# Appendix F Opportunities and Constraints

CATAWBA CROSSINGS

# OPPORTUNITIES AND CONSTRAINTS EVALUATION

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The Catawba Crossings Project is an important regional transportation investment within a dynamic metropolitan geography that is experiencing significant residential growth. This growth and development pressure are occurring across multiple jurisdictions and planning areas. This Opportunities and Constraints Evaluation is intended to identify some of the parameters uncovered to date that will shape the development and implementation of the Catawba Crossings Project to accommodate future demands and meet public expectations. While not an exhaustive list, this document will discuss the opportunities and constraints associated with multiple topics, including Transportation, Recreation, Environment, Land Use and Funding.

Both tangible and intangible opportunities and constraints should be considered. Tangible constraints like impacts to properties and environmental resources can be avoided and minimized during project development. Where impacts cannot be avoided, mitigation measures should be employed to address adverse effects. Certain mitigation measures may be considered opportunities, as well. For example, channel improvements associated with the proposed South Fork Catawba River Bridge have been identified as a benefit to the environment and recreational use.

Public and political opinion are important intangibles that will influence the success of this Project. The GCLMPO has implemented a robust public and stakeholder engagement program in support of the Catawba Crossings Feasibility Study and is conducting the study in a fully transparent manner. Public and stakeholder involvement has informed this Opportunities and Constraints Evaluation.

# Transportation

## Traffic

### Constraints

Traffic is currently constrained by the existing network which is in turn constrained by the physical environment (**Figures 1** and **2**). The Belmont Peninsula is bound by the South Fork Catawba River to the west and the Catawba River to the east, each of which is part of the Duke Energy Lake Wylie impoundment. These open waters constrain the surface transportation network and contribute to longer travel distances and travel times in, to, and through the Project area.

I-85 and US 29-74 (Wilkinson Boulevard) cross the Catawba River within 1-mile of each other approximately 3 miles north of the Project corridor; Highway 49 (York Road) crosses the Catawba River approximately 7 miles south of the Project corridor. This forces traffic with origins and/or destinations in southeastern Gaston County and northern York County to share these river crossings with regional and interstate traffic which contributes to congestion and delays throughout the network.

### Opportunities

Introducing a bridge across the Catawba River between the US 29-74 and Highway 49 bridges represents a significant opportunity to improve the transportation network. The traffic benefits associated with the construction of an alternate Catawba River crossing are expected to improve conditions on existing parallel routes (e.g., I-85, US 29-74, and NC 49). By virtue of connecting several major north-south routes (i.e., NC 279, NC 273, I-485, NC 160), the Catawba Crossings would enhance regional access and mobility for all travelers, local, regional, and intrastate. Based on the “Catawba Crossings Transportation Technical Memorandum”, the Project has the potential to:

- reduce travel times,

- improve the resiliency of the US 29-74 corridor by decreasing traffic volumes and improving traffic operations along the corridor,
- reduce congestion, delay, and the frequency of crashes at study area intersections along US 29-74, NC 160, N. Main Street, and NC 273 north of Catawba Crossings.

Other traffic related opportunities include the potential inclusion of access management features, alternative intersection treatments, and technology. Access management should be planned now, in consultation with local jurisdictions to maximize the traffic operations of the facility long-term and attract compatible development that will enrich the community. These strategies may or may not be integral to alternative intersection designs that accommodate all modes of traffic safely and efficiently.

As a new alignment roadway, the Catawba Crossings Project will have the opportunity to fully embrace and implement the latest technology as it relates to connected and automated vehicles. Like all networks, these technologies are most effective when integrated into larger systems. The Project should plan to implement "smart" and/or adaptive signals equipped to monitor and adjust signal timing along the corridor during peak travel hours and optimize the traveler experience and throughput. By providing direct connections to major regional transportation facilities, including I-485 and Charlotte Douglas International Airport (CLT), additional consideration should be given to integration of advance warnings (e.g., Digital Messaging Signs) along the corridor as appropriate.

## Multimodal - Bicycles and Pedestrians

### Constraints

The bicycle and pedestrian transportation network(s) are likewise constrained by the physical environment. Whereas a vehicle may circumnavigate Lake Wylie through the study area relatively quickly, these natural features are a formidable barrier to east-west bicycle and pedestrian mobility. In addition, cyclists and pedestrians are further constrained by poor connections to the Catawba Crossings corridor. Whereas much of the corridor has not yet been developed, the major north-south routes and future Catawba Crossing intersections (i.e., NC 279, NC 273, and Dixie River Road) do not currently include safe cyclist or pedestrian facilities.

### Opportunities

The Catawba Crossings represents a significant opportunity to improve east-west bicycle and pedestrian connectivity in the study area. Local jurisdictions are supportive of expanding safe accommodations for cyclists and pedestrians alike, where it makes sense. Local jurisdictions should continue to collaborate in the expansion of efficient bicycle and pedestrian corridors and include requirements from private developers consistent with those multimodal goals and plans.

The GCLMPO and CRTPO Comprehensive Transportation Plans (CTPs) identify needed and recommended bicycle and pedestrian improvements along the major north-south arterials and intersecting roadways, including NC 279, NC 273, and Dixie River Road (**Figure 3**). The Carolina Thread Trail (CTT) (discussed in **Recreation** below) is the most significant opportunity and one that should drive the inclusion of cyclist and pedestrian mobility in this Project's development and facilitate long- and short-distance trips. These identified future connections support the continued planning for multimodal accommodations on the Catawba Crossings corridor and represent opportunities to expand local and regional mobility options.

*Exhibit 1. Catawba Crossings proposed typical section includes a separated sidewalk and a separated multiuse path to safely accommodate bicycle and pedestrian use.*

Continued multimodal planning should also prioritize safe and efficient bicycle and pedestrian crossings. The proposed bridges over the South Fork Catawba and Catawba rivers provide four opportunities to include grade-separated bicycle and pedestrian crossings between signalized intersections along the corridor.

To ensure the successful incorporation of bicycle and pedestrian accommodations and maximize cost-sharing potential, the GCLMPO and regional transportation planning partners should continue to evaluate multimodal opportunities. The *North Carolina Department of Transportation Complete Streets Implementation Guide* (Jan. 2022 Revision) provides guidance for planning multimodal facilities as part of a roadway project. Adopted CTPs are considered the controlling plan for the identification of non-motorized facilities to be evaluated as part of a roadway project. Early planning will ensure the full cost-share potential for local jurisdictions.

## Multimodal – Public Transportation

### Constraints

The potential for the Catawba Crossings as a transit corridor has not been fully evaluated, nor will it be by this feasibility study. The constraints on the regional transit network are like those experienced by other modes and further complicated by funding and public perception.

Regional transit plans have identified the US 29-74 corridor for investment as a major transit corridor, namely the planned development of the LYNX Silver Line from the City of Belmont in Gaston County, through Center City Charlotte and the Town of Matthews, into Union County. Planned development in southeastern Gaston County does not appear to support heavy transit alternatives as the current zoning and land use plans favor less density and single-family housing.

### Opportunities

The Catawba Crossings should be further evaluated as a potential transit corridor connecting Gaston and Mecklenburg counties. With significant current and planned future employment centers at CLT and the River District, the Catawba Crossings has the potential to serve as a major transportation corridor, thus potentially suited for transit options. Additional study would be necessary to understand the future potential growth scenarios with transit-oriented development, etc. There is an opportunity now to work with local jurisdictions and local and regional public transportation planners to evaluate this future potential.

While light-rail and/or commuter rail does not currently appear to make sense on the Catawba Crossings' corridor, it would be short-sighted to conclude it may not be suitable in the future considering current and future projected growth trends. Given the density of employment at the east end of the Project (i.e., future River District and CLT) and connectivity to Renaissance Park and Uptown Charlotte, it is reasonable to imagine a future for transit. There is the opportunity to establish a lower-order service along this corridor, e.g., bus service, to establish and encourage the use of the corridor for transit. Transit infrastructure may also be further evaluated through NCDOT's Complete Streets program (see **Multimodal - Bicycles and Pedestrians**).

The Catawba Crossings Project should monitor and coordinate with the Southeast High-speed Rail (SEHSR) Project which is also under development. The Federal Railroad Administration (FRA) announced the Greenfield Corridor Alternative as the Preferred Atlanta to Charlotte Passenger Rail Corridor in the fall of 2020. As currently proposed, the Greenfield Corridor Alternative would include a South Gastonia station before crossing the Catawba River via the existing Norfolk Southern Railway bridge located north of Catawba Crossings. How these two projects may interact is uncertain but should be further evaluated.

## Bridge

### Constraints

The bridge crossings are central components to the Catawba Crossings Project. Among the constraints that will influence the bridges' lengths will be the water quality buffers (Lake Wylie) and the Federal Energy Regulatory Commission (FERC) shoreline management plan. The height of the structures will be dictated by vertical clearance requirements to accommodate recreational navigation. The US Coast Guard (USCG) does not restrict clearance on Lake Wylie; the Lake Wylie Marine Commission, though, requires a minimum 13.5-foot vertical clearance above full pond elevation to accommodate emergency response watercraft.

One public comment noted the use of sailboats on Lake Wylie. Depending on the size of the craft, sailboat masts can exceed 50 feet in height. As the local authority, additional coordination with the Lake Wylie Marine Commission would be appropriate to validate recreational watercraft vertical clearance requirements.

### Opportunities

In addition to carrying all modes of travel across Lake Wylie, other opportunities have been identified for consideration in the design and construction of the proposed bridges, including but not limited to placemaking, river access, and blueway wayfinding.

The Lake Wylie bridges are “once-in-a-lifetime” infrastructure investments and the Catawba River bridge, specifically, has been identified by Project stakeholders and the public as a candidate for signature design. This concept is associated with the idea of placemaking in the sense that the bridge’s design could serve as a visual focal point and/or a feature around which to organize activity(ies) (e.g., recreation, water access, gateway). Recent collaboration resulted in a locally preferred aesthetic treatment for the US 29-74 bridge over the Catawba River bridge (STIP project B-6051) and may serve as a good baseline concept for the Catawba Crossings’ structures (**Exhibit 2**).

*Exhibit 2. Rendering of the US 29-74 (Wilkinson Boulevard) bridge replacement (STIP project B-6051). An aesthetic committee met and agreed to the bridge railing, brick pattern, colors, light fixtures, etc. (Source: GCLMPO)*

As discussed in **Multimodal - Bicycles and Pedestrians**, the bridges may provide the opportunity to support physical access to the river. Visual access from the bridge decks have also been identified as an opportunity. Physical and visual access to Lake Wylie coupled with public education (e.g., signs, kiosks) can raise awareness and promote individual and collective action to address some of the larger environmental issues facing Lake Wylie, the Catawba River watershed, and the animal species that inhabit the ecosystem. Observation areas on the bridge itself and paths accessing the shoreline under the bridge(s) may permit safe access and unique views of the lake.

In addition to physical access, a path to the shoreline could accommodate other opportunities: (1) Catawba River Blueway access and (2) safe multimodal crossing (see **Multimodal - Bicycles and Pedestrians**). A hand-carry boat launch would require additional infrastructure (e.g., parking lot) beyond the normal scope of a transportation project; however, Project sponsor(s) should further explore this and consider seeking partners to accomplish this, e.g., the Carolina Thread Trail.

# Recreation

## Constraints

The incorporation of new recreational facilities as part of this Project will be dependent on available funding, partnerships with local and regional sponsors, and land use and recreation plans. Physical and environmental features will constrain recreational opportunities in the same way as the transportation components of the Project. Development of recreation facilities may require additional right of way beyond that needed for the transportation Project, thus contributing to additional costs and impacts. Water access would be constrained by lakeside development and bank conditions (e.g., topography, bathymetry).

## Opportunities

Development of new recreation facilities is typically beyond the scope of transportation projects; however, the Carolina Thread Trail (CTT) offers a significant opportunity to improve both regional mobility and access to recreation (see **Figure 3**). Access to local and regional recreation opportunities has important health benefits for the community and offers additional opportunities to raise awareness of the natural environment. The Project should consider appropriate connections to the Mecklenburg County Berewick Park (Dixie River Road, Charlotte) which is planned for expansion into a sports complex-type park (**Exhibit 3**). Further, the Daniel Stowe Botanical Garden (6500 S New Hope Rd, Belmont) is located at the west end of the Project corridor. These and other potential recreation features dovetail with the Gaston County Department of Travel and Tourism's "Go Gaston" initiative.

*Exhibit 3. The planned Mecklenburg County Berewick Park Masterplan (Source: www.mecknc.gov/ParkandRec/Parks/ParkPlanning/Documents/Berewick%20Regional%20Park%20Master%20Plan.jpg)*

The CTT is currently planned to be carried over the Catawba River on the new US 29-74 bridge; accommodations are included in STIP project B-6051. However, the inclusion of multimodal components in the Catawba Crossings Project translates to an opportunity for improved multimodal connectivity, in general, as a potential segment of the CTT within a growing bicycle and pedestrian network. While the CTT vision is regional in scale and would accommodate long-distance trips, the facilities that carry the CTT would likewise accommodate short-distance trips with the appropriate local connections (see **Multimodal - Bicycles and Pedestrians**).

*Exhibit 4. Catawba River non-motorized boat put in at South Fork Trail and Blueway Access (119 Willow Drive, McAdenville).*

Similarly, there exist opportunities to improve intersecting blueways on the Catawba River by establishing boat put ins on the shores adjacent to proposed bridges where feasible and subject to Federal Energy Regulatory Commission (FERC) permitting. Additionally, stakeholders have identified the incorporation of wayfinding features for watercraft on the bridge piers (e.g., directional signs) as an opportunity. Further, through development and planning of the proposed bridges the Project can benefit recreational navigability by improving the river channels.

# Environment

## Constraints

There are several environmentally sensitive resources, including but not limited to regulated floodplains and floodways, jurisdictional waters of the state and waters of the US, known and potential cultural resources, and community resources. The presence and quality of these resources are not fully known at this time but would have to be identified and delineated by professionals later in project development. The "Catawba Crossings Environmental Screening" identifies known and suspected environmental resources that should be avoided to the extent feasible.

The Catawba River and South Fork Catawba River are substantial natural features that will constrain project development. These rivers are located within the Catawba River Watershed, designated as Lake Wylie and subject to the Catawba River Buffer Rules. The Project is located outside a hazardous spill basin zone. Lake Wylie's water classification in the vicinity of the Project is WS-V, B (primary contact recreation, fresh water). According to the 2020 NC 303(d) list, Lake Wylie in this area exceeds NC Division of Water Resources (DWR) criteria and is subject to a polychlorinated biphenyl (PCB) Fish Tissue Advisory, which translates to a fish consumption advisory. Beaverdam Creek has a C (aquatic life, secondary contact recreation, fresh water) classification and is not in the 2020 NC 303(d) list. The section of Beaverdam

Creek the Project crosses is not considered part of Lake Wylie and the Catawba River Buffer Rules do not apply.

The Duke Energy Allen Steam Station, located on the west bank of the Catawba River and directly south of the Catawba Crossings corridor, and associated coal ash ponds constrain the Project corridor.

### Opportunities

While the Duke Energy Allen Steam Station has been decommissioned, early coordination with Duke Energy indicated that there are no plans to divest the property. The NCDEQ approved the Allen Steam Station Coal Ash Closure Plan on October 28, 2020. The approved closure plan for the Allen Steam Station outlines how nearly all the coal ash will be excavated and moved to three, new onsite lined landfills. A small amount of ash will remain and be capped in place for the structural stability of transmission towers. Additional coordination may explore a partnership with Duke Energy to recycle the pond ash located at the Allen Steam Station in the local manufacture of concrete for Project construction. The US Environmental Protection Agency (EPA) implements the final rule for the 2015 Disposal of Coal Combustion Residuals (CCR) and supports the beneficial use of fly ash as a replacement for portland cement in concrete.

Improvements to the South Fork Catawba River channel specifically should be considered as a betterment during construction of a proposed bridge. The removal of sediment by dredging would benefit recreational use, water quality, and fish and wildlife habitat. There is also an opportunity to implement design standards for sensitive watersheds (15A NCAC 04B .0124) through coordination with appropriate regulatory agencies to minimize impacts to water quality.

As discussed in the **Bridge** section above, physical and visual access to Lake Wylie coupled with public education (e.g., signs, kiosks) can raise awareness and promote individual and collective action to address some of the larger environmental issues facing Lake Wylie, the Catawba River watershed, and the animal species that inhabit the ecosystem. Such educational opportunities should continue to be evaluated with appropriate local organizations, including but not limited to Catawba Lands Conservancy and Catawba Riverkeeper.

The public and stakeholders have identified landscaping as an area of opportunity, specifically in the boulevard median. Generally, there has been a desire to incorporate native species in landscaping. Several comments identified the Daniel Stowe Botanical Garden as a possible partner in this endeavor.

While wildlife passages and connectivity are typically associated with large mammal mass migration routes and/or as conservation measures for threatened and endangered species, there are viable conservation benefits for several species and potential to improve public safety by avoiding wildlife-vehicle collisions and reduce maintenance costs associated with retrieving roadkill. Additional study would be required to determine whether and where such a feature, or features, is justified. Wildlife crossings may be considered in conjunction with bicycle and pedestrian crossings, as well.

## Land Use

### Constraints

As a new alignment Project, Catawba Crossings will require right of way from predominantly residential land uses within the Project corridor. Local land use plans administered by the City of Belmont, Town of

Cramerton, City of Charlotte, Gaston County, and Mecklenburg County intersect the Project corridor. The Catawba Crossings corridor, identified as a long-term transportation need in the GCLMPO CTP and Charlotte Regional Transportation Planning Organization (CRTPO) CTP, is included in permitted local development plans including but not limited to the Overlook at Riverside (Town of Cramerton) residential development on the west bank of the South Fork Catawba River and the mixed-use River District (City of Charlotte) between the Catawba River and I-485 (see **Figure 4**). The reservation of right of way highlights an opportunity for local land use planning moving forward; however, it also may be perceived as a constraint on the Project alignment.

CLT is acquiring and consolidating property south of the airport for future compatible and supportive uses. At the time of this memorandum, CLT is developing concept plans for a Norfolk Southern Multimodal Yard Expansion Area No. 3 between I-485 and NC 160 that intersects the Project corridor. This conflict will need to be resolved through coordination with CLT and other Project stakeholders. Realignment of the Project corridor in Mecklenburg County will conflict with planned developments (i.e., Charlotte Intermodal Distribution Center and Garrison Road industrial [see **Figure 4**]); would likely result in additional impacts to natural resources (e.g., streams, wetlands); and would likely require property from Berewick Park. Proximity to the NC 160 interchange with I-485 (exit 4) will constrain Catawba Crossings interchange options with I-485.

### Opportunities

The Project aligns with local transportation and development plans, including the Gaston County Land Use Goal to improve transportation system connectivity between Gaston County and the Charlotte Metropolitan Region and the Charlotte Future 2040 Comprehensive Plan vision elements to be a “Livable and Connected City” through multimodal transportation and a “Regional City” with linkages to the broader region. The successful reservation for right of way through the land development permitting process by the Town of Cramerton and City of Charlotte could be used as a model for other local jurisdictions.

The boulevard design of Catawba Crossings and the inclusion of a sidewalk and multiuse path represents a significant opportunity for the Project to benefit existing residential land uses by creating safe multimodal transportation options for pedestrians and bicyclists. With these multimodal amenities planned for and established by the Project, local planning authorities should expect complementary development that emphasizes multimodal connectivity. These development types could include more diverse, mixed land uses adjacent to the Project corridor. Land use diversification could be beneficial for job development and growth. Higher densities may be sought in accordance with zoning regulations and in conjunction with a vision for public transportation on the Project corridor.

## Funding

### Constraints

The Project’s access to funding is a challenge in the near term considering current budgetary constraints under which the NC Department of Transportation (DOT) is operating. This Project may be submitted for Prioritization 7.0, which is expected to begin in 2023, to compete for available transportation funding through the NCDOT.

If the Project is not funded through the NCDOT State Transportation Improvement Program (STIP), the Catawba Crossings may seek funds from other competitive sources, like federal transportation grants, or through local legislature. Both options may be challenging to advance. Local legislative funding options could be in the form of taxes, levies, or bonds. These programs require local political and public support.

### Opportunities

The "Catawba Crossings Benefit Cost Assessment" (BCA) concluded that the Project would have quantifiable benefits to the region and is a favorable investment of funds. Pursuing and implementing the Project is a considerable opportunity for the region. Local political and public support for the Project is strong based on public and stakeholder feedback.

At the time the "Catawba Crossings Funding Evaluation" was completed for this Project, a federal infrastructure bill was being debated in Congress. The Infrastructure Investment and Jobs Act (IIJA) has since passed. The infusion of federal dollars for infrastructure projects has the potential to positively impact the Catawba Crossings' position for competitive and discretionary federal funding programs. Among the new funding opportunities announced in the IIJA is the "Local and Regional Project Assistance Program" (§21202 Public Law 117-58). The goal of the program is to fund eligible projects that will have a significant local or regional impact and improve transportation infrastructure. The Program is authorized to grant up to $25 million for eligible projects. This Program would not fully fund the Catawba Crossings Project, but it could supplement other funds. Additional funding opportunities may be available through the IIJA upon closer scrutiny. Further, positive local political and public sentiment may provide an opportunity to explore legislation to raise monies locally for the Catawba Crossings Project.

## Conclusion and Recommendations

The Catawba Crossings Feasibility Study is being developed with significant regional public and stakeholder review and input. This approach has informed this Opportunities and Constraints Evaluation and should continue to inform the Project's direction. The pursuit and advancement of multimodal, recreational, and environmental opportunities discussed above, and summarized below, have the potential to raise the profile of the Catawba Crossings Project in competitive funding scenarios. The table below summarizes several recommended actions for consideration in project development.

| Topic Area | Recommended Action |
|---|---|
| Transportation-Traffic | Continue to plan for access management along the Catawba Crossings corridor to ensure optimal operational benefit and compatible adjacent land uses |
| Transportation-Multimodal-Bicycles and Pedestrians | Use the Complete Streets Project Sheet to advance multimodal planning for the Catawba Crossings Corridor through consultation with NCDOT-IMD |
| | Ensure that bicycle and pedestrian improvements remain in GCLMPO and CRTPO CTP associated with the corridor |
| Transportation-Multimodal-Public Transportation | Engage local and regional public transportation planners in long-range visioning for transit uses along the Catawba Crossings corridor |
| | Evaluate opportunities and intersections between the Catawba Crossings corridor and the Preferred Atlanta to Charlotte Passenger Rail Corridor SEHSR |
| Transportation-Bridge | Consult the Lake Wylie Marine Commission to determine veracity (and extent, if valid) of the reported use of recreational sailboats |
| Recreation | Continue coordination with the Carolina Thread Trail and reach agreement on minimum design requirements; also coordinate on the potential for water access and blueway amenities |

| Topic Area | Recommended Action |
|---|---|
| | Continue coordination with the Mecklenburg County, Parks and Recreation Department regarding plans for the expansion of Berewick Park and evaluate future access needs |
| | Evaluate dredging the South Fork Catawba River in coordination with the Project to improve recreational use of Lake Wylie and achieve environmental benefit |
| Environment | Explore the beneficial use of coal ash stored at the Duke Energy Allen Steam Station |
| | Partner with Catawba Land Conservancy and Catawba Riverkeeper in the development and inclusion of educational materials (e.g., panels, kiosks) that raise the visibility and awareness of the environmental pressures facing the Catawba River watershed |
| Land Use | Continue to coordinate the I-485 interchange and the NC 160 intersection with CLT and other stakeholders |
| | Review and plan for density, as appropriate, in coordination with public transportation planning |
| Funding | Submit the Catawba Crossings in the next round of NCDOT Prioritization |
| | Continue to monitor and evaluate funding opportunities available through the Infrastructure Investment and Jobs Act (IIJA) |

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*Figure 1*

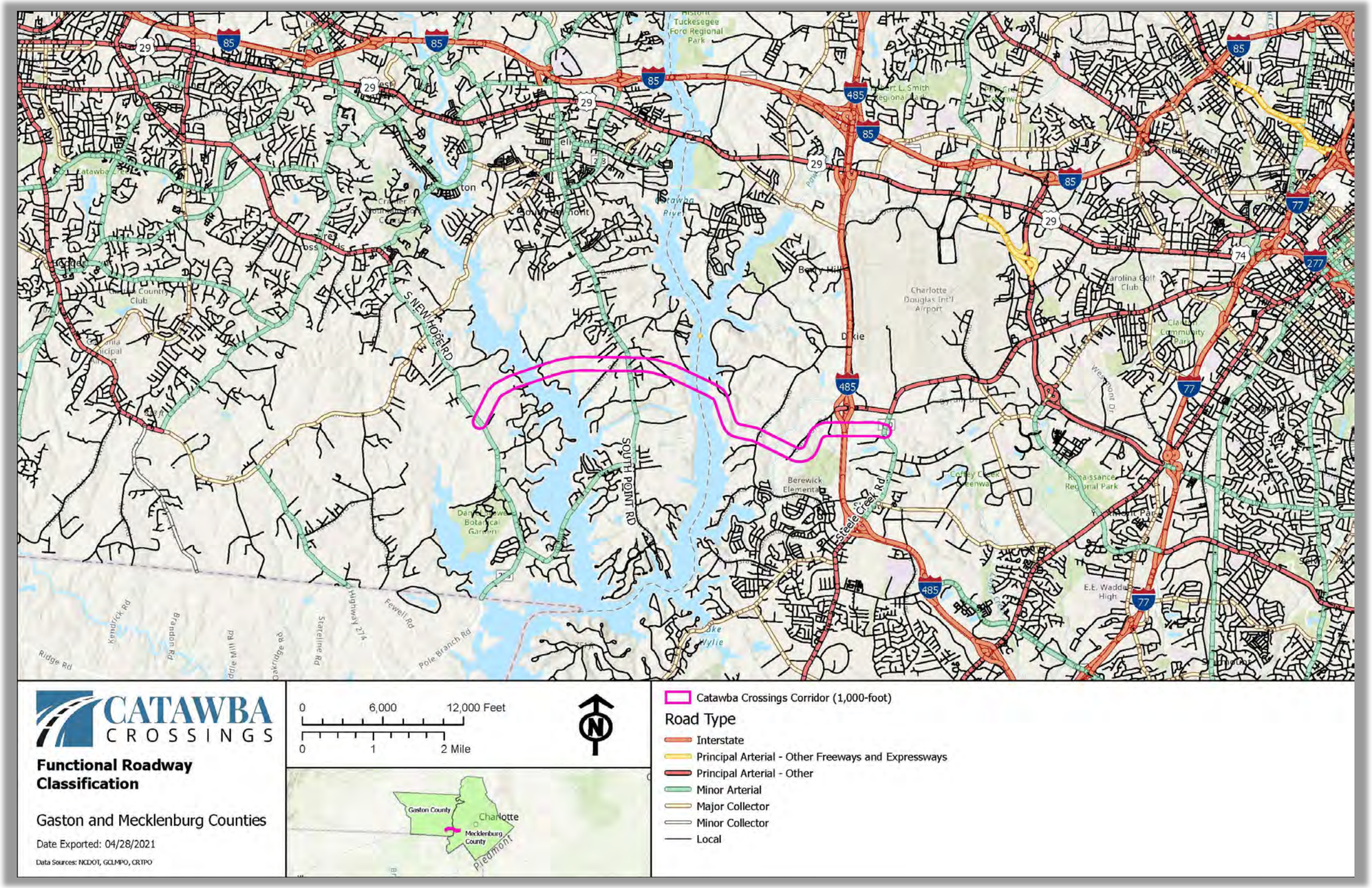
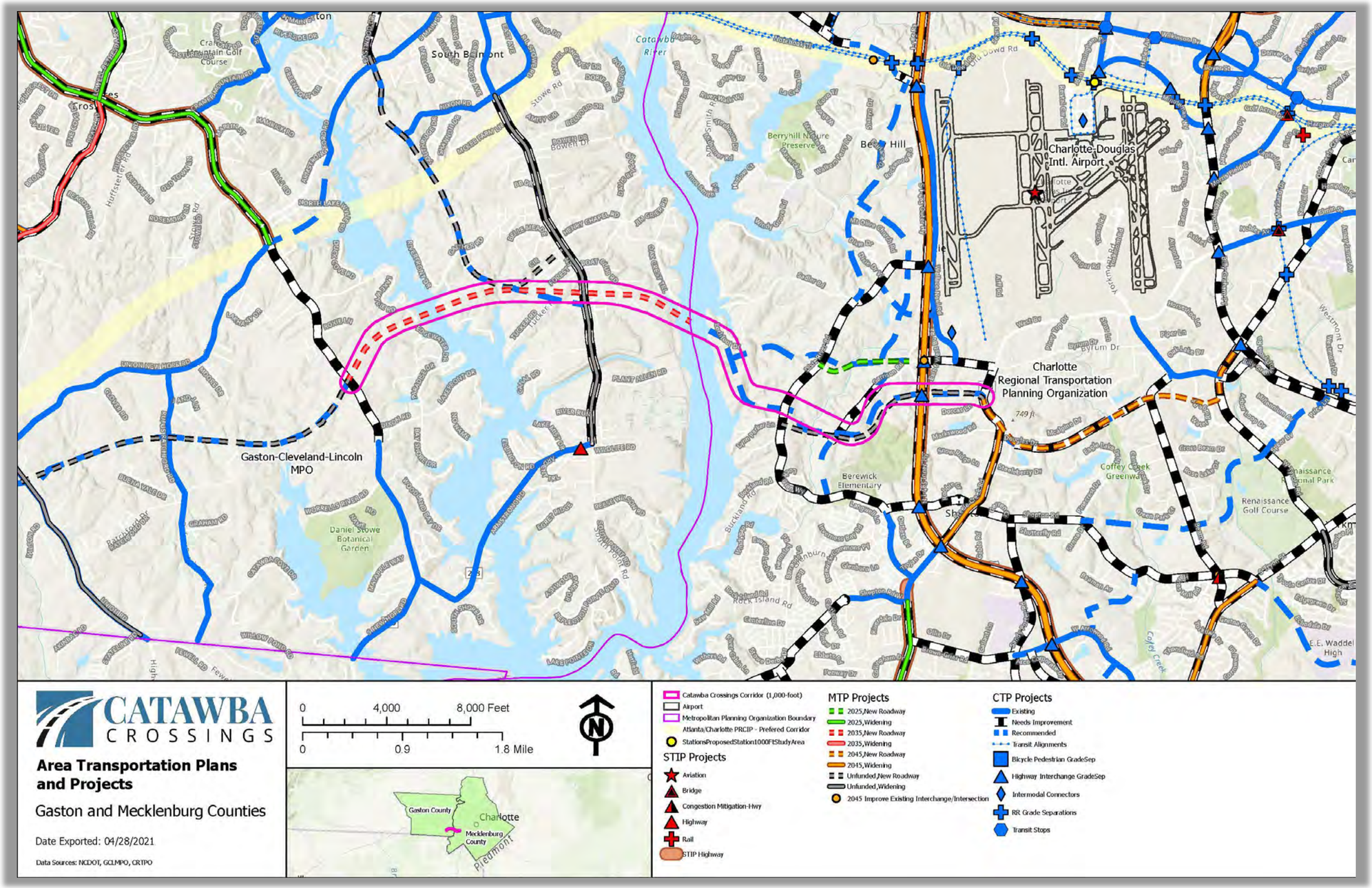

CATAWBA CROSSINGS
Functional Roadway Classification
Gaston and Mecklenburg Counties
Date Exported: 04/28/2021
Data Sources: NCDOT, GCLMPO, CRTPO
0 6,000 12,000 Feet
0 1 2 Mile
Gaston County
Charlotte
Mecklenburg County
Piedmont
Catawba Crossings Corridor (1,000-foot)
Road Type
Interstate
Principal Arterial - Other Freeways and Expressways
Principal Arterial - Other
Minor Arterial
Major Collector
Minor Collector
Local
Tuckaseegee Ford Regional Park
Charlotte Douglas Int'l Airport
Dixie
Berry Hill
Carolina Golf Club
Berewick Elementary
Renaissance Regional Park
E.E. Waddell High
Steele Creek Rd
South Point Rd
S New Hope Rd
Ridge Rd
Kendrick Rd
Bradford Rd
Middle Mill Rd
Oakridge Rd
Starlineline Rd
Highway 274
Fewell Rd
Pole Branch Rd
Lake Wylie

*Figure 2*


South Belmont
Catawba River
Berryhill Nature Preserve
Charlotte-Douglas Intl. Airport
Charlotte Regional Transportation Planning Organization
Gaston-Cleveland-Lincoln MPO
Daniel Stowe Botanical Garden
Berewick Elementary
Renaissance Golf Course
Coffey Creek Greenway
CATAWBA CROSSINGS
Area Transportation Plans and Projects
Gaston and Mecklenburg Counties
Date Exported: 04/28/2021
Data Sources: NCDOT, GCLMPO, CRTPO
0 4,000 8,000 Feet
0 0.9 1.8 Mile
Gaston County
Mecklenburg County
Charlotte
Piedmont
Catawba Crossings Corridor (1,000-foot)
Airport
Metropolitan Planning Organization Boundary
Atlanta/Charlotte PRCIP - Prefered Corridor
StationsProposedStation1000FtStudyArea
STIP Projects
Aviation
Bridge
Congestion Mitigation-Hwy
Highway
Rail
STIP Highway
MTP Projects
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2045 Improve Existing Interchange/Intersection
CTP Projects
Existing
Needs Improvement
Recommended
Transit Alignments
Bicycle Pedestrian GradeSep
Highway Interchange GradeSep
Intermodal Connectors
RR Grade Separations
Transit Stops

*Figure 3*

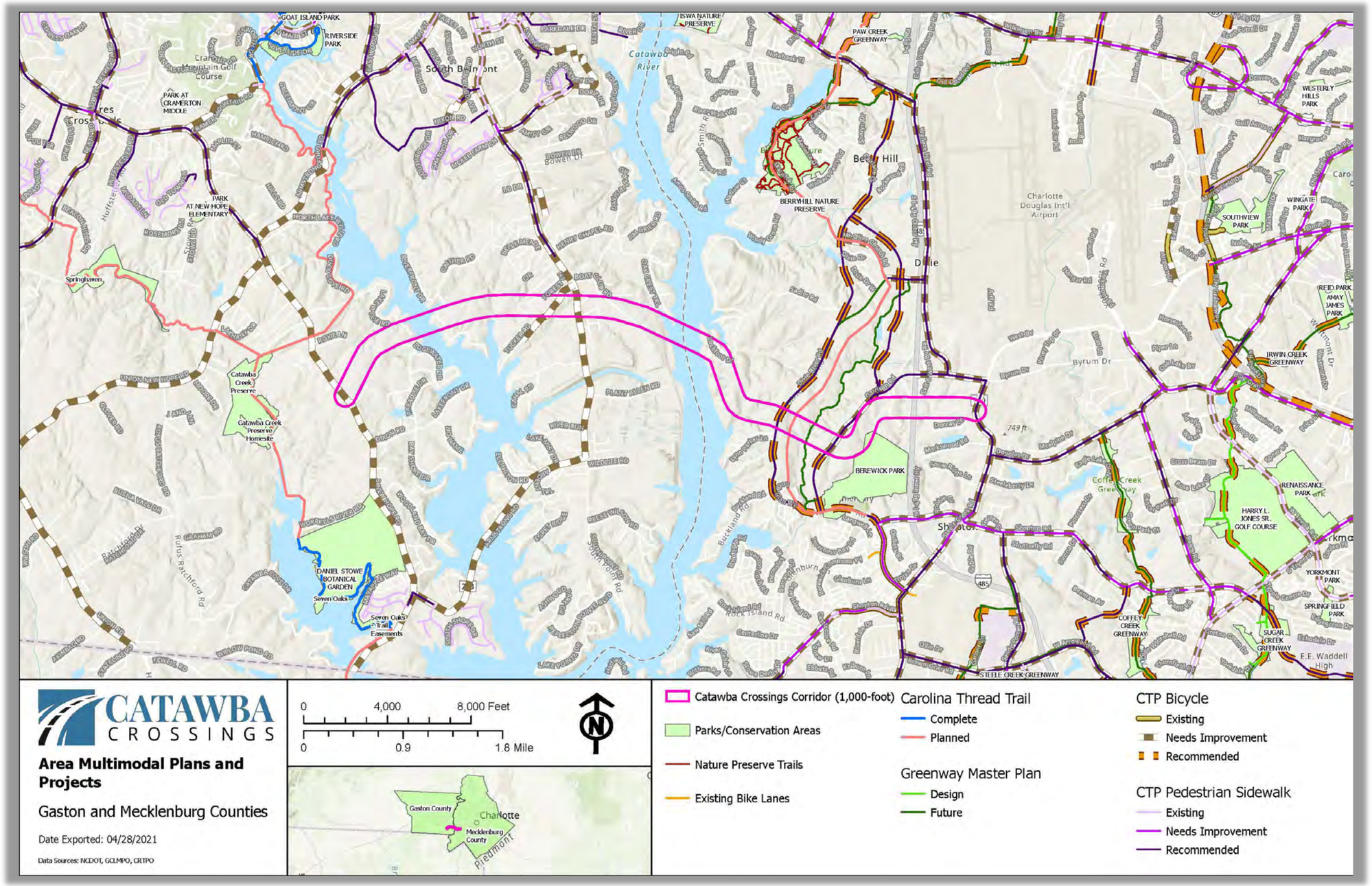
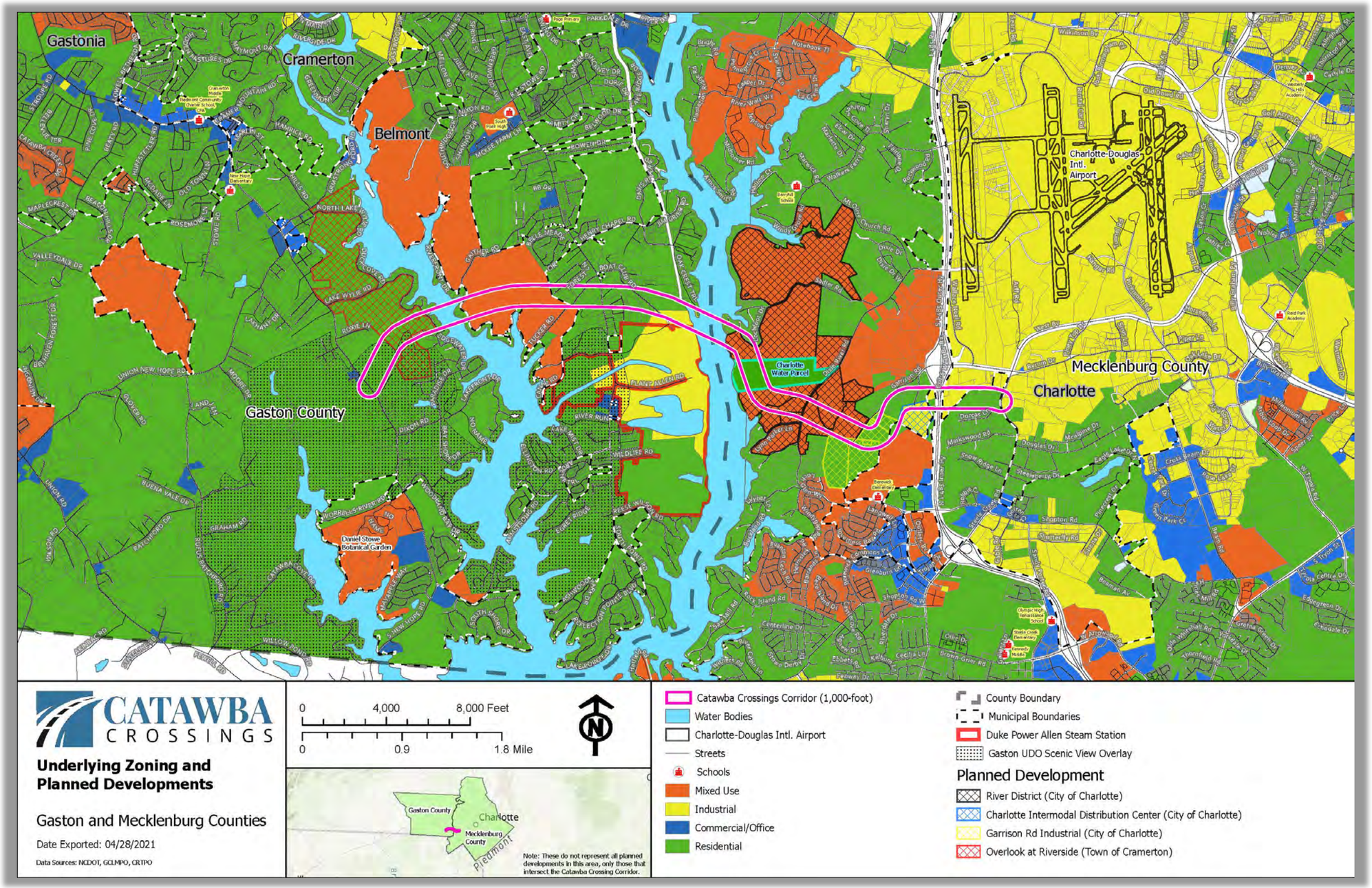

CATAWBA CROSSINGS
Area Multimodal Plans and Projects
Gaston and Mecklenburg Counties
Date Exported: 04/28/2021
Data Sources: NCDOT, GCLMPO, CRTPO
0 4,000 8,000 Feet
0 0.9 1.8 Mile
Gaston County
Charlotte
Mecklenburg County
Piedmont
Catawba Crossings Corridor (1,000-foot)
Parks/Conservation Areas
Nature Preserve Trails
Existing Bike Lanes
Carolina Thread Trail
Complete
Planned
Greenway Master Plan
Design
Future
CTP Bicycle
Existing
Needs Improvement
Recommended
CTP Pedestrian Sidewalk
Existing
Needs Improvement
Recommended
GOAT ISLAND PARK
RIVERSIDE PARK
PARK AT CRAMERTON MIDDLE
PARK AT NEW HOPE ELEMENTARY
Springhaven
Catawba Creek Preserve
Catawba Creek Preserve Homesite
DANIEL STOWE BOTANICAL GARDEN
Seven Oaks
Seven Oaks Trail Easements
ISWA NATURE PRESERVE
PAW CREEK GREENWAY
BERRYHILL NATURE PRESERVE
Charlotte Douglas Int'l Airport
BEREWICK PARK
WESTERLY HILLS PARK
WINGATE PARK
SOUTHVIEW PARK
REID PARK
AMAY JAMES PARK
IRWIN CREEK GREENWAY
RENAISSANCE PARK
HARRY L. JONES SR. GOLF COURSE
YORKMONT PARK
SPRINGFIELD PARK
SUGAR CREEK GREENWAY
COFFEY CREEK GREENWAY
STEELE CREEK GREENWAY
E.E. Waddell High

*Figure 4*


Gastonia
Cramerton
Belmont
Gaston County
Mecklenburg County
Charlotte
Charlotte-Douglas Intl. Airport
Charlotte Wilder Parcel
Daniel Stowe Botanical Garden
CATAWBA CROSSINGS
Underlying Zoning and Planned Developments
Gaston and Mecklenburg Counties
Date Exported: 04/28/2021
Data Sources: NCDOT, GCLMPO, CRTPO
0 4,000 8,000 Feet
0 0.9 1.8 Mile
Gaston County
Charlotte
Mecklenburg County
Piedmont
Note: These do not represent all planned developments in this area, only those that intersect the Catawba Crossing Corridor.
Catawba Crossings Corridor (1,000-foot)
Water Bodies
Charlotte-Douglas Intl. Airport
Streets
Schools
Mixed Use
Industrial
Commercial/Office
Residential
County Boundary
Municipal Boundaries
Duke Power Allen Steam Station
Gaston UDO Scenic View Overlay
Planned Development
River District (City of Charlotte)
Charlotte Intermodal Distribution Center (City of Charlotte)
Garrison Rd Industrial (City of Charlotte)
Overlook at Riverside (Town of Cramerton)