

**Bells Ferry Road Operational Study** 









SEPTEMBER 2021

Prepared by



In partnership with









# **Overview of Study**

# **Background**

The study corridor forms the eastern border of the Town Center Community Improvement District (TCCID) and is characterized by primarily residential land uses, with commercial uses and an elementary school at the southern end. At the heart of the corridor is the Noonday Creek Trail, which is accessible via the Bells Ferry Trailhead. This creates a unique opportunity to connect residential neighborhoods to nearby recreational amenities and destinations. As an important north-south corridor used by people walking, biking, and driving, this study seeks to improve safety, operations, and multimodal mobility. Funded, in part, by the Atlanta Regional Commission's (ARC) Livable Centers Initiative (LCI) Program, the study examines ways to improve safety, comfort, and connectivity to help improve mobility for all people, encourage healthy lifestyles, and improve access to jobs and services.

# **Corridor Facts**

- 1.4-Mile Study Corridor
- Classified as a Minor Arterial
- Two Signalized Intersections
- 14 Side Street Intersections
- 45 MPH Speed Limit
- School Zone at Bells Ferry Elementary

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**Bells Ferry Road in Relation to Area Landmarks** 



**Bells Ferry Road Study Corridor Extents** 

# **Study Objectives & Goals**

# Goals



**Objectives** 

Identify needs to improve efficiency and safety for people using all transportation modes



Support local land uses, natural assets and features



Develop conceptual plan for safety and operational improvements



Identify recommendations and develop a 100-day action plan



**Enhance Access to Destinations** 



Protect Natural Features and Environmental Resources



Improve Safety and Efficiency for All Modes While Accommodating Anticipated Future Traffic



Make Biking and Walking Safer and More Comfortable



**Establish the Corridor as a Destination for Recreation** 



Improve Traffic Operations at Key Intersections

# **Operational Study**

The Bells Ferry Road LCI Operational Study identifies opportunities to improve efficiency and safety for all modes of transportation along Bells Ferry Road between Chastain Road/New Chastain Road and Barrett Parkway/Piedmont Road. The study aims to support TCCID's vision for the area and to improve the overall quality of life of residents who live nearby. There is a focus on safe access for all roadway users as well as supporting local land uses and the unique natural context set by Noonday Creek.



Bridge Over Noonday Creek Along Bells Ferry Road



Facing South Towards Barrett Parkway/Piedmont Road

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# **Plan Development Process**

# **Process Summary**

The study, which started in December 2020, comprised of four primary tasks - stakeholder and public involvement, an assessment of the existing conditions and characteristics of the corridor, plan development, and production of key deliverables. It began with an assessment and evaluation of existing conditions and characteristics of the roadway. The project team gathered and analyzed data such as historical crashes, traffic volume, land use, and prior plans and approved projects. The team also conducted a field-run topographic survey, defining contours and taking inventory of aboveground improvements, structures, pavement markings, utilities and property boundaries. This phase also included a road safety audit and an audit of pedestrian stress and comfort, walking, and driving the corridor to make firsthand observations. Building upon these analyses, the team identified issues and challenges related to safety for all users and traffic operations.

From there, the project team identified opportunities to potentially improve safety and operations along the corridor, identifying preliminary ideas for improvements. The team first presented these initial ideas to the project management team (TCCID, ARC, and Cobb County), then screened the preliminary ideas to see how well they align with study objectives and to assess potential benefits and challenges. After refining preliminary ideas, the project team presented draft recommendations to the Stakeholder Committee in June 2021 and at a virtual public forum in July 2021.



**Study Team Members Complete Road Safety Audit** 

# Summary of Issues

- Disconnected sidewalk and lack of bicycle facilities
- No sidewalk to trailhead from the south
- Pattern of rear-end and left-turn with thru-movement crashes
- Bridge over Noonday Creek lacks space for people biking and walking
- Speed of vehicular traffic
- Deficient turning movements at key intersections
- Congestion and queuing at signalized intersections
- Challenges turning from side streets

# **Summary of Opportunities**

- Improve safety and comfort for people walking and biking
- Improve access and connectivity to destinations like the trailhead, elementary school, and shopping center
- Reinforce residential nature of the corridor
- Encourage slower driving speeds
- Raise awareness of recreational uses
- Reduce queuing and improve operations at key intersections
- Reduce likelihood and frequency of crashes

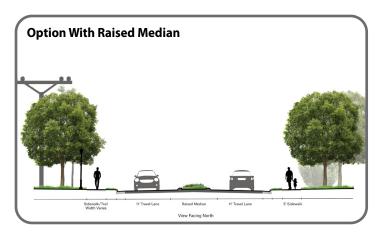
# **Corridor-wide Recommendations**

# **Recommendations Overview**

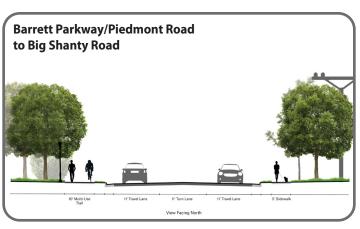
Recommendations include a range of safety and operations improvements, presented as a series of short-term, mid-term, and long-term projects and strategies that can be advanced for implementation over time, according to priorities and available funding. In addition to operational improvements at key intersections, the study makes recommendations to enhance the streetscape, reduce speeding, and reduce the likelihood and severity of crashes along the corridor. The recommendations include enhancements which apply to the entire study corridor:

- Continuous sidewalk/multi-use trail
- Center/left-turn lane and raised medians where possible
- Consistent curb and gutter
- Upgrade/replace signage
- Pedestrian-scale lighting along multi-use trail
- Consistent pavement markings on side streets
- Update wayfinding signage

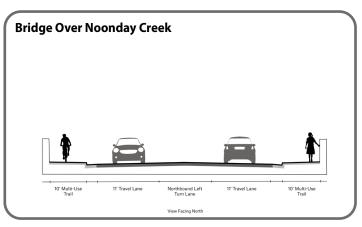
The typical sections shown on this page illustrate the recommended configuration of sidewalk, trails, travel lanes, turn lanes, and raised medians in each of the segments of the study corridor. The report includes a conceptual plan which illustrates how these elements come together along the extent of the study corridor.



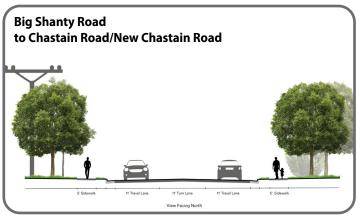
**Proposed Typical Cross-Section Option With Raised Median** 



Proposed Typical Cross-Section From Barrett Parkway/Piedmont Road to Big Shanty Road



Proposed Typical Cross-Section at the Bridge Over Noonday Creek



Proposed Typical Cross-Section From Big Shanty Road to Chastain Road/New Chastain Road

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# **Recommended Projects**

# Intersection Improvements

Based upon observations from the road safety and walking user stress audits as well as the traffic analysis findings, the project team identified a series of operational and safety improvements at key intersections throughout the study corridor. The study recommends improvements at Barrett Parkway/Piedmont Road, Rockbridge Road, Big Shanty Road, and Chastain Road/New Chastain Road. Specific improvements recommended at these locations include adding turn lanes, traffic signal phasing improvements, installing a single-lane roundabout at Big Shanty Road, and improving pedestrian crossings. One project is long-term and three are mid-term.

ID	Name	Timeframe
l1	Bells Ferry Road at Barrett Parkway	Long-Term
12	Bells Ferry Road at Rockbridge Road	Mid-Term
13	Bells Ferry Road at Big Shanty Road	Mid-Term
14	Bells Ferry Road at Chastain Road	Mid-Term

# **Segment Improvements**

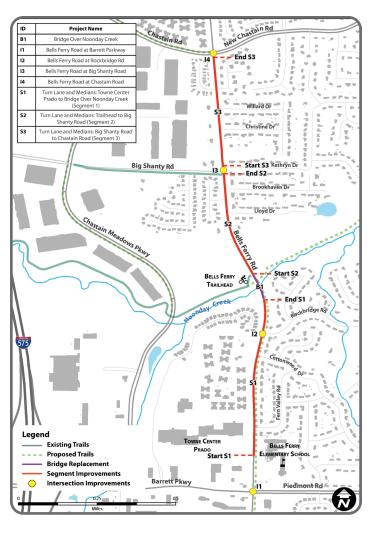
The recommended segment improvements span the entire study corridor and are consistent with the typical sections presented on the previous page. The study recommends adding a two-way center left-turn lane that would become dedicated left-turn lanes at side streets and include short raised medians at select locations, where possible. The study also recommends adding five-foot sidewalk to fill gaps on both sides of the corridor as well as widening some segments of sidewalk to ten feet on the west side of the road between Big Shanty Road and Towne Center Prado. All side street intersections should include crosswalks and ADA-compliant ramps. Segment 2 is a mid-term project while Segments 1 and 3 are long-term projects.

ID	Name	Timeframe
<b>S1</b>	Turn Lane and Medians: Towne Center Prado to Bridge over Noonday Creek (Segment 1)	Long-Term
<b>S2</b>	Turn Lane and Medians: Trailhead to Big Shanty Road (Segment 2)	Mid-Term
<b>S</b> 3	Turn Lane and Medians: Big Shanty Road to Chastain Road (Segment 3)	Long-Term

# **##** Bridge Replacement

Cobb County's Special Purpose Local Option Sales Tax (SPLOST) was renewed via voters' approval in November 2020. Among projects included on the 2022 SPLOST project list is the replacement of the Bells Ferry Road bridge over Noonday Creek, for which \$2.8 million has been allocated. To set the stage for this bridge replacement, the study team recommends designing the bridge to provide one lane in each direction with a dedicated northbound left-turn lane to the trailhead driveway and a ten-foot multi-use trail/ walkway on both sides of the new bridge. The bridge design should also accommodate a potential future extension of the Noonday Creek Trail beneath the bridge.

ID	Name	Timeframe
B1	Bridge Over Noonday Creek	Short-Term



**Bridge Replacement and Intersection and Segment Improvements** 

# Streetscape & Placemaking

The study recommends three pedestrian and streetscape projects. These projects include: planting trees and shrubs and installing streetscape elements along the west side of the road just north of the Bells Ferry Trailhead to provide shade and enhance aesthetics; enhancing the Bells Ferry Trailhead with educational signage, public art, and e-bike charging stations; and widening the existing walkway along the west side of Bells Ferry Road between the trailhead and Big Shanty Road from eight feet to ten feet to accommodate bicyclists. The table below shows the recommended streetscape and placemaking projects.

ID	Name	Timeframe
SP1	Revegetation and Placemaking	Short-Term
SP2	Trailhead Enhancements	Short-Term
SP3	Upgrade Multi-Use Trail	Long-Term



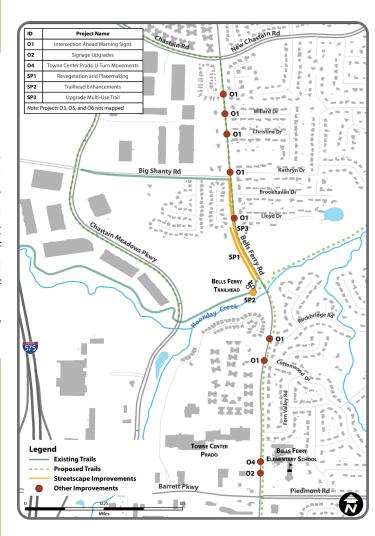
# **Other Projects**

In addition to intersection and segment recommendations, the study recommends installing intersection ahead warning signs where they are currently not present; upgrading signage at Bells Ferry Elementary School; identifying additional parking for trail users in the area; controlling U-turn movements at Towne Center Prado; conducting a study to pilot the use of dynamic speed display devices; and conducting a speed study along Bells Ferry Road to evaluate the possibility of lowering the speed limit in conjunction with engineering improvements. All projects in this category are relatively simple and are quick-wins to jumpstart plan implementation.

ID	Name	Timeframe
01	Intersection Ahead Warning Signage	Short-Term
02	Signage Upgrades	Short-Term
03	Identify Additional Trailhead Parking	Short-Term
04	Towne Center Prado U-Turn Movements	Short-Term
O5	Pilot Study: Dynamic Speed Display Devices	Short-Term
06	Speed Study	Mid-Term



**Noonday Creek Trail Near Bells Ferry Trailhead** 



Streetscape, Placemaking, and Other Improvements

# TOWN CENTER COMMUNIT IMPROVEMENT DISTRICT

# **Implementation Strategy**

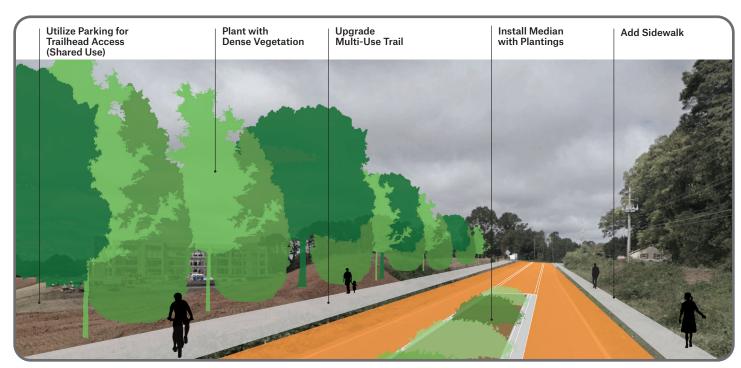
# **Overview**

The project list for the Bells Ferry Road LCI Operational Study includes 17 projects over short-term (one to three years to begin project implementation following the completion of this study), mid-term (four to seven years), and long-term ranges (eight to ten years and beyond). Some of these projects include recommendations for multiple locations and could be split into smaller-scale short-term projects, depending on priorities and resources. The project list includes a designated level of complexity, based on the scale and anticipated scope and cost of each project as well as the degree of coordination required for planning and implementation. Projects fall into five primary project types:

- B: Bridge Replacement (1 project)
- I: Intersection Improvements (4 projects)
- S: Segment Improvements (3 projects)
- SP: Streetscape & Placemaking Recommendations (3 projects)
- O: Other Recommendations (6 projects)

To help advance plan implementation, this section provides an outline of key incremental steps that can be taken within the first 100 days of the conclusion of the planning process. It should be noted that the following action plan is a suggested course of short-term action steps. It is up to TCCID and partners to determine which steps to prioritize based upon coordination with ongoing projects, shifting priorities, and other considerations.

The tables to the right depict a suggested "order of implementation" for recommendations within each timeframe. The suggested order is based on the identification of logical starting and ending points of infrastructure projects and sequencing of projects that build upon one another. The intent of this section is to provide flexible guidance to TCCID. The suggested order of implementation is not intended to be prescriptive but to serve as a guide as TCCID and partners consider potential funding opportunities, partnerships, and other factors. The suggested timeframe reflects when each project should be initiated and not necessarily completed due to the varying complexity of each recommendation.



Proposed Placemaking and Revegetation Elements Along Bells Ferry Road

# **100-Day Action Plan**

- 1) Work with Cobb County DOT to complete installation of intersection ahead warning signage at side street intersections (Project O1).
- Work with Cobb County to complete needed signage replacements at the main driveway entrance to Bells Ferry Elementary School (Project O2).
- 3) Engage property owners of Edison Chastain to explore additional opportunities for parking for users of the Bells Ferry Trailhead (Project O3). Coordinate with the Noonday Creek Trail Extension Feasibility Study.
- 4) Coordinate with Town Center Community Alliance to identify additional amenities and placemaking features at the Bells Ferry Trailhead (Projects SP1 and SP2).
- 5) Initiate coordination with Cobb County DOT to discuss and identify which of the recommended projects may be funded and implemented via the 2022 SPLOST.
- 6) In coordination with Project S1 and the anticipated RFP for concept design to fill trail gaps along Chastain Meadows Parkway, work with Cobb County to identify the southern end point for the proposed multi-use trail along the west side of Bells Ferry Road.
- Support Cobb County DOT Planning Division on the launch of the Noonday Creek Trail Extension Feasibility Study.

# **Recommended Phasing Plan**

# **Short-Term Recommendations**

SHORT-TERM RECOMMENDATIONS (1-3 YEARS)	
01*	Intersection Ahead Warning Signs
02*	Signage Upgrades
03	Identify Additional Trailhead Parking
SP1	Revegetation and Placemaking
SP2	Trailhead Enhancements
04	Towne Center Prado U-Turn Movements
B1	Bridge Over Noonday Creek
O5	Pilot Study: Dynamic Speed Display Devices

# **Mid-Term Recommendations**

MID-TERM RECOMMENDATIONS (4-7 YEARS)	
12	Bells Ferry Road at Rockbridge Road
<b>S2</b>	Turn Lane and Medians: Trailhead to Big Shanty Road (Segment 2)
13	Bells Ferry Road at Big Shanty Road
14	Bells Ferry Road at Chastain Road
06	Speed Study

# **Long-Term Recommendations**

LONG-TERM RECOMMENDATIONS (8-10 YEARS & BEYOND)	
SP3	Upgrade Multi-Use Trail
<b>I</b> 1	Bells Ferry Road at Barrett Parkway
<b>S3</b>	Turn Lane and Medians: Big Shanty Road to Chastain Road (Segment 3)
<b>S</b> 1	Turn Lane and Medians: Towne Center Prado to Bridge over Noonday Creek (Segment 1)

Note: The order of projects within the above tables is a suggested order of implementation, subject to change based on priorities, needs, and available resources.

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<sup>\*</sup> This project was in the process of being implemented at the time of the study's completion in Fall 2021.

