

PROJECT READINESS

Gaston County has a history of working with municipal and community partners to develop projects. *The Catawba Crossings Feasibility Study, Attachment 10*, completed in August 2022, is a good example of a partnership between Gaston County, City of Gastonia, City of Belmont, Town of Cramerton, and City of Charlotte, as well as many regional partners. These entities, in conjunction with the Gaston-Cleveland-Lincoln MPO, Charlotte Regional TPO, and NCDOT, worked collaboratively and financially to develop the feasibility study.

PROJECT SCHEDULE

The Catawba Crossings Environmental Document can begin quickly upon receipt of the RAISE funds and is expected to be completed within two (2) years after a grant agreement has been executed.

A summarized project schedule in Table 1 below shows the start and completion dates for the Project. The schedule includes flexibility to allow for unforeseen delays, while meeting the September 30, 2027 deadline to obligate funds.

Milestone	Start Date	End Date
Federal Award Notice	May 2023	June 2023
Grant Agreement Negotiation	July 2023	January 2024
Data Collection	January 2024	March 2024
NEPA Scoping and Purpose and Need <i>(includes agency consultation, public scoping/public involvement (including Public Hearing); stakeholder meetings; workshops, presentations)</i>	February 2024	July 2024
Alternatives Analysis	March 2024	September 2024
Draft Environmental Impact Report (EIR) <i>(includes public involvement)</i>	September 2024	May 2025
Final Environmental Impact Report (EIR) <i>(includes public involvement)</i>	May 2025	December 2025

Table 1. Planned Development Adjacent to Catawba Crossings Corridor

REQUIRED APPROVALS

While funding has not yet been identified for the construction of the Catawba Crossings Project, the utilization of federal funding, federal permits, and/or federal authorizations are likely. Therefore, it is highly reasonable to assume that this Project will be advanced through a rigorous planning and design process that meets the statutory requirements of the National Environmental Policy Act (NEPA) and other applicable federal, state, and local environmental laws and regulations. The completion of an environmental document for the Project will ensure that potential impacts to the social and natural environment are considered as well as the transportation needs of the public in reaching a decision that is in the best overall public interest.

State and Local Planning

The Catawba Crossings Project supports Gaston County’s long-standing policies, plans, and investments that encourage growth where it is most efficiently served in Gaston County. Currently, the Catawba Crossings Corridor is largely undeveloped; however, large portions of the Corridor are planned for mixed use development. Development pressure in the greater Charlotte metropolitan area is significant and large tracts of undeveloped or underutilized land are actively being consolidated and subdivided. Population growth is expected to continue at a pace exceeding the state-wide average.

With the Catawba Crossings included in the GCLMPO Comprehensive Transportation Plan (CTP) as well as CRTPO’s CTP (included as the Western Parkway), the Town of Cramerton, City of Belmont, and City of Charlotte have all been able to require right-of-way reservation for the Catawba Crossings as part of their development ordinances.

Table 2 summarizes some of the known, planned developments adjacent to the Corridor. The planned River District is transformational in scope and has the potential to develop into a regional destination. There are also two planned public development projects adjacent to the Catawba Crossings in Mecklenburg County. In addition, CLT Airport has consolidated ownership of several properties south of the airport in an area known as the “CLT South Airport Enterprise Logistics and Distribution” area.

County (Municipality)	Development Name	Description	Relation to Catawba Crossings
Gaston (Cramerton)	Overlook at Riverside	Conditional Zoning Plan for mixed-use development. Approx. 1,070 single family dwelling units, 80,000 square feet (sf) of retail/commercial uses, 100,000 sf of office uses, and 70 acres set aside for future business park.	Approx. 479 acres located between the South Fork Catawba River and NC 279. Includes 180-ft reserved right-of-way for Catawba Crossings.
Mecklenburg (Charlotte)	The River District	Master Plan includes 8,000,000 sf of office space, 2,300 single family dwelling units, 2,350 multifamily dwelling units, 550 acres of open space, and 1,000 hotel rooms.	Approx. 1,400 acres between Catawba River and I-485. Includes 150-ft reserved right-of-way for Catawba Crossings.
Mecklenburg (Charlotte)	Garrison Road Industrial (485 Logistics Industrial Park)	Plan includes approximately 1,200,000 sf for Class A industrial park.	Approx. 150 acres south and east of Garrison Road. Includes 120-ft reserved right-of-way for Catawba Crossings.
Mecklenburg	Charlotte Water Parcel	Originally purchased in early 1990's for future water and wastewater development by the city. The scope of the future project is currently unknown; no plans are currently available.	Approx. 130 acres between Catawba River and Dixie River Road. Reserved right-of-way corridor assumed for Catawba Crossings.

Table 2. Planned Development Adjacent to Catawba Crossings Corridor

Federal Transportation Requirements Affecting State and Local Planning

The Catawba Crossings Project is a significant piece of infrastructure for the region and RAISE funding is critical to advance this project. The Catawba Crossings is included in both the GCLMPO Comprehensive Transportation Plan (CTP) and 2050 Metropolitan Transportation Plan (MTP), as well as CRTPO's CTP.

ASSESSMENT OF PROJECT RISKS AND MITIGATION STRATEGIES

As with any project, there are certain risks that have been identified for the Catawba Crossings Project. For this project, the potential for environmental uncertainties until NEPA is complete is the primary risk. However, this risk will be easily mitigated as the project moves through the planning process and the Environmental Document is completed.

The project partners have assessed the risks to the proposed project in this application relative to implementation and have not identified any major risks that will cause delay or otherwise prohibit the obligation of funds prior to the September 30, 2027 statutory obligation deadline.

Additionally, through the multiple planning efforts that have been conducted over the last several decades, there have been numerous public involvement processes to inform the public and adjacent property owners of the proposed improvement and the potential impacts.

TECHNICAL CAPACITY

Gaston County has extensive experience in managing grants and has worked with NCDOT and the GCLMPO in the past using federal funds. Gaston County has the resources to deliver the project and will comply with all applicable Federal requirements.

Moreover, Gaston County commits to all RAISE grant funds being expended well in advance of the September 30, 2032 expenditure deadline.

FINANCIAL COMPLETENESS

Gaston County is requesting 100% RAISE grant funding for the Catawba Crossings Environmental Document. The cost estimate used for this grant application is a high-level, magnitude of effort associated with the development and publication of an Environmental Impact Report (EIR) that will fulfill the regulatory requirements of the National Environmental Protection Act (NEPA). The cost estimate assumes that some of the Garden Parkway EIS field data will hold true, but that multiple disciplines will require field data collection to update previously collected field data and/or to cover potential new alternative alignments. Certain circumstances discovered in the field data collection may result in additional associated costs (e.g., requirement for Phase 2 Environmental Site Assessment (ESA), Phase II and/or Phase III Archaeological Investigations, etc.). Gaston County and the project partners will fund any and all cost overruns to ensure the successful completion of the Catawba Crossings Environmental Document.

ECONOMIC ANALYSIS OF PROJECT COSTS AND BENEFITS

Although a Benefit-Cost Analysis (BCA) is not required for this planning grant application, one was completed as part of the Catawba Crossings Feasibility Study to estimate the costs and benefits of the Catawba Crossings Project over a 20-year period and discounted to present-day value using a 7 percent discount rate. The BCA Narrative has been included as [Attachment 7](#). The BCA has been documented in a spreadsheet format that is consistent with the US Department of Transportation (USDOT) BCA guidelines for applications to federal funding programs, and is also included as [Attachment 8](#).

The BCA is based on the project description contained in the Catawba Crossings Transportation Technical Memorandum (April 2021). The following benefits were quantified:

- Establishment of physical transportation assets (roadway alignment and bridge) with a long useful life
- Accident-prevention benefits realized by shortening of long-distance trips
- Reduced travel time for passengers and increased productivity for drivers
- Reduced morbidity and negative health outcomes associated with a more direct access to emergency services at Charlotte Area hospitals and medical campuses
- Social benefits realized by shortening of long-distance trips which reduces carbon and other mobile source emissions
- Increased property values due to enhanced mobility between Gaston and Mecklenburg counties
- Increased truck-air freight capacity and resiliency
- Increased productivity and reduced expenses for agricultural uses

Additional project benefits are described in BCA Narrative, but remain unquantified due to uncertainty or lack of empirical data. These include opportunities to enhance the quality of life and economic vitality in the communities surrounding the project and the region, such as:

- Quality of Life – The Catawba Crossings Project provides a critical connection between Gaston County, York County, SC, and Mecklenburg County, creating community, access, jobs, and opportunity;
- Decreased congestion on regional roadways and at the other bridge crossings;
- Improved state of good repair and deferred maintenance or rehabilitation costs for area roadways and bridges, as a function of reduced vehicle miles traveled;
- Long Term Economic benefits from increased activity and employment due to improved accessibility (e.g., agglomeration benefits);
- Short Term Economic Impact, including creation of temporary quality jobs during construction, increasing wages, and spending in the local economy and providing economic benefits to local suppliers and contractors.

Possible Societal Benefits for Consideration	Key Benefits Quantified	Total Benefits	Present Value (7% Discount Rate)
Economic Competitiveness			
Travel Time Savings	Reduced driving distance and associated reduced travel time	\$443,502,921	\$114,132,270
Real Estate	Property value increases in Belmont area due to increased Highway Connectivity and River Crossing	\$25,604,193	\$12,164,368
Air Freight Resiliency	Increase in Truck-Air outbound freight at Charlotte Douglas International Airport due to reduced congestion	\$232,920,000	\$110,658,614
Agricultural Access	Increase in farm productivity / reduction in farm expense directly related to equipment and crop transportation expenses	\$9,181,293	\$2,346,644
Safety			
Crash Savings	Reduction in injury and property damage only (PDO) crashes	\$71,872,328	\$18,369,828
Environmental Sustainability			
Peak Hour Vehicle Emissions	CO2, VOC, NOx, PM2.5 reductions	\$216,295,786	\$81,533,312
Other			
Access to Hospitals and Emergency Services	Reduced Travel time and Morbidity due to more direct access to Charlotte Area Hospitals	\$260,133,082	\$66,491,550
Residual Value	Residual value of assets at the end of the analysis period	\$100,790,033	\$11,564,762
Maintenance Costs	Cost of regular maintenance and inspection of assets	-\$19,927,779	-\$4,308,940
Total Benefits		\$1,340,371,857	\$412,952,408
Total Costs		-\$296,712,837	-\$172,757,901
Benefit / Cost Ratio		4.52	2.39

Table 3. Benefit-Cost Analysis Summary

The capital costs required to purchase the right-of-way (ROW) and build the roadway and bridge infrastructure are the key drivers of costs. Initial investment costs total \$314.8M based on cost estimates prepared in 2021, or \$296.7M in constant year 2019 dollars, with annual operating and maintenance costs to follow.

As demonstrated by the BCA, this project will contribute to quantifiable benefits to the region. The substantial positive impacts of the project in 2019 dollars are monetized at \$413M in benefits, assuming a 7 percent discount rate. This is in comparison to a discounted project cost of \$172.8M. As a result, the project has a BCR of 2.39, which represents a favorable investment of funds and a significant benefit to the region.