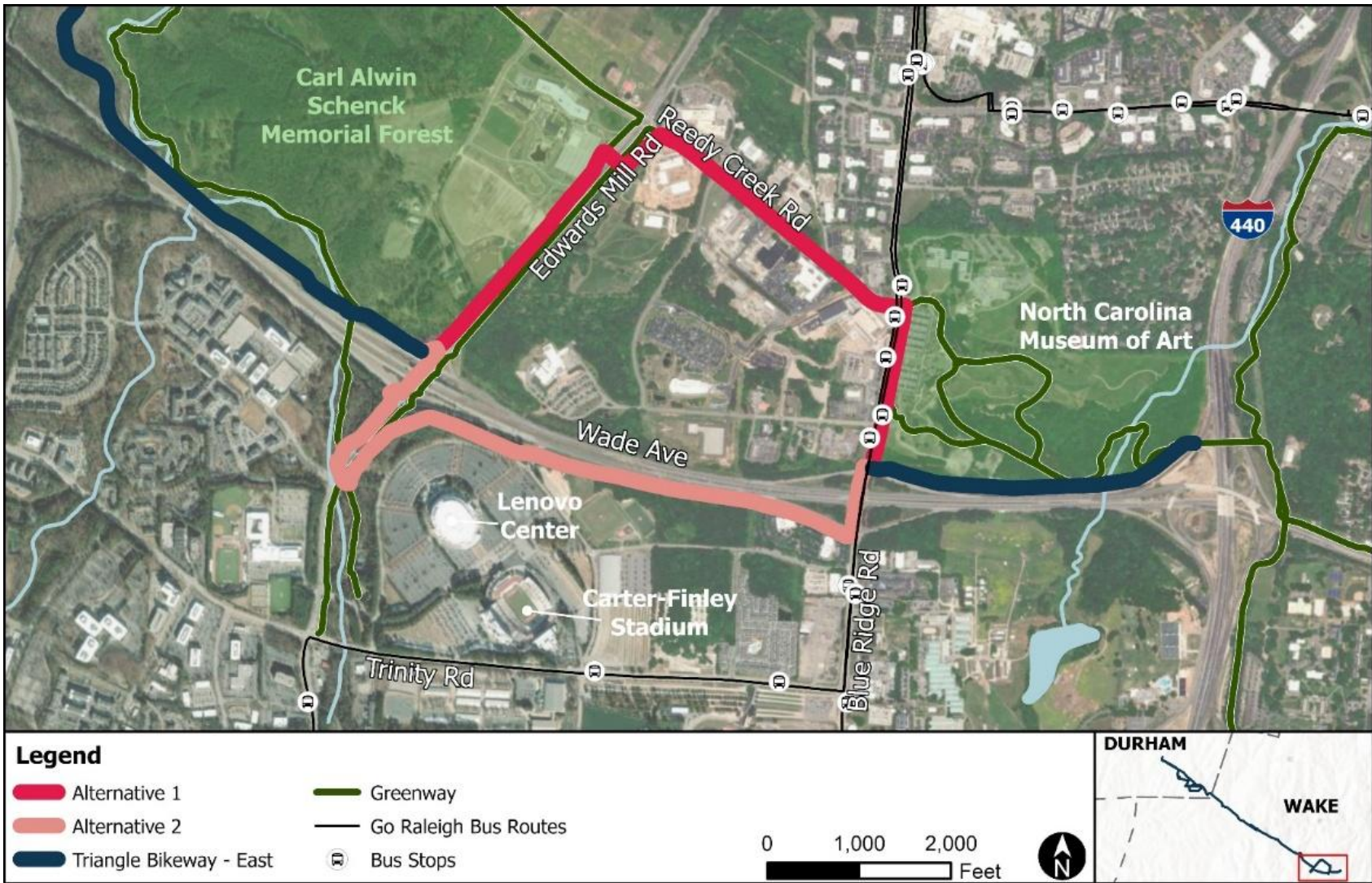
- More favorable connection to the new RDU recreation and wellness district.
- More direct connection to Black Creek Greenway (including trailhead with parking and restrooms).
- Unique placemaking opportunities on boardwalk overlooking Lake Crabtree.
- Less costly maintenance of boardwalks.
- Lower construction costs and provides opportunity for crossing of I-40 to be partially funded by STIP project I-5966.

Wade Avenue Alternatives Alignment Area

Triangle Bikeway – East consists of two alternatives between Edwards Mill Road and Blue Ridge Road as follows:

- **Alternative 1** begins at the northwest quadrant of the Wade Avenue / Edwards Mill Road interchange and heads north as a shared use path along the west side of Edwards Mill Road. The route then turns east and passes below Edwards Mill Road via the existing Reedy Creek Trail pedestrian tunnel, continuing north to Reedy Creek Road. The bikeway continues east along the south side of Reedy Creek Road to the intersection with Blue Ridge Road. After crossing Blue Ridge Road at the existing signalized intersection, the route turns south along the east side of Blue Ridge Road adjacent to the NC Museum of Art before ending at the northeast quadrant of the Wade Avenue / Blue Ridge Road interchange.
- **Alternative 2** begins at the northwest quadrant of the Wade Avenue / Edwards Mill Road interchange and heads south as a shared use path along the west side of Edwards Mill Road. The route then turns east and passes below Edwards Mill Road via the existing Richland Creek Trail pedestrian tunnel, before turning north along the east side of Edwards Mill Road. The bikeway then routes east along the south side of Wade Avenue to the Blue Ridge Road interchange. Utilizing the sidepath and pedestrian bridge currently under construction, the bikeway crosses to the north side of Wade Avenue before crossing Blue Ridge Road and ending at the northeast quadrant of the Wade Avenue / Blue Ridge Road interchange.

A map of these alternatives can be found on the following page.



Public and Stakeholder Feedback

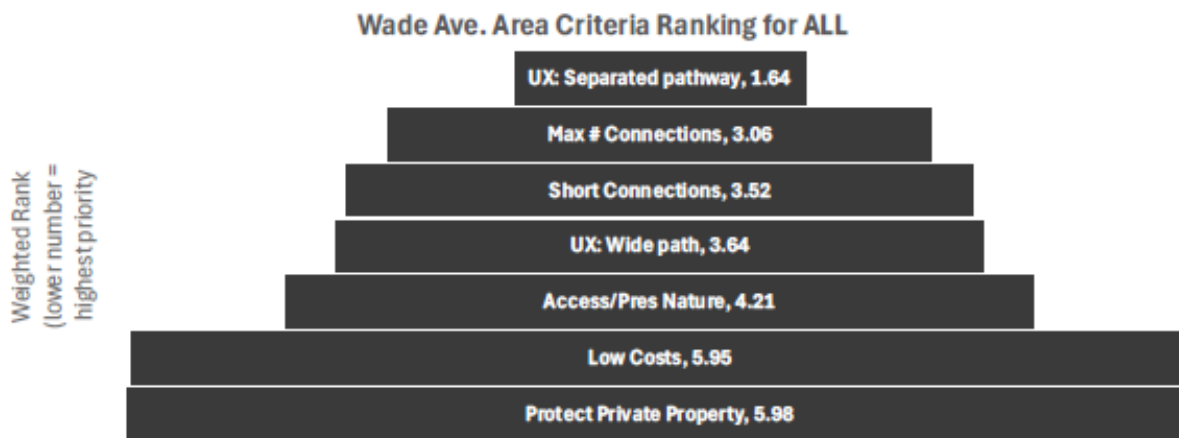
PUBLIC INPUT DURING TRIANGLE BIKEWAY STUDY (2020-2022)

During the development of the Triangle Bikeway Study, completed in 2022, feedback from the **City of Raleigh** emphasized the following:

- Importance of highlighting the bikeway as a commuter route.
- Preference for routing the bikeway along I-40 and Wade Ave.
- Consideration of connections between the Triangle Bikeway corridor and the City’s greenway network.
- Consideration of bikeway corridor width to accommodate high multimodal traffic volumes and various non-motorized travel modes.
- Consideration of multi-modal connections between the Triangle Bikeway, GoRaleigh transit routes, and the proposed GoTriangle commuter rail line.

PUBLIC INPUT DURING EARLY DESIGN PROCESS (2024-2026)

Public survey respondents were asked to rank a set of criteria to help identify top priorities for selecting a preferred alternative in the Wade Avenue Area, as shown in the chart below. The lower the rank score, the higher the priority.



The following summarizes other input and comments from the public about the Wade Avenue Corridor:

- Respondents prioritized a physically separated and full width facility and desire to maximize connectivity.
- Desired connections are clustered around the NC State Centennial Campus, the NC Museum of Art, State Fairgrounds, Carter-Finley Stadium, and Lenovo Center/ Raleigh Sports and Entertainment District.
- Several commenters asked to minimize at-grade delay and highlighted long signal cycles and safety risks at Blue Ridge Rd and Edwards Mill Rd crossings near Wade Avenue; there is interest in grade-separated solutions where feasible.
- Some respondents recommended avoiding Reedy Creek Rd given traffic associated with the new DHHS complex.

STAKEHOLDER INPUT DURING EARLY DESIGN PROCESS (2024-2026)

On November 18, 2024, the design team facilitated a site visit with stakeholders including City of Raleigh, NCDOT, Wake County, and CAMPO to confirm the alternatives under consideration and obtain early feedback to inform alternative development. Subsequently, the project team met with stakeholders including City of Raleigh, Town of

Cary, NCSU, DNCR and NC Parks on January 13, 2026, to share the alignment alternatives, initial evaluation results, and collect input (including through a post-meeting survey). A summary of the feedback received is provided below:

Alternative 1

- **Typical Section:** Concern that the section along Edwards Mill Road will feel too close to the road; desire to maintain separation between bicyclists and pedestrians near NCMA; concern that the bikeway is narrower.
- **Right-of-Way and Infrastructure:** Challenges to extend curb and gutter and sidewalk down Edwards Mill Road and work within the right of way along Reedy Creek Road by the National Guard fence.
- **Connectivity:** Concerns about shifting the bus shelter and demolition of the bike lane near NCMA.
- **Streetscape:** Desire to see streetscape along Blue Ridge Road retained.
- Two respondents (NCDOT) prefer this alternative for implementation.

Alternative 2

- **Traffic Considerations:** Concerns of major traffic issues/congestion/signal phasing impacts near Edwards Mill Road and Wade Avenue due to lane reductions and new pedestrian signals; Traffic Impact Analysis needed to secure approval from NCDOT.
- **Connectivity:** Need to coordinate with Raleigh Sports and Entertainment District development, which could make the project more complicated by also providing access to a new mixed-use district.
- One survey respondent (City of Raleigh) prefers this alternative for implementation.

Evaluation Factor Preference

- City of Raleigh prioritizes connectivity/destinations served, at-grade crossing considerations, environmental considerations, and cost considerations.
- NCDOT prioritizes traffic considerations, at-grade crossing considerations, structures, utility considerations, and connectivity/destinations served.

Additional North Carolina Museum of Art (NCMA) Feedback

Following this meeting, NCMA emailed the project team on March 11, 2025, with the following feedback on Alternative 1:

- NCMA does not want combined bike and pedestrian use on one sidewalk along Blue Ridge Road.
- NCMA will not grant permission to make changes to the existing 10-foot concrete sidewalk.
- NCMA will not grant permission to relocate utilities on their property.
- Expanding the existing 10-foot sidewalk would impact the tree plantings along both sides of the alignment, and the Museum does not accept any disturbance or the removal of these trees.
- Per the Urban Forestry City Tree Manual, page 20. “Any person desiring to undertake a tree disturbing activity on a City tree or any land disturbance within 15 feet of a City tree on City owned or controlled property must have a Tree Impact Permit.” The Museum requests to be included on any correspondence with the City of Raleigh regarding impacts to the trees within the ROW.

Alternatives Analysis

The following describes how each alternative scored for each of the eight key factors and supporting information for how their scores were assigned. Please refer to Alternatives Analysis Methodology in the Overview section for details on the methodology.

TYPICAL SECTION

Alternative 1	Alternative 2
14-foot Shared Use Path	14-foot Shared Use Path
10-foot Clear Width Pedestrian Tunnel (Existing)	15-foot Clear Width Pedestrian Tunnel (Existing)
12-foot Shared Use Path	16-foot Separated Use Path
	10-foot Shared Use Path (by Others)
	10-foot Clear Width Shared Use Bridge (by Others)
Score: 1 - Highly Unfavorable	Score: 3 - Neutral

- The two alternatives are significantly different with respect to their approach to typical section.
- Alternative 1 uses a reduced width section (12 feet wide) along Reedy Creek Road and has none of the desired 16-foot Separated Use Path within this segment.
- Alternative 2 utilizes the 16-foot separated use path along nearly 60 percent of its length.
- Both alternatives are reduced to 10-foot wide to make use of existing facilities within the Reedy Creek Trail Pedestrian Tunnel (Alternative 1) and over the newly constructed Pedestrian Bridge over Wade Avenue (Alternative 2).

STRUCTURE MAINTENANCE

Alternative 1	Alternative 2
+/- 180 LF Pedestrian Tunnel Under Edwards Mill Rd (Existing)	+/- 150 LF Pedestrian Tunnel Under Edwards Mill Rd (Existing)
+/- 300 LF Retaining Wall (Max Height = 7 feet)	+/- 3,380 LF Retaining Wall (Max Height = 10 feet)
Score: 5 – Highly Favorable	Score: 3 – Neutral

- The primary difference between the two alternatives is the volume of retaining walls. These structures are viewed as minimal maintenance items and do not significantly affect the score within this segment. However, given the order of magnitude difference in retaining wall quantity within this segment, Alternative 1 is scored as highly favorable and Alternative 2 is scored as neutral.

REAL ESTATE CONSIDERATIONS

Alternative 1	Alternative 2
<p>The bikeway remains within the existing right-of-way for 65% of the alignment.</p> <p>4 parcels require permanent easement / right-of-way</p> <ul style="list-style-type: none"> • State of North Carolina • Bandwidth, Inc • USEF Edwards Miller Owner LLC • NCMA <p>4 parcels require temporary construction easements</p> <ul style="list-style-type: none"> • State of North Carolina • Bandwidth, Inc • USEF Edwards Miller Owner LLC • NCMA 	<p>The bikeway remains within the existing right-of-way for 100% of the alignment.</p> <ul style="list-style-type: none"> • 0 parcels require permanent easements / right-of-way <p>4 parcels require temporary construction easements</p> <ul style="list-style-type: none"> • State of North Carolina • F7 West LLC
Score: 2 - Unfavorable	Score: 4 - Favorable

- Alternative 1 requires permanent easements/right of way for four properties, whereas Alternative 2 is completely within the public right of way. This is the primary driver for the difference between the scoring on these alternatives.
- The Blue Ridge Corridor is nearly built out within the limits of the existing right-of-way. Easement acquisition on the NCMA property may not be achievable and therefore a reduced width, or alternative section for Bikeway along that parcel is likely needed.

CONNECTIVITY / ROUTE EFFICIENCY / DESTINATIONS SERVED

Alternative 1	Alternative 2
<p>Length = 1.68 miles</p> <p>Direct connections include:</p> <ul style="list-style-type: none"> • Bandwidth Corporate Office • Reedy Creek Trail • NC DEQ Office • Claude T. Bowers Military Center (NC National Guard) • NC DHHS Office • NC Museum of Art • Bus stop/shelter on Blue Ridge Road <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> • Carl Alwin Schenck Memorial Forest (via Reedy Creek Road sidepath) • Umstead State Park (via Reedy Creek Trail) 	<p>Length = 1.72 miles</p> <p>Direct connections include:</p> <ul style="list-style-type: none"> • Richland Creek Trail • Raleigh Sports and Entertainment District <p>Additional nearby destinations served include:</p> <ul style="list-style-type: none"> • Carter Finley Stadium • Bandwidth Corporate Office (via Edwards Mill sidewalk and Reedy Creek Trail) • Reedy Creek Trail (via Blue Ridge SUP/Edwards Mill sidewalks) • NC DEQ Office (via Blue Ridge sidewalk) • Claude T. Bowers Military Center (NC National Guard, via Blue Ridge sidewalk) • NC DHHS Office (via Blue Ridge sidewalk)

Alternative 1	Alternative 2
<ul style="list-style-type: none"> Raleigh Sports and Entertainment District (via Blue Ridge Road SUP and Westchase Boulevard sidewalk) 	<ul style="list-style-type: none"> NC Museum of Art (via Blue Ridge MUP) Bus stop/shelter on Blue Ridge Road (via Blue Ridge sidewalk)
Score: 2 - Unfavorable	Score: 4 - Favorable

- Except for Alternative 2’s direct connection to the Raleigh Sports and Entertainment District, both alternatives serve the same destinations either directly or indirectly via the existing bicycle and pedestrian network.
- The Raleigh Sports and Entertainment District was consistently identified as a desirable connection during public surveys and Centennial Authority has expressed great interest in Alternative 2.
- For these reasons, Alternative 2 is viewed as favorable and Alternative 1 is viewed as unfavorable for this factor.

CONFLICT POINTS / CROSSING SAFETY

Alternative 1	Alternative 2
<p>9 Total Driveway Crossings</p> <p>4 Total Street Crossing</p> <ul style="list-style-type: none"> Mission First Trail (Signalized – 3 Lanes) Gold Star Drive (Unsignalized – 2 Lanes) Blue Ridge Road (Signalized – 5 Lanes) NC Museum of Art Entrance (Signalized – 3 Lanes) <p>Utilizes existing pedestrian signals at road crossings. No additional traffic signals or traffic signal modifications required.</p>	<p>1 Driveway Crossing</p> <p>7 Total Street Crossings</p> <ul style="list-style-type: none"> SB Edwards Mill Road On-Ramp (proposed RRFB – 1 Lane) NB Edwards Mill Road On-Ramp (Signalized – 2 Lanes anticipated) EB Wade Avenue Off-Ramp to Northbound Edwards Mill (Signalized – 1 Lane) EB Wade Avenue Off-Ramp to Southbound Edwards Mill (Proposed RRFB – 1 Lane) EB Wade Avenue Off-Ramp to Blue Ridge Road (Signalized – 3 Lanes) WB Wade Avenue On-Ramp from Blue Ridge Road (Signalized – 1 Lane) Blue Ridge Road (Signalized – 4 Lanes) <p>Requires addition of pedestrian signals at two existing traffic signals in the Edwards Mill Road / Wade Avenue interchange. Proposes installing RRFB crossings at the EB Wade Avenue off-ramp to SB Edwards Mill Road and the SB Edwards Mill Road on-ramp to WB Wade Avenue. Supplemental RRFB signs could be incorporated upstream of the crossings to provide advance warning to roadway users when crossings are activated.</p> <p>This Alternative proposes converting the combination thru/right turn lane on SB Edwards Mill Road to a thru-lane. This conversion provides increased safety/operational benefits by:</p> <ul style="list-style-type: none"> Reducing the lanes crossed at the on-ramp to a single lane

Alternative 1	Alternative 2
	<ul style="list-style-type: none"> • Removing the existing conflict point between users of the existing southbound bicycle lane and the turning movement from the existing thru/right-turn lane. • Preventing queueing of traffic from the on-ramp back into the thru/right turn lane when crossing is activated. <p>Coordination with NCDOT Congestion Management Section/FHWA required for the proposed improvements at the Edwards Mill Road / Wade Avenue interchange. A traffic analysis study will be required, and an Interchange Access Report may be required, to gain approval of this concept.</p> <p>Utilizes pedestrian signal upgrades currently under construction to make crossings at the Blue Ridge Road / Wade Avenue interchange.</p>
Score: 4 - Favorable	Score: 1 - Highly Unfavorable

- Alternative 1 scores as favorable due to the low number of un-signalized crossings and relatively low number of potential interactions across the driveway/streets.
- Alternative 2 crosses a significant number of high-volume traffic lanes within the Edwards Mill / Wade Avenue Interchange. Two of these crossings have proposed RRFB signals and the remaining are signalized. Due to the potential safety concerns at these crossings, and uncertainty surrounding the future configuration of this interchange, this alternative is scored highly unfavorable.

CONSTRUCTABILITY CONSIDERATIONS

Alternative 1	Alternative 2
<p>Construction access from existing roadways</p> <p>Outside lane closures required on multilane facility</p> <p>Potential flagging operations or temporary pavement anticipated on Reedy Creek Road</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> • Aerial power distribution lines (+/- 8 anticipated guy wire relocations) • Aerial power transmission lines • Underground fiber optic/telecom lines • Gas line • Water line (+/- 3 anticipated hydrant relocations) • Storm sewer (+/- 3 anticipated catch basin relocations) 	<p>Construction access from existing roadways</p> <p>Outside lane/shoulder closures required on multilane facility</p> <p>Traffic control operations will need to be coordinated with major-event traffic associated with Lenovo Center and Carter Finley Stadium.</p> <p>Depending on project timing, construction on the Raleigh Sports and Entertainment District may occur simultaneously and require coordination.</p> <p>Utilities present include:</p> <ul style="list-style-type: none"> • Aerial power distribution lines • Aerial power transmission lines • Underground fiber optic/telecom lines • Gas line

Alternative 1	Alternative 2
<ul style="list-style-type: none"> Sanitary sewer 	<ul style="list-style-type: none"> Water line Storm sewer (+/- 3 anticipated catch basin relocations) Sanitary sewer
Score: 2 - Unfavorable	Score: 3 - Neutral

- Alternative 1 scores as unfavorable because it has the potential to cause significant impacts to Reedy Creek Road during construction and possesses an increased number of utility conflicts when compared to Alternative 2.
- Alternative 2 scores as neutral for constructability primarily due to expected high traffic volumes near the Raleigh Sports and Entertainment District and anticipated limitations on lane closures due to those volumes. This can be mitigated if Bikeway construction is coordinated with the anticipated site development and intersection improvements.

ENVIRONMENTAL / PERMITTING CONSIDERATIONS

Alternative 1	Alternative 2
<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> Armory Tributary <p>Removal/relocation/replacement of street trees is anticipated on Reedy Creek Road and Blue Ridge Road</p> <p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> NCDOT Encroachment Agreement NCDOT Traffic Signal Divisions Coordination (Reedy Creek Road / Blue Ridge Road Intersection Improvements STIP project) Erosion Control Permit Floodplain Development Permit 401/404 Permit Private Utility Coordination Adjacent Landowners/Businesses Coordination NC Museum of Art Coordination GoRaleigh Coordination City of Raleigh Coordination 	<p>Jurisdictional features to be crossed include:</p> <ul style="list-style-type: none"> Richland Creek (no crossing per se, floodplain/floodway encroachment at existing pedestrian tunnel under Edwards Mill Road) <p>Tree clearing is anticipated along the majority of the route</p> <p>Anticipated coordination/permitting needs include:</p> <ul style="list-style-type: none"> NCDOT Encroachment Agreement NCDOT Traffic Signal Divisions / Congestion Management Section Coordination - possible Interchange Access Report (IAR) if determined applicable by NCDOT Erosion Control Permit Floodplain Development Permit 401/404 Permit Private Utility Coordination Adjacent Landowners/Businesses Coordination Raleigh Sports + Entertainment District Development Project Coordination City of Raleigh Coordination
Score: 3 - Neutral	Score: 3 - Neutral

- Alternatives 1 and 2 score as neutral; challenges for each are consistent with one another and are not a differentiator.
- Of note but not affecting the assigned score, coordination efforts are anticipated to be higher for Alternative 2 given the pending alterations to the Edwards Mill/Wade Avenue interchange and the site modifications at the Raleigh Sports and Entertainment District.

CONSTRUCTION COST

Alternative 1 - Highly Favorable	Alternative 2
\$5,947,000	\$11,452,000
Score: 4 – Favorable	Score: 2 - Unfavorable

- Alternative 2 is more than one and a half times the cost of Alternative 1. This cost differential is driven in large part by a significantly wider typical section along roughly 60 percent of length of Alternative 2.

Scoring Summary / Preferred Alternative Recommendation

Alternative 2 scores slightly higher (2.85) than Alternative 1 (2.80) as shown in the following summary table:

Evaluation Factor	Weight	Alternative 1	Alternative 2
Typical Section	10%	1	3
Structure Maintenance	5%	5	3
Real Estate Considerations	5%	2	4
Connectivity / Route Efficiency / Destinations Served	30%	2	4
Conflict Points / Crossing Safety	15%	4	1
Constructability Considerations	10%	2	3
Environmental / Permitting Considerations	5%	3	3
Construction Cost	20%	4	2
Total	100%	2.80	2.85

Alternative 2 is recommended to be selected as the preferred alternative for the Wade Avenue Corridor for the following reasons:

- Makes a direct connection to the Raleigh Sports and Entertainment District
- Offers a significantly better user experience in terms of its typical section when compared to Alternative 1.
- Offers enhanced user experience with more tree cover while maximizing connections to recently improved bicycle and pedestrian infrastructure.