GO Triangle

Durham-Orange

Light Rail Transit Project

NCCU Station Refinement

Amended Record of Decision

December 2016

Durham-Orange Light Rail Transit Project-NCCU Station Refinement Amended Record of Decision

The Federal Transit Administration (FTA), pursuant to Title 23 of the Code of Federal Regulations (C.F.R.), Part 771, and Title 40 C.F.R. Parts 1500-1508, issues this Amended Record of Decision (ROD) finding that the requirements of the National Environmental Policy Act of 1969 (NEPA) and Section 4(f) of the US Department of Transportation Act of 1966 (49 U.S.C. § 303 and 23 U.S.C. § 138) have been satisfied for the Durham-Orange Light Rail Transit Project (D-O LRT Project) North Carolina Central University Station Refinement (NCCU Station Refinement). As the D-O LRT-NCCU Station Refinement project sponsor and potential recipient of FTA financial assistance, the Research Triangle Regional Public Transportation Authority d/b/a Triangle Transit d/b/a GoTriangle served as a co-lead agency with FTA in conducting the environmental review process. The United States Environmental Protection Agency (USEPA), United States Army Corps of Engineers (USACE), and the Federal Highway Administration (FHWA) served as NEPA cooperating agencies. This process produced the *Durham-Orange Light Rail Transit Project Draft Environmental Impact Statement* (DEIS) dated August 2015, the *Durham-Orange Light Rail Transit Project Combined Final Environmental Impact Statement/Record of Decision* (Combined FEIS/ROD) document dated February 11, 2016, and the *Durham-Orange Light Rail Transit Project-North Carolina Central University Station Refinement Supplemental Environmental Assessment* (Supplemental EA) dated November 2016.

The Federal Transit Administration (FTA) issued a Combined FEIS/ROD based on the D-O LRT Project in February 2016. The decisions and findings in this Amended ROD are based on and incorporate by reference the limited supplemental environmental review contained in the D-O LRT Project-NCCU Station Refinement Supplemental EA, November 2016. The decisions and findings made in the February 2016 Combined FEIS/ROD remain in effect, except where this Amended ROD expressly alters them, as described in Section 1.4 below. Therefore, the limitation on claims that may be brought against the project remains in effect, as published in the Federal Register on March 2, 2016.

Based on its consideration of the environmental review documents, FTA finds that the project has met all applicable requirements. FTA further finds that this Amended ROD is complete and supports the determination that all NEPA Requirements have been met.

If FTA provides financial assistance for the design and/or construction of the D-O LRT Project, including the NCCU Station Refinement, FTA will require GoTriangle to design and build the project as presented in the Combined FEIS/ROD and Supplemental EA. Changes to the D-O LRT Project, including the NCCU Station Refinement, that are inconsistent with the Combined FEIS/ROD or this Amended ROD must be evaluated in accordance with 23 C.F.R. Part 771 and be approved by FTA in writing before GoTriangle can proceed with the change.

Yvette G. Taylor, Regional Administrator
Federal Transit Administration, Region IV

12-14-16
Date

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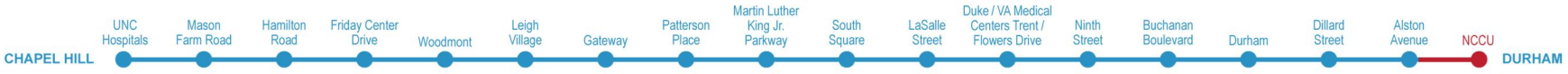


Acronyms and Abbreviations

Acronym	Definition
AA	Alternatives Analysis
ADA	Americans with Disabilities Act of 1990, as amended
APE	Area of Potential Effect
BMP	Best Management Practices
C.F.R.	Code of Federal Regulations
CPTED	Crime Prevention Through Environmental Design
CSX	CSX Corporation
DCHC MPO	Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
DEIS	Draft Environmental Impact Statement
D-O	Durham-Orange
D-O LRT Project	Durham-Orange Light Rail Transit Project
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	environmental justice
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPIC	Environmental Permits, Issues, and Commitments Plan
FAST	Fixing America's Surface Transportation Act
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
LRT	Light Rail Transit
LRV	Light Rail Vehicles
MAP-21	Moving Ahead for Progress in the 21th Century Act
MOA	Memorandum of Agreement
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NC	North Carolina
NCCU	North Carolina Central University
NCDOT	North Carolina Department of Transportation
NCRR	North Carolina Railroad Company
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NS	Norfolk Southern
ROD	Record of Decision
ROW	Right-Of-Way
SASI P	Station Area Strategic Infrastructure Program
SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
UNC	University of North Carolina at Chapel Hill
US or U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service

Amended ROD

Amended Record of Decision

This Amended Record of Decision (ROD) is an amendment to the Combined Final Environmental Impact Statement/Record of Decision (Combined FEIS/ROD) previously issued by the Federal Transit Administration (FTA) on February 11, 2016. This Amended ROD approves the inclusion of the NCCU Station Refinement in the D-O LRT Project. The NCCU Station Refinement was evaluated in the November 2016 Supplemental Environmental Assessment (Supplemental EA). Unless expressly modified herein, the findings and determinations made in the Combined FEIS/ROD remain final, valid, and unchanged.

1.1 Decision

The Federal Transit Administration (FTA) has determined that the requirements of the National Environmental Policy Act of 1969 (NEPA); Section 4(f) of the US Department of Transportation Act of 1966 (49 U.S.C. § 303 and 23 U.S.C. § 138); and related Federal environmental statutes, regulations, and executive orders have been satisfied for the D-O LRT Project-NCCU Station Refinement located in Durham and Orange Counties, North Carolina.

This Amended ROD applies to the fixed guideway transit alternative operating between the Alston Avenue Station to a new NCCU Station (including the reconfiguration of the Alston Avenue Station, park-and-ride, and associated alignment), which was described as the NCCU Station Refinement, and evaluated in the *D-O LRT Project-NCCU Station Refinement Supplemental Environmental Assessment*, dated November 2016. As the project sponsor and potential recipient of FTA financial assistance for the Project, GoTriangle served as the co-lead agency with FTA in conducting the environmental review process.

The FTA issued a Combined FEIS/ROD based on the D-O LRT Project in February 2016. The decisions and findings in this Amended ROD are based on and incorporate by reference the limited supplemental environmental review contained in the D-O LRT Project-NCCU Station Refinement Supplemental EA, November 2016. The decisions and findings made in the February 2016 Combined FEIS/ROD remain in effect, except where this Amended ROD expressly alters them, as described in Section 1.4 below. Therefore, the limitation on claims that may be brought against the project remains in effect, as published in the Federal Register on March 2, 2016.

Based on its consideration of the environmental review documents, FTA finds that the project has met all applicable requirements. FTA further finds that this Amended ROD is complete and supports the determination that all NEPA requirements have been met.

Proposed changes by GoTriangle must be evaluated in accordance with 23 C.F.R. Part 771 and must be approved by FTA in writing before the agency can proceed with the change.

1.2 Background

FTA and GoTriangle, in cooperation with the U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), and Federal Highway Administration (FHWA), initiated an Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the Durham-Orange Light Rail Transit Project (D-O LRT Project) in 2012. The Draft Environmental Impact Statement (DEIS) was issued on August 28, 2015, with the public comment period occurring between August 28, 2015, and October 13, 2015.

After the DEIS was published, the Fixing America's Surface Transportation (FAST) Act (Public Law 114-94) was signed into law by President Obama on December 4, 2015. Its provisions became effective on October 1, 2015. Although the FAST Act supersedes Moving Ahead for Progress in the 21th Century Act (MAP-21), it still incorporates environmental streamlining requirements. The use of errata sheets and a Combined Final Environmental Impact Statement/ Record of Decision (FEIS/ROD) complied with the requirements of the FAST Act. The Combined FEIS/ROD was signed by FTA on February 11, 2016.

In response to comments made on the DEIS, in the Combined FEIS/ROD, FTA and GoTriangle committed to analyze the feasibility of extending the alignment to North Carolina Central University (NCCU). Early in this analysis, GoTriangle determined that this extension is feasible, and FTA determined that a Supplemental Environmental Assessment (Supplemental EA) would be required to document any associated impacts.

The design refinement would change the location of the eastern terminus in Durham by adding a station near NCCU. The change is referred to as the "NCCU Station Refinement." It includes the reconfiguration of the previously-approved Alston Avenue Station, park-and-ride, and associated alignment; the addition of new alignment

from the Alston Avenue Station to the new NCCU Station; and the addition of a new NCCU Station. The incremental additional cost of including the NCCU Station Refinement is estimated to be between $100 and $110 million (in 2016 dollars).

1.2.1 Supplemental EA

The D-O LRT Project-NCCU Station Refinement, as described in the Supplemental EA, is the subject of this Amended ROD.

The D-O LRT Project identified in the February 11, 2016 Combined FEIS/ROD remains the same as described between the UNC Hospitals and the Dillard Street Station in Downtown Durham. Changes evaluated in the Supplemental EA and addressed in this Amended ROD include the following changes in the scope and design of the project:

- Reconfiguration of Alston Avenue Station, park-and-ride, and associated alignment.
- Addition of alignment from Alston Avenue Station to new NCCU Station.
- Addition of new NCCU Station (new eastern project terminus).

1.3 Basis for Decision

FTA has determined that the inclusion of the NCCU Station Refinement in the D-O LRT Project meets the Purpose and Need of the proposed action.

The purpose of the proposed D-O LRT Project is to provide a high-capacity transit service located within the D-O Corridor, between Chapel Hill and Durham, along the North Carolina (NC) 54, Interstate 40 (I-40), United States (US) 15-501, Erwin Road, and NC 147 transportation corridors, that improves mobility, expands transit options, and supports future development plans.

The needs of the D-O Corridor include improving mobility, expanding transit options, and supporting future development, as discussed below.

Improves Mobility

The NCCU Station Refinement would enhance mobility by providing a competitive, reliable alternative to auto use for the students, faculty, staff, and visitors of NCCU. This connection to NCCU would also increase transit operating efficiency by eliminating a transfer to bus from the Alston Avenue Station.

Expands Transit Options

The NCCU Station Refinement would continue to expand transit options between Durham and Chapel Hill by providing expanded service and direct connection to neighborhoods not previously served by the D-O LRT Project. It would also add a major activity center by including a station at NCCU in Southeast Central Durham.

Supports Future Development

Finally, it would continue to support local land use plans that foster compact development throughout the corridor. The direct linkage to NCCU would make the campus more accessible by public transportation, and would provide the opportunity for consideration of additional compact development in the areas surrounding the NCCU Station.

1.4 Measures to Minimize Harm

Measures to avoid, minimize, and mitigate the potential adverse effects of the NCCU Station Refinement were considered throughout the development of the environmental review process and in coordination with the public and participating agencies.

1.4.1 Commitments or Mitigation Measures

The mitigation commitments included in Table ROD-1 of the Combined FEIS/ROD are applicable to the NCCU Station Refinement. Additional mitigation measures necessary to address effects specific to the NCCU Station Refinement are identified in bold italicized text. Any changes to the project that are inconsistent with this Amended ROD must be evaluated in accordance with 23 C.F.R. Sections 771.129 and 771.130, and if required therein, must be approved by FTA in writing before GoTriangle can proceed with the change.

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
Public Transportation (PT)			
PT01 DEIS section 3.1.4	▪ No significant impacts	▪ NA	▪ NA
Roadways (R)			
R01 DEIS section 3.2.3.2	▪ Traffic delays and queues at some intersections, resulting in traffic impacts at five intersections: – University Drive and Martin Luther King Jr. Parkway (a.m.). – Morreene Road/Towerview Road and Erwin Road (a.m.). – LaSalle Street and Erwin Road (a.m. and p.m.). – Main Street and Magnum Street (p.m.).	▪ Perform additional traffic analysis during the Engineering phase. ▪ Coordinate with NCDOT, DCHC MPO, and municipalities during the Engineering phase to refine roadway modifications included in the design and determine adjustments to project elements, which may include solutions that would not require property acquisitions.	▪ GoTriangle with NCDOT and municipalities
R02 DEIS section 3.2.3.2 DEIS Errata 38	▪ Ingress/egress movements at the East Drive, Jackson, and Dogwood parking decks on UNC Campus.	▪ Perform a detailed traffic analysis on the UNC Campus during the Engineering phase evaluating potential effects of the project on the ingress/egress movements (e.g., East Drive, Jackson, and Dogwood parking decks and circulation on nearby roadways).	▪ GoTriangle and UNC
R03 DEIS section 3.2.3.2	▪ Introduction of new at-grade intersections and train operations along NC 54 with potential to cause roadway delays and intersection queues at intersections including: – Barbee Chapel Road – Littlejohn Road – Downing Creek Parkway	▪ Refine the traffic analysis along NC 54 during the Engineering phase, and if necessary make refinements to the roadway design.	▪ GoTriangle with NCDOT
R04 DEIS section 3.2.3 DEIS Errata 36 and 108	▪ Roadway safety from introduction of new at-grade intersections and train operations.	▪ Design safety measures and parameters into the proposed D-O LRT Project such as: – Using presently underdeveloped parcels and/or otherwise locating the alignment away from vehicular, pedestrian, and bicycle traffic. – Installing sidewalks and pedestrian paths to provide connectivity to stations. – Installing elevated structures to avoid significant impacts on existing	▪ GoTriangle with NCDOT and municipalities

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		roads and sidewalks. – Reconfiguring or relocating crosswalks to occur at safely controlled intersections. – Reconfiguring the roadway signal and signage network to safely accommodate users in the context of light rail operations. – Installing visible and audible crossing signals and/or gates where appropriate for vehicles and pedestrians. – Segregating and delineating the track area using design elements such as fencing, pylons, road surface markings, rumble strips, unique paving materials, etc. – Installing illumination and signage at stations and where streets and light rail facilities interface. – Building pedestrian bridges and underpasses such as the ones currently proposed at UNC Hospitals Station and Hamilton Road Station. – Using best practices in the design of pedestrian and bicycle facilities that interface with light rail facilities, including ensuring adequate sight distance at crossings, providing pedestrian refuge areas where the light rail results in long crosswalks, and installing active warning devices where appropriate. ▪ At-grade crossings will be signalized or equipped with gates with bells to warn of oncoming trains. The trains will also have bells and horns. Bells, gates, and horns would be activated according to GoTriangle operating procedures and safety guidelines. ▪ During the Engineering phase, coordinate with NCDOT to evaluate additional engineering safety measures, including vehicle detection technology, where appropriate.	
R05 DEIS section 3.2.4 DEIS Errata 39	▪ Potential transportation effects from other transportation projects in the vicinity of the D-O LRT Project.	▪ During Engineering, coordinate with the NCDOT, DCHC MPO, and municipalities as the designs of other transportation projects in the vicinity of the D-O LRT Project advance.	▪ GoTriangle with NCDOT and municipalities
R06	▪ Conversion of driveways on Erwin Road to right-	▪ During Engineering, coordinate with the City of Durham to address	▪ GoTriangle with

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
DEIS section 3.2.4.3 DEIS Errata 40	in/right-out, resulting in impacts to the Crest Street Neighborhood.	roadway impacts resulting from the conversion of driveways on Erwin Road to right-in/right-out, including impacts to the Crest Street neighborhood.	City of Durham
R07 *Supplemental EA section 3.1.2*	▪ *The NCCU Station Refinement would result in minor increases in traffic at the Grant Street/Pettigrew Street, Linwood Avenue/Alston Avenue, and Lawson Street/Alston Avenue intersections in the study area.*	▪ *Coordinate with NCDOT, Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), and City of Durham during the Engineering phase to refine roadway modifications included in the design and determine adjustments to project elements, which may include solutions that would not require property acquisitions.* ▪ *Mitigation commitment R01 identified in the Combined FEIS/ROD for roadways would be applicable and appropriate for the NCCU Station Refinement.*	▪ *GoTriangle with NCDOT and City of Durham*
R08 *Supplemental EA section 3.1.2*	▪ *The NCCU Station Refinement would introduce two additional at-grade intersections at Pettigrew Street just east of Grant Street and at Alston Avenue/Linwood Street.*	▪ *At-grade crossings will be signalized or equipped with gates with bells to warn of oncoming trains. The trains will also have bells and horns. Bells, gates, and horns would be activated according to GoTriangle operating procedures and guidelines.* ▪ *Mitigation commitment R04 included in the Combined FEIS/ROD to address the introduction of new at-grade intersections is applicable to the NCCU Station Refinement.*	▪ *GoTriangle with NCDOT*
R09 *Supplemental EA section 3.1.2*	▪ *Conversion of Massey Avenue, Price Avenue, Fleetwood Street, Cox Avenue, and Dupree Street on Alston Avenue to right-in/right-out.*	▪ *No additional mitigation commitments beyond those included in the Combined FEIS/ROD would be necessary. Mitigation commitmentR06 included in the Combined FEIS/ROD to address the conversion of driveways to right-in / right-out on Erwin Road is extended to be applicable to the NCCU Station Refinement.*	▪ *GoTriangle with City of Durham*
		Parking (P)	
P01 DEIS section 3.3.4	▪ Removal of 705 parking spaces from existing parking facilities at proposed stations and along the alignment.	▪ During the Engineering phase, develop a Maintenance of Traffic Plan to manage the temporary closure and access to parking facilities. GoTriangle will include the Maintenance of Traffic Plan in construction plans and contract specification plans. ▪ To the extent that access to and/or affected parking facilities can be restored after construction, work to restore access; if identified as	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		necessary, replacement parking will be provided to the extent practicable. ▪ Where parking facilities cannot be restored or replacement parking is not feasible, during real estate acquisition, work with the affected entities pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act.	
P02 DEIS section 3.3.4	▪ Spillover parking onto nearby streets (either adjacent to park-and-ride facilities or adjacent to walk-up stations, where no parking is provided).	▪ Once the D-O LRT Project is in operation, monitor station areas and investigate any complaints of spillover parking. Work with the municipalities to develop appropriate parking enforcement if spillover parking becomes a concern.	▪ GoTriangle with municipalities
P03 *Supplemental EA section 3.1.3*	▪ *The NCCU Station Refinement would result in the removal of 16 on-street and 10 off-street spaces (with 8 of the off-street spaces being replaced after mitigation).*	▪ *No additional mitigation commitments beyond P01 included in the Combined FEIS/ROD would be necessary.*	▪ *GoTriangle*
P04 *Supplemental EA section 3.1.3*	▪ *Spillover parking onto nearby streets (either adjacent to park-and-ride facilities or adjacent to walk-up stations, where no parking is provided).*	▪ *No additional mitigation commitments beyond those included in the Combined FEIS/ROD would be necessary. Mitigation commitment P02 included in the Combined FEIS/ROD to address spillover parking concerns is applicable to the NCCU Station Refinement.*	▪ *GoTriangle with City of Durham*
Freight and Passenger Railroads (FPR)			
FPR01 DEIS section 3.4.4.1 DEIS Errata 45	▪ Planned NCRR project to grade-separate the existing NCRR Corridor at Blackwell and Mangum streets through downtown Durham.	▪ During Engineering and Construction, coordinate with NCRR and NCDOT Rail Division on the use of the NCRR right-of-way and planned NCRR projects.	▪ GoTriangle with NCRR and NCDOT Rail Division
Airports (A)			
A01 DEIS section 3.5.5	▪ Portions of the project corridor located within 5 mile protection zone; as a result, indirect impacts could occur such as wildlife attractants from wet pond treatment sites.	▪ During Engineering, coordinate with the FAA to comply with FAA Advisory Circular 150/5200-33B Section 2-3(B) when it is necessary to locate stormwater best management practices (BMPs) such as bio retention along the alignment within 5 miles of Womble Field and Horace Williams Airport (i.e., the 5 mile protection zones). ▪ Include measures identified during Engineering regarding the design of	▪ GoTriangle with FAA

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		BMPs located within 5-mile protection zones in construction plans and contract specifications.	
Pedestrian and Bicycle Facilities (PBF)			
PBF01 DEIS section 3.6.4	▪ Where design requirements necessitate the addition of pedestrian and/or bicycle facilities, but constraints exist (either due to the existing built environment, roadways, and/or topographical constraints) some pedestrian and/or bicycle infrastructure would not be accommodated.	▪ During Engineering, coordinate with NCDOT and the municipalities to refine the project design to ensure that light rail station design includes improvements to bicycle and pedestrian facilities. The design shall ensure that: – Sidewalks and crosswalks at the stations are enhanced. – Pedestrian crossings of light rail tracks are designed in accordance with ADA requirements and standards to ensure access and mobility for all users. – Bicycle and pedestrian infrastructure within station areas are designed according to BMPs for pedestrian and bicycle safety. – Pedestrians are discouraged from crossing the tracks outside of the designated track crossings (e.g., fencing, signage, and/or pedestrian corals); and include measures to enhance the safety for pedestrians at permitted crossing locations (e.g., pedestrian signals and/or well-marked crosswalks). ▪ During Engineering, work with members of the public, the City of Durham, Town of Chapel Hill, NCDOT, the Durham Bicycle and Pedestrian Advisory Commission, the Town of Chapel Hill Connectivity Board, and representatives from the Alston Avenue neighborhood to identify ways to improve bicycle and pedestrian connections to stations.	▪ GoTriangle with NCDOT and municipalities
PBF02 DEIS section 3.6.4	▪ Need to maintain or provide new pedestrian and bicycle infrastructure as required by the development or design guidelines of the municipalities and/or NCDOT.	▪ Coordinate with the City of Durham's Station Area Strategic Infrastructure Program (SASI P) to incorporate pedestrian and bicycle improvements into the design of the D-O LRT Project.	▪ GoTriangle with NCDOT and municipalities
PBF03 DEIS section 3.6.4 DEIS Errata 37	▪ Impacts to 80 existing pedestrian and/or bicycle facilities.	▪ During Engineering, if the project design cannot avoid impacts to existing and/or planned pedestrian and/or bicycle facilities, coordinate with NCDOT and/or municipalities to discuss potential Project design refinements for facility reconstruction, and applicability of the design	▪ GoTriangle with NCDOT, municipalities,

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		guideline requirements. ▪ If existing and/or planned pedestrian and bicycle facilities have restrictive covenants due to funds used for construction, avoid impacts to these facilities or reach an agreement with the agency(ies). ▪ During Engineering, refine design to address the following commitments: – Coordinate with UNC regarding impacts from the Mason Farm Road Station and parking lot reconstruction on pedestrian movements and adjacent undeveloped land. – To mitigate the loss of opportunity for on-street bicycle facilities on Erwin Road and Pettigrew Street, work with the City of Durham, NCDOT, and local advocates to identify the potential for off-street facilities or on-street facilities on parallel or nearby roadways. – Maintain the existing pedestrian connection between the Durham Station and Amtrak Station. – Design and implement a sidewalk or multi-use path connection from the proposed Alston Avenue Station to the existing R. Kelly Bryant Pedestrian Bridge in consultation with the City of Durham, NCDOT, the Durham Bicycle and Pedestrian Advisory Commission, and representatives from the Alston Avenue neighborhood. ▪ During Engineering, develop a Maintenance of Traffic Plan to manage the temporary closure and access to pedestrian and bicycle facilities. Include the Maintenance of Traffic Plan in construction plans and contract specification plans. ▪ Where access to and/or affected pedestrian and/or bicycle facilities can be restored after construction, work to restore access; if identified as necessary, existing pedestrian and/or bicycle infrastructure (e.g., bicycle lanes, sharrow markings, sidewalks, crosswalks, curb ramps, and/or other pedestrian or bicycle infrastructure) will be reconstructed to the extent practicable as defined in the construction plans.	and UNC
PBF04 DEIS section 2.3.2.1	▪ Need for multi-modal transportation system that	▪ During Engineering, when vehicle specifications are developed and	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
DEIS Errata 24	accommodates bicyclists on transit.	refined, include the provision for bicycle storage on-board the light rail vehicles (LRVs) (e.g., bicycle racks or hooks). ▪ During Engineering, Construction, and Operations, develop and refine operational procedures to provide for the allowance of bicycles on-board the LRVs.	
PBF05 Supplemental EA section 3.1.4	▪ *The DCHC 2040 Metropolitan Transportation Plan (MTP) calls for 4-foot bike lanes on Pettigrew Street and Alston Avenue; however, these planned bicycle lanes are not included in the proposed reconstruction of those roadways with the NCCU Station Refinement due to constraints on the further widening of those roads.*	▪ *To mitigate this loss of opportunity for on-street bicycle facilities on Alston Avenue, GoTriangle will work with the City of Durham, NCDOT, the Durham Bicycle and Pedestrian Advisory Commission, and representatives from the Alston Avenue neighborhood to identify the potential for off-street facilities or on-street facilities on parallel or nearby roadways.*	▪ *GoTriangle with NCDOT and City of Durham*
PBF06 Supplemental EA section 3.1.4	▪ *Need to maintain or provide new pedestrian and bicycle infrastructure as required by the development or design guidelines of the City of Durham and/or NCDOT.*	▪ *No additional mitigation commitments beyond those included in the Combined FEIS/ROD would be necessary. Mitigation commitment PBF02 included in the Combined FEIS/ROD to address new pedestrian and bicycle and infrastructure is applicable to the NCCU Station Refinement.*	▪ *GoTriangle with NCDOT and City of Durham*
Land Use and Zoning (LUZ)			
LUZ01 DEIS section 4.1.4	▪ Rezoning may be necessary for the conversion of existing land uses to transit-oriented land uses in order to construct the park-and-rides or other elements of the project design. ▪ Through the rezoning process, it is expected that municipalities may require specific requirements or land use entitlements in order to comply with local land use ordinances or design principles (e.g., ground floor commercial space for parking decks in the City of Durham).	▪ During Engineering, coordinate rezoning with the municipalities for park-and-ride locations, where required. ▪ During Engineering, work with the City of Durham to ensure that the project design includes the incorporation of commercial space within the proposed parking deck at the Alston Avenue Station.	▪ GoTriangle with municipalities
LUZ02 DEIS section 4.1.4.1	▪ Farrington Road ROMF site is not consistent with existing zoning or with future land use as identified in the Durham Comprehensive Plan.	▪ During Engineering, continue to coordinate with property owners and residents near the Farrington Road ROMF to develop and refine strategies to complement the surrounding context such as use of	▪ GoTriangle with City of Durham

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		architectural styles and/or landscape design. ▪ During Engineering, and after working with the Durham staff and the property owners near the Farrington ROMF site, coordinate with Durham to apply for an amendment to the Comprehensive Plan (if required) as well as the rezoning of the ROMF site at Farrington Road.	
LUZ03 DEIS section 4.14.4	▪ Acquisitions, relocations, and/or displacements of existing uses.	▪ During Engineering and throughout the real estate process, work with the entities directly affected by construction, pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act.	▪ GoTriangle
LUZ04 DEIS section 4.2.4 DEIS Errata 64	▪ Higher density and mixed-use, including retail, commercial, and residential development surrounding stations consistent with future land use plans. ▪ Potential for fewer affordable housing opportunities surrounding station areas.	▪ Work with municipalities to identify tax abatement and affordable housing programs. ▪ During Engineering and Construction, work with the municipalities to identify the most appropriate programs for each station area and promote education of these programs within the station areas to help keep existing residents in their homes.	▪ GoTriangle with municipalities
LUZ05 *Supplemental EA section 3.2*	▪ *Rezoning may be necessary for the conversion of existing land uses to transit-oriented land uses in order to construct the park-and-rides or other elements of the project design.* ▪ *Through the rezoning process, it is expected that City of Durham may require specific requirements or land use entitlements in order to comply with local land use ordinances or design principles.* ▪ *NCCU Station Refinement may result in the conversion of lower density uses to institutional. The NCCU Station Refinement will complement NCCU's plans to expand the campus with a new Business School.* ▪ *Existing zoning and future land uses in the vicinity of the station are primarily medium density residential (6-12 units per acre) and the*	▪ *Mitigation Commitment LUZ01 identified in the Combined FEIS/ROD, including: working with municipalities on rezonings, tax abatement programs, and affordable housing programs in station areas, is applicable to the NCCU Station Refinement.* ▪ *During Engineering, coordinate rezoning with the Durham City-County Planning for park-and-ride locations, where required, as described in LUZ01.* ▪ *In addition, during Engineering, as part of the NCCU Station Refinement GoTriangle will coordinate with NCCU regarding property acquisitions and campus development plans to inform the final placement and design of the NCCU Station.* ▪ *GoTriangle will work with Durham City-County Planning to evaluate potential updates to future land use plans and station area infrastructure needs in the NCCU Station Refinement area.* ▪ *GoTriangle will commit to work with Durham City-County Planning to prioritize land use planning for this new station area. Land use*	▪ *GoTriangle with City of Durham and NCCU*

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	institutional uses (NCCU). These units are transit-supportive but would not allow for higher density uses that would be expected to develop at other D-O LRT Stations. ▪ *No compact development plan currently exists for the station area. Durham City-County Planning may choose to make updates to future land use plans to incorporate the proposed NCCU Station.*	*plans will help to identify future land uses and densities based on community input.* ▪ *Mitigation Commitment LUZ03 identified in the Combined FEIS/ROD is applicable to the NCCU Station Refinement. No additional mitigation measures are required.*	
Socioeconomic and Demographic Conditions (SDC)			
SDC01 DEIS section 4.2.4	▪ Potential tax revenue losses.	▪ During Engineering, work with the municipalities to identify proactive policies to promote redevelopment, infill, and economic development opportunities around affected areas. ▪ Work with the municipalities to identify proactive policies to relocate businesses near their existing location.	▪ GoTriangle with municipalities
SDC02 DEIS section 3.1.4	▪ Mobility options and affordability for transit-dependent populations.	▪ Prior to revenue operations, as part of the bus-rail integration planning process, engage the public and complete a Transit Service and Fare Equity Analysis.	▪ GoTriangle
SDC03 *Supplemental EA section 3.3*	▪ *Additional acquisition of private property to implement the NCCU Station Refinement would result in an overall reduction in the property tax base.*	▪ *Mitigation commitment SDC01 from the Combined FEIS/ROD is applicable to the NCCU Station refinement. This includes working with municipalities to identify policies to promote redevelopment, infill, and economic development opportunities around affected areas to mitigate for the loss in property tax base.* ▪ *GoTriangle will work with Durham City-County Planning to evaluate potential updates to future land use plans and station area infrastructure needs in the NCCU Station Refinement area.*	▪ *GoTriangle with City of Durham*
Neighborhoods and Community Resources (NCR)			
NCR01 DEIS section 4.3.4.1	▪ Changes to neighborhood traffic operations and street patterns.	▪ During Engineering, coordinate with affected residents, businesses, and community facilities to identify strategies to minimize neighborhood effects through refinements in the project design.	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
NCR02 DEIS section 4.3.4.1 DEIS Errata 40 and 67	▪ Access to neighborhoods and community resources for the following locations: – Between Larchmont Road and the intersection of Snow Crest Trail and University Drive. – Pedestrian access to neighborhoods, hospitals, Duke University, and community facilities located along Erwin Road. – Vehicular access changes to Erwin Road that would result from the construction the Crest Street neighborhood. – Relocation of the John Hope Franklin Center, which would impact access to the services provided at the center. – Loss of property around the John Avery Boys and Girls Club near the play field and along the site frontage, which would also include pedestrian and vehicular changes to access the site. – Impacts to pedestrian access at the Aldersgate Methodist Church.	▪ During Engineering, incorporate and/or refine the following measures to ensure maintenance of access to directly impacted neighborhoods and community resources: – Add a new roadway between Larchmont Road and Snow Crest Trail to provide access from Larchmont Road to the signalized intersection at Snow Crest Trail and University Drive. – Coordinate with NCDOT to provide safe and convenient pedestrian access to neighborhoods and community facilities along Erwin Road. – Coordinate with the City of Durham to address roadway impacts resulting from the conversion of driveways on Erwin Road to right-in/right-out, including impacts on the Crest Street neighborhood. – Coordinate with Duke University to ensure that services provided at the John Hope Franklin Center are relocated and maintained. – Cooperate with owners of the John Avery Boys and Girls Club to maintain or replace the existing fence around the play field, maintain or improve existing access to the site and building, and improve the sidewalk along Pettigrew Street and Grant Street including marked crosswalks. ▪ Work with Aldersgate Methodist Church to reconfigure the sidewalk and steps.	▪ GoTriangle with NCDOT, municipalities, Duke University
R02 DEIS section 3.2.3.2 DEIS Errata 38	▪ Potential impacts to ingress/egress movements at the East Drive, Jackson, and Dogwood parking decks on UNC Campus.	▪ Perform a detailed traffic analysis on the UNC Campus on the potential effects of the project in ingress/egress movements (e.g., East Drive, Jackson, and Dogwood parking decks and circulation on nearby roadways) to determine whether additional refinements to the design are necessary.	▪ GoTriangle and UNC
NCR03 DEIS section 4.3.4.1 DEIS Errata 73	▪ Potential effect on the safety of students, staff, and faculty of Glenwood Elementary School and users of the adjacent trails.	▪ During Engineering, incorporate protective fencing and a pedestrian underpass to ensure safety at Glenwood Elementary School and to preserve access to the adjacent trails and enhance safety along the pedestrian path. ▪ Coordinate with Glenwood Elementary School during the Engineering	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		phase to review the designs.	
R04 DEIS section 3.2.3 DEIS Errata 36 and 108	▪ Operational effects of the introduction of new at-grade intersections and train operations on the safety, roadway delays, and intersection queues along NC 54.	▪ Refine the traffic analysis along NC 54 during the Engineering phase, and if necessary make refinements to the roadway design. ▪ At-grade crossings will be signalized or equipped with gates with bells to warn of oncoming trains. The trains will also have bells and horns. Bells, gates, and horns would be activated according to GoTriangle operating procedures and safety guidelines. ▪ During the Engineering phase, coordinate with NCDOT to evaluate additional engineering safety measures, including vehicle detection technology, where appropriate.	▪ GoTriangle with NCDOT
LUZ02 DEIS section 4.1.4.1	▪ Neighborhood concerns regarding visual, noise, safety, and access effects on residential properties located near the ROMF site.	▪ During Engineering, coordinate with property owners and residents near the Farrington Road ROMF to develop and refine strategies to complement the surrounding context such as use of architectural styles and/or landscape design. ▪ During Engineering, and after working with the Durham staff and the property owners near the Farrington ROMF, coordinate with Durham to apply for an amendment to the Comprehensive Plan as well as the rezoning of the ROMF site at Farrington Road. The public will have the opportunity to comment on the design through a public hearing as part of the city and/or county approval process.	▪ GoTriangle with City of Durham
LUZ03 DEIS section 4.14.4	▪ As a result of the construction of the ROMF, displacements of residents would occur.	▪ During Engineering, ensure that any displaced residents would be relocated in accordance with Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 C.F.R. Part 24).	▪ GoTriangle
NCR04 DEIS section 4.3.4.1	▪ Acquisition of a portion of the parcel that contains the Patterson's Mill Country Store (which is considered to be a community resource) would be necessary, but the store could remain.	▪ Develop landscaping, vegetative screening, and modified access to the store.	▪ GoTriangle
NCR05 DEIS section 4.16.3.3	▪ Temporary impacts to school bus routes and vehicular travel patterns during construction of the project.	▪ Coordinate with Chapel Hill-Carrboro City Schools and Durham Public Schools to identify detours for impacted school bus routes. ▪ During the Engineering phase, develop a Maintenance of Traffic Plan	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		to manage the temporary closure and access to parking facilities. GoTriangle will include the Maintenance of Traffic Plan in construction plans and contract specification plans.	
NCR06 Supplemental EA section 3.4	▪ *The NCCU Station Refinement would affect access and mobility due to the conversion of numerous intersections along Alston Avenue to right-in and right-out access only; however, the existing grid street network provides convenient access to the affected neighborhoods to allow access to left turns on Alston Avenue from Linwood Avenue or Lawson Street.*	▪ *Impacts to neighborhoods and community resources for the NCCU Station Refinement would generally be the same as those described in the Combined FEIS/ROD for the D-O LRT Project, but would extend these impacts to a new area.* ▪ *Mitigation commitment NCR02 in the Combined FEIS/ROD is extended to be applicable to the NCCU Station Refinement. No additional mitigation measures are required.*	▪ *GoTriangle and City of Durham*
Visual and Aesthetic Conditions (VAC)			
VAC01 DEIS section 4.4.4.1 DEIS Errata 75, 76, and 77	▪ Introduction of new visual elements to the viewshed. These new elements could negatively affect visually sensitive resources by altering the view to and/or from the resource, or by adding an element that would be out of scale or character with the existing visual context.	▪ During Engineering, coordinate with the Town of Chapel Hill and the City of Durham as well as with affected residents, businesses, neighborhoods, and community facilities to identify strategies to further minimize the visual effects of the project. ▪ For locations where visual impacts cannot be avoided, incorporate the following measures in the project design: – The use of interdisciplinary design teams to create aesthetic guidelines and standards. – The interdisciplinary design teams will use input from the coordination with municipalities, residents, businesses, neighborhoods, and community facilities to inform the strategies for minimizing visual effects in the project design. – Integrate facilities with area redevelopment plans. – Work with the municipalities and NCDOT to identify landscape planting and appropriate vegetation in and adjoining the project right-of-way. – Replant remainder parcels when portions of a parcel will remain after the construction. – Use source-shielding in exterior lighting at ROMFs, stations, and	▪ GoTriangle, NCDOT, and municipalities

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		auxiliary facilities to reduce light pollution from new light sources. – Identify and integrate Art-in-Transit opportunities in the design (e.g., unique artistic design in the etching, color, or materials of windscreens, canopies, and seating at transit stations, landscape planting along the project right-of-way, and/or incorporation of color, murals, form design in the project's walls, bridges, and/or murals at transit stations). ▪ Incorporate landscaping and aesthetic treatments to the design of elevated or aerial structure in close proximity to residences.	
VAC02 DEIS section 4.4.4.1 DEIS Errata 78 and 79	▪ Site-specific visual impacts include: – UNC Finley Golf Course (Landscape Unit #2) – changes in the viewshed and the introduction of new visual elements that would result from the project (station, lighting, OCS poles, track, etc.). – East 54/Hamilton Road Station (Landscape Unit #2) – changes in the viewshed and the introduction of new visual elements that would result from the project (station, lighting, OCS poles, track, etc.). – Patterson's Mill Country Store and Walter Curtis Hudson Farm (Landscape Unit #4) –changes in the viewshed and introduction of new visual elements that would be located adjacent to the community resource and historic property, respectively (Section 106 and Section 4(f) Resources). – Duke West Campus (Landscape Unit #6) – introduction of aerial structure adjacent to the Al Buehler Trail. – Duke University Golf Course (Landscape Unit #7 and #8) – introduction of new visual elements adjacent to the Duke University Golf Course and	▪ Implement the following mitigation measures for site-specific visual impacts: – UNC Finley Golf Course – reconstruct the affected hole and provide landscaping and a protective screen, which is based on a plan developed by the golf course designer, as described in chapter 6, Draft Section 4(f) Evaluation. – East 54/Hamilton Road Station – incorporate additional landscaping along Prestwick Road. – Patterson's Mill Country Store and Walter Curtis Hudson Farm – provide a landscape visual buffer for the Walter Curtis Hudson Farm including additional landscaping. – Duke West Campus – coordinate with Duke University and NCDOT to determine appropriate mitigation measures for the Al Buehler Trail and aesthetic treatments to the elevated structure. – Duke University Golf Course - coordinate with Duke University to provide landscaping and vegetative screening for the golf course. ▪ Farrington Road ROMF – coordinate with the surrounding landowners and the City of Durham during Engineering to identify potential treatments including landscaping, architectural treatments, visual barriers, and building height maximum.	▪ GoTriangle with City of Durham, Duke University, NCDOT, and SHPO

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	would require the removal of some existing landscaping and vegetative screening. – The ROMF would include built facilities (maintenance buildings, office spaces, and shops) and infrastructure (parking and paved areas, tracks, switches, OCS lines and poles, TPSS, and signals). The site topography would change due to grading, and would include changes in structural features, such as the removal of existing structures and the construction of new buildings; changes in vegetation, such as the removal of vegetation and planting of new vegetation; and the addition of lighting.		
VAC03 Supplemental EA section 3.5	▪ *For the NCCU Station Refinement, visual impacts in Landscape Unit #10 would be moderate. This is a change from the visual impacts identified in the Combined FEIS/ROD for Landscape Unit #10 for the D-O LRT Project, which were expected to be low-moderate. This change is due to the addition of a multi-story parking structure on the property adjacent to the Durham Water Tower and Valve House, a National Register resource.* ▪ *Visual impacts for the NCCU Station Refinement for Landscape Unit #11 would be moderate. No visual impacts to this area were anticipated with the D-O LRT Project, as the project did not extend into this area.*	▪ *The NCCU Station Refinement would result in moderate visual impacts in Landscape Units #10 and #11. Mitigation commitment VAC01 from the Combined FEIS/ROD is extended to the NCCU Station Refinement.* ▪ *As potential impacts of the NCCU Station Refinement on visual resources are similar in type and magnitude to those disclosed in the Combined FEIS/ROD, no additional mitigation measures are required.*	▪ *GoTriangle, NCDOT, and City of Durham*
Historic and Archaeological Resources (CHAR)			
CHAR01 DEIS section 4.5.3.1	Architectural Historic Resources ▪ Indirect impacts to 13 of 25 architectural historic properties within the area of potential effect: – Dr. Robert Jack Shankle House	Architectural Historic Resources ▪ Provide a landscape visual buffer for the following historic resources due to their non-urban settings: the Rocky Ridge Farm Historic District, the Highland Woods Historic District, the Walter Curtis Hudson Farm,	▪ GoTriangle with SHPO

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	– H.G. Baity House – Bowers-Nelson House – Dubose Tenant Farm Complex – Meadowmont – West Durham Historic District – Powe House – Trinity Historic District – Watts and Yuille Tobacco Warehouses – Bright Leaf Historic District – Downtown Durham Historic District – Durham Water Tower – East Durham Historic District	and the Ruth-Sizemore Store (Table 4.5-1). This visual buffer would provide a blooming of at least two seasons of each year. GoTriangle will consult with property owners, historic district representatives, and the SHPO on the appearance of this buffer.	
CHAR02 DEIS section 4.5.4.2	Archaeological Resources ▪ Impacts to archaeological resources will not be more fully understood until Engineering. Therefore, GoTriangle has entered into a Memorandum of Agreement (MOA) with FTA and SHPO. ▪ The Archaeological Background Information identified areas where further archaeological surveys (Phase 1 and II) will be conducted during future engineering and prior to construction.	Archaeological Resources ▪ Conduct Phase I archaeological surveys for the following locations of the proposed D-O LRT Project (Table 4.5-2): – North of Mason Farm Road between UNC and Fordham Boulevard. – Between George King Road and Interstate-40 (I-40). – Farrington Road ROMF site. – West of I-40 at the US 15-501 Interchange (Exit 270) (Gateway Station). – Between US 15-501 and the NC 751 – Erwin Road intersection. ▪ GoTriangle may conduct Phase II archaeological testing projects at the following locations dependent on the nature and extent of potential ground-disturbing activities: – Archaeological site 31DH655 – PS-1 – PS-3 ▪ FTA, GoTriangle, and SHPO entered into a MOA for the proposed D-O LRT Project to establish the procedures by which FTA, GoTriangle, and SHPO will work together to ensure the effective protection of historic and/or archaeological resources during the implementation and construction of the proposed D-O LRT Project. FTA, GoTriangle, and	▪ GoTriangle with SHPO

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		SHPO agree that the D-O LRT Project shall be implemented in accordance with the stipulations outlined in the MOA – The MOA and Final EIS/ROD identify measures required to mitigate impacts to archaeological historic properties if any are identified during archaeological Phase I or Phase II studies. ▪ In the event of an inadvertent discovery of archaeological materials, cease construction within a 50 foot buffer around the material. The construction manager will immediately contact the SHPO, FTA, and GoTriangle. The SHPO and FTA will consult to determine appropriate actions to identify archaeological materials and mitigate adverse effects.	
CHAR03 Supplemental EA section 3.6	*Architectural Historic Resources* ▪ *The NCCU Station Refinement would add an eight-story parking structure on the GoTriangle-owned property immediately west of the Durham Water Tower's eligible boundary. FTA and SHPO determined no adverse effect on the Durham Water Tower and Valve House (DH-3508) based on design features incorporated into the parking structure.* ▪ *FTA and SHPO determined no adverse effect on the Russell Memorial CME Church.* ▪ *The NCCU Station Refinement would have no adverse effect on any historic properties within the Area of Potential Effects (APE).*	*Architectural Historic Resources* ▪ *Design parking structure such that no structures on the east side of the garage will rise above the 60-foot level of the garage; no cell towers or related antenna will be erected on the garage.* ▪ *The Memorandum of Agreement (MOA) developed for the D-O LRT Project (described in CHAR02) addresses the procedures by which FTA, GoTriangle, and SHPO will work together to ensure the effective protection of historic and/or archaeological resources during the implementation and construction of the proposed D-O LRT Project. Provisions in the MOA regarding the inadvertent discovery of archaeological materials is applicable to the NCCU Station Refinement.* ▪ *FTA and GoTriangle received concurrence that there will be no adverse effect on any historic property within the APE.*	▪ *GoTriangle with SHPO*
Parklands and Recreational Areas (PRA) (Refer to Section 4(f) entries for additional information)			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Impacts to three existing public parks (UNC Open Space, UNC Finley Golf Course, and USACE Lands), one private park (Duke University), and one	▪ During Engineering and Construction, continue to coordinate with agencies with jurisdiction (i.e., UNC, North Carolina Botanical Gardens, Town of Chapel Hill, USACE, NCWRC, Duke Forest, and City-County	▪ GoTriangle with UNC, North Carolina

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	planned public park (UNC Central Park South), with a total impact to 13.3 acres of parklands. ▪ Crossing of three proposed trails (East 54/Botanical Gardens, Little Creek Connector Trail, and the New Hope Creek Trail).	of Durham) to minimize potential impacts to parklands and recreational resources. ▪ Provide financial compensation for purchase and development of replacement park property of at least equivalent value with the property acquired, or, where appropriate, enhancement of the existing facility to compensate for impacts in coordination with the respective agencies with jurisdiction. This mitigation will be provided for UNC Open Space, the planned UNC Central Park South, Coker Pinetum, Meadowmont Park, and Duke University properties that will be impacted by the NEPA Preferred Alternative. ▪ During Engineering, as the result of ongoing stakeholder coordination, incorporate the following site-specific commitments into the project design: – UNC Finley Golf Course – One golf hole (#17) will be redesigned based on the plan developed by the golf course designer and golf course cart paths will be realigned. GoTriangle will reconstruct the affected hole and provide landscaping. GoTriangle will continue to coordinate with UNC, and the golf course will remain open during construction. – UNC Cross Country Trails – Install a pedestrian underpass and realign the trails to maintain connectivity in a manner consistent with existing conditions. GoTriangle will continue to coordinate with UNC during Engineering to minimize impacts to these trails and will coordinate closings of the trails with UNC during Construction. – Jordan Game Lands (USACE Property) –GoTriangle commits to the following: • Replace reservoir water-storage volume lost due to fill below elevation 245 feet msl by excavation of an equal amount of new storage volume at the same elevation as the lost storage volume. • Compensate the NCWRC for loss of marketable timber. Timber value will be determined by a registered government forester and payment for timber will be collected at the time the	Botanical Gardens, Town of Chapel Hill, USACE, NCWRC, Duke Forest, and City-County of Durham

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		easement is issued. • Relocate the access road to the existing impoundment parking area, place gravel on the parking lot, provide and install a new gate and informational signs. • Construct a gravel access road (16 feet wide) from the existing parking area to a second parking area along the NEPA Preferred Alternative for the impoundment, and provide and install a new gate and informational signs. • Construct a public access parking area on the south side of NC 54, and provide and install a double gate and informational signs. • Replace the existing Waterfowl Impoundment sign and install a new Game Lands access directional sign for new area along NC 54. ▪ Coordinate with USACE to locate fencing as appropriate.	
Natural Resources (NR)			
NR01 DEIS section 4.7.4 DEIS Errata 90	▪ Impacts to approximately 316 acres of habitat. ▪ Crossing of the USACE property and the NCWRC Jordan Game Lands, potentially impacting habitat and wildlife movement. ▪ Potential impacts to the Little Creek Bottomlands and Slopes, a Significant Natural Heritage Area.	As a result of ongoing coordination with the agencies with jurisdiction, GoTriangle commits to the following: ▪ Revegetate bare soils after construction to minimize erosion. Disturbed land would be re-vegetated with a native seed mix or landscaping in the urban environment. During Engineering, GoTriangle will include these provisions in the construction plans and contract specifications. ▪ Minimize adverse effects to aquatic wildlife by bridging wetland and stream areas, and employing sediment and erosion control BMPs. Efforts to avoid, minimize, or mitigate impacts to wildlife and their habitats will continue during final design and construction. Mitigation measures, such as nesting surveys if required, will be developed in consultation with NCWRC and the NCDA. During Engineering, GoTriangle will work with NCWRC and NCDA to determine if nesting surveys are required prior to construction. ▪ During Engineering and Construction, periodically review the county species list to ensure the status of the northern long-eared bat. If the	▪ GoTriangle with USACE, USFWS, NCWRC, and NCDA

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		bat is listed in the county and tree removal has not yet been completed for the project, then GoTriangle will consult with USFWS at that time. ▪ Conduct surveys if it becomes evident that bald eagles are utilizing the project area. During Engineering, GoTriangle will include these specifications in the design and construction plans. ▪ While impacts to migratory birds are not anticipated, GoTriangle commits to the following: Between October 1 and February 15, the contractor would remove all old migratory bird nests from any structures that would be affected by the proposed project, and complete any necessary construction on existing bridges and/or vegetation clearing. In addition, the contractor would be prepared to prevent migratory birds from building nests between February 15 and October 1, per the Environmental Permits, Issues, and Commitments Plan (EPIC). In the event that migratory birds are encountered on-site during project construction, adverse impacts on protected birds, active nests, eggs, and/or young would be avoided. However, if construction is to take place during nesting season for migratory birds, GoTriangle will conduct a nesting survey prior to construction. During Engineering, GoTriangle will include these provisions in the construction plans and contract specifications.	
NR02 Supplemental EA section 3.7	▪ *Terrestrial Communities* – *One community: maintained/disturbed* – *NCCU Station Refinement would convert 18 acres of maintained disturbed habitat to a transportation use* ▪ *Terrestrial Wildlife* – *Animal species are opportunistic* ▪ *Threatened and Endangered Species* – *3 federally protected species in Durham County* – *Of the 3 species, Michaux's Sumac and the*	▪ *Mitigation commitment NR01 identified in the Combined FEIS/ROD is applicable to the NCCU Station Refinement. No additional mitigation measures are required.* – *During Engineering and Construction, periodically review the county species list to ensure the status of the northern long-eared bat. If the bat is listed in the county and tree removal has not yet been completed for the project, then GoTriangle will consult with USFWS at that time.* – *While impacts to migratory birds are not anticipated, GoTriangle commits to the following: Between October 1 and February 15, the contractor would remove all old migratory bird nests from any structures that would be affected by the proposed project, and complete any necessary construction*	▪ *GoTriangle with USACE, USFWS, NCWRC, and NCDA*

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	Northern Long Eared Bat have the potential to occur within the NCCU Station Refinement area ▪ *Migratory Bird Treaty Act* – *A number of observed and expected bird species are located in the NCCU Station Refinement study area that fall under the purview of the Migratory Bird Treaty Act of 1918. However, migratory birds are mobile and transient and not likely to be adversely affected.*	*on existing bridges and/or vegetation clearing. In addition, the contractor would be prepared to prevent migratory birds from building nests between February 15 and October 1, per the Environmental Permits, Issues, and Commitments Plan (EPIC). In the event that migratory birds are encountered on-site during project construction, adverse impacts on protected birds, active nests, eggs, and/or young would be avoided. However, if construction is to take place during nesting season for migratory birds, GoTriangle will conduct a nesting survey prior to construction. During Engineering, GoTriangle will include these provisions in the construction plans and contract specifications.*	
Water Resources (WR)			
WR01 DEIS section 4.8.4 DEIS Errata 92, 94, 95, 97, 98, 100, 102, and 103	▪ Impacts to 3,413 linear feet (0.438 acre) of streams. ▪ Impacts to 0.558 acre of wetlands. ▪ Impacts to 216,455 square feet (4.97 acres) of Riparian Buffer Zone 1. ▪ Impacts to 178,517 square feet (4.10 acres) of Riparian Buffer Zone 2. ▪ Impacts to 0.005 acre of open water/ponds. ▪ Impacts to 6.420 acres of 100-year floodplain. ▪ Impacts to 0.378 acre of 500-year floodplain. ▪ Impacts to 0.880 acre of floodway.	▪ Use the Erosion and Sediment Control Planning and Design Manual (NCDENR [NCDEQ] 2009) and the NCDOT design specifications to minimize the impacts to land and water resources. ▪ Abide by local standards set by the City of Durham and the Town of Chapel Hill when designing erosion and sediment controls. These sediment and erosion control measures will help to protect aquatic resources that may contribute to groundwater recharge within the study area. ▪ Implement BMPs for the collection and treatment of stormwater runoff at each station location and park-and-ride facility. ▪ Capture and store all fluids used at the ROMF in tanks where they are periodically collected by an outside vendor for off-site recycling or disposal. ▪ Avoid and minimize impacts by consideration during Engineering of alternative alignments, placement of piers outside of wetlands and streams to the greatest extent possible, use of bottomless culverts, and top-down construction techniques. ▪ For wetland crossings where it is not feasible to use aerial structures, minimize impacts to these resources by using retaining walls or similar	▪ GoTriangle with NCDOT, USACE, NCDWR, and North Carolina Division of Mitigation Services

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		structures and 2:1 side slopes. ▪ Develop specific compensatory mitigation measures in consultation with the USACE and NCDWR as part of the Section 404/401 permitting process during the Engineering phase. Compensatory mitigation measures may include: – Purchase of credits at a USACE-approved mitigation bank. – Payment of a compensatory mitigation fee into the Riparian Buffer Restoration Fund. – The donation of real property or an interest in real property if the property is maintained as a riparian buffer. – Restoration or enhancement of an existing riparian buffer that is not otherwise required to be protected or the creation of a new riparian buffer. – Construction of an alternative measure that reduces nutrient loading as well as or better than the riparian buffer that is lost in the same river basin. ▪ Coordinate a buffer mitigation with the North Carolina Division of Mitigation Services. ▪ Implement mitigation measures for increases in 100-year flood elevation greater than 0.1 feet pending hydraulic studies. Mitigation measures would include either purchasing the additional potentially flooded property from any private landowner, or making floodplain modifications to decrease the 100-year flood elevation to within 0.1 feet to avoid purchasing property. ▪ Obtain a floodplain development permit from the local jurisdiction for all construction, grading, development, or storage of equipment or materials within the Special Flood Hazard Area (SFHA). ▪ If hydraulic studies during Engineering determine that there would be an increase in flood levels during the base flood discharge, obtain a No-Rise Certification from the North Carolina Department of Public Safety Division of Emergency Management. If studies indicate that	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		there would be an increase in flood levels, request a Conditional Letter of Map Revision. ▪ The Basis for Engineering Design calls for bridging over the major streams of the study area that include Meeting of the Waters (Stream YY), Little Creek (Stream Y), New Hope Creek (Stream T), and Sandy Creek (Stream J) in an effort to minimize impacts to 100-year floodplains, 500-year floodplains, and the FEMA floodways. These bridges will be designed to minimize impacts to floodplains and regulated floodways. ▪ Review opportunities for green building design and low-impact development design during Engineering. Water Quality ▪ Implement BMPs, including on-site storage and detention for stormwater, as engineering controls along the alignment, at station park-and-ride facilities, and at the ROMF for stormwater runoff collection and treatment. ▪ Maintain stormwater BMPs to ensure that the controls are functioning properly for the protection of area water quality. ▪ Design the ROMF to manage stormwater runoff in a manner consistent with local and state regulations to avoid and minimize impacts to neighborhoods and community resources in the vicinity such as Leigh Farm Park and the Piedmont Wildlife Center. ▪ Complete analysis of cumulative and secondary impacts anticipated as a result of the project as part of the Section 401 Water Quality Certification application and in conformance to the Division of Water Resources policy on the assessment of secondary and cumulative impacts dated April 10, 2004. ▪ Identify construction-related impacts during the Engineering phase, including temporary impacts and include them as part of the 401 Water Quality Certification application. ▪ Design bridge deck drains so that they do not discharge directly into	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		project area streams. Stormwater shall be directed across bridges and will be pre-treated through BMPs. Temporary Mitigation ▪ Conduct construction activities in accordance with local, state, and federal regulations, as well as BMPs, including the NCDENR Stormwater Best Management Practices Manual (2007), the Erosion and Sediment Control Planning and Design Manual (NCDENR 2009), the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual, and the Design Standards in Sensitive Watersheds (15A N.C.A.C. § 04B.0124). ▪ Locate construction staging areas away from wetlands, and demarcate preserved wetland areas prior to construction. ▪ Restore wetlands anticipated to be temporarily affected by construction as close to their original condition as possible and plant with an appropriate native wetland seed mix. ▪ During Engineering, coordinate aforementioned water resource commitments, with appropriate agencies with jurisdiction, and include provisions in the construction plans and contract specifications, as appropriate.	
Air Quality (AQ)			
AQ01 DEIS section 4.9.4	▪ No significant impacts.	▪ NA	▪ NA
Noise and Vibration (NV)			
NV01 DEIS section 4.10.5 DEIS Errata 105 and 106	▪ One severe noise impact, 4 moderate noise impacts, 8 vibration impacts, and 13 ground-borne noise impacts.	▪ Coordinate design and policies related to audible warning devices with NCDOT and local jurisdictions in accordance with applicable regulations, guidance, municipal policies, and BMPs. ▪ In accordance with the FTA Guidance Manual, conduct a detailed vibration analysis during the Engineering phase to further evaluate geotechnical conditions and more precisely predict the vibration effects of the proposed light rail system on area receptors. ▪ Implement noise mitigation measures, including property acquisition	▪ GoTriangle with NCDOT, UNC, UNC Hospitals, and Duke University

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		and elevated track barriers. During real estate acquisition, work with the affected properties pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act. ▪ Implement vibration mitigation measures consisting of special track support systems, resilient fasteners, ballast mats, resiliently supported ties, and floating slabs. ▪ Coordinate with UNC and UNC Hospitals to avoid and mitigate vibration impacts to sensitive medical and research equipment. ▪ Coordinate with Duke University to confirm the appropriate land use category for the Center for Documentary Studies and its outdoor amphitheater and update the analysis as appropriate during Engineering. ▪ During Engineering, include the aforementioned provisions in the construction plans and contract specifications.	
NV02 *Supplemental EA section 3.8*	▪ *The NCCU Station Refinement would add two vibration and three ground-borne noise impacts to the D-O LRT Project.*	▪ *Mitigation commitment NV01 made in the Combined FEIS/ROD is applicable to the NCCU Station Refinement area. Applicable mitigation measures include conducting a detailed vibration analysis during the Engineering phase to further evaluate geotechnical conditions and more precisely predict the vibration effects of the proposed light rail system on area receptors and implementing vibration mitigation measures consisting of special track support systems, resilient fasteners, ballast mats, resiliently supported ties, and floating slabs. Implementation of these mitigation measures is anticipated to reduce the vibration and ground-borne noise impacts below the level of significant impact. These mitigation measures are adequate and applicable; therefore, no additional mitigation is required.*	▪ *GoTriangle with NCDOT*
Hazardous, Contaminated, and Regulated Materials (HCRM)			
HCRM01 DEIS section 4.11.4 DEIS Errata 107	▪ Chance of disturbing 41 high risk sites, 83 medium risk sites within 500 feet of NEPA Preferred Alternative.	▪ Perform a full Phase I or Phase II Environmental Site Assessment for high risk properties following American Society for Testing and Materials (ASTM) standards prior to construction.	▪ GoTriangle with NCDEQ

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ During Engineering, coordinate with NCDEQ to review the closure status or current site status for the medium risk properties prior to starting construction. ▪ Coordinate with NCDEQ to have the current site status of the three high risk properties (Flintom Services Inc. [former], Bob's Service Garage, and Graybar Building Site [former]) reviewed prior to any construction activities to determine whether any cleanup activities have occurred. If cleanup has occurred, Phase II sampling will be conducted again to determine whether remediation of the site has been performed to acceptable standards. If cleanup has not occurred, coordinate with NCDEQ to determine what cleanup actions, if any, are necessary. ▪ Train engineering and construction crews to be alert for signs of apparent contamination during excavations or pre-construction borings, even if the Phase I assessment indicates low probability of contamination at a given location. ▪ Train engineering and construction crews to immediately report apparent contamination to their supervisor. Upon discovery of contamination, supervisors will be aware of whom to contact at GoTriangle, the managing contractor's office, NCDEQ, and EPA, if necessary. ▪ Develop a Spill Prevention, Control, and Countermeasure Plan prior to demolition, excavation, and construction activities. ▪ Handle and manage potentially hazardous materials in compliance with applicable regulatory standards and dispose of them in accordance with an approved remediation plan or within an approved disposal site. Sampling will be conducted for hazardous materials intended for disposal. ▪ Conduct asbestos surveys at all locations where demolition and renovations may occur. ▪ Manage used oil generated from operations or maintenance in accordance with the standards for the management of used oil	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		described in 40 C.F.R. Part 279. Temporary Mitigation: ▪ Implement preventive measures to minimize exposure of the public, community residents, and construction workers to hazardous materials. ▪ Dispose of construction waste at approved sites. ▪ Follow Occupational Safety and Health Administration (OSHA), state, and local standards for the handling and storage of fuels and other materials. ▪ Establish provisions for the identification and management of known and unexpected buried tanks or contaminated materials that might be encountered during soil disturbance activities associated with construction. ▪ During Engineering, include the aforementioned provisions in the construction plans and contract specifications.	
HCRM02 Supplemental EA section 3.9	▪ *Chance of disturbing 45 high risk sites and 86 medium risk sites within 500 feet of D-O LRT Project with the NCCU Station Refinement.* ▪ *The NCCU Station Refinement would result in one reclassification from medium to high (not added to the total) and seven newly listed or reclassified sites. Two sites upgraded from low to medium, and one site upgraded from low to high. Additionally, four new sites (two medium and two high risk) would also be included.*	▪ *Mitigation measure HCRM01 identified in the Combined FEIS/ROD is applicable to the reclassified and new sites identified for the NCCU Station Refinement.*	▪ *GoTriangle with NCDEQ*
Safety and Security (SS)			
SS01 DEIS section 4.12.4 DEIS Errata 108, 109, and 110	▪ Potential safety hazards at stations, light rail vehicles, park-and-ride facilities, impacts to police, security, and emergency service operations.	Passenger Safety: ▪ Before revenue service begins, develop transit system safety management procedures. This safety program will be documented in the System Safety Program Plan (SSPP), a plan to guide system risk management and a core aspect of the State Safety Oversight program.	▪ GoTriangle with local law enforcement, emergency medical personnel,

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ Develop system security management during revenue service guided by the Safety and Emergency Preparedness Plan (SEPP), which will be developed prior to the opening of revenue service. The SEPP will include an evacuation plan for the ROMF. ▪ Before revenue operations begin, develop additional protocols to protect passenger safety near and on the platforms and in the light rail vehicles as part of the SSPP and SEPP. Security patrols and cameras, lighting, communications systems, and public announcements will be employed as appropriate to increase passenger safety. Clear instructions to passengers will be developed regarding emergency exiting from the light rail vehicles and from tracks that are at ground level or elevated. ▪ Locate the NEPA Preferred Alternative a minimum of 40 feet from any potential future railroad track, a safety separation distance required by the NCRR. A fence with intrusion detection equipment will be installed between the railroad tracks and light rail tracks to automatically alert operations staff in the event of a railroad train derailment. Policies and procedures pertaining to railroad train derailments will be included in the SEPP for the project and will be coordinated with local emergency response agencies. Station Platforms and Park-and-Ride Facilities: ▪ Consult with local law enforcement and other public agencies to design the project's public facilities to maximize the safety and security of light rail patrons and the transit system's employees. ▪ Design station platforms and park-and-ride facilities using Crime Prevention Through Environmental Design (CPTED) principles to increase natural surveillance opportunities. CCTV cameras will be placed on every platform and in park-and-ride facilities. Blue light emergency phones will be available at regular intervals on station platforms and in park-and-ride locations. The ticket vending machines will contain passenger assistance telephones to link passengers with a central control center. Security will be provided using roving patrols along the corridor, at stations, and at the proposed park-and-ride	NCDOT, railroads, and Durham County

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		facilities. Each station platform will be equipped with a public notification system. Durham County Detention Center: ▪ Coordinate with Durham County during the Engineering phase to determine the appropriate location and design of TPSS #16 near the Durham County Detention Center. ▪ Modify the approaches to the Detention Center from Pettigrew Street to preserve truck access. Coordinate with Durham County during the Engineering phase to develop plans for work zone traffic control along Pettigrew Street. Transit Vehicles: ▪ Light rail vehicles will be compliant with a number of requirements, codes, and other design criteria. These include, but are not limited to, tamper-resistant equipment, dependable/redundant communication networks, CCTV monitoring, intrusion alarm systems, and relevant fire, life, and safety requirements. Employees and Contractors: ▪ Before revenue operations begin, develop operational manuals and establish procedures consistent with the SSPP to ensure the safety of the transit system's employees and contractors. Pedestrians, Bicyclists, and Motorists: ▪ Design safety measures and parameters into the proposed D-O LRT Project including: – Using presently underdeveloped parcels and/or otherwise locating the alignment away from vehicular, pedestrian, and bicycle traffic. – Installing sidewalks and pedestrian paths to provide connectivity to stations. – Installing elevated structures to avoid significant impacts on existing roads and sidewalks. – Reconfiguring or relocating crosswalks to occur at safely controlled intersections.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		– Reconfiguring the roadway signal and signage network to safely accommodate users in the context of light rail operations. – Installing visible and audible crossing signals and/or gates where appropriate for vehicles and pedestrians. – Segregating and delineating the track area using design elements such as fencing, pylons, road surface markings, rumble strips, unique paving materials, etc. – Installing illumination and signage at stations and where streets and light rail facilities interface. – Developing public education programs to explain how to use the system safely, and how to respect the operation of the system to ensure safety of the non-user. These education programs would be implemented before revenue operation near the end of the construction period, and would continue during the initial months of revenue operation. – Building pedestrian bridges and underpasses such as the ones currently proposed at UNC Hospitals Station and Hamilton Road Station. – Using best practices in the design of pedestrian and bicycle facilities that interface with light rail facilities, including ensuring adequate sight distance at crossings, providing pedestrian refuge areas where the light rail results in long crosswalks, and installing active warning devices where appropriate. ▪ Follow all national, state, and local safety guidelines and best practices, and coordinate with NCRR, Norfolk Southern (NS), CSX Corporation (CSX) (as appropriate), NCDOT, and local jurisdictions regarding motorist and pedestrian safety near at-grade crossing of the light rail alignment within the NCRR corridor, and along the light rail alignment. Police, Security, and Emergency Service Operations: ▪ As design advances, coordinate with law enforcement, emergency and medical personnel, and other public agencies to investigate impacts of	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		the potential light rail system on their day-to-day operations. For example, work with fire departments to determine whether implementation of the NEPA Preferred Alternative warrants changing dispatch locations for emergency services. ▪ Coordinate with local emergency management departments during the Engineering phase to get input on the development of a *Safety and Security Management Plan*, and to develop plans and materials useful for training of police, security, and emergency service personnel. The training would include methods by which these personnel can assist in informing and educating the public about system safety. ▪ Construct the guideway in embedded track such that emergency vehicles can bypass other vehicles via use of the embedded track condition. The light rail operation would yield to these infrequent occurrences. Access to emergency and health care facilities would not be compromised by the light rail. ▪ Work with local law enforcement and emergency medical personnel to develop a training plan that involves responding to incidents at light rail facilities and on light rail vehicles. This plan will include a schedule for training prior to and during revenue operations. ▪ During Engineering, include the aforementioned provisions in the construction plans and contract specifications.	
SS02 Supplemental EA section 3.10	▪ *The NCCU Station Refinement would include a new area in which the light rail system would operate between opposing directions of street traffic, two new at-grade intersections between motorists and the light rail system at Pettigrew Street and Alston Avenue at Linwood Avenue, and a new station platform at NCCU. The number of at-grade crossings of the light rail tracks with pedestrian and bicycle facilities would be reduced from the D-O LRT Project as a result of*	▪ *Mitigation commitment SS01 identified in the Combined FEIS/ROD for safety and security is applicable tothe NCCU Station Refinement.*	▪ *GoTriangle with local law enforcement, emergency medical personnel, NCDOT, railroads, and Durham County*

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	the reorientation of the Alston Avenue Station; however, the NCCU Station would be located in the median of Alston Avenue, which would introduce a conflict for pedestrians and bicyclists crossing vehicular traffic to access the station.		
	Energy (E)		
E01 DEIS section 4.13.4	▪ No significant impacts.	▪ NA	▪ NA
	Acquisitions, Relocations, and Displacements (ARD)		
ARD01 DEIS section 4.14.4 DEIS Errata 112	▪ Acquisitions, relocations, and displacements include 92 potential full acquisitions, 138 potential partial acquisitions, and 65 displacements.	▪ Conduct the acquisition and relocation process in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. ▪ For property owners and tenants whose primary language is not English, conduct the property acquisition and relocation discussions in alternate languages. ▪ If exercising eminent domain is necessary, follow the procedures set forth under North Carolina law, including NC Eminent Domain (N.C.G.S. §§ 40-A-1 – 40A-85) and NC Relocation Assistance Act (N.C.G.S. § 133-5 – 133-22). ▪ Pursuant to 23 C.F.R. Part 810 Subpart C, request authorization from the Federal Highway Administration (after an assessment by NCDOT) to use federally-owned rights-of-way in conjunction with the proposed D-O LRT Project. ▪ Conduct any relocation of a displaced use in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Provide ample notice to those being relocated to allow for any planning contingencies that may arise. ▪ In accordance with Title VI of the Civil Rights Act of 1964, provide relocation advisory assistance to all eligible persons without discrimination.	▪ GoTriangle with UNC and Duke University

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ Provide relocation planning and services to businesses including review of site requirements, current lease terms, and other contractual obligations; outside specialists to assist in planning and moving; identification and resolution of personal property/real property issues; an estimate of time required for the business to vacate the site; an estimate of the anticipated difficulty in locating replacement property; and an identification of any advance relocation payments required for the move. ▪ During Engineering, coordinate with UNC and Duke University to determine whether an acquisition or easement is appropriate.	
ARD02 Supplemental EA section 3.12	▪ *The NCCU Station Refinement would result in 34 new full acquisitions (including one that was previously a partial), 5 new partial acquisitions, and 23 additional displacements.*	▪ *Mitigation commitment ARD01 identified in the Combined FEIS/ROD is applicable to the NCCU Station Refinement:* – *Conduct the acquisition and relocation process in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.* ▪ *In addition, GoTriangle will coordinate with NCCU regarding property acquisitions and campus development plans to inform the final placement and design of the NCCU Station.*	▪ *GoTriangle*
Utility Impacts (UI)			
UI01 DEIS section 4.15.4	▪ Potential impacts to 85 miles of utility lines. ▪ Potential impacts to the cell tower on the Farrington Road ROMF site.	▪ Survey existing utilities during the Engineering phase and seek to avoid or limit impacts to existing utilities. ▪ All protection in place, relocation, replacement, or abandonment will be conducted in consultation with the utility owner. ▪ Where relocation will be required, make efforts to consolidate existing utilities. ▪ Minimize utility service outages and schedule them with the utility owner and the customer such that they would present the least inconvenience. ▪ Incorporate special measures to ensure continuous service to life safety functions such as hospitals, fire protection, emergency	▪ GoTriangle

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		response, detention centers, and other facilities providing critical support such as private medical offices/care facilities or university laboratories. ▪ Notify residences and businesses of utility work. ▪ During Engineering and construction, coordinate with the utility owners to monitor relocation activities and execute any necessary relocation agreements. ▪ Coordinate with the utility owner and property owners to determine the feasibility of accommodating the cell tower and access for the utility owner for operations and maintenance into the Farrington Road ROMF site design.	
UI02 *Supplemental EA section 3.13*	▪ *Up to two miles of utility impacts could result from the NCCU Station Refinement.*	▪ *Mitigation commitment UI01 identified in the Combined FEIS/ROD is applicable to the NCCU Station Refinement, and no additional mitigation is proposed for the NCCU Station Refinement.* ▪ *As noted in the Combined FEIS/ROD, GoTriangle will survey existing utilities during the Engineering phase to avoid or limit impacts, minimize utility outages during construction, and notify residences, universities, and businesses of utility work.*	▪ *GoTriangle*
Construction (C)			
C01 DEIS section 4.16.3 DEIS Errata 115, 116, 117, 120, and 121	▪ Temporary impacts to: – Transportation, traffic, and parking – Access for residents and businesses – Neighborhood and community resources – Visual and aesthetics – Historic and archaeological resources – Natural resources – Water resources – Air quality	▪ Develop a project construction, education, and outreach plan during the Engineering phase. This plan will identify how to educate the public and stakeholders about ongoing and upcoming construction and construction impacts (e.g., detours, service interruptions). It will include both broad-based approaches to educate the public (e.g., media, web site, newsletters, public meetings) and targeted outreach to those who may be more directly affected by construction activities (e.g., direct mail, small group meetings, in-person communication). ▪ Minimize construction impacts through selection and implementation of BMPs.	▪ GoTriangle with NCDOT, railroads, and municipalities

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	– Noise and vibration – Hazardous, contaminated, and regulated materials – Safety and security – Energy use – Utilities	▪ Comply with all municipal and state regulations and policies regarding development for the construction and development of the D-O LRT Project. Coordinate with municipalities on the design of the project during Engineering. Transportation, Traffic, and Parking: ▪ Maintain pedestrian and vehicular access to businesses, universities, medical facilities, and residences with a priority placed on emergency facilities. ▪ Prepare work zone traffic control plans during the Engineering and Construction phases. Coordinate these plans with the City of Durham, Town of Chapel Hill, NCRR, universities, emergency services, and the NCDOT. The plans will identify requirements for maintaining access to businesses, university, medical, and emergency facilities. They will include advanced warning for lane closures. ▪ Construct the structures employing methods that minimize the impact to the roadway user. Lane closures on the major arterials must be approved by the NCDOT and coordinated with the Highway Patrol and local police authority. ▪ Restrict lane closures to night and weekend lane closures to minimize traffic inconvenience. Traffic detours will be restricted to minimum time durations via the contract and work zone traffic control plans. ▪ Include appropriate access provisions in the Work Zone Traffic Control Plans, and BMPs to manage debris for potential disruptions to bicycle and pedestrian facilities during construction. ▪ Minimize closing adjacent crosswalks at the same time to allow for continued pedestrian movement across streets. Provide sidewalks and crosswalks to meet minimum standards for accessibility and free of slipping and tripping hazards. ▪ Provide special facilities (such as handrails, fences, barriers, ramps, and walkways) to maintain bicyclist and pedestrian safety in the event of temporary closures or impacts to sidewalks.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ During the Engineering phase, develop a plan to manage the closure of pedestrian crossings and other restrictions on non-motorized transportation facilities and crossings throughout the construction process. ▪ Temporary off-site detours of traffic and/or phased construction would be necessary when the Farrington Road bridge is lengthened to accommodate the light rail line. Traffic on I-40 would be maintained during the construction period. Short periods of lane closure may be necessary to construct the pier adjacent to I-40 traffic and to erect the girders. ▪ Reduce construction-related transportation impacts by scheduling construction activities during off-peak hours; coordinating freight and passenger rail schedules and construction activities with NCRR, Norfolk Southern, and Amtrak; coordinating with appropriate traffic control authorities to maintain reasonable and safe traffic operations at affected roadway crossings; and coordinating with hospitals, universities, and businesses in order to make reasonable efforts to mitigate concerns regarding reduction of parking through education of patrons and employees about parking alternatives, such as carpooling, park and rides, and transit options. Access for Residents and Business: ▪ Avoid and/or minimize adverse impacts to residents and businesses during project construction by maintaining traffic, parking, and access during construction, modifying business signage to maintain business visibility, using marketing campaigns to advise patrons of required construction in areas with multiple businesses, installing temporary directional signage, and providing advance communication of construction activities. ▪ Include temporary arrangements for safe pedestrian access in the construction documents. Site-specific business and access management plans will also be developed by the contractor.	

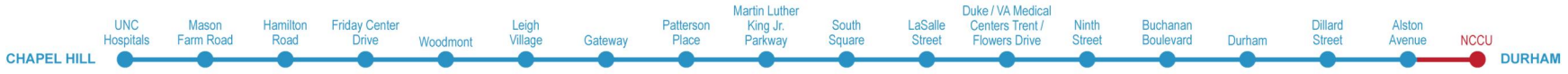


Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		Neighborhood and Community Resources: ▪ Inform local property owners of roadway disruptions and other construction-related activities and consequences through construction education and outreach plans. ▪ Coordinate with emergency response personnel to maintain continuous access for emergency vehicles throughout the duration of construction. ▪ Prior to construction, coordinate with Chapel Hill-Carrboro City Schools and Durham Public Schools to identify potential impacts on school bus routes and appropriate temporary detour routes during construction. Visual and Aesthetic Considerations: ▪ Stabilize embankments and plant vegetation in construction areas as quickly as possible so that sediment and erosion control devices can be removed. ▪ Locate staging areas in the least visibly sensitive project areas. Whenever possible, these facilities will be located out of view of residences, businesses, or any potential viewer. ▪ Implement height limits for staged materials and excavated soil so that they are less visible ▪ Direct lighting toward the interior of the construction areas or provide shielding to minimize light pollution into adjacent properties. ▪ Screen construction activities whenever possible. ▪ Clear dirt and debris from areas adjacent to the construction sites in a timely manner. ▪ Keep construction sites well organized and clear of trash and debris. Historic and Archaeological Resources: ▪ Address mitigation measures and construction control through consultation with the North Carolina State Historic Preservation Office as part of the process for compliance with Section 106 of the National Historic Preservation Act of 1966.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ Develop an Archaeological Recovery Plan during Engineering. ▪ Avoidance and minimization measures are outlined in the MOA. Coordinate these measures pursuant to the MOA through ongoing consultation with the North Carolina State Historic Preservation Office and FTA. Natural Resources: ▪ BMPs will be followed by the contractor during construction. BMPs could include the demarcation of the construction limits and staging areas prior to the initiation of construction to limit the disturbances to habitat and wildlife. Create a plan to minimize impacts and losses of vegetation. Water Resources: ▪ Implement appropriate BMPs during construction, such as installing fabric barriers at storm drain inlets. ▪ Locate the placement of the piers outside of wetlands and streams and employ top-down construction of the aerial structures to minimize disturbance to the wetland soils. ▪ Require contractors to have spill prevention, containment, and collection plans in place to address the risk of contamination from construction equipment. ▪ Develop a Stormwater Pollution Prevention Plan (SWPPP) during the Engineering phase of the project. The SWPPP will include provisions to control erosion and reduce sedimentation and other pollutants associated with construction activities. Air Quality: ▪ Minimize dust generated during construction through standard dust control measures such as applying water to exposed soils and limiting the extent and duration of exposed soil conditions. ▪ Employ the following measures to mitigate fugitive dust kicked up into the air from earthmoving and other ground disturbance and emissions from construction equipment:	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		– Shutting off construction equipment not in direct use. – Watering areas of exposed soil. – Covering open body trucks transporting materials to and from construction sites. – Rerouting truck traffic away from schools and residential communities when possible. – Repaving and/or replanting exposed areas as soon as possible following construction. – Securing tarps, plastic, or other material over debris piles. – Prohibiting delivery trucks or other equipment from idling during periods of extended unloading or inactivity. Noise and Vibration: ▪ During Engineering, complete a detailed construction noise assessment that will provide property specific details to develop mitigation plans to keep the noise levels at or below acceptable levels during construction. ▪ Construction equipment will be required to be properly muffled and maintained. ▪ Limit certain construction activities to weekday daytime hours (typically from 7 a.m. to 6 p.m.) and consider prohibition of nighttime construction near residential neighborhoods. ▪ Monitor noise on a regular basis during construction near potentially affected sensitive receptors. ▪ Conduct vibration and noise monitoring during construction depending on the sensitivity of the surrounding resources. ▪ Limited duration of pile driving operations resulting in short term levels of annoyance. Monitor vibration levels at sensitive building structures during construction. ▪ In the event monitoring results in impacts beyond acceptable levels, implement additional site-specific mitigation.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ Where construction of deep foundations for elevated structures is required near sensitive receptors, employ drilled shaft footings to reduce noise and vibration. ▪ Implement other noise mitigation during construction: – Noise barriers. – Minimizing the distance of truck routing and routing trucks away from residential streets. – Relocating noise-generating equipment as far away from the sensitive noise areas as possible. – Drilled pile instead of impact pile driving. – Specifying quieted equipment in construction specifications. – Alternative demolition or pavement breaking techniques. Hazardous, Contaminated, and Regulated Materials: ▪ Minimize construction-related impacts related to hazardous materials: – Comply with applicable federal and state regulations. – Follow OSHA, state, and local standards in handling and storage of fuels and other materials. – Dispose of hazardous materials according to applicable federal, state, and local guidelines. – Clean construction vehicles to prevent off-site contamination. – Dispose of construction waste at approved sites. ▪ During Construction, minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials where suitable. Any waste generated during Construction that cannot be beneficially reused or recycled will be disposed of at a solid waste management facility approved to manage the respective waste type. ▪ Develop a Spill Prevention, Control, and Countermeasure Plan prior to demolition, excavation, or construction activities.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		▪ Conduct sampling of hazardous materials intended for disposal. ▪ Assess potential exposure levels through the use of monitoring equipment. ▪ Develop decontamination procedures. ▪ Perform a full Phase I and/or Phase II Environmental Site Assessment for high risk properties following ASTM standards prior to construction. ▪ Review the closure status or current site status of medium risk properties with NCDEQ before starting construction. ▪ Manage any hazardous waste generated from the demolition, construction, maintenance, operation, and/or remediation (e.g., excavated soil) from the D-O LRT Project in accordance with the North Carolina Hazardous Waste Rules. Notify the NCDEQ Hazardous Waste Section on the quantity of hazardous waste generated in order to make a determination whether the D-O LRT Project qualifies as a small or large quantity generator. Safety and Security: ▪ Provide construction barriers and fencing to secure construction sites and staging areas, and evaluate the need for additional security measures such as guards, if needed. ▪ Address the safety of the public, particularly the passage of pedestrians, bicyclists, and other spectators near open excavations and other construction activity through the creation, proper timing, and placement of protective safety programs, public information efforts, and selected protective measures. Energy Use: ▪ Minimize energy consumption during construction by limiting the idling of construction equipment and employee vehicles as well as locating staging areas and material processing facilities as close as practical to work sites.	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		Utilities: ▪ Avoid and minimize utility disruptions by coordinating utility construction with other construction activities and limiting construction around existing utility lines such as excavations, removal of fill, and grading. ▪ Prior to construction, contact area utility companies and utility agencies and request them to provide line location measures and approval of the proposed alteration of utility lines. ▪ Coordinate with businesses such as restaurants, grocery stores, and food preparation/manufacturing facilities in order to protect food preparation and storage. ▪ During construction, should utilities be identified that were not identified prior to construction, contact appropriate utility companies and agencies to identify the line(s). The newly identified line(s) will not be disrupted until businesses and residences are notified and the utility owner/operator has approved the proposed alteration. ▪ During Engineering, include the aforementioned provisions in the construction plans and contract specifications. During Construction, GoTriangle will monitor contractor compliance.	
C02 Supplemental EA section 3.14	▪ *Construction of the NCCU Station Refinement has the potential to cause vibration impacts at the historic water tower and valve house located on Pettigrew Street east of the Alston Avenue Station parking garage.*	▪ *Monitoring of vibration impacts during construction will be conducted on the historic water tower and valve house located on Pettigrew Street east of the Alston Avenue Station parking garage. Construction techniques would be required so as not to cause detrimental vibration to these facilities.* ▪ *Mitigation commitment C01 identified in the Combined FEIS/ROD is applicable to the NCCU Station Refinement.*	▪ *GoTriangle with City of Durham*
Indirect and Cumulative Effects			
ICE01 Supplemental EA section 3.15	▪ *The NCCU Station Refinement may contribute to indirect impacts to land use due to new growth that could occur that may not be consistent with the current adopted Durham Comprehensive*	▪ *The NCCU Station Refinement would result in similar levels of indirect impacts on land use compared to the D-O LRT Project.* ▪ *The NCCU Station Refinement would result in similar levels of*	▪ *GoTriangle*

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	Plan. The current adopted plan calls for medium-density residential uses in this area. ▪ *The NCCU Station Refinement may contribute to cumulative impacts on parking, pedestrian and bicycle conditions, and land use. However, these cumulative impacts are anticipated to result in positive effects on these resources, resulting from improved regional connectivity, and more efficient land use patterns. These effects are consistent with potential cumulative effects identified for the D-O LRT Project as documented in the Combined FEIS/ROD.*	*cumulative impacts on parking, pedestrian and bicycle conditions, and land use, compared to the D-O LRT Project.* ▪ *GoTriangle will commit to work with Durham City-County Planning to prioritize land use planning for this new station area. Land use plans will help to identify future land uses and densities based on community input.*	
Environmental Justice (EJ)			
EJ01 DEIS section 5.5 DEIS Errata 123	▪ There will be no disproportionate impacts to EJ populations. Effects on specific resources within EJ areas include the following: – Visual impacts near the Oak Creek Village Apartments on Garrett Road. – One moderate noise impact in downtown Durham. – Commercial, institutional, and residential displacements along the entire D-O Corridor, most of which would occur in the US 15-501 and east Durham evaluation areas. – Acquisitions in the east Durham community could be perceived as an adverse effect since historically, transportation projects have adversely affected community cohesion, access, land use planning, and development in this evaluation area. – Indirect effects associated with gentrification, resulting in reduction in affordable housing	▪ Some of the specific impacts of the NEPA Preferred Alternative may adversely affect EJ populations. Therefore, where possible, the alignment options have been refined through the NEPA process to minimize impacts to both the human and natural environments. ▪ Continue to provide outreach to EJ communities to implement the proposed mitigation strategies effectively. ▪ Continue coordination with EJ populations and assess design and aesthetic treatments during further design development to address visual impacts throughout the corridor. ▪ Provide design treatments to reduce visual impacts at affected locations, where possible, including those in EJ areas. ▪ Reduce operational vibration by evaluating and implementing specific materials and construction methods in the construction of the light rail line. ▪ Conduct the acquisition and relocation process in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. ▪ Continue working with EJ communities to address ways that their	▪ GoTriangle and municipalities

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	opportunities.	concerns could be mitigated further. ▪ Work with the City of Durham to provide opportunities for local businesses to benefit from commercial space within the parking deck at the proposed Alston Avenue Station. ▪ Work directly with the Town of Chapel Hill and Durham City/County Planning staff to encourage, support, and facilitate the development and implementation of affordable housing policies for the D-O Corridor. ▪ Continue to participate in the Coalition for Affordable Housing and Transit, a citizens group led by the Durham People's Alliance that is focused on working with local governments to develop policies to protect existing affordable housing and promote creation of new affordable housing in proposed D-O LRT Project station areas.	
EJ02 Supplemental EA section 5.4	▪ *There will be no disproportionately high and adverse impacts to EJ populations. Effects on specific resources within EJ areas include the following:* – *Parking Facilities: Loss of 16 on-street parking spaces; reconfiguration and relocation of Alston Avenue parking garage with 1,200 additional spaces.* – *Pedestrian and Bicycle Facilities: Loss of opportunity for on-street bicycle facilities on Alston Avenue.* – *Access and Mobility: Generally an improvement to access and mobility for EJ communities around the NCCU Station area; five roadway intersections would be converted to right-in right-out access only. Access changes and visual impacts for the Russell Memorial Christian Methodist Episcopal Church and Child Development Center (daycare).*	▪ *Some of the specific impacts of the D-O LRT Project may adversely affect EJ populations. Therefore, where possible, the alignment options have been refined through the NEPA process to minimize impacts to both the human and natural environments.* ▪ *Continue to provide outreach to EJ communities to implement the mitigation strategies effectively.* ▪ *Continue coordination with EJ populations and assess design and aesthetic treatments during further design development to address visual impacts throughout the corridor.* ▪ *Provide design treatments to reduce visual impacts at affected locations, where possible, including those in EJ areas.* ▪ *Reduce operational vibration by evaluating and implementing specific materials and construction methods in the construction of the light rail line.* ▪ *Conduct the acquisition and relocation process in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.* ▪ *Continue working with EJ communities to address ways that their*	▪ *GoTriangle and City of Durham*

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	– *Land Use: Land uses around NCCU station could promote higher density residential not currently indicated in Durham's future land use plans.* – *Community Cohesion: Improved connectivity between neighborhoods located north and south of NC 147 that were separated by the construction of the highway.* – *Employment: Minor increase of 15 full time equivalent jobs in the region.* – *Community Facilities: Improved access to community facilities; impacts to John Avery Boys and Girls Club.* – *Visual and Aesthetic: Change from low-moderate to moderate visual impacts in Landscape Unit #10 from introduction of multi-story parking garage east of Alston Avenue; new moderate visual impacts in Landscape Unit #11.* – *Vibration: Three ground-borne noise and two vibration impacts.* – *Safety and Security: At-grade crossings of LRT; LRT between opposing lanes of traffic.* – *Acquisitions and Displacements: Residential and commercial acquisitions and displacements in the Alston Avenue Station area and along Alston Avenue (Full acquisitions: +14 residential; +5 commercial; Partial: +2 residential /-1 residential; +1 community facilities; Displacements: +18 residential, +5 commercial, no additional community resources).* – *Indirect and Cumulative: Indirect and*	*concerns could be mitigated further.* ▪ *Work directly with Durham City/County Planning staff to encourage, support, and facilitate the development and implementation of affordable housing policies for the NCCU Station Refinement.* ▪ *Continue to participate in the Coalition for Affordable Housing and Transit, a citizens group led by the Durham People's Alliance that is focused on working with local governments to develop policies to protect existing affordable housing and promote creation of new affordable housing in NCCU Station Refinement station areas.* ▪ *Mitigation Commitment EJ01 included in the Combined FEIS/ROD is applicable to the NCCU Station Refinement and would address visual and aesthetic impacts identified.* ▪ *Mitigation Commitment EJ 01 included in the Combined FEIS/ROD is applicable to additional impacts from the NCCU Station Refinement to access and mobility, community facilities, noise and vibration, and acquisitions and displacements.* ▪ *Mitigation Commitment PBF05 identified for the loss of opportunity for bicycle facilities along Alston Avenue would be addressed through coordination between GoTriangle, the City of Durham, NCDOT, and local advocates to identify the potential for off-street facilities or on-street facilities on parallel or nearby roadways.* ▪ *Additional mitigation measures to address impacts to land use and indirect and cumulative impacts of the NCCU Station Refinement are as follows:* ▪ *During Engineering, GoTriangle will coordinate with NCCU regarding property acquisitions and campus development plans to inform the final placement and design of the NCCU Station.* ▪ *GoTriangle will also coordinate with the City of Durham to*	

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	cumulative impacts to land use in the Southeast Central Durham neighborhood, including indirect effects associated with potential gentrification and reduction in affordable housing opportunities.	*evaluate potential updates to their future land use plan and station area infrastructure needs in the NCCU Station Refinement area.* ▪ *During Engineering, work with the City of Durham to ensure that the project design includes the incorporation of commercial space within the proposed parking deck at the Alston Avenue Station.*	
Section 4(f) Property – Jordan Game Lands			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Permanent easement of approximately 3.6 acres in the area of the Jordan Game Lands. This is comprised of approximately 1.7 acres of permanent easement within an existing transportation easement held by NCDOT for the occupancy of NC 54; approximately 1.7 acres of permanent easement within the George King Road right-of-way, and approximately 0.2 acre of land in the Jordan Game Lands at the western edge of George King Road and northern edge of NC 54. ▪ The latter 0.2 acre is not within an existing easement or right-of-way and would constitute a Section 4(f) use of the property. ▪ Approximately 1.4 acres of land would be needed for a temporary construction easement. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). ▪ GoTriangle will provide the following commitments regarding the Jordan Game Lands: – Replace reservoir water storage volume lost due to fill below elevation 245 feet msl by excavation of an equal amount of new storage volume at the same elevation as the lost storage volume. – Compensate NCWRC for loss of marketable timber. Timber value would be determined by a registered government forester and payment for timber would be collected at the time the permanent easement is issued. – Coordinate with USACE and NCWRC regarding location of fencing on government property necessary for safety and security of the D-O LRT Project. – Complete the following to the satisfaction of NCWRC: • Relocate the access road to the existing impoundment parking area #1, place gravel on the parking lot, provide and install a new gate and informational signs. • Construct a gravel access road (16 feet wide) from parking area #1 to parking area #2 along the alignment. Improve parking area #2 by installing gravel; provide and install a new gate and informational signs. • Construct a public access parking area #3 on the south side of	▪ GoTriangle with USACE and NCWRC

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		NC 54, provide and install a double gate and informational signs. • Replace the existing Waterfowl Impoundment sign and install a new Game Lands access directional sign for the new parking area #3, along NC 54. – Restore the area used for the temporary construction easement of the aerial structure along NC 54 to the condition it was in before construction or utilized by the USACE for its identified purposes as part of the mitigation for the D-O LRT Project. ▪ Sign an agreement with USACE, consistent with the measures stated above prior to issuance of the easements (permanent and temporary) required for the D-O LRT Project.	
Section 4(f) Property – Central Park South			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Would require acquisition of approximately 0.9 acre of permanent easement of the 13.7 acres of UNC lands designated for the future development of Central Park South. ▪ GoTriangle will ensure that construction would not preclude future development of Central Park South. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).	▪ NA
Section 4(f) Property – Coker Pinetum			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Would require a permanent easement of approximately 0.1 acre of land from the Coker Pinetum and a temporary construction easement of approximately 0.01 acre. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).	▪ NA
Section 4(f) Property – Disc Golf Course and Athletic Fields			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	*Section 4(f) Determination: The proximity impacts from construction and operation of the NEPA Preferred Alternative would not substantially impair the protected activities, features, or attributes that qualify the property*	▪ Coordinate with UNC on the schedule of construction activities near the disc golf course and athletic fields.	▪ GoTriangle with UNC

Table Amended ROD-1: Commitments or Mitigation Measures

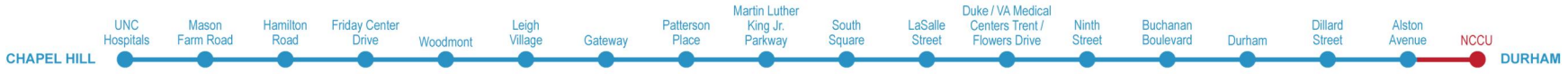
Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	for protection under Section 4(f).		
Section 4(f) Property– UNC Finley Golf Course and Athletic Fields			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Would require approximately 2.6 acres of permanent easement from the UNC Finley Golf Course and Athletic Fields. ▪ Would also require a 0.3 acre temporary construction easement. ▪ Construction of the alignment would require cart paths and tee boxes to be re-located and vegetation to be cleared. ▪ Visual changes, such as clearing vegetation, would result in adverse impacts to the recreational features. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). ▪ GoTriangle will provide the following commitments regarding the UNC Finley Golf Course and Athletic Fields: – Place landscaping and tree buffers along the alignment to increase privacy and minimize noise impacts to users of this Section 4(f) property in accordance with the UNC Finley Golf Course Design Concept Plan and Construction Cost Estimates, by Fazio Golf Course Designers, Inc., last updated in April 2014 (Fazio 2014). – Coordinate with UNC to minimize disruption to the golf course users and staff. – Restore the area used for the temporary construction easement to the condition it was in before construction or better. ▪ Work with UNC to minimize construction-related effects and maintain access to the public properties during construction.	▪ GoTriangle with UNC
Section 4(f) Property – UNC Open Space			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Approximately 0.8 acre of the 120 acre UNC Open Space property would be acquired for a permanent easement. ▪ Approximately 1.0 acre would be acquired as a temporary construction easement. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). ▪ GoTriangle will provide the following commitments regarding the UNC Open Space: – Notify UNC at least 48 hours in advance as to when the paths will be temporarily closed and coordinate closely with UNC to communicate the closure to users to minimize impacts to the	▪ GoTriangle with UNC

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
		public's recreational use of the property during construction. – Restore the area being used for the temporary construction easement to the condition it was in before construction or better. ▪ Relocate a UNC Athletics cross country trail and direct users to a short segment of the golf course cart path to avoid crossing the proposed alignment at-grade.	
Section 4(f) Property – Glenwood Elementary School			
NCR03 DEIS section 4.3.4.1 DEIS Errata 73	▪ Would require a permanent easement of approximately 0.1 acre of undeveloped land in the southeast corner of the school's property. ▪ Temporary easement of 0.1 acre would be required for construction of the light rail alignment. ▪ Would not directly impact the area of the school property developed or used for recreational purposes, as the proposed alignment is over 150 feet away in a wooded area not used by students for recreation. *Section 4(f) Determination: The proximity impacts from construction and operation would not substantially impair the protected activities, features, or attributes that qualify the property for protection under Section 4(f).*	▪ No substantial impacts to the activities, features, or attributes that qualify the property for protection under Section 4(f), and as such, no mitigation measures are warranted.	▪ NA
Section 4(f) Property – New Hope Creek Trail			
PRA01 DEIS section 4.6.4 DEIS Errata 84, 85, and 86	▪ Would cross the proposed New Hope Creek Trail in the vicinity of US 15-501 on an elevated platform and require less than 0.1 acre of land for permanent easement. ▪ While the guideway would be a new visual element in the vicinity of the planned trail, the overall change in visual character of the area would be moderate, given the existing highway structure that would be	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).	▪ NA

Table Amended ROD-1: Commitments or Mitigation Measures

Mitigation ID and Reference	Construction or Long-Term Issue	Commitment or Mitigation Measure	Responsible Party
	viewed from the trail. *Section 4(f) Determination: de minimis impact.*		
Section 4(f) Property – Venable Tobacco Company Warehouse			
CHAR01 DEIS section 4.5.3.1	▪ A portion of the NEPA Preferred Alternative would be constructed at-grade approximately 25 feet north of the Venable Tobacco Company Warehouse within the current alignment of East Pettigrew Street, in an urban setting. ▪ The NEPA Preferred Alternative has been designed to avoid taking any property located within the warehouse's National Register boundaries. Therefore, no use under Section 4(f) would occur. ▪ Construction of the NEPA Preferred Alternative would require a temporary construction easement of approximately 0.03 acre from the northeast/northwest corner of the parcel's National Register boundaries. ▪ Temporary easement would have no effect on the features or attributes that qualify the property for protection under Section 4(f). ▪ The area to be used for the temporary construction easement would be restored to the condition it was in before construction or better. *Section 4(f) Determination: de minimis impact.*	▪ After considering previous measures to minimize harm, FTA has determined that the impacts to this resource are de minimis and require no mitigation. That is, the impacts will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). No adverse effects on the NRHP-listed property under Section 106, and as such, no mitigation measures are warranted. ▪ GoTriangle will restore the area to be used for the temporary construction easement to the condition it was in before construction or better.	▪ NA



1.5 Monitoring and Enforcement

FTA and GoTriangle are ultimately responsible for monitoring and enforcing mitigation measures. GoTriangle, as well as its contractors, will be responsible for compliance assurance of all related commitments and regulatory permit conditions made or obtained for the D-O LRT Project, including the NCCU Station Refinement. A list of permits specific to the NCCU Station Refinement that are anticipated to be required for the construction are identified in **Table Amended ROD-2**.

Table Amended ROD-2: Anticipated Permits and Approvals

Regulatory Program or Proposed Action	Applicability	Responsible Entity
State Permits		
Land Disturbance Activities	Required for construction activities disturbing lands	NCDEQ Division of Land Quality
NCDOT State Safety Oversight Approval	Required prior to revenue service	NCDOT
NCDOT Construction, Use and Occupancy Agreements	Required for construction within and use of NCDOT and federal Right-of-Way (ROW)	NCDOT
NCRR Site Approval	Required for plans within the NCRR Corridor	NCRR
NCRR Lease Agreement	Required for operating the light rail within the NCRR Corridor	NCRR
Road Crossing Permit	Required if crossing of NCDOT controlled access road right-of-way	NCDOT
Section 106 MOA (Historic and Archeological)	Required for mitigating impacts to historic and archaeological properties	SHPO
Sediment and Erosion Control Plans Approval	Required prior to construction	NCDEQ Division of Energy, Mineral, and Land Resources Land Quality Section
State Stormwater Permits	Required when impervious surface percentage thresholds are exceeded. Since Orange and Durham counties are classified as Phase II Tipped Counties, the NCDEQ Division of Energy, Mineral and Land Resources must issue state stormwater permits unless post-construction discharges are authorized under the City's MS4 permits	City of Durham, NCDEQ Division of Energy, Mineral and Land Resources
Regional and Local Permits		
Building Permits	Required for the construction of buildings, mechanical, electrical, and plumbing systems to ensure code compliance	County or Municipal
Encroachment Permit or Agreement	Required if crossing of uncontrolled access road right-of-way	County or Municipal
Major Special Use Permit	Required for sections of track crossing through the Major Transportation Corridor Overlay District	City of Durham, Durham County
Minor Special Use Permit	Required for stations in Durham, outside of Downtown Tier, and without park-and-rides	City of Durham
Railroad		
North Carolina Railroad Company (NCRR) Operating and Lease Agreement	Required to operate D-O LRT within the NCRR Corridor.	NCRR

1.6 Public Outreach and Opportunities to Comment

For GoTriangle, education, inclusion, transparency, accountability and responsiveness have been key principles of the planning process for transit service in the D-O Corridor from before the AA was completed in 2012 through the ongoing NEPA and project development process.

The public has been engaged through:

- Public meetings and community group meetings
- Project newsletters and email distribution lists
- Project website
- Interaction with community organizations

Informational materials at all public meetings, including presentation materials, handouts, and comment sheets, have been available in Spanish as well as English, and a Spanish-speaking staff member has been present at all meetings.

In September 2016 GoTriangle began engaging property owners and tenants within the study area for the NCCU Station Refinement. Four community meetings were held in September (on the 23rd and 24th) and October (on the 6th and the 7th) 2016 to provide an opportunity to learn about the NCCU Station Refinement, with meeting notices being mailed to all property owners and tenants. The Supplemental EA was released for a 30-day Public Comment period on November 7, 2016. The comment period ran until December 7, 2016. Two public meetings were held during the comment period on November 12 and 17, 2016. These meetings targeted potentially interested and affected parties of the NCCU Station Refinement. Property owners and tenants within a quarter-mile area around the Alston Avenue Station area, the alignment along Alston Avenue to NCCU, and the NCCU station area were contacted via letter. Interested parties were notified via two public legal notices; one on November 7 in the Durham Herald Sun and one on November 9 in the News and Observer, as well as with a press release reminder on November 15.

1.7 Determinations and Findings Regarding Other Laws

1.7.1 Section 106 of the National Historic Preservation Act

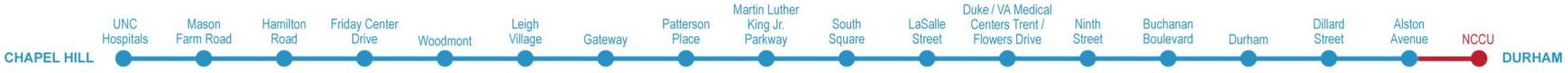
Any federal agency whose project, funding, or permit may affect a historic property, both those listed or eligible for inclusion in the NRHP, must consider the effects on historic properties and "seek ways to avoid, minimize or mitigate" any adverse effects on historic properties.

Architectural Historic Resources

Applicable laws addressing historic properties include Section 106 of the National Historic Preservation Act (NHPA) (54 United States Code [U.S.C.] § 306108 and implemented in 36 C.F.R. Part 800) and Section 110 of the NHPA (54 U.S.C. §§ 306101-306114). Both laws require federal agencies to consider the potential effects of a proposed federally funded project, also referred to as an undertaking, on historic properties.

The Durham Water Tower and Valve House (DH-3508), previously identified in studies for the D-O LRT Project as eligible for the NRHP, falls within the Area of Potential Effect (APE) and was considered during the historic resources survey for the NCCU Station Refinement. The Durham Water Tower and Valve House, located at 1318 East Pettigrew Street, was erected in 1939. It was determined eligible for NRHP listing in 2015 by FTA under Criterion A for its association with the local activities of the Federal Emergency Administration of Public Works, which funded it, and Criterion C as an excellent and unusually large example of a 1930s-era water tower. The NRHP-eligible boundaries include the fenced 0.4-acre area encompassing the Water Tower and Valve House, which retains its integrity.

The NCCU Station Refinement would add an eight-story parking structure on the



GoTriangle-owned property immediately west of the Durham Water Tower's NRHP-eligible boundary. The structure would rise no more than 60 feet above Pettigrew Street.

The tower and the NCCU Station Refinement are within an urban setting characterized by industrial and transportation-related buildings and small single-family residences. At 156 feet tall, the water tower would remain the dominant visual feature of the surrounding area.

The design of the parking deck will include no stairwells, elevator towers, or other structures that rise above the 60-foot height of the garage parapet on the eastern half of the structure. This would minimize visual effects on the Water Tower. Therefore, FTA has made a determination, in consultation with the State Historic Preservation Officer (SHPO) that the parking structure would result in no adverse effect on the Durham Water Tower and Valve House.

The Russell Memorial CME Church is located at 703 South Alston Avenue in Durham. The church was built around 1952 and is located on the eastern side of Alston Avenue within the APE that was considered in studies supporting the Supplemental EA for the NCCU Station Refinement. The church is essentially a straightforward, cross-gabled building of brick construction. Its solid appearance, numerous rounded arches, relatively tall front and vertical projection are believed to embody the distinctive characteristics of the Romanesque Revival style. The Eligibility Report prepared in support of the Supplemental EA recommended that the church was not eligible for the NRHP.

Based on comments from and coordination with the SHPO on the Section 106 Eligibility Report, the Russell Memorial CME Church has been identified as eligible for listing on the NRHP. Russell Memorial is believed to be NRHP-eligible under Criterion C as a significant and largely intact example of an African-American, Romanesque Revival-style church in Durham. The recommended NRHP-eligible boundaries of Russell Memorial CME Church are those of its two lots. They include the church and the former parsonage, which is recommended as a contributing building. The boundaries of these lots, as currently shown on tax maps, extend on the west to a retaining wall and steps in front of the church, but not to the sidewalk and South Alston Avenue and its right-of-way. On the east they also extend to a retaining wall and not beyond to the sidewalk or to Ridgeway Avenue and its right-of-way.

The transportation improvements associated with the NCCU Station Refinement would include continued provision for automobile, bicycle, and pedestrian traffic in front of the church and would introduce light rail to the environment. This transportation focus in front of the church is consistent with the historic transportation uses provided in front of the church in the past.

The NCCU Station Refinement would make transportation improvements in front of the church, but the construction limits of the proposed improvements would not extend into the NRHP-eligible boundary of the church property. For this reason, the project would have no adverse effect on the Russell Memorial CME Church.

The NCCU Station Refinement would have no adverse effect on any historic properties within the APE.

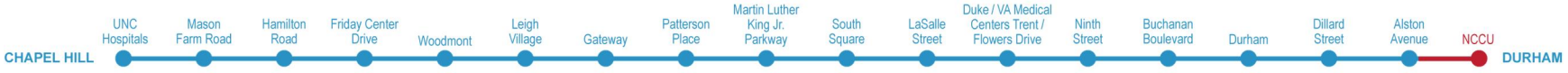
Archaeological Resources

Archaeological site location information is confidential information under North Carolina General Statute 70-18 and not intended for public display or public viewing.

Given the urbanized landscape, previously disturbed nature of the APE, and age of the historic occupation in the area, it is anticipated that no significant archaeological resources are present and impacts to archaeological resources from the NCCU Station Refinement would be non-existent or minimal.

FTA has made a determination in consultation with the SHPO that no additional Phase I survey is necessary within the NCCU Station Refinement area.

FTA, GoTriangle, and SHPO entered into a Memorandum of Agreement (MOA) for the D-O LRT Project to establish the procedures



by which FTA, GoTriangle, and SHPO will work together to ensure the effective protection of historic and/or archaeological resources during the implementation and construction of the D-O LRT Project. FTA, GoTriangle, and SHPO agree that the D-O LRT Project shall be implemented in accordance with the stipulations outlined in the MOA. The stipulations outlined in the MOA are applicable to the D-O LRT Project, including the NCCU Station Refinement.

1.7.2 Section 4(f)

Section 4(f) of the U.S. Department of Transportation Act of 1966, 49 U.S.C. § 303 and 23 U.S.C. § 138, is a federal law that protects publicly owned parks, recreation areas, wildlife and/or waterfowl refuges, and significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the U.S. Department of Transportation (USDOT). As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) implementing regulations are at 23 C.F.R. Part 774.

FTA cannot approve a transportation project that uses a Section 4(f) property, as defined in 23 C.F.R. § 774.17, unless FTA determines that:

- There is no feasible and prudent avoidance alternative, as defined in 23 C.F.R. § 774.17, to the use of land from the Section 4(f) property, and the action includes all possible planning, as defined in 23 C.F.R. § 774.14, to minimize harm to the property resulting from such use (23 C.F.R. § 774.3(a)) or
- The use of the Section 4(f) property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant will have a *de minimis* use, as defined in 23 C.F.R. § 774.17, on the property (23 C.F.R. § 774.3(b)).

Section 4(f) applies to the use of protected property for transportation purposes. Use can occur as a result of direct impact from construction or impacts from adjacency that result in a constructive use. Section 4(f) has no further applicability where there is no use of property.

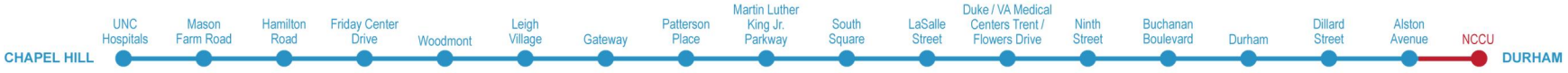
As described in the Section 4(f) Evaluation in chapter 4 of the Supplemental EA, there is an existing bicycle and pedestrian path that connects with the R. Kelly Bryant Jr. Pedestrian Bridge located on the east side of Alston Avenue, south of the planned parking garage property owned by GoTriangle. There are no other publicly-owned park, recreation, or wildlife or waterfowl refuges within 250 feet of the NCCU Station Refinement that meet the criteria for protection as a Section 4(f) property.

No temporary or permanent easements or property acquisition would be required from this property and therefore, there would be no direct use of the property. All construction would be confined to the GoTriangle-owned proposed parking garage property. Access would be maintained and the user experience would not be substantially impaired by noise, visual, or other effects. Since there are no proximity effects, no constructive use of the resource would occur.

There are two Section 4(f) historic properties in the Area of Potential Effects of the NCCU Station Refinement: the Durham Water Tower and Valve House, and the Russell Memorial CME Church.

The Durham Water Tower and Valve House, located at 1318 East Pettigrew Street was determined eligible for National Register of Historic Places (NRHP) listing in 2015 by FTA under Criterion A and Criterion C, which qualifies it for protection under Section 4(f).

The NCCU Station Refinement would not require the acquisition of property or any easements within the NRHP-eligible boundary of the water tower. FTA, in conjunction with SHPO determined that the NCCU Station Refinement would not substantially impact the eligibility criteria for listing the Durham Water Tower and Valve House on the NRHP that qualify the property for Section 4(f) protection. Therefore, the NCCU Station Refinement does not create a use of the Durham Water Tower and Valve House.



The Russell Memorial CME Church, located at 703 South Alston Avenue was determined eligible for National Register of Historic Places (NRHP) listing under Criterion C as described in section 1.6.1, which qualifies it for protection under Section 4(f).

The NCCU Station Refinement would not require the acquisition of property or any permanent or temporary easements within the NRHP-eligible boundary of the Russell Memorial CME Church. FTA, in conjunction with SHPO determined that the NCCU Station Refinement would not substantially impact the eligibility criteria for listing the Russell Memorial CME Church on the NRHP that qualify the property for Section 4(f) protection. Therefore, the NCCU Station Refinement does not create a use of the Russell Memorial CME Church.

As described above, the NCCU Station Refinement will not require any temporary or permanent land from any of the properties that qualify as Section 4(f) properties. Consequently, the NCCU Station Refinement would not result in a use of any Section 4(f) property.

The NCCU Station Refinement would not require temporary or permanent easements or property acquisition from any properties and therefore, there would be no direct use. Further, no constructive use of resources would occur for the NCCU Station Refinement.

1.7.3 Environmental Justice

The environmental documentation for the D-O LRT Project-NCCU Station Refinement was prepared in accordance with Executive Order (EO) 12898; DOT Order 5610.2(a); and FTA Circular 4703.1 and Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d (Title VI). The general methodology for addressing EO 12898 involves:

- Identifying the environmental justice (EJ) populations within the study area
- Providing information on the efforts that GoTriangle made to involve minority and low-income populations in the study area
- Assessing whether the project alternatives would result in disproportionately high and adverse effects on EJ populations, taking into consideration minimization, mitigation, and enhancement measures and project benefits, as appropriate

Chapter 5 of the Supplemental EA notes the evaluation areas, study area, and counties and indicates percentages of minority and low-income populations. Of the 84 block groups in the study area, 37 (44 percent) have higher concentrations of EJ populations than the county averages.

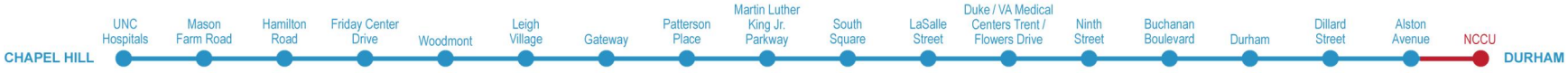
Outreach to EJ Populations

GoTriangle has conducted a robust public outreach program with an emphasis on interaction and communication with EJ populations as a key element of the D-O LRT Project and NCCU Station Refinement. The engagement of local residents, business owners, and other stakeholders began with scoping (2012) and is on-going. The outreach program was conducted in accordance with the *D-O LRT Project Public Involvement Plan,* EO 12898, and guiding principles contained in FTA Circular 4703.1.

Outreach efforts were described in detail in chapter 6 of the Supplemental EA.

Assessment of Disproportionately High and Adverse Effects

In East Durham, where the NCCU Station Refinement would be constructed, 93 percent of the population is minority and 64 percent is living below the poverty level (low-income defined as being at or below 150 percent of the poverty line). It is to be expected that effects of the project would be experienced by EJ populations. The adverse effects of the project would be distributed proportionately between EJ and non-EJ areas, when looking at the NCCU Station Refinement with the entire project. The proposed D-O LRT Project and the NCCU Station Refinement would provide an additional and affordable option for travel in the D-O Corridor. Light rail service to the NCCU campus would provide greater access to a major educational institution and other destinations within the corridor. Increased travel reliability and time-saving are further benefits of the project. The main benefits of the D-O LRT Project and the



NCCU Station Refinement include the following:

- Employment opportunities due to construction and the potential redevelopment/development opportunities in the areas surrounding stations, which would result in positive economic gains in the form of increased wages and spending
- Competitive advantages for existing and future businesses located along the corridor due to the additional transportation capacity and accessibility for customers
- Improved pedestrian and bicycle enhancements, connections, and access
- Faster transit service
- More reliable, more frequent, and higher capacity service for transit riders
- Improved mobility through the project vicinity
- Improved connections to existing transit as well as to employment, education, shopping, medical services, recreation, and cultural opportunities
- Opportunities for improved overall health of the users of the D-O LRT Project and the NCCU Station Refinement by increasing opportunities to walk and bike to stations and surrounding areas along the corridor

While these benefits are distributed, they would be experienced to a higher degree by minority and low-income populations within the D-O Corridor and the NCCU Station Refinement area due to a higher reliance on transit.

While EJ populations would experience some direct effects related to the project, the EJ populations in the NCCU Station Refinement area would also benefit from the project.

Taking all factors into account, the project would not have “disproportionately high and adverse effects” on EJ populations. Mitigation measures identified would address impacts from light rail operations and construction activities that may affect EJ populations. Nonetheless, GoTriangle recognizes that some of the specific impacts of the NCCU Station Refinement may adversely affect EJ populations, particularly with regards to potential displacements. GoTriangle is committed to working with all affected residents to ensure that they are compensated in accordance with provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. GoTriangle will continue to provide outreach to EJ communities to implement the mitigation strategies effectively.

1.8 Conclusion

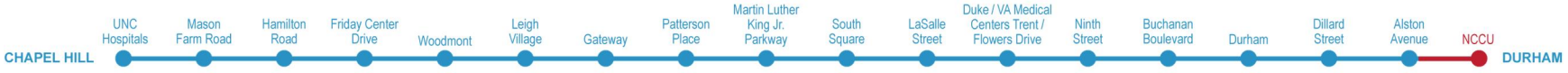
The environmental record for this decision includes the following documents:

- D-O LRT Project DEIS
- D-O LRT Project Combined FEIS/Section 4(f) Determination/ROD
- D-O LRT Project-NCCU Station Refinement Supplemental EA
- All technical reports, white papers, Title VI analysis, and supporting documentation incorporated by reference into the DEIS, Combined FEIS/ROD, and Supplemental EA

These documents, incorporated herein by reference, constitute the statements required by NEPA and Title 23 of the United States Code on:

- The environmental impacts of the project
- The adverse environmental effects that cannot be avoided should the project be implemented
- Alternatives to the proposed project
- Irreversible and irretrievable impacts on the environment that may be involved with the project should it be implemented

Having carefully considered the environmental record noted above, the mitigation measures as required herein, the written and oral comments offered by agencies and the public on this record and the written responses to the comments, FTA makes a Finding of No Significant Impact with respect to inclusion of the NCCU Station Refinement in the D-O LRT Project



and finds that a supplemental environmental impact statement is not necessary.

FTA finds that all practicable measures to minimize environmental harm have been incorporated into the design of the NCCU Station Refinement and will ensure that the commitments outlined herein will be implemented as part of final design, construction contract, and post-construction monitoring. FTA also determines that this decision is in the best overall public interest.