

Federal Agencies

Affiliation	<i>Federal</i>
Sub-Group	<i>US Army Corps of Engineers (USACE)</i>
First Name	<i>Carol</i>
Last Name	<i>Banaitis</i>

Comment

We have reviewed August 2015 Draft Environmental Impact Statement (DEIS) for the Durham-Orange Light Rail Transit Project (D-O LRT) proposed by The Research Triangle Regional Public Transportation Authority d/b/a Triangle Transit d/b/a GoTriangle (Triangle Transit). The identified National Environmental Policy Act of 1969 as amended (NEPA), Preferred Alternative would impact 0.558 acre of wetlands and 3,413 linear feet (0.438 acre) of streams under the jurisdiction of the US Army Corps of Engineers (USACE). Department of the Army (DA) permit authorization, pursuant to Section 404 of the Clean Water Act of 1977, as amended, will be required for these discharges of excavated or fill material into waters of the United States or any adjacent wetlands in conjunction with this project, including disposal of construction debris. Specific permit requirements will depend on design of the project, extent of fill work within the waters of the United States, construction methods, and other factors including temporary construction, support facilities (i.e. rail stations, maintenance shop facilities), facility maintenance access, mechanized land clearing and dewatering activities. The Wilmington District Regulatory Division does not object with the Federal Transit Administration's (FTA) DEIS determinations and selection of the NEPA Preferred Alternative. However please be aware the referenced DA permitting process includes a "Public Interest Review" in the determination of a "Least Environmentally Damaging Practicable Alternative" (LEPDA) for the D-O LRT to authorize referenced discharges of fill material into waters of the United States including adjacent wetlands. Triangle Transit should continue to coordinate with Mr. John Thomas of our Raleigh Regulatory Field Office regarding DA permitting including development of compensatory mitigation measures as indicated in the DEIS. Mr. Thomas may be reached at 919-554-4884 extension 25. A portion of the NEPA Preferred Alternative crossing Little Creek (Alternative C2A) would impact government property under the stewardship of the USACE at B. Everett Jordan Lake (Jordan Lake). The proposed 3.6 acres of Triangle Transit easement on government property includes 1.7 acres within the right-of-way easement for NC Highway 54, 1.7 acres within the deeded right of way for George King Road, and 0.2 acres outside of these rights of way. We concur with the determination that Alternative C2A will have a de minimis impact on the government property provided the avoidance, minimization, mitigation, and enhancement measures are carried out as specified in the DEIS. Triangle Transit should continue to coordinate with Mr. Francis Ferrell, of the Jordan Lake staff, regarding completion of the USACE land use request process and issuance of the required easement. Mr. Ferrell may be reached at 919-542- 4501 extension 28. We appreciate Triangle Transit's efforts to avoid and minimize adverse impacts to public lands at Jordan Lake and jurisdictional wetlands. If you have questions regarding this matter, please refer to points of contact listed above.

Comment Responses

DEIS/Errata References

[Emailed Version of September 23, 2015 Letter] Triangle Transit will continue to coordinate with the USACE, including Mr. Francis Ferrell and Mr. John Thomas, as requested throughout the development of the D-O LRT Project. Triangle Transit notes that the permitting process includes a Public Interest Review of a Least Environmentally Damaging Practicable Alternative and will comply with all requirements and continue to coordinate with Mr. John Thomas of the Raleigh Regulatory Field Office regarding the DA permitting process including development of compensatory mitigation measures. Regarding Jordan Lake, Triangle Transit will continue to coordinate with Mr. Francis Ferrell of the Jordan Lake staff on the completion of the USACE land use request process and issuance of the required easement. Triangle Transit is committed to carrying out the avoidance, minimization, mitigation, and enhancement measures outlined in the DEIS.

DEIS chapter 4

Affiliation	<i>Federal</i>
Sub-Group	<i>US Army Corps of Engineers (USACE)</i>
First Name	<i>Carol M</i>
Last Name	<i>Banaitis</i>

Comment

Dear Mr. Mitchell: We have reviewed August 2015 Draft Environmental Impact Study (DEIS) for the Durham-Orange Light Rail Transit Project (D-O LRT) proposed by The Research Triangle Regional Public Transportation Authority d/b/a Triangle Transit). The identified National Environmental Policy Act of 1969 as amended (NEPA), Preferred Alternative would impact 0.558 acre of wetlands and 3,413 linear feet (0.438 acre) of streams under the jurisdiction of the US Army Corp of Engineers (USACE). Department of the Army (DA) permit authorization, pursuant to Section 404 of the Clean Water Act of 1977, as amended will be required for these discharges of excavated or fill material into waters of the United States or any adjacent wetlands in conjunction with this project, including disposal of construction debris. Specific permit requirements will depend on design of the project, extent of fill work within the waters of the United States, construction methods, and other factors including temporary construction, support facilities (i.e. rail stations, maintenance shop facilities), facility maintenance access, mechanized land clearing and dewatering activities. The Wilmington District Regulatory Division does not object with the Federal Transit Administration's (FTA) DEIS determinations and selection of the NEPA Preferred Alternative. However, please be aware the referenced DA permitting process includes a "Public Interest Review" in the determination of a "Least Environmentally Damaging Practicable Alternative" (LEPDA) for the D-O LRT to authorize referenced discharges of fill material into waters of the United States including adjacent wetlands. Triangle Transit should continue to coordinate with Mr. John Thomas of our Raleigh Regulatory Field Office regarding DA permitting including development of compensatory mitigation measures as indicated in the DEIS. Mr. Thomas may be reached at 919-554-4884 extension 25. A portion of the NEPA Preferred Alternative crossing Little Creek (Alternative C2A) would impact government property under the stewardship of the USACE at B. Everett Jordan Lake (Jordan Lake). The proposed 3.6 acres of Triangle Transit easement on government property included 1.7 acres within the right-of-way easement for NC Highway 54, 1.7 acres within the deeded right of way for George King Road, and 0.2 acres outside of these rights of way. We concur with the determination that Alternative C2A will have a de minimis impact on the government property provided the avoidance, minimization, mitigation, and enhancement measures are carried out as specified in the DEIS. Triangle Transit should continue to coordinate with Mr. Francis Ferrell, of the Jordan Lake staff, regarding completion of the USACE land use request process and issuance of the required easement. Mr. Ferrell may be reached at 919-542-4502 extension 28. We appreciate Triangle Transit's efforts to avoid and minimize adverse impacts to public lands at Jordan Lake and jurisdictional wetlands. If you have questions regarding this matter, please refer to points of contact listed above.

Comment Responses

DEIS/Errata References

Triangle Transit will continue to coordinate with the USACE, including Mr. Francis Ferrell and Mr. John Thomas, as requested throughout the development of the D-O LRT Project. Triangle Transit notes that the permitting process includes a Public Interest Review of a Least Environmentally Damaging Practicable Alternative and will comply with all requirements and continue to coordinate with Mr. John Thomas of the Raleigh Regulatory Field Office regarding the DA permitting process including development of compensatory mitigation measures. Regarding Jordan Lake, Triangle Transit will continue to coordinate with Mr. Francis Ferrell of the Jordan Lake staff on the completion of the USACE land use request process and issuance of the required easement. Triangle Transit is committed to carrying out the avoidance, minimization, mitigation, and enhancement measures outlined in the DEIS.

DEIS chapter 4

Affiliation	<i>Federal</i>
Sub-Group	<i>Environmental Protection Agency (EPA)</i>
First Name	<i>Christopher</i>
Last Name	<i>Militscher</i>

Comment

SUBJECT: Draft Environmental Impact Statement (DEIS) and Draft §4(f) Evaluation for the Durham-Orange Light Rail Transit (D-O LRT) Project, Durham and Orange Counties, North Carolina; ERP No.: FHW-E54014-NC; CEQ No.: 20150240

Dear Mr. Charters: The U.S. Environmental Protection Agency (USEPA) Region 4 Office has received and reviewed the subject document and is commenting in accordance with §309 of the Clean Air Act (CAA) and §102(2)(C) of the National Environmental Policy Act (NEPA). We are providing cooperating agency remarks for your consideration. GoTriangle (formerly Triangle Transit Authority), in cooperation with the Federal Transit Administration (FTA), prepared a Draft Environmental Impact Statement (DEIS) which proposes several alternatives for a high-capacity transit service within the Durham-Orange (D-O) Corridor-an approximately 17-mile corridor from southwest Chapel Hill to eastern Durham, North Carolina. The proposed project also entails the construction of 17 stations and a Rail Operations and Maintenance Facility (ROMF). The purpose of this project is to augment mobility, expand transit options, serve major employment centers, increase transit operating efficiency, and sustainably support land use plans that promote compact development within a rapidly-growing metropolitan area. The USEPA staff has been participating on the D-O LRT Technical Advisory Committee for the proposed project, including the purpose and need, the detailed study alternatives to be carried forward and the alignment review. Specific technical review comments on the DEIS are attached to this letter (See Attachment A). The USEPA rated the DEIS as 'Environmental Concerns' (EC-2), indicating that several environmental concerns requiring additional information regarding impacts to the natural and human environment, including environmental justice (EJ) were identified. The USEPA's review of the DEIS identified the opportunity for potential avoidance and minimization of impacts as well as mitigation measures related to stream and wetland impacts, water quality, and EJ and community health issues. The '2' rating indicates that the DEIS information and environmental analysis will require some additional information and clarification as the project moves forward, including: stream and wetland impacts, §303(d) listed impaired waters, residential and business relocations, socio-economic and community health issues, and a re-assessment and clarification of potential minority and low-income population impacts. In general, the USEPA strongly supports the development of mass transit options for the Research Triangle Park metropolitan area as it provides a meaningful alternative to sole reliance on surface transportation such as highways and local collector roads for mobility. The USEPA also supports the proposed project's purpose and need and detailed study alternatives. With appropriate disclosure and proper mitigation, this project should result in reduced adverse impacts. The USEPA recommends that all of the technical comments in the Attachment be addressed in the Final EIS (FEIS). All relevant environmental impacts that have not been disclosed in this document or covered in the FEIS should also be addressed in additional NEPA documentation prior to the issuance of a Record of Decision (ROD). Dr. Cynthia F. Van Der Wiele, of my staff, will continue to work with you as part of the D-O LRT Technical Advisory Committee in the identification of reasonable and feasible alternatives. Should you have any questions concerning these comments, please feel free to contact her at vanderwiele.cynthia@epa.gov or (919) 450-6811.

Sincerely, Christopher A. Militscher
 Chief, NEPA Program Office
 Resource Conservation and Restoration Division
 Attachment ATTACHMENT A
 Draft Environmental Impact Statement
 Durham-Orange Light Rail Transit Project, Durham and Orange Counties
 ERP No.: FHW-E54014-NC; CEQ No.: 20150240

Project Purpose and Need
 The purpose of the project are outlined in Section 1.4 of the DEIS and are summarized as: to provide a high-capacity transit service within the Durham-Orange (D-O) Corridor between Chapel Hill and Durham [along the NC 54, 1-40, US 15-501, Erwin Road, and NC 147 transportation corridors] that improves mobility, increases connectivity by expanding transit options, and supports future development plans. The needs for the proposed project are detailed in Section 1.5. These include: 1) enhance mobility-by providing a competitive, reliable alternative to auto use that supports compact development while increasing transit operating efficiency; 2) increase connectivity by expanding transit options between Durham and Chapel Hill to enhance and seamlessly connect with the existing transit system and by serving major activity and employment centers between Durham and Chapel Hill; and 3) promote future development by supporting local land use plans that foster compact development and manage future growth while maximizing the potential for economic development near activity centers. The USEPA generally supports the purpose and need of the project as a viable solution that promotes a more sustainable means of managing growth and transportation needs while supporting economic growth and protecting natural and human resources.

Detailed Study Alternatives
 The DEIS Selection of a Build Alternative was based on four key decisions: transit technology, alignment, station locations, and rail operations and maintenance facility (ROMF) location. Light rail was selected as an alternative that best meets the Purpose and Need due to higher forecasted ridership and its ability to promote transit-oriented development, while conventional bus, bus rapid transit, streetcar, and commuter rail transit were eliminated from consideration. The USEPA concurs with the elimination of these transit technology alternatives. The DEIS evaluated the No

Build alternative along with several light rail alternatives. The No Build alternative examined existing and planned transportation programs and projects scheduled to be constructed and open before the forecast year 2040 (and included in both the State Transportation Improvement Plan (STIP) and the Durham Chapel Hill Carrboro Metropolitan Planning Organization's transportation plan), and was used as a baseline against which the Build alternatives were compared in relation to impacts to the natural and human environment. Four potential crossings of Little Creek between Hamilton Road and the proposed Leigh Village State (Alternatives C1, C1A, C2, and C2A) were evaluated in detail, with Alternative C2A identified as the NEPA Preferred Alternative. Additionally, three potential crossings of New Hope Creek and Sandy Creek between Patterson Place and South Square (Alternatives NHC LPA, NHC 1, and NHC 2) were also evaluated in detail; NHC 2 was identified as the NEPA Preferred Alternative. USEPA Recommendations: Due to the high potential for large mammal interactions [wildlife collisions] with the D-O Light Rail, the USEPA encourages collaboration with the NC Wildlife Resources Commission (NCWRC) and the US Fish & Wildlife Service (USFWS) to design appropriate wildlife under- and overpasses to reduce wildlife mortality and increase safety and reliability of the rail in "hotspot" areas along the corridor. Seventeen (17) rail stations are proposed with two station alternatives evaluated for the Duke/VA Medical Center Station location: Duke Eye Center and Trent/Flowers Drive. The success of the D-O LRT project depends on ridership levels and in strategically locating stations where demand will be the highest. These stations may have an impact on air quality, community resources, land use (i.e., transit-oriented development along with in-fill and redevelopment), impervious surfaces, stormwater management, etc. USEPA Recommendations: The USEPA encourages green building design, low-impact development (LID) design for managing stormwater runoff into the §303(d)-listed Jordan Lake watershed, and other sustainable design and building practices to be used in planning, design, and construction. Further, the USEPA requests that all potential natural and human environment impacts from rail stations, including the park and ride lots, be discussed in the FEIS. Five (5) alternatives for the ROMF were studied in detail: Leigh Village, Farrington Road, Patterson Place, Cornwallis Road, and Alston Avenue. Farrington Road was identified as the NEPA Preferred Alternative. USEPA Recommendations: USEPA notes that the brief paragraphs on each ROMF alternative did not provide sufficient detail to support or eliminate any particular alternative. The FEIS should provide the necessary impact detail in order for decision-makers to have the necessary comparative information between the alternatives. Section 2.3.2.1 discusses light rail technology and proposed vehicle capacity. Vehicles are slated to carry 40 - 60 seated and up to 125 (including standing) passengers. USEPA Recommendations: The vehicle specifications did not include bicycle capacity or how bicycles would be accommodated on board each rail vehicle. While some bicyclists and bicycle commuters may park their vehicle at a particular station, the USEPA anticipates that many would wish to take their bicycle on board for use in reaching their final destination(s) from a station. The USEPA supports vehicle configurations that maximize the ability for passengers bringing bicycles along to be accommodated on board as this would support the Purpose and Need of the project. Transportation Chapter 3 presents existing conditions along with the potential consequences/impacts to transportation resources including transit service, parking, bicycle and pedestrian facilities, and roadways. Table 3.2-1 lists the traffic impact criteria (Level of Service). Section 3.2.2 describes the improvements that would be necessary due to the D-O LRT project, while Table 3.2-5 lists the roadway modifications that would be proposed as part of the NEPA Preferred and Project Element Alternatives. USEPA Recommendations: The USEPA notes that natural resource and human environment impacts resulting from these roadway modifications-in some cases, new two-lane connector roadways-have not been analyzed or included in the lists of impacts. Consequently, it is not possible to know the potential impacts to aquatic resources, residences, businesses, historic properties, environmental justice communities, costs, etc. This issue should be addressed in the FEIS or subsequent environmental documentation prior to the issuance of a ROD. In addition, safety features that avoid or minimize conflicts between large mammals (e.g., deer strikes) as well as bicycles and pedestrians adjacent to the D-O Light Rail should also be considered during final planning and design. Affected Environment and Environmental Consequences Socioeconomic and Demographic Conditions According to Table 4.2-2 Demographic Conditions, approximately 18% of the population in the study area are of Limited English Proficiency (LEP), with a high of 19% LEP concentrated in the Duke West Campus & Medical Center portion of the study area. East Durham has 50% of households with no car compared to 22% of the study area. The percentage of people under 18 and 65 years old and older is approximately 21% in the study area and exceeds that percentage in five of the eight sections of the study area. Population projects in the U.S. indicate a rapidly-growing population of those ages 65 and older, with many living below or near the poverty line, particularly in minority populations (DHHS/AOA, 2010; DHHS/AOA(b), 2010). The health and social impacts due to changes in transportation systems and local roadway connectivity may be more severe in older populations who rely more heavily on pedestrian infrastructure and/or transit (Balfour and Kaplan, 2002). Section 4.2 describes the age of the population, but does not assess potential impacts to this population in Section 4.2.3 Environmental Consequences. USEPA Recommendations: The assessment of how vulnerable populations, such as the elderly, may or may not be impacted by the proposed light rail project should be addressed in the FEIS and the FTA should determine if this population is being adversely and disproportionately impacted from the proposed project. Neighborhoods and Community Resources Section 4.3 describes neighborhoods and community resources within the D-O Co1 Tidor and examines the impact of the project on community cohesion and community resources. The NEPA Preferred Alternative would be located directly behind the Glenwood Elementary School and would form a barrier between the school and the neighborhood. Additionally, protective fencing would also restrict the use of the adjacent wooded area as an outdoor classroom. The DEIS proposes mitigation measures for this community resource impact by constructing a pedestrian underpass to connect the trails and enhance safety. Within the Old West Durham/Duke East Campus neighborhood, the historic Smith Warehouse will not receive a direct impact; however, warehouses that are currently used by the Duke University transportation services department would be demolished to accommodate the

NEPA Preferred Alternative and the proposed Buchanan Boulevard Station. It is unclear from the DEIS whether or not these warehouses are also historic tobacco warehouses or whether they are of newer construction. The Alston Avenue ROMF, studied as a "project element alternative" notes that construction of the facility would necessitate the relocation of several businesses including Brenntag and Eastern Organics, resulting in the loss of 150 - 250 jobs. However, in its present location, Brenntag is grandfathered as a non-conforming use and currently unable to expand their operations; consequently, this business has been exploring other sites to meet their needs and grow. The loss of employment opportunities may not be entirely accurate.

USEPA Recommendations: The USEPA encourages further collaboration with Glenwood Elementary School to design an appropriate access point to the wooded area for continued use by students and faculty. The Patterson Place and Alston Avenue ROMF sites may have community cohesion issues. However, it is unclear from the DEIS whether the Alston Avenue site is actually not viable or if the Brenntag site can be redeveloped under the NC Brownfields Program.

Visual and Aesthetic Conditions
USEPA Recommendations: The USEPA supports the use of vegetative buffers to ameliorate visual, noise, and air quality impacts from the proposed light rail transit system.

Historic and Archaeological Resources
Section 4.5 addresses Historic and Archaeological Resources. In the analysis, 13 of the 25 architecturally historic properties would have No Effect from the NEPA Preferred Alternative, while the remaining 12 properties would have No Adverse Effect. A landscaped buffer is proposed for the Rocky Ridge Historic District, the Highland Woods Historic District, the Walter Curtis Hudson Farm, and the Ruth-Sizemore Store. However, no mitigation has been proposed for the remaining properties.

USEPA Recommendations: The FEIS should address what measures will be proposed to alleviate the No Adverse Effect on the historic properties. If no measures are proposed, documentation should include why mitigation is not possible since the majority of these building and historic districts are in active, daily use by the citizens (including children) of Durham and Durham County, and represent vital community resources.

Parklands and Recreational Areas/Section 6(f)
The NEPA Preferred Alternative has the highest impacts to Section 6(f) resources with a total acreage of 13.4 acres. **USEPA Recommendations:** The USEPA encourages GoTriangle to work with the staffs of University of North Carolina-Chapel Hill, the N.C. Botanical Garden, U.S. Army Corps of Engineers, and Duke Forest during final design to develop further avoidance and minimization of impacts and to locate suitable mitigation for these impacts.

Water Resources
The study area included 400-foot wide rail corridors for each alternative, the proposed rail stations and park-and-ride lots, and the proposed ROMFs. The study area did not include any desk or field investigation of potential impacts to water resources from roadway improvements necessitated by the D-O Light Rail Transit project. The NC Division of Water Resources (NCDWR) classifications for waters within the project study area are either Water Supply (WS)- IV, WS-V, or Nutrient Sensitive Waters (NSW); thus, stormwater runoff drains to water supply watersheds and/or waters that are sensitive to additional pollutants. One stream is listed on DWR's 2012 §303(d) list of impaired streams. All aquatic resources drain to Jordan Lake and are subject to Cape Fear or Neuse River riparian buffer rules. The D-O Light Rail Transit Project falls within the Federal Emergency Management Agency (FEMA) 100-year floodplain in multiple locations as well as the FEMA 500-year floodplain. The NEPA Preferred Alternative would impact: 3,413 linear feet of streams; 0.558 acres of jurisdictional wetlands; 4.97 acres of riparian buffer zone 1 and 4.10 acres of zone 2; 6.42 acres of the 100-year floodplain; and 0.378 acres of the 500-year floodplain. With the exception of the Alston Avenue ROMF site, all other corridor and ROMF alternatives would incur greater impacts to aquatic resources.

USEPA Recommendations: Further avoidance and minimization during final design will be necessary to reduce impacts to aquatic resources and riparian buffers, particularly those streams and wetlands that have a higher quality rating using the NC Stream Assessment Methodology (SAM) and the NC Wetland Assessment Methodology (WAM) respectively. The USEPA encourages engineering design that incorporates resiliency strategies into the rail corridor to mitigate the likelihood of flooding in low-lying, flood-prone areas in addition to the identified FEMA 100- and 500-year floodplains. Such design will ensure that the project Purpose and Need is met with regard to a robust, reliable transit system as well as mitigate for extreme weather events that are anticipated to increase as a result of climate change.

Air Quality: Greenhouse Gas and Climate
Executive Order (EO) 13653 (November 2013) was intended to prepare the U.S. for the impacts of climate change by taking actions to enhance climate preparedness and resilience. In December 2014, the Council on Environmental Quality (CEQ) released an updated draft guidance' to replace the 2010 draft. This guides how federal agencies should consider the effects of greenhouse gas emissions and climate change in their NEPA reviews. Agencies should consider the potential effects of a proposed action on climate change as indicated by its greenhouse gas (GHG) emissions and the implications of climate change for the environmental effects of a proposed action. While the USEPA understands that it may be "analytically problematic to conduct a project-level cumulative effects analysis", the DEIS did not sufficiently follow the 2014 draft guidance as detailed on page 4 and further described in IV. Considering the Effects of Climate Change on the Environmental Consequences of a Proposed Action (pages 21-25) in terms of addressing climate change in terms of resiliency was not addressed in the DEIS. See: https://ceq.doe.gov/current-developments/docs/nepa_revised_draft_ghg_guidance_searchable.pdf

USEPA Recommendation: The FEIS should qualitatively address the effects of climate change on the environment and the proposed rail. Additionally, during the final design of the rail, climate change mitigation and resiliency strategies should also be incorporated to reduce vulnerability and ensure a reliable transportation system. The USEPA encourages an assessment of the vulnerability of the rail corridor to extreme weather and the development of cost-effective methods to enhance the resilience of the transit system.

Environmental Justice
EJ Demographics: The project is located in the vicinity of communities with EJ concerns. As described in the DEIS, the minority population is 51% of the population in the project area with the highest concentrations located in northeastern portion of the D-O Corridor and the low-income population is 43% of the population in the area which is meaningfully greater than the average for Orange County at 25% and Durham County at 26%. Table 5.2-1 provides a summary of EJ populations within the D-O Corridor and includes the evaluation areas, total

population and percent minority and low income population. The table does not include an ethnic breakdown of the minority populations to better identify groups that may be served or impacted by the project and to develop effective public involvement and outreach strategies. USEPA Recommendations: The USEPA recommends that the FEIS include a table that breaks down the minority populations by ethnicity. It would also be helpful to include the demographic information related to percent minority populations and low-income populations for the State of North Carolina for reference. Figure 5.2-1 is a map of EJ populations within the D-O Corridor that depicts the alignment, alternatives, stations and rail operation and maintenance facilities (proposed) in the study area. The map depicts areas with high concentrations of minority and low-income populations based on the criteria described on page 5-6. The map also provides a good summary of the minority and low income populations. USEPA Recommendation: We request that the FEIS include a separate chart with minority and low-income information by numbered block group and overlay a map such as Figure 5.2-1 with the affected block groups in the area. The USEPA recognizes the importance of language access to Federal programs and projects and acknowledges the FTA and GoTriangle efforts for engaging and linking communities with limited English proficiency to information and tools. The DEIS highlights varied outreach activities to EJ communities including providing Spanish and Chinese translation at public open houses, public meetings, or in community newspapers, staffing project information at community health fairs and festivals to engage diverse stakeholders. The USEPA further acknowledges the inclusion of information related to the historical impacts experienced by EJ communities within the evaluation area. USEPA Recommendations: The USEPA recommends that the FEIS continue to include public comments related to EJ as part of an ongoing responsiveness summary and indicate issues that remain unresolved. Secondly, the USEPA recommends that every effort should be made to continue to work with residents to ensure that appropriate replacement housing is available. We further recommend that the FEIS summarize or reference efforts made to avoid and minimize acquisitions and displacement impacts to EJ communities along US-15-50 I and east Durham area within Section 5.6.10, and identify the numbers or percentage of proposed relocations or acquisitions that are located in areas with high concentrations of EJ populations. Based on the information included in Table 5.4.1, it appears to the USEPA as though the displacements will not result in "fragmented" or isolated pockets of homes that are separated from the remaining portion of the community in these areas.

Comment Responses

DEIS/Errata References

Fixing America's Surface Transportation (FAST) Act codifies in 23 USC 139(n)(2)(A) and 49 USC 304a(b) language for using errata sheets and developing a single document that contains an Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the Durham-Orange Light Rail Transit (D-O LRT) Project. As such, Triangle Transit and FTA have issued a combined FEIS/ROD. Project Purpose and Need: Comment noted. Detailed Study Alternatives: Wildlife Over- and Under-passes: Throughout the project development and preliminary engineering design process, efforts have been made to avoid and minimize impacts to wildlife habitat, including streams and wetlands as described in DEIS section 4.8.4.2. Adverse effects to aquatic wildlife would be minimized by bridging wetland and stream areas, and employing sediment and erosion control Best Management Practices (BMPs). Operations for the NEPA Preferred Alternative would utilize existing roadway corridors in the portions of the study area that pass through large areas of wildlife habitat (see DEIS section 4.7.3.2). Because of this, impacts to wildlife are expected to be limited after construction is completed. Mitigation in the form of wildlife over- and under-passes is not included as part of the NEPA Preferred Alternative, nor has it been requested from the US Fish & Wildlife Service or the North Carolina Wildlife Resources Commission (NCWRC). Efforts to avoid, minimize, or mitigate impacts to wildlife and their habitats will continue during Engineering and Construction. The NCWRC and the North Carolina Department of Agriculture and Consumer Services (NCDACS) are currently reviewing appendix K.21. Triangle Transit will continue to coordinate with the NCWRC and NCDACS throughout future phases (e.g., Engineering and Construction) of the D-O LRT Project. Stations: Triangle Transit will comply with stormwater management permitting requirements and include the North Carolina Department of Environmental Quality (NCDEQ) Division of Water Resources (DWR) stormwater management BMPs. Specific design measures can be found in the Basis for Engineering Design (DEIS appendix L) and the Design Criteria documents prepared for the D-O LRT Project. Triangle Transit is reviewing approaches to sustainable design, and will continue this effort during the Engineering Phase. Potential impacts of all project-related infrastructure were included in the DEIS and were maintained in the combined FEIS/ROD. Section 1.4 of the combined FEIS/ROD, DEIS Errata 95 and 100 clarify that opportunities for green building design and low-impact development design will be reviewed during Engineering. ROMF Alternatives: DEIS Chapter 8 discusses the differentiating impacts of the five rail operations and maintenance facility (ROMF) alternatives considered. Table 8.2-3 provides a detailed

*DEIS chapter 5
DEIS section 5.3
DEIS section 8.2.2.2
DEIS Table 5.3-1
DEIS appendix L
FEIS/ROD section 1.4
FEIS/ROD Table FEIS-2*

breakdown of the benefits and environmental consequences of each ROMF alternative studied in detail in the DEIS. Impacts associated with the ROMF alternatives are more fully explained in Chapters 3 and 4 and in the technical reports in Appendix K.

Vehicles: Bicycles will be allowed on board the light rail vehicles (LRVs). At this time, Triangle Transit expects that each LRV will have capacity for four bicycles. Trains will run initially as either single-vehicle or two-vehicle trains, so each train would have capacity for either four or eight bicycles. Operational decisions about the use of space in the LRV will be made during the Engineering Phase. Section 1.4 of the combined FEIS/ROD, DEIS Errata 24 clarifies bicycles will be allowed on board the light rail vehicles (LRVs). At this time, Triangle Transit expects that each LRV will have capacity for four bicycles. Trains will run initially as either single-vehicle or two-vehicle trains, so each train would have capacity for either four or eight bicycles. Operational decisions about the use of space in the LRV will be made during the Engineering Phase.

Transportation: Roadway modifications were included in the D-O LRT Project's footprint and accommodated in the environmental analysis and mitigation. Technical reports provided in the appendices to the DEIS provide more detailed information and figures illustrating the D-O LRT Project footprint for which environmental impacts were evaluated. Section 1.4 of the combined FEIS/ROD, DEIS Errata 23 clarifies roadway modifications as part of the D-O LRT Project were included in the project footprint and discussed in the environmental analysis and mitigation. The safety and security of pedestrians and bicyclists is described in DEIS sections 3.6.4, 4.12.2.5, 4.12.3.5, and 4.12.4.5. During the Engineering phase, Triangle Transit will work with the City of Durham, Town of Chapel Hill, NCDOT, the Durham Bicycle and Pedestrian Advisory Commission, the Chapel Hill Transportation and Connectivity Board, and representatives from station area neighborhoods to identify ways to improve pedestrian and bicycle connections to stations. Further, Triangle Transit will continue to coordinate with the City of Durham's Station Area Strategic Infrastructure Program (SASI) as the D-O LRT Project moves forward. In certain areas, these improvements may be incorporated into the design of the D-O LRT Project. In particular, Triangle Transit will 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.

Operations for the D-O LRT Project would utilize existing roadway corridors in the portions of the study area that pass through large areas of wildlife habitat (see DEIS section 4.7.3.2). Because of this, impacts to wildlife, including conflicts with large mammals (e.g., deer strikes) are expected to be limited.

Affected Environment and Environmental Consequences:

Socioeconomic and Demographic Conditions: The DEIS discusses benefits to transit dependent populations, including the elderly. DEIS chapter 5 discusses vulnerable populations (environmental justice populations) and assesses whether these populations would be adversely affected.

Neighborhoods and Community Resources: Triangle Transit will continue to coordinate with Glenwood Elementary School to identify strategies to minimize the effects of the D-O LRT Project on the school as clarified in section 1.4 of the combined FEIS/ROD, Table FEIS-2, DEIS errata 73. Section 8.2 of the DEIS presents the evaluation of the five ROMF alternatives and explains why the NEPA Preferred Alternative (Farrington Road ROMF) was selected. Although the Alston Avenue ROMF alternative would not require rezoning, it would introduce several risks to both the project schedule and budget associated with the potential remediation of regulated materials and the relocation of existing businesses. It also has the potential to result in net loss of employment within the D-O Corridor and East Durham in particular if the existing businesses that would be displaced could not be relocated within the D-O Corridor. The Alston Avenue ROMF location would result in impacts to existing and future freight rail infrastructure including the elimination or relocation of one existing rail spur and customer (Brenntag) and the use of the existing North Carolina Railroad freight corridor for 0.5 mile of light rail track. Further, this alternative has the highest capital cost of all of the alternatives considered in this DEIS (DEIS section 8.2.2.2).

Visual and Aesthetics: Comment noted.

Historical and Archaeological Resources: As indicated in DEIS section 4.5 and pointed out by the EPA, 12 historic properties would have a No Adverse Effect determination. A landscape buffer was included for 4 of these 12 properties in order to reduce potential effects to the level where a determination of No Adverse Effect could be made. For the other eight properties, mitigation was not necessary in order to make a determination of No Adverse Effect; therefore, no mitigation was recommended. Section 1.4 of the combined FEIS/ROD, DEIS Errata 50 corrects DEIS text from preliminary determination of no adverse effects" to "Preliminary determination of no effect on 13 of

25 architectural historic properties within APE" and changed "Indirect impacts to 13 of 25 architectural historic properties within APE" to "Preliminary determination of no adverse effect on other 12 of 25 architectural historic properties within APE .Parklands and Recreational Areas/Section 6(f): The DEIS includes the following statement in a call out box on page 4-119, "Section 6(f): The NEPA Preferred and Project Element Alternatives would not have an effect on Section 6(f) resources." This statement was not included in the body text of the document, section 1.4 of the combined FEIS/ROD, DEIS Errata 83 clarifies no parks that would qualify as Section 6(f) resources will be effected affected. Similarly, the following statements are included on page 4-118 of the DEIS, "No parks funded by the LWCF were identified within the Orange County portion of the study area. However, there are 10 parks within the Durham City-County portion of the study area that were developed with grants from the LWCF. These 10 parks are noted in Table 4.6-1." Table 4.6-1, however, does not identify which parks qualify as Section 6(f) resources. Section 1.4 of the combined FEIS/ROD, DEIS Errata 82 and 87 added names of parks that were developed using grants from the LWCF to highlight same parks already listed in Table 4.6-1. "These include Old Chapel Hill Road Park, Cornwallis Road Park, Morreene Road Park, Crest Street Park, Erwin Field, Burch Avenue Park, Oakwood Park, Hillside Park, Grant Street Park, Burton Park."Water Resources: Because of the identified impacts, it is anticipated that a Section 404/401 permit application will be required and that a permit will need to be issued by the U.S. Army Corps of Engineers (USACE) and NCDEQ DWR before construction activities may begin. Table 4.8-8 displays all of the potentially jurisdictional waters of the United States and wetlands within the NEPA Preferred Alternative and Project Element Alternatives, including roadway improvements, and the anticipated Section 404 permitting. During the preliminary design phase, Triangle Transit made efforts to minimize the potential impacts to water resources and will continue to design the project in ways to avoid and minimize impacts to water resources. In addition, the Section 404 permit application will include the D-O LRT Project's measures taken to avoid and minimize impacts to waters of the United States and a compensatory mitigation proposal to offset the unavoidable impacts. During the Engineering Phase of the D-O LRT Project, Triangle Transit will coordinate with the USACE to incorporate resiliency strategies to mitigate the potential for flooding in flood-prone areas. After a permit application has been submitted, it will undergo a review at which time the USACE may decide to alter the permit type, make additional data requests, or determine whether mitigation is needed. Ongoing coordination with the USACE will assist with minimizing the time frame for the permit application review. Due to the nature of the D-O LRT Project, the USACE will issue either a Nationwide Permit or an Individual Permit. Activities that do not qualify for authorization under the Nationwide Permit Program may qualify for authorization under an Individual Permit. Individual Permits are issued for activities that have more than minimal adverse impacts to waters of the United States (DEIS section 4.8.4). Air Quality: Triangle Transit is reviewing approaches to sustainable design for the proposed stations and ROMF, and will continue this effort during the Engineering Phase. Section 1.4 of the combined FEIS/ROD, DEIS Errata 95 and 100 clarified opportunities for green building design and low impact development design will be reviewed during the Engineering phase. In addition, section 1.4 of the combined FEIS/ROD, DEIS Errata 111 adds a green house gas emissions row to DEIS Table 4.13-2. This calculation was based on the change in Vehicle Miles Traveled by mode (e.g. automobile, diesel bus, light rail vehicle) using the methodology and values included in the Final Interim Policy Guidance Federal Transit Administration Capital Investment Grant Program, Aug. 2015, http://www.fta.dot.gov/documents/Final_CIG_interim_policy_guidance_August_2015.docx. Environmental Justice: The breakdown of minority populations by ethnicity by block group and low income data by block group is provided in DEIS appendix I. County level data on minority and low-income populations are also included in DEIS appendix I. Section 1.4 of the combined FEIS/ROD, DEIS Errata 138 clarifies according to the US Census Bureau, the overall percentage of minorities and low income populations in North Carolina is 26.5 percent and 17.5 percent, respectively. Triangle Transit will mitigate adverse impacts throughout both environmental justice (EJ) and non-EJ communities. Environmental commitments and mitigation measures identified throughout DEIS chapters 3 and 4 would address impacts from D-O LRT Project operations and construction activities that may affect EJ populations. Table 5.3-1 in DEIS section 5.3 provides a summary of the concerns expressed by EJ communities on the Project to date and lists Triangle Transit's responses to their concerns. Combined FEIS/ROD section 1.3 provides an update on public outreach since the DEIS, and FEIS/ROD section 1.2.2.2

states that public comments did not indicate any Environmental Justice concerns that remain unresolved. Triangle Transit will continue to coordinate with all EJ communities, including those that are limited English proficient, throughout the duration of the D-O LRT Project to ensure that they are not disproportionately burdened by any impact (or prevented from obtaining any benefit) from this project. Mitigation for land acquisitions of privately-owned properties and businesses will be addressed in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Act) and relevant North Carolina laws and regulations. Any businesses or persons displaced from property by the D-O LRT Project will be compensated in accordance with provisions of the Act. See DEIS section 4.14 and appendix I for more information on acquisitions and displacements. Section 1.4 of the combined FEIS/ROD, DEIS Errata 125 describes the efforts Triangle Transit has made to avoid EJ acquisitions and displacements as follows, "An effort was made during design to minimize acquisitions and displacements in the Alston station area, including having the station parking in a parking deck to minimize the footprint associated with parking in an EJ community."

Affiliation	<i>Federal</i>
Sub-Group	<i>Durham VA Medical Center</i>
First Name	<i>Deanne</i>
Last Name	<i>Seekins</i>

Comment

Subject : Support for Durham-Orange Light Rail Transit (D-0 LRT) Project Dear

Mr. Mann:
 The purpose of this letter is to advise you that the Durham VA Medical Center (VAMC) staff continues to support the implementation of the D-0 LRT Project. We also support the NEPA (National Environmental Policy Act) Preferred Alternative included in the Draft Environmental Impact Statement (DEIS). It reflects the outcome of public involvement and the collaborative process in which we along with other Project Partners have been engaged as members of the Steering Committee and Technical and Communications Advisory Committees.

To provide our Veterans with a greater range of services in a more enjoyable environment we are renovating and expanding facilities on our campus. Dependable mobility options for our patients and employees are critical to the successful delivery of services. The Duke/Durham VA Medical Centers LRT Station between Trent and Flowers Drives will enhance this transformation by providing our Veterans, their families and our staff with dependable, cost- effective access to the Durham VAMC. The LaSalle LRT Station will also support our campus and provide transportation options for our patients, staff and the students who live in the adjacent neighborhoods .

The addition of the roundabout at Elba Street will improve vehicular circulation and divert some of the traffic congestion on Fulton Street at both Erwin and Elba. We also believe that the park and ride facilities including those proposed at the Alston Avenue and Dillard Street LRT stations will be attractive to our commuters who use NC 147 to access the medical centers.

The Durham VAMC staff remains committed to working with GoTriangle as the current Project Development phase is completed and the D-0 LRT project advances through the design and implementation phases of this major transportation investment.

Sincerely,

DEANNE M. SEEKINS, MBA, VHA-CM
 Director, Durham VA Medical Center

Comment Responses *DEIS/Errata References*

Process - Agency Coordination:Comments noted.Process - Public Involvement:Comments noted.Transportation - Access & Connections:Comments noted.Transportation - Traffic:Comments noted.Transportation - Parking:Comments noted.

Affiliation	Federal
Sub-Group	US Department of Interior (US DOI)
First Name	Joyce
Last Name	Stanley

Comment

Re:Comments on the Draft Environmental Impact Statement and Section 4(f) Evaluation Durham-Orange Light Rail Transit Project, Cities of Chapel Hill and Durham, NC
Dear Mr. Mitchell: The U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation Durham-Orange Light Rail Transit Project located in the cities of Chapel Hill and Durham, NC. The Department offers the following comments for your consideration. The Federal Transit Administration (FTA) and the Triangle Transit plan to develop approximately 17 miles of light rail transit service from University of North Carolina Hospitals in Chapel Hill, Orange County to the Alston Avenue Station in Durham, Durham County. The alignment will consist of at-grade alignment, fill and cut sections, and elevated structures. A total of 17 stations are planned, and up to 5,100 parking spaces would be provided. A Rail Operations and Maintenance Facility would also be constructed. The Draft Environmental Impact Statement evaluates a No Build, NEPA Preferred Alternative which includes preferred alignment options, and Project Element Alternative, include station alternatives associates with the alignment alternatives. The NEPA Preferred Alternative includes C2A, NHC2, Trent/Flowers Drive Station, and the Farrington Road ROMF Alternatives. The draft Section 4(f) Evaluation describes a range of avoidance alternatives, the affected Section 4(f) resources, and discloses potential project impacts to those resources with the exception of Archaeological resources. The Draft Section 4(f) Evaluation includes FTA's intent to pursue a de minimis impact determination for six park and recreation properties: USACE Jordan Game Lands, UNC Central Park South (Planned), Coker Pinetum, UNC Finley Golf Course and Athletic Fields, UNC Open Space, and New Hope Creek Trail (Planned). Coordination is ongoing among the FTA and agencies that own and/or administer the affected portion of the 4(f) properties, to avoid and minimize and mitigate adverse impacts. According to the Draft Section 4(f) Evaluation, the FTA will make a final determination of effects regarding archaeological resources once the alignment has been further defined and the final determination will be included in the Final Environmental Impact Statement and Record of Decision. It will also be included in a Section 106 Memorandum of Agreement document between the North Carolina state Archaeological office, Triangle Transit, and FTA that will contain the terms that will be executed prior to ground disturbing activities. The Draft and the Final Environmental Impact Statements should clearly outline the environmental commitments for landscaping and other means proposed to reduce the effects of the undertaking on historic properties. The commitments should include the groups, organizations and/or agencies that will be involved in developing plans for any landscaping or other treatments that will be implemented to ensure that no adverse effects will occur. Because an MOA has not yet been developed and land owners with jurisdiction have not yet concurred to the avoidance, minimization and mitigation to the 4(f) properties, the Department cannot concur that all possible planning to minimize potential harm to these resource has been employed. The Department has a continuing interest in working with the FTA to ensure impacts to resources of concern to the Department are adequately addressed. For continued consultation and coordination with the issues concerning Section 4(f) resources, please contact Anita Barnett on (404)507-5706 or via email at Anita_Barnett@nps.gov. I can be reached via email at joyce_stanley@ios.doi.gov or on (404) 331-4524.

Comment Responses

DEIS/Errata References

Agency Coordination:As stated in Chapter 6 of the DEIS, Triangle Transit and the FTA will continue to consult with affected agencies regarding the impacts of the proposed D-O LRT Project on the features and attributes of Section 4(f) properties, and provide opportunity for public comment. A final Section 4(f) evaluation and the FTA's Section 4(f) determination is included as appendix A of the combined FEIS/ROD. Section 4(F):Mitigation measures for potential impacts to parklands protected under Section 4(f) are outlined in section 4.6 of the DEIS and appendix A of the combined FEIS/ROD. Triangle Transit will coordinate with agencies with jurisdiction with lands used by the NEPA Preferred Alternative (i.e., UNC, USACE, and City-County of Durham) to minimize potential impacts to parklands and recreational resources. The combined FEIS/ROD reflects that Triangle Transit will continue to coordinate with UNC during the Engineering phase to minimize impacts to trails and other resources, including Finley Golf Course and Coker Pinetum, and will coordinate closings of the trails with UNC during Construction. The presence and significance of archaeological resources is not yet determined. One

*DEIS chapter 6
FEIS/ROD appendix A
FEIS/ROD appendix B
FEIS/ROD Table ROD-1*

previously recorded archaeological site potentially eligible for the National Register, two potential sites, and five areas were identified for further study. Since the eligibility of the one previously recorded archaeological site is not known at this time, and data recovery is recommended to make the eligibility determination on that site, no use of a known archaeological resource would occur. The remaining two sites and five areas are recommended for further study and are subject to a Memorandum of Agreement with the SHPO (combined FEIS/ROD appendix B) that outlines the measures for the identification of archaeological resources, avoidance measures, and continued consultation. Procedures for an expedited 4(f) determination will be utilized if any resource warrants preservation in place. See DEIS Chapter 6 and combined FEIS/ROD appendix A for more information. Cultural Resources: The Determination of Effects resulted in No Potential to Cause Effects for the No Build Alternative and No Adverse Effects for the NEPA Preferred Alternative. For this reason, no mitigation measures are recommended. Commitments regarding Section 106 are included in the combined FEIS/ROD, Table ROD-1.
