FINAL
STAKEHOLDER INVOLVEMENT REPORT

For

ADMINISTRATIVE ACTION
ENVIRONMENTAL IMPACT STATEMENT

Wake and Johnston Counties

STIP Project Nos. R-2721, R-2828, and R-2829
State Project Nos. 6.401078, 6.401079, and 6.401080
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1 INTRODUCTION

This technical report describes the scoping process, agency coordination process, and public involvement activities, as well as the key issues and pertinent information received through these efforts during preparation of the Draft Environmental Impact Statement (EIS) and Final EIS for the Complete 540 project. This version of the report supersedes the March 2015 version of the report. The March 2015 version was prepared prior to the release of the Draft EIS. Following release of the Draft EIS, there was substantial stakeholder involvement. This version of the report includes information about the stakeholder involvement activities that occurred following release of the Draft EIS, in addition to the activities that occurred prior to its release.

1.1 PROPOSED ACTION AND PROJECT PURPOSE

The North Carolina Department of Transportation (NCDOT), in cooperation with the Federal Highway Administration (FHWA), proposes transportation improvements in the project study area and surrounding region to address transportation needs as defined in the project's *Purpose and Need Statement* (Lochner, 2011). The focus of these improvements is a potential extension of the Triangle Expressway (NC 540) from its current terminus at the NC 55 Bypass in Apex to the US 64/US 264 Bypass (I-495) in Knightdale. This action is designated as three projects in the NCDOT 2016-2025 STIP: R-2721, R-2828, and R-2829. Together, these STIP projects would combine to complete the 540 Outer Loop around the Raleigh metropolitan area. In some instances, the project is referred to as having two phases: Phase I is the western portion of the study area between NC 55 Bypass in Apex and I-40 near the Wake/Johnston County line; Phase II is the eastern portion of the study area between I-40 and US 64/US 264 Bypass (I-495) in Knightdale. NCDOT established a protected corridor for the project between NC 55 Bypass and I-40 in 1996 and 1997. For purposes of meeting the requirements of the National Environmental Policy Act (NEPA), both phases are being examined in the current study as a single and complete project. It is likely that the project would be constructed in phases, but depending on the availability of funding, may or may not be consistent with the current phase descriptions noted.

The project study area is located south and southeast of the City of Raleigh between the towns of Holly Springs to the west and Knightdale to the east. The project study area extends as far south as NC 42 between Fuquay-Varina and Clayton. While most of the project study area is within Wake County, a small portion of western Johnston County is also included. **Figure 1** shows the project study area.

This project, referred to as the Complete 540 - Triangle Expressway Southeast Extension, is intended to improve transportation mobility and reduce forecast traffic congestion. The proposed action is included in the Capital Area Metropolitan Planning Organization (MPO) and Durham-Chapel Hill-Carrboro MPO joint *2040 Metropolitan Transportation Plan* (MTP), as well as the Capital Area MPO *2016 – 2025 Metropolitan Transportation Improvement Program* (MTIP). In addition, the proposed action is included in the state's system of Strategic Transportation Corridors (STC) aimed at providing a safe, reliable, and high-speed network of highways within North Carolina (NCDOT, 2015). NCDOT developed the *Purpose and Need Statement* (Lochner, 2011) for this project with input from federal and state environmental regulatory and resource agencies, local government representatives, and the public.

1.2 PROJECT ALTERNATIVES

The project's *Alternatives Development and Analysis Report* (Lochner, 2014) evaluated several possible alternatives associated with this project through a three-tiered screening process. The alternatives remaining under consideration fall into two main categories: No-Build and Build Alternatives.

The No-Build Alternative is the baseline comparative alternative. It assumes that the transportation systems in the project study area will continue to develop as currently planned in the Capital Area MPO and Durham-Chapel Hill-Carrboro MPO joint 2035 LRTP, but without the proposed Complete 540 - Triangle Expressway Southeast Extension project.

The project's Build Alternatives were developed and evaluated as color-coded segments termed Preliminary Corridor Alternatives. Combinations of the various Preliminary Corridor Alternatives comprise end-to-end project alternatives. The end-to-end project alternatives remaining following the screening process outlined in the *Alternatives Development and Analysis Report* were termed Detailed Study Alternatives (DSAs) and were documented and evaluated in detail in the project's Draft EIS. Ten Preliminary Corridor Alternatives comprised seventeen end-to-end DSAs. **Figure 2** shows the locations of the Preliminary Corridor Alternatives that made up the DSAs for the project. **Table 1** lists the Preliminary Corridor Alternatives that made up each of the DSAs. The Orange Corridor Alternative between NC 55 Bypass and I-40 corresponds to a protected corridor established by NCDOT for this project in 1996 and 1997; it remained in place until 2016, when the North Carolina General Assembly repealed the Transportation Corridor Official Map Act.

Table 1. Preliminary Corridor Alternatives Comprising Each Detailed Study Alternative

DSA	Preliminary Corridor Alternatives
1	Orange to Green
2	Orange to Green to Mint Green to Green
3	Orange to Brown (South) to Tan (North) to Green
4	Orange to Brown to Green
5	Orange to Green to Teal to Brown to Green
6	Orange to Red to Green
7	Orange to Red to Mint Green to Green
8	Orange to Purple-Blue-Lilac to Green
9	Orange to Purple-Blue-Lilac to Green to Mint Green to Green
10	Orange to Purple-Blue-Lilac to Brown (South) to Tan (North) to Green
11	Orange to Purple-Blue-Lilac to Brown to Green
12	Orange to Purple-Blue-Lilac to Teal to Brown to Green
13	Orange to Lilac to Green
14	Orange to Lilac to Green to Mint Green to Green
15	Orange to Lilac to Brown (South) to Tan (North) to Green
16	Orange to Lilac to Brown to Green
17	Orange to Lilac to Green to Teal to Brown to Green

The Draft EIS for the Complete 540 project was signed on November 2, 2015, and subsequently made available for public and agency review on the NCDOT website on November 6, 2015. A notice of availability was published in the Federal Register on Friday, November 20, 2015 (Federal Register Vol. 80, No. 224, Pg. 72719). Copies of the document were distributed to public review locations and agencies between November 7 and 13, 2015. Public meetings were held on December 7, 8 and 9, 2015, and a Public Hearing was held on December 9, 2015. The public comment period for the Draft EIS ended on January 8, 2016.

1.3 PREFFERED ALTERNATIVE

A Draft *Preferred Alternative Report*, identifying DSA 2 as NCDOT's recommended Preferred Alternative, was submitted to the environmental resource and regulatory agencies in February 2016. Two Interagency Meetings were held to discuss the recommended Preferred Alternative, in February and March 2016. No Issues of Concern, as defined in the project's Section 6002 Coordination Plan, were raised by any of the agencies on the recommended Preferred Alternative. **DSA 2 is the Preferred Alternative for the Complete 540 project**. The *Preferred Alternative Report* (Lochner, 2017) was finalized following the agency coordination efforts.

The project is proposed to be a toll facility. An open road (highway speed) transponder-based system will likely be used as the primary means of toll collection. This would allow drivers to travel unobstructed through the toll collection points at highway speeds.

2 AGENCY COORDINATION

In compliance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Section 6002 (23 U.S.C. § 139), a Section 6002 Project Coordination Plan has been prepared for the Complete 540 – Triangle Expressway Southeast Extension project. This plan describes the process for agency coordination and public involvement in the project development process. The Project Coordination Plan was first presented to resource and regulatory agency representatives at the resource and regulatory agency meeting held on December 8, 2009, and agencies approved a draft of the Plan following the August 10, 2010 resource and regulatory agency meeting. The Plan has been updated as needed during the course of the project, with the most recent update occurring in November of 2013. A copy of the current version of this document is included in **Appendix A**.

2.1 SCOPING

As part of preparation of an EIS, NEPA requires there to be an early and open process with project stakeholders for determining the major and important issues that need to be addressed during the study. This process is called scoping. To initiate the scoping process, NCDOT sent a formal scoping letter, as required by NEPA, to state and federal resource and regulatory agencies on January 25, 2010. A separate letter was sent to local agencies and officials on February 4, 2010. The purpose of these letters was to solicit comments and collect pertinent project information early in the alternatives development process. Coordination between NCDOT, FHWA, and the agencies has assisted with the development of the DSAs. Copies of the formal scoping letters are included in **Appendix B**. The resource and regulatory agency meeting held on February 16, 2010, served as the agency scoping meeting for the project to discuss project study area environmental features and community characteristics and potential issues of concern. More information about agency scoping for the project is in **Section 2.3.2**.

2.2 NOTICE OF INTENT

Pursuant to Title 23, CFR Part 771, Environmental Impact and Related Procedures, the FHWA published a Notice of Intent (NOI) to prepare an EIS for the proposed Complete 540 – Triangle Expressway Southeast Extension project. The NOI was published in the Federal Register on November 30, 2009 (Vol. 74, No. 228). A copy of the NOI is included with the Section 6002 Project Coordination Plan in **Appendix A**.

2.3 INTERAGENCY MEETINGS

The principal method for interagency coordination on NCDOT projects is through meetings of the resource and regulatory agencies, hosted by NCDOT.

For the Complete 540 project, agencies participating in the process are:

Lead Agency

- Federal Highway Administration

Cooperating Agency

- US Army Corps of Engineers

Participating Agencies

- US Army Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service
- NC Department of Cultural Resources
- NC Department of Environment and Natural Resources
  - Division of Water Resources
  - Division of Marine Fisheries
  - NC Wildlife Resources Commission
- Capital Area Metropolitan Planning Organization

Designation as a Cooperating Agency signifies a somewhat higher level of involvement and responsibility in the environmental review process. A Cooperating Agency can also be a Participating Agency. Participating Agencies include any federal, state, or local agencies that may have an interest in the project.

The sections below describe the resource and regulatory agency meetings that have been held for the Complete 540 project to date. Detailed summaries of each of these meetings are in **Appendix C**.

2.3.1 December 8, 2009 Meeting

The purpose of this meeting was to introduce the project to representatives of the resource and regulatory agencies. At this meeting, the project team presented a draft Section 6002 Coordination Plan for the project and a draft Notice of Intent for announcing the project in the Federal Register. Agency representatives had the opportunity to provide input on each of these items during and following this meeting.

The project team also presented a map of the draft study area for developing project alternatives. Following an initial request by the US Environmental Protection Agency, the resource and regulatory agencies expressed interest in shifting the originally proposed northern study area boundary farther to the north. This was suggested in order to allow early consideration of potentially shorter alternatives closer to more heavily developed portions of the area and to allow evaluation of a larger number of potential locations for the crossing of Swift Creek, providing options for minimizing impacts to habitat of the federally protected dwarf wedgemussel. As a result of this request, the northern study area boundary west of I-40 was shifted from its original location near Ten Ten Road to north of Lake Wheeler and Lake Benson. This shift resulted in most of the area within the town of Garner being added to the project study area.

2.3.2 February 16, 2010 Meeting

As described in **Section 2.1**, this meeting served as the agency scoping meeting for the project. The meeting discussion included initial information and input on the potential key project issues and key environmental constraints that would affect the project. The project team also presented a preliminary summary of the key elements of the need for the project and a preliminary draft statement of the project's purpose.

Four agencies (US Environmental Protection Agency, US Fish and Wildlife Service, NC Department of Environment and Natural Resources, and NC Department of Cultural Resources) prepared formal scoping responses, as did two local governments (Cary and Holly Springs) and the Capital Area

Metropolitan Planning Organization (MPO). Copies of the scoping responses are in **Appendix B**. The following summarizes scoping comments made by these agencies and organizations:

US Environmental Protection Agency (EPA)

- Project expected to have significant direct impacts to jurisdictional wetland and streams, protected water supply areas, protected mussel species, residences and business, prime and unique farmland, and air quality.
- Project anticipated to have significant indirect and cumulative effects to human and natural environmental resources in southern Wake County and western Johnston County.
- Recommends that improvements to Ten Ten Road, including a new location extension from NC 50 to I-40 interchange at Clayton Bypass be evaluated as a build alternative.

US Fish and Wildlife Service (USFWS)

- Project expected to have significant impacts on streams, wetlands, upland forest and other habitat types. Impacts will include direct loss of habitat and fragmentation effects on remaining habitat.
- USFWS is particularly concerned about impacts to the dwarf wedgemussel population in Swift Creek. Impacts will include direct effects from project construction and indirect effects on water quality from secondary development.
- Additional cumulative impacts to Swift Creek may occur in conjunction with the proposed widening of I-40 (STIP No. I-5111).
- Proposed eastern terminus of protected corridor, with interchange at I-40 and US 70 Bypass would impact several tributaries of Swift Creek and is in close proximity to Swift Creek mainstem. USFWS recommends alternative interchange locations away from Swift Creek and its tributaries be considered.
- NCTA should explore innovative conservation measures to minimize effects to dwarf wedgemussel.
- Surveys for Michaux's sumac should be conducted within the species' survey window (May-October).

NC Department of Environment and Natural Resources (NCDENR)

Natural Heritage Program

- There are a number of records of rare species, significant natural heritage areas, and conservation/managed areas within the project area.
- Project will cross nationally significant Swift Creek Aquatic Habitat, which contains numerous existing records of rare mussel species, including dwarf wedgemussel.
- It is important to keep sediment from reaching the Neuse River as there are rare aquatic species locations farther south toward Clayton.

Division of Water Quality (now called Division of Water Resources)

- All named streams in project area have supplemental classification of nutrient sensitive waters (NSW) of the State. Agency is concerned with sediment and erosion impacts.
- Swift Creek, Middle Creek, Walnut Creek, and Little Creek are listed as 303(d) waters of the State. Agency is concerned with sediment and erosion impacts.
- Project area includes surface waters classified as Water Supply Critical Area (WSCA).
- Riparian buffer impacts shall be avoided and minimized to the greatest extent possible.
- Quantitative secondary and cumulative impacts analysis will be required because the project is a new location road in areas with impaired streams and WSCA.

NC Wildlife Resources Commission

- NCWRC is concerned about potential impacts due to new crossings of Swift Creek, Middle Creek and the Neuse River, which contain several State and federal listed species.
- Neuse River in this area is designated as an Anadromous Fish Spawning Area and an Inland Primary Nursery Area.

NC Department of Agriculture and Consumer Services

- Project would increase the loss of prime farm and forest land, negatively impacting agricultural environmental balance in the project area.
- Location of the project should include consideration of farms near existing Voluntary Agricultural Districts (VAD).
- Economic impacts due to loss of agribusiness jobs associated with loss of agricultural production are a concern.

NC Department of Cultural Resources

- Project area contains numerous archaeological sites which may be eligible for the National Register of Historic Places.
- Much of the study area has never been surveyed to determine the presence or significance of archaeological resources.

Town of Cary

- NCTA should investigate providing an interchange within the Town of Cary Comprehensive Planning Area. Due to growth and development, an additional interchange may be needed near the intersection of Kildaire Farm Road and Holly Springs Road, where there is currently one interchange proposed.
- Moving the corridor off the protected alignment could negatively impact residential communities, proposed greenways, proposed parks, and proposed thoroughfare improvements.

Town of Holly Springs

- Holly Springs supports the completion of the project and the project's location in the current proposed corridor.
- Planned interchange at Holly Springs Road and Kildaire Farm Road needs special evaluation. Protected corridor area in the location is not adequate for on and off ramps.
- Town would prefer that the project be elevated on an overpass over Sunset Lake Road.

Capital Area MPO

- Phases I and II should be developed as a single design and right-of-way acquisition project to the extent possible.
- Project should provide a balanced transportation facility design that includes multimodal considerations.
- CAMPO supports inclusion of Intelligent Transportation System (ITS) components in the project design.
- Design of facility should minimize negative impacts to Swift Creek watershed and water supply area.

2.3.3 August 10, 2010 Meeting

At this meeting, the project team reviewed a revised Section 6002 Coordination Plan and received a copy of a *Draft Purpose and Need Statement* for the project. The project team also began discussion of alternatives development, evaluation, and screening at this meeting, presenting an overview of the proposed methods for screening alternatives and discussing preliminary results of a qualitative first tier screening of broad Alternative Concepts and a quantitative second tier screening of preliminary alternatives.

The agencies agreed to eliminate from further consideration several of the preliminary alternatives that were presented at the meeting. These preliminary alternatives each included a proposed new location segment (known as Segment 38) east of I-40, near the Wake and Johnston County line; this is described in detail in the project's *Alternatives Development and Analysis Report*. These options were eliminated because their potential negative environmental effects did not appear to be offset by other benefits, as compared to other preliminary alternatives under consideration.

2.3.4 September 8, 2010 Meeting

The purpose of this meeting was to discuss the project's *Draft Purpose and Need Statement* and to continue discussing the screening of preliminary alternatives under consideration for the project. A preliminary alternative that would have combined upgrading existing roads west of I-40 with a new location roadway east of I-40 (known as Hybrid Alternative #3) was eliminated at this meeting. It was eliminated because it would have required many more relocations than other options under consideration without providing any relative advantages. This is described in detail in the project's *Alternatives Development and Analysis Report*.

This meeting also served as a preview of the Public Informational Meetings that were held later this same month.

2.3.5 November 2, 2010 Meeting

The primary purpose of this meeting was to review the results of the September 2010 Public Informational Meetings and to review the project's preliminary alternatives in light of impact data and the results of the meetings. NCDOT summarized the public meetings, explaining that most public comment expressed continued support of the project's protected corridor between NC 55 Bypass and I-40, and opposed several of the other corridors under consideration, particularly the Red, Blue, and Purple Corridor Alternatives. The agencies agreed with NCDOT's recommendation to eliminate several of the preliminary alternative corridors presented at the September 2010 public meetings, including the Blue, Purple, and Yellow Corridor Alternatives.

Following this meeting, and following subsequent coordination with the agencies and the area local governments, NCDOT added four additional preliminary alternative corridors into consideration to provide additional opportunities for avoiding or minimizing potential effects to community resources and neighborhoods in the eastern part of the project study area. These were the Tan, Brown, Teal, and Mint Green Corridor Alternatives.

2.3.6 January 20, 2011 Meeting

At this meeting, the project team discussed the extensive public input that occurred since the time of the previous agency meeting in November 2010. Based on this public input and a closer review of the

existing data, NCDOT recommended eliminating the Red Corridor Alternative due to its significant community impacts and the Pink Corridor Alternative due to both its impacts and its inability to serve traffic needs as well as other alternatives. The agencies agreed with the recommendation to eliminate the Pink Corridor Alternative, but recommended retaining the Red Corridor Alternative due to its potential for avoiding habitat for the federally protected dwarf wedgemussel.

2.3.7 August 22, 2012 Meeting

State legislation passed in March 2011, described in **Section 4.4**, limited evaluation of certain options under consideration for the project, including the Red Corridor Alternative. This resulted in a temporary halting of most project activities. The purpose of the August 2012 agency meeting was to discuss approaches to advancing the project in light of the restrictions put in place by the State legislation. One approach discussed was introducing new Preliminary Corridor Alternatives into consideration for their ability to potentially reduce wetland impacts to a similar degree as the Red Corridor Alternative while minimizing community impacts. One of these, the Lilac Corridor Alternative, showed potential to balance impacts similarly to other options under consideration.

2.3.8 December 12, 2012 Meeting

At this meeting, the project team discussed the status of the project in light of the project advancement approaches considered at the August 22, 2012, meeting. Coordination between the agencies to advance the project in light of the State legislation was also discussed.

2.3.9 September 19, 2013 Meeting

Following the June 2013 passage of subsequent State legislation removing the alignment restrictions previously imposed on the project by the 2011 legislation, NCDOT was able to resume project activities. The Lilac Corridor Alternative was formally introduced into consideration. In addition, the previously eliminated Blue and Purple Corridor Alternatives were reconsidered based on a potential alignment following the Purple to Blue to the Lilac Corridor Alternative, based on the potential of this alignment to reduce overall wetland impacts and to balance impacts similarly to other options under consideration. These options were discussed at the September 2013 agency meeting.

At this meeting, NCDOT also presented its recommended DSAs, along with a revised *Draft Alternatives Development and Analysis Report* documenting these recommendations.

2.3.10 December 12, 2013 Meeting

The purpose of this meeting was to finalize the DSAs for the project. At the meeting, the agencies confirmed that they did not require any additional time (as covered by Section 8.5 of the Section 6002 Coordination Plan) to review the project's *Draft Alternatives Development and Analysis Report* and the recommended DSAs in light of the public and local government comments made since the October 2013 public meetings. USACE noted agreement to waive the additional time period for reviewing the report as noted in the Section 6002 plan. Additionally, no agencies raised any objections to proceeding with the 17 end-to-end alternatives as DSAs, and no agencies asked for any additional alternatives to be considered. To date, no agencies have raised any Issues of Concern (per the Section 6002 Coordination Plan) on the project purpose and need, range of alternatives, alternatives screening, or DSAs. Additionally, no Issues of Concern relative to these four areas of the study were raised at the meeting.

2.3.11 November 13, 2014 Meeting

The main purpose of this meeting was to discuss the appropriate locations and lengths of bridges over natural resources along the project's DSAs. To expedite this discussion, NCDOT reviewed project information on natural resources, hydrology, and proposed designs in order to make suggestions about which sites should be bridged. The agencies agreed with many of NCDOT"s suggestions, but requested a field review of four of the sites before agreeing to the suggestions at those sites. The agencies also suggested design modifications at another site in order to determine if a bridge would be feasible.

The project team then held a field review meeting on December 2, 2014, to review the four sites requested by the agencies. At this meeting, NCDOT and the agencies came to agreements on the appropriate hydraulic conveyance structure at each of these four sites. NCDOT then incorporated design modifications necessary to accommodate the agreed upon structure at each site.

Following selection of the project's Preferred Alternative and Least Environmentally Damaging Practicable Alternative (LEDPA), the project team and agency partners will review proposed bridge sites and other sites on the LEDPA in greater detail.

2.3.12 August 19, 2015 Meeting

This was an informational meeting to explain to the project team the reader-friendly format used to prepare the Draft EIS. The project team also provided a project status update and explained the project's next steps following publication of the Draft EIS.

2.3.13 February 17, 2016 Meeting

At this meeting, the project team provided an overview of the Public Meetings and Public Hearing held in December 2015, summarized the public and agency input received following release of the Draft EIS, and explained the reasons why DSA 2 was NCDOT's recommended Preferred Alternative. Prior to the meeting, NCDOT distributed the *Draft Preferred Alternative Report* to the agencies. NCDOT and FHWA reiterated the definition of Issues of Concern under Section 6002 and asked the agencies to indicate any known Issues of Concern relative to selecting DSA 2 as the Preferred Alternative. No Issues of Concern were raised at the meeting, and no Issues of Concern were submitted to NCDOT prior to the March 18, 2016, deadline.

2.3.14 March 16, 2016 Meeting

This was a follow-up informational meeting to review the development of the functional preliminary plans for the 17 DSAs considered in the project's Draft EIS. The main purposes of the information provided was to explain the level of detail included in the functional preliminary plans and summarize how impact avoidance and minimization were an important element of plan development. No Issues of Concern regarding selection of DSA 2 as the Preferred Alternative were noted at this meeting. The *Preferred Alternative Report* was finalized after this meeting.

Following this meeting, USEPA submitted written comments relative to the functional preliminary designs. The comments were marked on a set of the Public Hearing Maps. The comments included and responses to each are noted in the summary of this meeting included in **Appendix C**.

2.3.15 June 15, 2017 Meeting

The main purpose of this meeting was to explain the methods used to quantitatively assess the potential indirect and cumulative effects (ICE) of the project on land use and development and on water quality in the project vicinity. The project team also summarized the preliminary results of the ICE analysis.

2.3.16 July 12, 2017 Meeting

The main purpose of this meeting was to summarize how avoidance and minimization of impacts to environmental resources have been incorporated into the current preliminary designs for the Preferred Alternative. This included a discussion of the ways that earlier, less detailed functional designs were refined following selection of DSA 2 as the Preferred Alternative, and an explanation of the different ways impacts were calculated for the earlier functional designs and the current preliminary designs. The project team explained the ways that prior design decisions, including selection of layouts for each interchange and proposing to bridge eight wetland/stream sites beyond what is needed for hydraulic conveyance, helped to avoid and minimize natural system impacts. The project team also described several alignment shifts that were incorporated into the preliminary designs to minimize impacts to environmental resources. No issues of concern were raised by any agencies during this meeting. NCDWR did indicate that would be interested in further discussion of streams related to Swift Creek as the project progresses.

2.4 AGENCY COORDINATION ON TECHNICAL REPORTS

2.4.1 Purpose and Need Statement

While there was extensive discussion of the project's *Purpose and Need Statement* at several resource and regulatory agency meetings (described in Section 2.3), only one agency submitted formal comments about the *Draft Purpose and Need Statement*. This was the NC Division of Water Quality (now known as the NC Division of Water Resources); a copy of the letter is in **Appendix D**. In general, the comments in this letter suggested the following:

- Removing consistency with the State's Strategic Highway Corridors Initiative as an element of the project's purpose;
- Clarifying the difference between the project's study area used for alternatives development and the study area used for traffic analysis purposes; and
- Making sure that the criteria used to screen project alternatives match the measures of effectiveness described in the *Purpose and Need Statement*.

The project team incorporated and addressed each of these suggestions in a revised *Purpose and Need Statement*.

2.4.2 Alternatives Development and Analysis Report

A copy of the *Draft Alternatives Development and Analysis Report*, dated January 13, 2012, was distributed January 13, 2012 to the cooperating and participating agencies involved in the environmental review process for this project, along with other organizations that requested to receive a copy. This included:

- Federal Highway Administration
- US Army Corps of Engineers

- US Environmental Protection Agency
- US Fish and Wildlife Service
- NC Department of Cultural Resources
- NC Department of Environment and Natural Resources
  - Secretary's Office
  - Division of Water Resources
- NC Wildlife Resources Commission
- Capital Area MPO
- NC Department of Transportation
  - State Highway Administrator
  - Project Development and Environmental Analysis
  - PDEA Human Environment Unit
  - Office of Civil Rights
- Town of Garner
- Regional Transportation Alliance

NCDOT requested that recipients of the report provide written comments on the information and conclusions in the report, including the report's recommendations for DSAs. NCDOT also requested that agency recipients identify any potential issues of concern that would result in the denial or significant delay in the issuance of any environmental permits.

Written comments were received from the following agencies and organizations:

- US Army Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service
- NC Department of Cultural Resources
- NC DENR Division of Water Resources
- Capital Area MPO
- Regional Transportation Alliance

In addition, a letter from the Southern Environmental Law Center (SELC) and a letter from the Town of Garner regarding the project and *Draft Alternatives Development and Analysis Report* were received.

Copies of all the written comments and letters are included in **Appendix D**. NCDOT responses to these comments were provided in the project's revised *Alternatives Development and Analysis Report.* The revised *Alternatives Development and Analysis Report* also included report edits and updates that were part of the responses.

A revised version of the *Draft Alternatives Development and Analysis Report*, dated September 2013, was distributed on September 5, 2013, to the agencies and the organizations listed above. This version of the report included revisions to the January 2012 version, as well as added material. It also included NCDOT/FHWA recommended DSAs for detailed study in the project's Draft EIS. Three agencies submitted written responses to the revised report. The NC Division of Water Resources and NC Division of Cultural Resources concurred with the recommended alternatives for detailed study. USACE indicated that the alternatives recommended for detailed study meet the agency's requirements under Section 404 of the Clean Water Act and NEPA. Copies of these responses are included in **Appendix D**. The remaining agencies submitted no further response. In accordance with item 8.5 of

the Section 6002 Coordination Plan for this project, no response is interpreted to mean that the participating agency had no significant objections to the alternative screening report.

2.4.3 Draft EIS

A Notice of Availability of the Draft EIS for the Complete 540 project was published in the Federal Register on November 20, 2015 (Federal Register Vol. 80, No. 224, Pg. 72719). Printed copies of the Draft EIS were distributed for public review beginning on November 7, 2015, at public libraries and local government offices in the project area, as noted in Appendix A of the Draft EIS. The Draft EIS was also posted to the official project website (https://www.ncdot.gov/projects/complete540/Complete540Documents.html) on November 6, 2015.

Copies of the Draft EIS were distributed to the cooperating and participating agencies involved in the environmental review process for this project, along with other local governmental and stakeholder organizations. This included:

- Federal Highway Administration
- US Army Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service
- US Department of Commerce - National Marine Fisheries Service
- US Department of Agriculture
- US Department of Energy
- Federal Railroad Administration
- NC Department of Commerce
- NC Department of Cultural Resources
- NC Department of Economic and Community Development
- NC Department of Environment and Natural Resources
- NC Department of Public Instruction
- NC Wildlife Resources Commission
- NC Attorney General
- NC State Clearinghouse
- Capital Area MPO
- City of Raleigh
- Greater Raleigh Chamber of Commerce
- Harnett County Board of Commissioners
- Johnston County Schools
- Regional Transportation Alliance
- Town of Angier
- Town of Apex
- Town of Cary
- Town of Clayton
- Town of Fuquay-Varina
- Town of Garner
- Town of Knightdale
- Town of Holly Springs
- Town of Wendell
- Triangle J Council of Governments

- Wake County Board of Commissioners
- Wake County Public School System

Comments received from federal and state agencies on the Draft EIS are discussed in **Section 5** of this report.

2.4.4 Preferred Alternative Report

A copy of the *Draft Preferred Alternative Report*, dated February 2016, was distributed to the cooperating and participating agencies and to other key stakeholder agencies. This included:

- Federal Highway Administration
- US Army Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service
- NC Department of Cultural Resources
- NC Department of Environment and Natural Resources
  - Secretary's Office
  - Division of Water Resources
- NC Wildlife Resources Commission
- Capital Area MPO
- NC Department of Transportation
  - State Highway Administrator
  - Project Development and Environmental Analysis
  - PDEA Human Environment Unit
  - Office of Civil Rights
- Town of Garner
- Regional Transportation Alliance

NCDOT requested that recipients of the report provide written comments on the report and its recommendation of DSA 2 as the Preferred Alternative for the project. NCDOT also requested that agency recipients identify any potential Issues of Concern regarding selection of DSA 2 as the Preferred Alternative that would result in the denial or significant delay in the issuance of any environmental permits.

Table 2 lists each of the agencies that submitted comments on the *Draft Preferred Alternative Report* and summarizes those comments. None of the agencies identified any Issues of Concern relative to selection of DSA 2 as the Preferred Alternative for the Complete 540 project, either in written comments or in oral comments at Interagency Meetings.

Table 2: Federal and State Agency Review Comments on Draft Preferred Alternative Report

Agency	Comments
NC Wildlife Resources Commission (2/23/16)	• Concerned that potential negative effects in area watersheds will continue to degrade aquatic habitat • Concerned about high wetland, stream, and buffer impacts.
NC Division of Water Resources (2/25/16)	• Avoidance of Water Supply Critical Area watersheds by DSA 2 is a positive. • Concerned about high wetland, stream, and buffer impacts.
US Environmental Protection Agency (3/10/16)*	• Would like to see information on impacts to forested land, floodways, and 500-year floodplain. • Would like to see preliminary designs for DSA 2 and DSA 7. • Would like to see quantitative information on indirect and cumulative effects. • Would like to see information on predicted pollutant loading and avoidance/minimization measures to reduce this effect.
US Army Corps of Engineers (3/18/16)	• No objections to proceeding with DSA 2 as the Preferred Alternative.

* Preliminary designs were presented to the agencies at the March 16, 2016, informational Interagency Meeting. A quantitative assessment of indirect and cumulative effects was subsequently prepared to compare the build to the no-build scenario; the results are summarized in the Final EIS. Impacts to forested land, floodways, and the 500-year floodplain were not a notable factor in comparing the project DSAs.

3 PUBLIC INVOLVEMENT

The public involvement process is integral to the entire project development and decision-making process. Public involvement activities described below are related to the development of the project's purpose and the development and evaluation of alternatives.

3.1 PUBLIC MEETINGS PRIOR TO DRAFT EIS PUBLICATION

NCDOT held public meetings on September 21, 22, and 23, 2010. The September 21 meeting was at Wake Technical Community College from 4:00 p.m. to 7:30 p.m.; 558 people attended. The September 22 meeting was at Holly Springs High School from 6:00 p.m. to 9:00 p.m.; 473 people attended. The September 23 meeting was at Barwell Road Community Center in southeast Raleigh from 4:30 p.m. to 7:30 p.m.; 146 people attended. The purpose of the meetings was to solicit public input on the project including the project's study area, purpose, and preliminary alternatives. Displays at the meetings included maps of the project study area, Preliminary Corridor Alternatives, and Improve Existing and Hybrid Alternatives, along with information on the transportation planning process and the preliminary purpose for this project. Comment sheets were distributed to obtain public input on the project study area, identified project needs and purposes, and range of alternatives. This input helped to ensure that the range of reasonable alternatives, including broad Alternative Concepts, covered the full spectrum of potential alternatives.

Over 2,100 comments were received during or following the meetings. The most common concerns and issues raised by meeting attendees included:

- Continued support of the Orange Corridor Alternative between NC 55 Bypass and I-40, which the public has been aware of for nearly twenty years as the protected corridor, and opposition to other new location corridors. Approximately 90 percent of those expressing an alternative preference indicated support for the Orange Corridor Alternative.
- Opposition to new alternatives (other than the Orange corridor), particularly the Blue and Purple Corridor Alternatives through Holly Springs and the Red Corridor Alternative in Garner.
- Concern about the perceived inequity of a tolled Complete 540 project when existing segments of I-540 are untolled.

Following introduction of the Tan Corridor Alternative, NCDOT held another public meeting on December 2, 2010, at the Barwell Road Community Center from 4:30 p.m. to 7:30 p.m.; 399 people attended. The purpose of this meeting was to solicit input on the Tan Corridor Alternative and the Green Corridor Alternative and to present information about these options in the Phase II area, which extends between I-40 and US 64/US 264 Bypass. Over 250 comments were received at or following this meeting. Most of these comments expressed opposition to the Tan Corridor Alternative due to potential neighborhood impacts and support for using publicly-owned land in the Randleigh Farm property for the project.

NCDOT held an additional round of three public meetings in October 2013 to present and receive public comment on the NCDOT/FHWA recommended DSAs for evaluation in the project's Draft EIS. The first meeting was at Wake Technical Community College on October 14 from 4:00 p.m. to 7:30 p.m.; 810 people attended. The next meeting was at Barwell Road Community Center on October 15 from 4:00 p.m. to 7:30 p.m.; 330 people attended. The third meeting was at Holly Springs High School on October 16 from 6:00 p.m. to 9:00 p.m.; 545 people attended. Displays included maps of the recommended DSAs, preliminary impact information, an illustration of the proposed typical section, and a summary of the project purpose and need. A brief informational video providing an overview of

the project was shown on a continuous loop at each meeting. A handout brochure describing the project, the recommended DSAs, the environmental review process, and the project schedule was distributed. Comment sheets were provided at the meeting.

Over 1,100 comments were received during or following the meetings. The most common concerns and issues raised by meeting attendees included:

- Strong opposition to the Purple-Blue-Lilac Corridor and a desire to see this option dropped from consideration before the DSAs are finalized.
- Opposition to the Lilac Corridor.
- Continued opposition to the Red Corridor.
- Continued support for the Orange Corridor.

3.2 PUBLIC MEETINGS FOLLOWING DRAFT EIS PUBLICATION

NCDOT held three public meetings and a formal Public Hearing in December 2015 to present details on the DSAs under consideration for the project and the findings of the Draft EIS and its associated technical studies. The meetings and the Public Hearing served as opportunities for the public and other project stakeholders to review the project DSAs and the findings of the Draft EIS. Displays at these meetings included maps showing the preliminary functional designs for each of the DSAs, information summarizing the potential impacts of each DSA, an illustration of the proposed typical section, and information on the project's purpose and need. A brief informational video providing an overview of the study process and the project DSAs was shown on a continuous loop at each meeting. A handout brochure with information about each of the DSAs, potential impacts, the study process, and the project schedule, was distributed. All displays and meeting materials were available on the project website (www.ncdot.gov/projects/complete540). **Table 3** summarizes public participation for the meetings and Public Hearing.

During the comment period for the Draft EIS, from early November 2015 through January 8, 2016, comments addressing the DSAs, the Draft EIS, or other substantive project issues were received from 1,476 commenters. The comments included 255 individual written comment forms plus one completed comment form photocopied and signed by 527 different individuals, 387 emails, 6 letters, and a petition with 239 signatures. The petition received was signed by residents of Holly Springs, Apex and Cary expressing support for the Orange Corridor and opposition to the Purple and Blue Corridors. The photocopied completed comment form supported DSA 1 (Orange Corridor/Green Corridor) and opposed the Red Corridor and was individually signed by 527 area residents associated with Springfield Baptist Church.

There were also 34 people who gave oral comments during the Public Hearing and 5 people who gave oral comments at the public meetings on the preceding days. A transcript of the Public Hearing is in **Appendix E**. There were also 23 people who submitted comments via NCDOT's mySidewalk site. Most of the comments expressed support for and/or opposition to various project alternatives or specific color-coded corridor segments.

The written comment forms included check boxes for commenters to indicate their preferred DSAs. Commenters could indicate more than one preferred DSA. Most commenters did indicate preferred DSAs. Public comments received that addressed the Draft EIS or selection of a Preferred Alternative are discussed in **Section 5** of this report.

Table 3: Public Participation at December 2015 Public Meetings and Public Hearing

Date	Type of Meeting	Location	Time	Number of Attendees	Number of Written Comments Received at Meeting	Number of Oral Comments Recorded at Meeting
12/7/15	Public Meeting	Barwell Road Elementary School, Raleigh	6:00 – 8:00 pm	210	12	5
12/8/15	Public Meeting	Holly Springs High School	6:00 – 8:00 pm	264	37	
12/9/15	Public Meeting	Wake Technical Community College, Raleigh	4:00 – 6:30 pm	532	85	34
	Public Hearing		7:00 – 9:30 pm			

Following the approval and distribution of the Final EIS, additional public meetings and public hearing will be held in a similar manner as to what was done for the Draft EIS.

3.3 PUBLIC OUTREACH METHODS

NCDOT is using several different methods for communicating project information to the public, soliciting feedback, and responding to comments and questions. These methods are described below:

3.3.1 Newsletters

To date, three project newsletters have been distributed to all property owners in the project study area, a mailing list including over 56,000 individuals. The first newsletter, distributed in March 2010, announced the start of the project study and provided introductory information about the project. The second newsletter, distributed in September 2010, announced the public meetings and included a map of the preliminary new location Corridor Alternatives. The third newsletter was distributed in September 2013 to announce the October 2013 public meetings and to present and solicit input on the recommended DSAs. A fourth newsletter was distributed in February 2014 to announce the selection of the DSAs. A fifth newsletter was distributed in November 2015 to announce the release of the Draft EIS, list the review locations for the Draft EIS, and to publicize the December 2015 Public Meetings and Hearing. A sixth newsletter was distributed in April 2016 to announce the selection of DSA 2 as the Preferred Alternative for the project. Copies of these newsletters are included in **Appendix F**. Newsletter 7 will be distributed at the time of the availability of the Final EIS and to announce the public meetings and public hearing for the project. Newsletter 8 is planned for announcing the completion of the environmental process in conjunction with the publication of the Record of Decision in the Federal Register.

3.3.2 Project Website

The project website (http://www.ncdot.gov/complete540) includes project information, documents, maps, newsletters, meeting handouts, press releases, other project materials, and project contact

information. Visitors to the website can also submit comments and questions electronically through the website.

3.3.3 Toll-Free Telephone Hotline/E-mail

A toll-free telephone number (800-554-7849) is available for the public to call with questions, request information, or to provide comments about the project. In addition, the public can e-mail the project team with comments or questions at *complete540@ncdot.gov*. To date, over 1,600 people have called the project hotline and over 6,000 e-mails have been received.

3.4 SMALL GROUP MEETINGS

Throughout the study process, the project team has met with local organizations and citizens groups to discuss the project. Several meetings were held during the development of preliminary alternatives in the project study area. Meetings were requested by and held with the following groups:

- Protected Corridor Public Information Workshop (January 27, 2010) – Open to the public; meeting notification sent to all property owners within 500 feet of the project's protected corridor (between NC 55 Bypass and I-40)
- Upchurch Place Homeowners Association (August 14, 2010)
- Bentwinds Homeowners Association (October 13, 2010)
- Wake Technical Community College engineering staff (October 14, 2010)
- Cary Oil employees (October 14, 2010)
- Bells Pointe and Village of Wynchester Homeowners Associations (November 9, 2010)
- Village at Aversboro Homeowners Association (November 15, 2010)
- Ridgebrook, Ridgebrook Bluffs, and Westbury Homeowners Associations (November 16, 2010)
- Preserve at Long Branch Farm Homeowners Association (November 16, 2010)
- River Ridge Homeowners Association (November 22, 2010)
- Springfield Baptist Church leaders (November 23, 2010)
- Vandora Pines Homeowners Association (December 2, 2010)
- Jamison Park Homeowners Association (December 7, 2010)
- Bingham Station Homeowners Association (December 14, 2010)
- Springfield Baptist Church congregation (December 15, 2010)
- Penske Truck Leasing (January 12, 2011)
- Bridgepoint Construction Services and WRAL (January 14, 2011)
- Good Samaritan Baptist Church (January 24, 2011)
- Bridgepoint Construction Services and WRAL (February 16, 2011)
- McCullers Ruritan Club (July 24, 2012)
- Sunset Oaks Homeowners Association (October 7, 2013)
- Bentwinds Homeowners Association (October 22, 2013)
- Fuquay-Varina Future Leaders class (November 19, 2014)

- Keller Williams Realty Cary (March 22, 2016)
- McCullers Ruritan Club (May 24, 2016)
- Fair Oaks Property Owners Association (June 23, 2016)
- Keller Williams Realty Garner (July 20, 2016)

3.5 PETITIONS

Following the Public Informational Meetings in September 2010 and October 2013, several neighborhood groups circulated petitions regarding the project. Petitions have been submitted by the following groups:

- Tyler Farms and Brookstone Homeowners – 86 signatures supporting the Orange Corridor Alternative and opposing the Purple, Blue and Pink Corridor Alternatives.
- Upchurch Place Homeowners – 37 signatures opposing the Blue Corridor Alternative, the project as a toll facility, and the project as a whole.
- Windward Pointe – 107 signatures opposing the Blue Corridor Alternative in the vicinity of Holly Springs.
- The Village at Aversboro – 63 signatures opposing the Red Corridor Alternative.
- Ridgbrook, Ridgebrook Bluffs, and Westbury Homeowners – 121 signatures opposing the Red Corridor Alternative, supporting selection of the Purple-to-Blue Corridor Alternative, and requesting that if the Orange Corridor Alternative is selected, that the intersection at Lake Wheeler Road be located as far south as possible with sound barriers.
- Bells Pointe Homeowners – 24 signatures opposing the Orange Corridor Alternative.
- Springfield North – 30 signatures supporting the Orange Corridor Alternative and opposing the Purple and Blue Corridor Alternative.
- Bentwinds and surrounding neighborhoods – 470 signatures supporting the Orange Corridor Alternative and opposing the Blue and Purple Corridor Alternatives.
- Jamison Park Board Homeowners Association Board of Directors – Signatures of Board members supporting the Blue Corridor Alternative and opposing the Orange Corridor Alternative and the Purple Corridor Alternative.
- Town of Garner – 356 signatures opposing the Red Corridor Alternative.
- Springfield Baptist Church – 1,096 signatures opposing the Red and Pink Corridor Alternatives and the Preliminary Study Alternative that would connect the Orange Corridor Alternative to the Red Corridor Alternative via improvements to a segment of I-40.
- Sunset Oaks – 858 signatures expressing support for the Orange Corridor and opposition to the Purple and Blue Corridors.
- Bentwinds and surrounding neighborhoods – 458 signatures expressing support for the Orange Corridor and opposition to the Purple and Blue Corridors. The petition was also signed by NC Representatives Paul Stam and Nelson Dollar, Wake County Commissioner Phil Matthews, and Fuquay-Varina Mayor John Byrne.
- Brookstone and surrounding neighborhoods – 245 signatures expressing support for the Orange Corridor and opposition to the Purple, Blue, and Lilac Corridors.
- Talicud Trail – 20 signatures expressing support for the Orange Corridor and opposition to the Purple-Blue-Lilac Corridor.

- High Grove – 47 signatures expressing support for the Orange Corridor and opposition to the Purple-Blue-Lilac Corridor.
- Hillington West and Turner Farms – 86 signatures expressing opposition to the Lilac Corridor.
- Upchurch Place – 19 signatures expressing opposition to both the Orange and Blue Corridors, and also to the project as a whole.
- Residents of Holly Springs, Apex, and Cary – 239 signatures expressing support for the Orange Corridor and opposing the Purple and Blue Corridors.

4 LOCAL GOVERNMENT COORDINATION

4.1 CAPITAL AREA MPO MEETINGS

NCDOT provides project updates at monthly meetings of the Capital Area MPO Executive Board and Technical Coordinating Committee (TCC). These committees include representatives of all local governments and other transportation-related groups in the region. Monthly meetings of these committees provide a forum for presenting important project information, answering comments and questions, and engaging local government representatives in the project development process.

NCDOT presented project updates at Executive Board meetings on:

- February 17, 2010
- March 17, 2010
- April 21, 2010
- May 19, 2010
- June 16, 2010
- September 15, 2010
- October 20, 2010
- January 17, 2011
- February 16, 2011
- March 16, 2011
- October 25, 2017

NCDOT presented project updates at TCC meetings on:

- March 18, 2010
- April 1, 2010
- June 3, 2010
- August 5, 2010
- September 2, 2010
- November 4, 2010
- January 6, 2011
- February 3, 2011
- March 3, 2011
- April 7, 2011
- September 1, 2016

CAMPO also established a Complete 540 Working Group to provide a forum for the affected local governments to discuss the project. To date, the working group has held five meetings:

- September 5, 2013
- October 3, 2013
- January 9, 2014
- November 19, 2014
- November 5, 2015

Summaries of these meetings are in **Appendix G**.

4.2 SMALL GROUP MEETINGS

NCDOT has met with local government staff and elected officials during development of preliminary alternatives to solicit input, respond to local concerns, and receive updates on local issues and constraints relative to the project. NCDOT staff attended the following meetings:

- Garner Town Council (September 28, 2010)
- Town of Holly Springs Engineering and Planning staff and Comprehensive Transportation Plan consultant (October 4, 2010)
- Town of Garner Planning staff (October 8, 2010)
- Wake County Planning and Community Services staff (October 11, 2010)
- Durham-Chapel Hill-Carrboro MPO (October 13, 2010)
- Wake County Board of Commissioners (October 18, 2010)
- City of Raleigh Public Utilities and Engineering staff (October 25, 2010)
- Wake County Planning Board (November 3, 2010)
- Holly Springs Engineering staff (November 8, 2010)
- Wake County Historic Preservation Commission (November 16, 2010)
- Town of Garner Meeting (November 17, 2010)
- Garner Town staff (November 23, 2010)
- Garner Town staff (December 3, 2010)
- Clayton Town staff and Johnston County staff (December 14, 2010)
- City of Raleigh staff (January 7, 2011)
- City of Raleigh, Wake County, and CAMPO staff (January 19, 2011)
- Garner Town staff (February 15, 2011)
- Garner Town representatives and stakeholders (February 24, 2011)
- Garner Town Council (August 6, 2012)
- Southern Wake County mayors and managers, CAMPO, and Regional Transportation Alliance (August 7, 2012)
- Wake County Board of Commissioners (August 20, 2012)
- Garner Town staff and stakeholders (August 22, 2012)
- Southern Wake County mayors and managers, CAMPO, and Regional Transportation Alliance (July 7, 2013)
- Wake County Board of Commissioners (August 20, 2013)
- Garner representatives and stakeholders (August 22, 2013)
- Holly Springs Town Council (October 1, 2013)
- Triangle Mobility Action Partnership (October 16, 2015)
- Triangle Mobility Action Partnership (April 1, 2016)
- Town of Benson economic development representatives (February 23, 2017)

4.3 LOCAL GOVERNMENT RESOLUTIONS AND STAFF COMMENTS

Following the Public Informational Meetings in September 2010, several local governments passed resolutions regarding Complete 540:

- The Town of Holly Springs passed a resolution supporting construction of the project in the Orange Corridor Alternative (September 21, 2010).
- The Town of Garner passed a resolution supporting construction of the project in the Orange corridor and opposing the Red Corridor Alternative (October 4, 2010).
- The Wake County Board of Commissioners passed a resolution supporting construction of the project in the Orange Corridor Alternative and opposing the Blue, Purple, and Red Corridor Alternatives (October 18, 2010).
- The Town of Fuquay-Varina passed a resolution supporting construction of the project in the Orange Corridor Alternative (October 19, 2010).
- The Town of Knightdale adopted a resolution in support of NCDOT building a new roadway for both phases of the Triangle Expressway Southeast Extension (October 20, 2010).
- The Capital Area MPO passed a resolution supporting the Orange Corridor Alternative and urging that the entire remaining portion of the Outer Loop be built as a single project (October 20, 2010).
- The Capital Area MPO passed a resolution opposing the Red and Tan Corridor Alternatives (March 17, 2011).
- The North Carolina General Assembly passed legislation to prevent construction of the project north of the Orange Corridor Alternative; the legislation was signed into law (March 18, 2011).
- The Capital Area MPO passed a resolution expressing its "unwavering support for construction of the Wake Outer Loop, as quickly as possible, in a location that meets the needs of area citizens and requirements of federal law" (May, 16, 2012).
- The Capital Area MPO passed a resolution requesting that North Carolina Session Law 2011-7 be repealed to allow study of alternative routes for the project in accordance with NEPA and other federal laws and to allow construction of the project as quickly as possible (December 12, 2012). On December 20, 2012, the Capital Area MPO sent a letter to the North Carolina General Assembly echoing this.
- Town of Holly Springs passed a resolution supporting construction of the project in the Orange Corridor Alternative (October 1, 2013).
- The Town of Fuquay-Varina passed a resolution supporting construction of the project in the Orange Corridor Alternative (October 19, 2013).
- The Wake County Board of Commissioners passed a resolution supporting construction of the project in the Orange and Green Corridor Alternatives (October 21, 2013).
- The Town of Garner passed a resolution supporting construction of the project in the Orange Corridor Alternative (October 22, 2013).
- The Capital Area Metropolitan Planning Organization (CAMPO) passed a motion to continue support of the Orange Corridor Alternative (November 20, 2013).
- The Towns of Holly Springs and Fuquay-Varina passed a resolution supporting construction of the project in the Orange Corridor and indicating that the Purple and Blue Corridors would be more disruptive to the two communities (June 16, 2015).

- The Town of Garner passed a resolution supporting construction of the project in the Orange Corridor (July 7, 2015).
- The Wake County Board of Commissioners passed a resolution supporting construction of the project in the Orange Corridor and indicating opposition to the Blue, Purple, Red, and Lilac Corridors (September 8, 2015).
- The Wake County Mayors' Association passed a resolution supporting construction of the project in the Orange Corridor and indicating that the Purple and Blue Corridors would be more disruptive to residents of Wake County (September 23, 2015).

Copies of these resolutions are in **Appendix H**.

Several local governmental and regulatory agencies, local interest groups, and local elected officials have also submitted formal letters regarding Complete 540:

- The Wake County Parks, Recreation & Open Space Department sent a letter (October 6, 2010) raising concerns about Purple, Red, and Blue Corridor Alternatives crossing segments of priority streams along Middle and Swift Creeks. Additionally there was concern expressed specifically about the Blue Corridor Alternative near the planned Southeast Regional Park. Modification of the Blue Corridor Alternative would avoid the acquired land for this park; however, Wake County is in negotiations for an adjacent piece of land to expand the park that could not reasonably be avoided with the Blue Corridor Alternative. They expressed support for the Orange Corridor Alternative.
- The Town of Holly Springs supports the Orange Corridor Alternative and sent comments (October 21, 2010) relative to the various alternative routes under consideration. The Town further supports the use of the Orange Corridor Alternative and not the Blue or Purple Corridor Alternatives at Holly Springs.
- The Garner Chamber of Commerce sent a letter (October 19, 2010) in support of the Orange Corridor Alternative and in opposition to the Red Corridor Alternative. They cited impacts to businesses and residences as the primary reason for their opposition to the Red Corridor Alternative.
- The Town of Garner sent a list of concerns (October 20, 2010) in support of eliminating the Red and Pink Corridor Alternatives. The reasons cited related to parks, recreational facilities, orderly growth, planned industrial development, community cohesion, water quality, access, and neighborhood impacts. The town reiterated in the letter their strong support for the Orange Corridor Alternative.
- The Town of Cary sent a letter (October 20, 2010) in support of designating the project as a bypass for the US 64 corridor and provided comments about the project's purpose and need statement.
- The YMCA of Garner and the YMCA of the Triangle sent a letter (October 22, 2010) opposing the Red Corridor Alternative due to potential impacts on a planned YMCA site on Aversboro Road.
- The North Carolina General Assembly's Garner delegation, including two State Representatives and two State Senators, sent a letter (November 30, 2010) asking NCDOT to eliminate the Red and Pink Corridor Alternatives from further consideration, citing potential impacts to Garner neighborhoods, the local tax base, and parks and other community facilities.

- The Wake County Board of Commissioners sent a letter (December 8, 2010) requesting elimination of the Tan Corridor Alternative.
- The Mayor of Raleigh sent a letter (January 11, 2011) stating opposition to the Tan Corridor Alternative and requesting that NCDOT work to develop other alternatives in the Phase II project area.
- USACE sent a letter (January 26, 2011) indicating its opposition to eliminating the Red Corridor Alternative.
- The Johnston County Board of Commissioners sent a letter (February 8, 2011) stating its opposition to the Tan Corridor Alternative and requesting its elimination.
- USFWS sent a letter (February 17, 2011) regarding the Dwarf Wedgemussel studies and data needs.
- USACE sent a letter (March 23, 2011) requesting more information regarding the Red and Pink Corridor Alternatives.
- The Town of Garner sent a letter (October 6, 2011) expressing continued opposition to study, consideration, or construction of the Red Corridor Alternative.
- USACE sent a letter (February 17, 2012) affirming its position that the project's Environmental Impact Statement should "rigorously explore and objectively evaluate" the Red Corridor Alternative.
- The Town of Garner sent a letter (March 7, 2012) stressing its concerns about detrimental community impacts that could arise with continued "construction and/or study" of the Red Corridor Alternative.
- The Wake County Board of Commissioners sent a letter (August 29, 2012) reaffirming the County's support of the Orange and Green Corridor Alternatives and requesting that the study be completed as quickly as possible.
- FHWA and USACE sent a letter (December 7, 2012) indicating that the Red Corridor Alternative should be studied in detail in the Draft Environmental Impact Statement.
- NC Representative Paul Stam submitted a letter (October 23, 2013) requesting that NCDOT complete studies on the Purple Corridor Alternative as quickly as possible and expressing support for the Orange Corridor Alternative.
- NC Representative Darren Jackson submitted a letter (November 12, 2013) suggesting that the Orange Corridor Alternative is the best option for the project west of I-40 and that potential impacts east of I-40 on the Sherriff's training center and the wastewater treatment spray fields should carry more weight than potential impacts to the Randleigh Farm property. The letter also suggested that NCDOT complete necessary work as soon as possible in order to eliminate the Red Corridor Alternative.
- NC Senator Tamara Barringer and Representative Nelson Dollar submitted a letter (November 12, 2013) expressing support for the Orange Corridor Alternative and opposition to the Red, Blue, Purple, and Lilac Corridor Alternatives.
- The Town of Holly Springs submitted a letter (November 12, 2013) detailing the reasons why the Town supports the Orange Corridor Alternative and opposes the Purple Corridor Alternative.
- The Wake County Planning, Development and Inspections Division submitted a letter (November 12, 2013) expressing support for the Orange Corridor west of I-40 and the Green Corridor east of I-40, citing the importance of these routes in supporting the Wake County Land Use Plan.

- The Wake County Division of Parks, Recreation and Open Space submitted a letter (November 12, 2013) expressing support for the Orange Corridor Alternative west of I-40 and the Green Corridor Alternative east of I-40, citing impacts to Wake County priority stream corridors, the planned Southeast County Park, and a Natural Heritage site along Middle Creek as concerns about the Purple, Blue, and Red Corridor Alternatives.

Copies of these letters are in **Appendix I**. Comments received from local governments and other stakeholder interest groups following publication of the Draft EIS are discussed in **Section 5** of this report.

4.4 STATE LEGISLATION

North Carolina House Bill 225 and Senate Bill 165, which both passed the State General Assembly, prevent implementation of the Complete 540 – Triangle Expressway Southeast Extension north of the Orange Corridor Alternative. Governor Beverly Perdue signed the bill into law as North Carolina Session Law (NCSL) 2011-7 on March 18, 2011. A copy of the legislation is in **Appendix H.**

As indicated in Section 6.3.3, the Capital Area MPO passed a resolution on December 12, 2012, requesting that NCSL 2011-7 be repealed to allow study of alternative routes for the project in accordance with NEPA and other federal laws and to allow construction of the project as quickly as possible. The Capital Area MPO sent a copy of the resolution to the North Carolina General Assembly to encourage repeal of the law. On January 23, 2013, the Town of Garner sent a letter to the Wake County delegation of the General Assembly affirming its opposition to the repeal of the law. A copy of this letter is in **Appendix H**.

During its 2013 session, the North Carolina General Assembly passed two bills removing the alignment restrictions previously imposed on the project by NCSL 2011-7. Governor Pat McCrory signed House Bill 10 into law as NCSL 2013-94 on June 12, 2013, and signed House Bill 817 into law as NCSL 2013-183 on June 26, 2013. By removing the restrictions imposed by NCSL 2011-7, this legislation allowed NCDOT to fully resume the project's environmental study. Copies of this legislation are in **Appendix H**.

5 COMMENTS ON DRAFT EIS

5.1 FEDERAL AND STATE AGENCIES

Following publication of the Draft EIS, NCDOT received formal review comments from several federal and state agencies. Comments addressed a number of topics, including potential impacts to protected species, water quality impacts, and impacts to wetlands and streams. Copies of all the comments received from federal and state agencies are in **Appendix J**. Also included in **Appendix J** are tables listing each individual comment, along with NCDOT's response to each comment. **Table 4** summarizes the agency comments that specifically addressed the project's DSAs, noting whether the agency indicated any preference among the project's DSAs, and indicating other key information the agency provided about its perspective on the DSAs.

Table 4: Federal and State Agency Review Comments on DSAs

Agency	DSA Preference?	Comments
US Fish & Wildlife Service (11/25/15)	None noted	• DSAs 6 and 7 (Red Corridor) have lowest impacts on wetlands & streams and the least direct and indirect effects on the dwarf wedgemussel (DWM). • USFWS understands the intense opposition to the Red Corridor due to its disproportionate impacts on the human environment. • DSAs 1 through 5 (Orange Corridor) greatly minimize impacts to human environment; however, they have great potential to adversely affect the DWM. USFWS finds the Orange Corridor very problematic. • DSAs 8 through 17 (Lilac Corridor) would have very similar, albeit somewhat lesser adverse effects on the DWM. • Ability to propagate DWM and augment the population in Swift Creek will factor significantly in analysis to determine whether the Complete 540 project will jeopardize the continued existence of the species. • USFWS would prefer that the Clemmons Educational State Forest not be impacted.
US Environmental Protection Agency (1/4/16)	None noted	• Notes that DSAs 6 and 7 "appear to most closely meet the Complete 540's 'Purpose and Need." • Environmentally prefers DSAs 6 and 7 as having least impacts to jurisdictional streams and wetlands. • Finds DSAs 8-17 problematic because they would have the most potential to induce indirect effects.
National Marine Fisheries Service (12/15/15)	DSAs 6 & 7	• Prefers DSAs 6 and 7 because they avoid impacts to shad and striped bass and their habitats in Swift Creek, would have smaller impacts to the Neuse River, and would impact the smallest amount of wetlands and streams.
NC Wildlife Resources Commission (12/9/15)	None noted	• Indirect and cumulative effects of the project on induced land development will be a key aspect in selecting the Least Environmentally Damaging Practicable Alternative (LEDPA). • NCWRC has concerns about the effect of continued development in the lower Swift Creek watershed, below the

Agency	DSA Preference?	Comments
		Lake Benson dam, on long-term viability of the DWM and other sensitive aquatic species.

Note: NCDOT also received comment letters from the U.S. Department of the Interior, U.S. Department of Agriculture, North Carolina Division of Water Resources, and North Carolina Division of Waste Management. These comment letters did not specifically address support for or opposition to project DSAs but they are included in Appendix E.

5.2 PUBLIC COMMENTS

As described in **Section 3.2** of this report, during the comment period for the Draft EIS, from early November 2015 through January 8, 2016, comments addressing the DSAs, the Draft EIS, or other substantive project issues were received from 1,476 commenters. Emailed comments, letters, and the petition generally cited only particular color-coded corridor segments, rather than end-to-end DSAs, when indicating preferences and opposition. Some comments indicated both opposed and preferred corridor segments, while others indicated only one or the other. Many comments indicated more than one corridor segment that were preferred or opposed. Key conclusions from a review of expressed preferences and opposition in all of the comments included the following:

- There was overwhelming support for the Orange Corridor west of I-40. About 93 percent of submitted comments (those stating support for a color corridor west of I-40) expressed a clear preference for the Orange Corridor.
- Support for the Red, Purple/Blue, and Lilac Corridors was at 2 percent, 4 percent, and 2 percent, respectively.
- There was widespread opposition to the Red (58 percent of those stating opposition to a color corridor west of I-40) and Purple/Blue Corridors (34 percent of those stating opposition to a color corridor west of I-40).
- There was also notable opposition to the Lilac Corridor, with 7 percent of those stating opposition to a color corridor west of I-40.
- Only 1 percent of those stating opposition to a color corridor west of I-40 were opposed to the Orange Corridor.
- There was less of a clear pattern of support and opposition to corridors east of I-40, with most comments not specifically addressing these options. However, among comments that specifically addressed the corridors east of I-40, the Green Corridor was most commonly preferred. The Brown Corridor and the Tan Corridor were most commonly opposed.

While some of the written comments indicated only route preferences, without citing specific reasons for those preferences, most of the comments that gave specific reasons cited concern about potential effects on their neighborhoods, communities, and homes, in indicating support for the Orange Corridor and opposition to other corridors. Many of these responders cited the fact that communities have planned around the Orange Corridor and residents have made location decisions based on the Orange Corridor since its protection in 1996 and 1997. Many responders also indicated an opinion that minimizing impacts on homes, businesses, and neighborhoods should take precedence over minimizing impacts on natural resources. For the smaller number of responders that specifically mentioned considerations east of I-40, many also indicated that since a route similar to the Green Corridor has been shown on planning maps for the past two decades, they have also made location decisions based on that assumed location for completing the 540 outer loop.

While the large majority of public comments dealt with preference for or opposition to certain DSAs or color-coded corridor segments, other issues were cited in some of the public comments. Some of the more common issues raised included:

- Questions about whether traffic/toll revenue on the existing portions of NC 540 is meeting the levels predicted by NCDOT.
- Concern about the perceived unfairness of tolling the extension of the 540 Outer Loop into southern Wake County when the northern sections of the Outer Loop are not tolled.
- Statements citing the fact that, since the mid-1990s, the decisions local residents have been making about where to live and local governments have been making about future land use plans have been based on the belief that the project would be constructed along the protected corridor (Orange Corridor).
- Questions about why the project has taken so long and why NCDOT didn't just start the environmental documentation process after the protected corridor was established.
- Questions about why NCDOT can't just widen existing roads (e.g., NC 55, NC 42, Ten Ten Road) instead of building a new road.
- Questions about where noise barriers will be constructed and when a noise impact study will be done.

There were also more specific comments that addressed aspects of the project design, the project development process, or information included in the Draft EIS. **Appendix J** includes a table listing each substantive public comment received during the Draft EIS comment period, along with NCDOT's response to each. It is important to note that many of these comments were expressed by numerous commenters. As listed in the table in **Appendix J**, each comment is paraphrased to capture the common issue expressed by those who addressed that particular topic.

5.3 LOCAL GOVERNMENTS AND OTHER STAKEHOLDER GROUPS

Several local governments other stakeholder groups in the Complete 540 project area submitted formal comments following release of the Draft EIS. Copies of all the comments received from local governments and other stakeholder groups are in **Appendix J**. Also included in **Appendix J** are tables listing each individual comment, along with NCDOT's response to each comment.

The City of Raleigh's Mayor and Office of Transportation submitted letters expressing support for DSA 2 and opposition to the Red, Lilac, Green, Brown, and Tan Corridors, and also noting some design- and infrastructure related issues. The Town of Cary submitted an email with editorial comments about the Draft EIS and a comment about greenway accommodations. The Town of Garner submitted a comment reiterating its support for the Orange Corridor and opposition to the Red and Lilac Corridors. The Town of Benson submitted a letter expressing support for the Orange Corridor.

The Regional Transportation Alliance and the Morrisville Chamber of Commerce submitted comments expressing clear support for project overall. The Triangle Greenways Council submitted comments about potential greenway and natural resources impacts. The Southern Environmental Law Center submitted a letter detailing their concerns about the analyses used in the project, indicating a clear opposition to a new location roadway alternative for the project, and suggesting that NCDOT give greater consideration to other options, such as improving existing roadways.

6 STAKEHOLDER INPUT FOLLOWING DRAFT EIS

6.1 SECTION 4(F) DE MINIMIS COORDINATION

The Preferred Alternative would result in minor effects to two publicly-owned recreational resources subject to Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303 and 23 CFR 774)—Middle Creek School Park and the Neuse River Trail. Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only minor impacts, known as *de minimis* impacts, on lands protected by Section 4(f).

Three criteria must be satisfied in order to determine that the effects of the Preferred Alternative on these two resources would constitute de minimis impacts:

1. FHWA must determine that the transportation use of the Section 4(f) resource does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);

2. The public must be afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource; and

3. The official(s) with jurisdiction over the properties must be informed of FHWA's intent to make the *de minimis* impact determination based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

As documented in the Draft EIS, FHWA has determined that the use of each of these two resources would not adversely affect their recreational activities, features, and attributes, fulfilling the first criterion. Detailed information about the evaluation of the potential impacts of the project on these recreational resources, and about the finding that their recreational activities, features, and attributes would not be adversely affected by the project, are included in an appendix to the Draft EIS.

The public had the opportunity to review and comment on the potential effects of the project DSAs on these resources following publication of the Draft EIS, by reviewing the document, and at public hearings held after publication of the document, fulfilling the second criterion. There was no expressed opposition by citizens to the *de minimis* determinations for these resources.

As documented in **Appendix J**, the Southern Environmental Law Center (SELC) in their comments on the Draft EIS expressed their opinion that impacts associated with the proposed highway on the Neuse River Trail would not be *de minimis*. SELC indicated that the highway crossing of the trail would create unusual conditions along the trail. What SELC failed to acknowledge is that the Neuse River Trail crosses over or under several transportation facilities including similar highway facility crossings at I-540, I-495, US 1, US 401, and US 64.

Concerning the Middle Creek School Park, SELC in their comments on the Draft EIS questioned the current use of the wooded open space that would be impacted by the highway project. NCDOT has addressed this question in **Appendix J**, noting that this area has no formal park function and currently serves as a wooded area behind a residential neighborhood.

NCDOT and FHWA have completed coordination with the officials with jurisdiction over these properties to make the *de minimis* impact determination, fulfilling the third criterion. Concurrence letters from the City of Raleigh and the Town of Cary are in **Appendix K**. The City of Raleigh has concurred with the FHWA *de minimis* determination relative to the Neuse River Trail. Likewise, the Town of Cary has concurred with the *de minimis* determination for the Middle Creek School Park.

6.2 SOUTHERN ENVIRONMENTAL LAW CENTER LETTERS

Following SELC's January 8, 2016, letter documenting the organization's comments on the Draft EIS, SELC sent two additional letters to NCDOT concerning the Complete 540 project. Copies of both of these letters are in **Appendix L**.

The first letter, dated March 7, 2016, was a letter sent jointly by SELC and the Regional Transportation Alliance (RTA). This letter requested additional information and clarifications about the project. NCDOT sent a detailed response letter, dated April 28, 2016, to SELC and RTA. This response letter, also included in **Appendix L**, includes the requested additional information and clarifications.

The second letter, dated July 5, 2016, suggested that NCDOT revisit its analysis of the Complete 540 project alternatives in light of the North Carolina Supreme Court's 2016 decision in *Kirby v. North Carolina Department of Transportation*. In this decision, the Supreme Court held that property restrictions authorized by the Roadway Corridor Official Map Act amount to a taking of property, triggering a constitutional requirement for the government to compensate property owners. The letter suggested that a Supplemental Draft Environmental Impact Assessment (DEIS) should be prepared as a result of the *Kirby* ruling, and that the US Army Corps of Engineers should be given the opportunity to review this revised document.

After reviewing the *Kirby* ruling, NCDOT does not believe that a Supplemental DEIS is required. NCDOT believes that the cost data presented in the Draft EIS and Final EIS do not conflict with the *Kirby* ruling. NCDOT notes the following information:

- The project's right-of-way cost estimates were based on current property values, with the same estimating method used for each of the project's DSAs.

- NCDOT understands the *Kirby* ruling to require paying property owners the difference between the value of their property immediately before the Roadway Corridor Official Map was recorded and the value immediately after, taking into account all factors including the reduction in ad valorem taxes on the property. While the net effect of this before-and-after comparison has yet to be determined, NCDOT does not expect it will increase the cost of alternatives using all or some of the Protected (Orange) Corridor.

- Payments to be made as a result of the *Kirby* ruling will be a "sunk cost," i.e., one that will be required of NCDOT regardless of which alternative was selected as the preferred. Therefore, the additional cost as a result of the *Kirby* ruling would be additive to the project, without regard to the Preferred Alternative.

- NCDOT will incorporate updated right-of-way cost information, when available for the Complete 540 project, in the Strategic Mobility Formula for prioritizing projects under the Strategic Transportation Investment law. The reprioritization of projects is done periodically as part of the updating process for the State Transportation Improvement Program.

7 REFERENCES

Capital Area Metropolitan Planning Organization. 2015. *2016-2025 Metropolitan Transportation Improvement Program.*

Capital Area Metropolitan Planning Organization and Durham-Chapel Hill-Carrboro Metropolitan Planning Organization. 2013. *2040 Metropolitan Transportation Plans*.

Federal Highway Administration. 1987. FHWA Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*.

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H.W. Lochner. 2016. *Preferred Alternative Report for Complete 540.*

H.W. Lochner. 2011. *Triangle Expressway Southeast Extension Purpose and Need Statement.*

North Carolina Department of Transportation. 2015. *North Carolina Transportation Network and Strategic Transportation Corridors Framework.*

North Carolina Department of Transportation. 2016. *2016-2025 State Transportation Improvement Program*.

Legend

- Study Area Boundary
- Triangle Expressway

N W E S

0 0.5 1 1.5 2 Miles

RALEIGH

CARY

APEX

KNIGHTDALE

GARNER

HOLLY SPRINGS

FUQUAY-VARINA

CLAYTON

Study Area

Begin Project

End Project

Lake Wheeler

Lake Benson

Sunset Lake

Crabtree Creek

Middle Creek

Swift Creek

White Oak Creek

Neuse River

Wake County / Johnston County

I-40

WADE AVE

WESTERN BLVD

AVENT FERRY RD

TRYON RD

POOLE RD

TAYLOR RD

TURNIPSEED RD

HODGE RD

BATTLE BRIDGE RD

ROCK QUARRY RD

CREECH RD

CENTER ST

TEN TEN RD

TINGEN RD

SMITH RD

SR#1154

PIERCE-OLIVE RD

WEST LAKE RD

BELLS LAKE RD

LAKE WHEELER RD

OLD STAGE RD

BANKS RD

HILLTOP RD

SAULS RD

JORDAN RD

MOUNT PLEASANT RD

OLD DRUG STORE RD

WHITE OAK RD

WIN RD

GUY RD

WINSTON RD

NEW BETHEL RD

JACK RD

JOSEPHINE RD

SHOTWELL RD

CITY RD

E MAIN

COVERED BRIDGE RD

CASS HOLT RD

WADE NASH RD

AVENT FERRY RD

SR#1119

SR#1101

SR#2500

54 40 I-40 WADE AVE 50 70 401 1 Crabtree Creek 64 64 SR#2500

440 WESTERN BLVD RALEIGH 440 BYP 64 264 540 End Project BYP 64 264 KNIGHTDALE TAYLOR RD

440 AVENT FERRY RD 1 POOLE RD POOLE RD

64 1 40 TRYON RD HODGE RD POOLE RD

64 TURNIPSEED RD

55 APEX CENTER ST TEN TEN RD CREECH RD 40 BATTLE BRIDGE RD

TINGEN RD ROCK QUARRY RD

1 SMITH RD Study Area 70 GARNER NEUSE RIVER

TOLL 540 Lake Wheeler SHOTWELL RD

SR#1154 PIERCE-OLIVE RD WEST LAKE RD TEN TEN RD LAKE WHEELER RD 401 OLD STAGE RD Lake Benson WHITE OAK RD COVERED BRIDGE RD

Begin Project BYP 55 WIN RD White Oak Creek GUY RD BUS 70 CITY RD

HOLLY SPRINGS BELLS LAKE RD E MAIN

55 Sunset Lake Swift Creek Wake County / Johnston County I-40 WINSTON RD GUY RD CLAYTON

AVENT FERRY RD BANKS RD NEW BETHEL RD 50 BYP 70 42

CASS HOLT RD Middle Creek SAULS RD JORDAN RD

WADE NASH RD HILLTOP RD JACK RD

SR#1119 401 42 42 Study Area OLD DRUG STORE RD

FUQUAY-VARINA MOUNT PLEASANT RD JOSEPHINE RD

SR#1101 55 Middle Creek 40 CLEVEL

NORTH CAROLINA Turnpike Authority

Complete 540 - Triangle Expressway Southeast Extension

State Project No. 6.401078 & 6.401079 & 6.401080

S.T.I.P. No. R-2721 & R-2828 & R-2829

Figure 1 Project Study Area

Legend

Study Area Boundary

Triangle Expressway

Corridors

- Orange
- Lilac
- Purple
- Blue
- Red
- Green
- Brown
- Mint
- Tan
- Teal

CARY

RALEIGH

KNIGHTDALE

APEX

GARNER

HOLLY SPRINGS

FUQUAY-VARINA

CLAYTON

Study Area

Study Area

I-40

WADE AVE

WESTERN BLVD

AVENT FERRY RD

POOLE RD

TRYON RD

CENTER ST

TEN TEN RD

SMITH RD

TINGEN RD

SR#1154

PIERCE OLIVER RD

WEST LAKE RD

BELLS LAKE RD

LAKE WHEELER RD

OLD STAGE RD

CREECH RD

BATTLE BRIDGE RD

ROCK QUARRY RD

HODGE RD

TAYLOR RD

TURNIPSEED RD

NEUSE RIVER

SHOTWELL RD

COVERED BRIDGE RD

CITY RD

E MAIN ST

GUY RD

WHITE OAK RD

WIN RD

WINSTON RD

NEW BETHEL RD

BANKS RD

HILLTOP RD

MOUNT PLEASANT RD

OLD DRUG STORE RD

JACK RD

CASS HOLT RD

WADE NASH RD

HOLLY SPRINGS RD

SR#1119

SR#1101

Middle Creek

Lake Wheeler

Lake Benson

Sunset Lake

Bass Lake

White Oak Creek

Swift Creek

Wake County

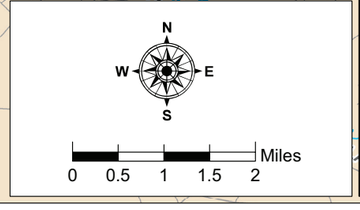
Johnston County

BYP 55

BYP 64 264

BYP 70

TOLL 540



NORTH CAROLINA Turnpike Authority

Complete 540 - Triangle Expressway Southeast Extension

State Project No. 6.401078 & 6.401079 & 6.401080

S.T.I.P. No. R-2721 & R-2828 & R-2829

Figure 2 Detailed Study Alternatives

APPENDICES

APPENDIX A
Section 6002 Coordination Plan
(Including Notice of Intent)

Final Section 6002 Coordination Plan
for the Triangle Expressway Southeast Extension Project
(STIP Projects R-2721, R-2828, & R-2829)

COORDINATION PLAN

1. Purpose of Plan.

   1.1. Section 6002 Compliance. This plan is intended to satisfy the requirement for a Coordination Plan under Section 6002 of SAFETEA-LU (23 U.S.C § 139) for the Triangle Expressway Southeast Extension, also known as the Southern and Eastern Wake Expressway, project (North Carolina Department of Transportation [NCDOT] State Transportation Improvement Program [STIP] Projects R-2721, R-2828, and R-2829).

   1.2. Integration of NEPA and Section 404 Requirements. The process established in this plan is intended to ensure that the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, and Section 404 of the Clean Water Act can be satisfied as part of a single process. Specifically, this plan is intended ensure that, to the maximum extent practicable,

   - there is regular communication and collaborative discussion among all agencies that have information, experience, and/or expertise relevant to issues considered in Section 404 permitting;

   - the North Carolina Department of Environment and Natural Resources (NCDENR) can issue Section 401, Riparian Buffer Authorizations, Isolated Wetland Permits, and State Stormwater Permits based on information developed as part of the NEPA process; and

   - the US Army Corps of Engineers (USACE) can issue a Section 404 permit for the project promptly following the end of the NEPA process, without the need for supplemental NEPA studies,

   - so that any other required permits or approvals can be obtained without unexpected issues or delays.

   1.3. Agency Communication. This plan establishes a framework for regular communication among all of the agencies involved in the environmental review process. This communication will include regular agency coordination meetings. These meetings will provide a forum for open discussion and dialogue among agencies. Meetings with one or more individual agencies also may occur as part of this process. When possible, all Participating Agencies will be informed of a smaller meeting to ensure all appropriate parties are included and will be updated after the meeting.

2. Project Initiation

2.1. Project Initiation Notice. The environmental review process for a project is initiated when the North Carolina Turnpike Authority (NCTA) submits a project initiation notice to the Federal Highway Administration (FHWA). This notice was provided in the form of a letter from NCTA to FHWA on November 20, 2009. A draft Notice of Intent was included with this notice.

2.2. Notice of Intent. A Notice of Intent to prepare an Environmental Impact Statement (EIS) for this project was published in the Federal Register on November 30, 2009. The project initiation notice and the Notice of Intent are attached as Exhibit 1.

3. Project Schedule

3.1. Schedule. The NCTA will prepare a project schedule showing projected dates for completing all environmental studies and permitting. A draft schedule for the Southern and Eastern Wake Expressway project is shown in Table 1.

Table 1: Draft Project Schedule

Notice of Intent	November 2009
Identify Detailed Study Alternatives	Q1 2011
DEIS	Q1 2012
Identify Preferred Alternative	Q2 2012
FEIS	Q1 2013
ROD	Q4 2013
Permit Application(s)	Q1 2014*
Let Contract/Begin Construction	Q2 2014*

*Contingent upon funding.

3.2. Agency Consultation. The schedule will be shared with the agencies and discussed at a Turnpike Environmental Agency Coordination (TEAC) meeting. Agency comments will be considered and the schedule may be revised as appropriate.

3.3. Updating Schedules. The project schedule may be revised from time to time by the lead agencies during the environmental review process. Schedule changes will be communicated to all Participating and Cooperating Agencies and the public. Under the statute, the schedule may be extended by the lead agencies for good cause, and may be shortened only with the consent of Cooperating Agencies.

4. Agency Roles

4.1. Lead Federal Agency. FHWA will be the lead Federal agency. As lead Federal agency in the Section 6002 process, FHWA is responsible for making certain decisions as

specified in Section 6002. In addition, FHWA has an overall responsibility for facilitating the expeditious completion of the environmental review process.

4.2. Lead State Agency. NCTA, a division of the NCDOT, will be the Lead State Agency, and thus will share with FHWA the responsibilities of the "Lead Agency" under the process defined in Section 6002.

4.3. Participating Agencies. NCTA will issue letters inviting Federal and non-Federal agencies to serve as Participating Agencies for each project developed under this plan. Participating Agencies include any Federal, State, or local agencies that may have an interest in the project.

4.3.1. Invitation List. Invitations were sent to Federal and non-Federal agencies that, in the judgment of FHWA and NCTA, may have an interest in the project. Table 2 lists agencies identified as having an interest in the Southern and Eastern Wake Expressway project. With the exception of the NC Department of Environment and Natural Resources (NCDENR), Division of Marine Fisheries, all agencies have agreed to serve as participating agencies for this project. Instead, NCDENR, Division of Marine Fisheries indicated that it will defer to NCDENR, Division of Water Quality. Invitation letters and agency responses thereto are included as Exhibit 2 to this Plan.

Table 2: Agency Roles

	Cooperating Agency	Participating Agency
US Army Corps of Engineers	✓	✓
US Environmental Protection Agency		✓
US Fish and Wildlife Service		✓
NC Department of Cultural Resources – Historic Preservation Office		✓
NC Department of Environment & Natural Resources		✓
Division of Marine Fisheries		✓
Division of Water Quality		✓
Wildlife Resources Commission		✓
Capital Area Metropolitan Planning Organization		✓

4.3.2. Deadline. Invitation letters specify a 30-day deadline for agencies to respond to the invitation.

4.3.3. Federal Invitees. A Federal agency that is invited to be a Participating Agency will be presumed to have accepted the invitation, unless the agency informs NCTA or FHWA in writing, by the deadline, that it: "(A) has no jurisdiction or

authority with respect to the project; (B) has no expertise or information relevant to the project; and (C) does not intend to submit comments on the project."

4.3.4. Non-Federal Invitees. Non-Federal agencies are not required to accept designation; they become Participating Agencies only if they affirmatively accept the invitation. If a non-Federal agency declines or does not respond to the invitation, the agency will not be considered a Participating Agency.

4.3.5. No Implied Support. Designation as a Participating Agency shall not imply that the Participating Agency supports a proposed project; or has any jurisdiction over, or special expertise with respect to evaluation of, the project.

4.3.6. No Effect on Other Laws. Nothing in Section 6002, or in this Coordination Plan, preempts or interferes with any power, jurisdiction, responsibility, or authority that a Federal, State, or local government agency, metropolitan planning organization, Indian tribe, or project sponsor has with respect to carrying out a project or any other provisions of law applicable to projects, plans, or programs.

4.4. Cooperating Agencies. A Participating Agency also may be designated as a Cooperating Agency. The responsibilities of a "Cooperating Agency" are defined in the CEQ regulations and are unchanged by SAFETEA-LU. In general, designation as a Cooperating Agency signifies a somewhat higher level of involvement and responsibility in the environmental review process. Federal, State, or local government agencies can be designated as Cooperating Agencies. As shown in Table 2, the USACE was invited to become a Cooperating Agency for this project. It is recognized that due to other program commitments, Cooperating Agencies will not be responsible for funding or writing portions of the NEPA document.

4.5. Local Government Coordination. The Capital Area Metropolitan Planning Organization (CAMPO) will serve as the official local representative for the project. CAMPO staff will be provided the same opportunities for input as other Participating Agencies. Local municipalities will be kept apprised of project developments through their involvement with CAMPO. The following municipalities are represented by CAMPO: City of Raleigh, City of Creedmoor, Town of Angier, Town of Apex, Town of Butner, Town of Cary, Town of Clayton, Town of Franklinton, Town of Fuquay-Varina, Town of Garner, Town of Holly Springs, Town of Knightdale, Town of Morrisville, Town of Rolesville, Town of Wake Forest, Town of Wendell, Town of Youngsville, Town of Zebulon, Wake County, and portions of Franklin, Granville, Harnett, and Johnston Counties.

4.5.1. CAMPO Technical Coordinating Committee (TCC). A NCTA staff member will represent NCTA at CAMPO Technical Coordinating Committee (TCC) meetings.

4.5.2. Meeting Summaries. Summaries of monthly TEAC meetings will be provided to CAMPO members.

5. Turnpike-Environmental Agency Coordination (TEAC) Meetings

5.1. TEAC Meetings. The principal method for agency coordination on NCTA projects will be TEAC meetings, which will be hosted by NCTA. These meetings will be used as a forum for discussing all NCTA projects, including those being studied under other procedures as well as those being studied under Section 6002. All TEAC meetings will be held at the NCTA office in Raleigh, unless otherwise specified in the meeting invitation.

5.2. Meeting Dates. The schedule for the TEAC meetings will be determined by FHWA and NCTA after consultation with NCDOT and the Participating Agencies. This schedule will be established, to the extent possible, for 12-month periods. The schedule will be coordinated with NCDOT interagency meetings to avoid or minimize conflicts and minimize travel. Changes to the schedule will be provided to the Participating Agencies as far in advance as possible. Each year, once available, a new schedule will be distributed.

5.3. Meeting Agenda and Objectives. The agenda for each TEAC meeting will be circulated via e-mail to all Participating Agencies. The agenda will identify (a) any specific issues that NCTA would like to resolve at the meeting and (b) any specific issues on which NCTA is seeking comments from the Participating Agencies at the meeting.

5.4. Meeting Materials. NCTA will post the agenda and materials for each TEAC meeting on a secure web site accessible to all Participating Agencies. Guidelines for circulating meeting materials are provided below.

5.4.1. Secure Web Site. Meeting materials will be made available to Participating Agencies via NCTA's Constructware Site (http://ncturnpike.constructware.com).

5.4.2. Timing of Circulation. To the greatest extent possible, NCTA will post the agenda and materials at least two weeks in advance of the meeting. In some cases, materials will be provided less than two weeks in advance, or will be circulated in the TEAC meeting itself. NCTA will not seek to resolve issues or obtain Participating Agency comments on materials that the Participating Agencies received less than two weeks in advance of the meeting.

5.4.3. Availability of Paper Copies. In addition to posting documents on the TEAC web site, NCTA will make paper copies of meeting materials available to all attendees at each meeting.

5.4.4. Large Documents. Documents that would be difficult or time-consuming for agencies to reproduce (e.g., large maps, lengthy bound documents with color, fold-out pages, etc.) will be made available to Participating Agencies in hard-copy format at a meeting (or by mail two weeks or more in advance) for discussion at a subsequent meeting. NCTA will consult with the Participating Agencies to determine when this type of distribution is appropriate.

5.5. Meeting Summaries. After each meeting, the NCTA will prepare a meeting summary. The summary will list the attendees, topics discussed, unresolved issues, and action items. The meeting summary will be posted in draft form to the TEAC web site for review and comment two weeks in advance of the next meeting. Meetings may be recorded on audiotape; the recording may be used in preparing the meeting summaries. The meeting summaries will be included in the administrative record.

5.6. Attendees. Participating Agencies (including Cooperating Agencies) will designate primary contacts for each NCTA project. These primary contacts will regularly attend TEAC meetings. Attendance may vary from month to month depending on the issues being discussed. Primary contacts for the Southern and Eastern Wake Expressway project are listed in Table 3.

Table 3: Primary Agency Contacts

US Army Corps of Engineers	Eric Alsmeyer
US Environmental Protection Agency	Chris Militscher
US Fish and Wildlife Service	Gary Jordan
NC Department of Cultural Resources – Historic Preservation Office	Peter Sandbeck
NC Department of Environment & Natural Resources	--
Division of Marine Fisheries	Kevin Hart
Division of Water Quality	Brian Wrenn
Wildlife Resources Commission	Travis Wilson
Capital Area Metropolitan Planning Organization	Chris Lukasina

6. Identification and Resolution of Project Issues

6.1. Constraint Mapping and Environmental Data. As early as practicable in project development, NCTA will provide FHWA and the Participating Agencies with mapping that shows key environmental resources, communities, topographic conditions, and other constraints in the project area. This mapping also will identify potential conceptual alternatives for the project, to the extent possible. (An "alternative" at this stage will generally be defined as a corridor.) The mapping may be accompanied by other supporting materials. This mapping may be presented to the Participating Agencies over a series of TEAC meetings and/or field meetings.

6.2. Field Visits and Agency Meetings. One or more field visits may be held with Participating Agencies to discuss constraints and obtain early input into development of alternatives. Attendees in field visits may be a sub-set of the Participating Agencies, depending on the issues to be discussed on the field visit; however, all Participating Agencies will be informed of upcoming meetings to determine interest in attending. The results of the field visit(s) will be discussed at a TEAC meeting, which will provide another opportunity for agency input.

6.3. General Project Issues. Throughout the process, Participating Agencies will be invited to identify issues that need to be considered by the Lead Agencies in preparing the environmental documentation and making project decisions, including issues that relate to the agencies' ability to approve (or comment favorably on the approval of) any necessary permits for the project. These issues will be referred to as "general project issues."

6.4. Issues of Concern. At any time in the process, a Participating Agency may identify an "issue of concern" as defined in SAFETEA-LU, which is an issue that in the agency's judgment could result in denial of a permit or substantial delay in issuing a permit.

6.4.1. Format. Participating agencies will be strongly encouraged to submit any "issues of concern" in writing to FHWA and NCTA on agency letterhead. Issues of concern submitted in other formats (e.g., e-mail) will also be considered.

6.4.2. Timing. Participating Agencies are required by statute to identify any issues of concern "as early as practicable" in the environmental review process, but this determination is based on information provided by the lead agencies. In some cases, it may not be practicable to identify an issue of concern until late in the process. The statute does not set a specific deadline for raising these issues.

6.4.3. Request for Comment. At any point in the process, NCTA may ask the Participating Agencies to state in writing whether there are any issues of concern. If such a request is made, NCTA will consult with the Participating Agencies before setting a deadline for a response. If agreed by the Lead and Participating Agencies, a deadline longer than 30 days could be established.

6.5. Monitoring and Updating. NCTA will maintain a record of both "general project issues" and "issues of concern" (if any) identified by the Participating Agencies. Separate meetings may be scheduled to resolve general project issues and/or any issues of concern. Additional issues may be added to the record based on new information or changed circumstances at any point in project development. This record will be posted to the TEAC web site.

6.6. Resolving General Project Issues. General project issues that are not resolved among the regular participants in the TEAC meetings can be elevated for consideration by the more senior officials within the relevant agencies. Any agency – Lead or Participating – can invoke the elevation process. The process is intended to be flexible, with specific procedures determined on a case-by-case basis depending on the nature of the issue. In general, the elevation process will involve the following steps:

- A Participating Agency requests elevation on an issue within the jurisdiction of that agency. This request can be made in a TEAC meeting or in a letter or e-mail to the other Participating Agencies and/or Lead Agencies.
- The request for elevation is placed on the agenda for discussion at a subsequent TEAC meeting.

- If the issue is not resolved at that subsequent TEAC meeting, the issue is elevated to more senior officials within the agencies.
- Each Participating Agency is responsible for identifying the more senior official(s) within his or her agency who will be directly involved in the elevation.
- The Participating Agencies will work together to plan the logistics and timing of the elevation process, including any briefing materials or other documents that need to be prepared prior to a resolution of the issue.

6.7. Resolving Issues of Concern. Under the statute, NCTA or the Governor may request a meeting at any time to resolve issues of concern. If such a meeting is requested, FHWA will convene a meeting in accordance with SAFETEA-LU to resolve the specified issues of concern. If an issue of concern is not resolved within 30 days after such a meeting, a report must be submitted to Congress and to the heads of certain agencies, as provided in SAFETEA-LU. If such a meeting is not requested, FHWA and NCTA will seek to address and resolve the agencies' issues of concern as part of normal agency coordination during the environmental review process, and will resolve the issue before proceeding with subsequent studies. NCTA anticipates that this process will be invoked rarely.

7. Development of Purpose and Need

7.1. Preliminary Purpose and Need Statement with Supporting Information. Early in project development, NCTA will prepare a brief preliminary statement of purpose and need – generally no more than one page in length. The preliminary statement of purpose and need will be distributed to the agencies. This preliminary statement will be accompanied by supporting information to the extent that it is available. This information may include:

- GIS map of study area (with study area identified)
- Summary of local concerns that resulted in project addition to the local transportation plan(s)
- Traffic data related to project needs
- Justification for designation as NCTA project (based on funding needs, etc.)
- Description of how the action will address the need.

7.2. Discussion at TEAC Meeting. The preliminary purpose and need will be discussed with the Participating Agencies at a TEAC meeting. This will provide an early opportunity for agency input into the purpose and need statement for the project. In accordance with Section 6002, the comment period will be 30 days (unless otherwise agreed).

7.3. Determination of Purpose and Need Statement. The purpose and need statement will be refined, as appropriate, based on input from the Participating Agencies and the public. Refinement of the purpose and need statement may be a gradual, iterative process that occurs during the alternatives development and screening process. This process will include an opportunity for agencies and the public to comment on the purpose and need

statement as part of their review of the alternatives screening report. (See Part 8.4 and 8.5 below.) The purpose and need statement will be determined by the time of selection of detailed study alternatives.

8. Development and Screening of Alternatives

8.1. Conceptual Alternatives. An initial set of conceptual alternatives will be developed as early as practicable in the process. The conceptual alternatives may be developed concurrently with the preliminary purpose and need statement. These alternatives will be provided to the agencies along with the environmental constraint mapping that provides the basis for identifying issues of concern. (See Part 6.1 above.)

8.2. Alternatives Development. Through agency coordination and public involvement, NCTA will develop a range of preliminary alternatives for consideration. This range may extend beyond the initial set of conceptual alternatives. This effort is intended to be comprehensive and inclusive. NCTA will maintain a summary of all alternatives suggested by Participating Agencies and the public.

8.3. Alternatives Screening Report. The NCTA will prepare an alternatives screening report that presents the development of alternatives, the justification for eliminating alternatives from further consideration, and identifies alternatives proposed for detailed study. The alternatives screening report will be provided to the Participating Agencies and discussed in a TEAC meeting.

8.4. Opportunity for Public Input. A summary of the purpose and need and alternatives screening report will be made available for public review and comment. A public meeting (or meetings) may be held in the project area during the public comment period on this report. This comment period will serve as the public's opportunity for involvement in both developing the purpose and need and determining the range of alternatives to be considered in the EIS. A summary of public input will be provided to Participating Agencies. Agencies will be given notice of the public meeting and will be welcome to attend.

8.5. Opportunity for Agency Input. Participating Agencies will be given a 30-day period to provide additional comments on the alternatives screening report following distribution of the report summarizing public comments. Participating Agencies will not be asked to concur on the alternatives screening report. Participating Agencies will be asked to submit any significant objections to the alternatives screening report in writing to FHWA and NCTA on agency letterhead.

8.6. Lead Agency Decision. The Lead Agencies identify the detailed study alternatives based on the comments received from Participating Agencies and the public. In general, the NCTA and FHWA will seek to resolve any issues or concerns regarding the range of detailed study alternatives at this stage of the process. Any issues that are not resolved at this stage will need to be resolved prior to issuance of a Section 404 permit by the USACE. It is incumbent on all Participating Agencies to raise issues, concerns, or comments in a timely manner and to also provide suggestions for resolution.

9. Methodologies and Level of Detail for Alternatives Analysis

9.1. Proposed Methodologies. Early in project development, NCTA will prepare materials outlining proposed methodologies for analyzing alternatives. The materials will summarize the methodologies intended to be used for each substantive area within the EIS – noise, air, water resources, traffic issues, secondary and cumulative impacts, etc. Standard procedures will simply be referenced, where applicable. Any modifications to standard procedures will be identified and discussed in more depth.

9.2. Opportunity for Agency Input. The proposed methodologies that vary from standard procedures will be developed in consultation with agencies having relevant information, experience, or expertise. For example, the USACE and NCDENR and other Participating Agencies as appropriate will be consulted in developing the methodology for analyzing impacts to aquatic resources; the HPO will be consulted in developing methodologies for analyzing impacts to historic sites (including both architectural and archeological resources).

9.3. Ongoing Coordination. Methodologies for alternatives analysis may be refined throughout the environmental review process. The Lead Agencies will discuss adjustments, as appropriate, with Participating Agencies at TEAC meetings.

9.4. Level of Detail. The Lead Agencies, in consultation with the Participating Agencies, will determine the appropriate level of design detail for preliminary alternatives, for the detailed study alternatives, and for the preferred alternative.

9.4.1. Preliminary Alternatives. The level of design for the detailed study alternatives will be determined in consultation with the Participating Agencies. There is no presumption that any specific level of design is needed; this issue will be determined based on the information needed to allow informed decision-making.

9.4.2. Detailed Study Alternatives. In general, functional design will be used as the basis for comparing the impacts of the alternatives in the Draft EIS (known as the Detailed Study Alternatives) and will be used for developing the cost estimates presented in the Draft EIS. A higher level of design detail may be developed for Detailed Study Alternatives in some cases; this issue will be discussed with Participating Agencies in accordance with Sections 9.1, 9.2, and 9.3.

9.4.3. Bridging Decisions. The Lead Agencies, in consultation with USACE and NCDENR (and, if appropriate, other Participating Agencies) will determine bridge locations and approximate lengths for each of the detailed study alternatives. These issues also will be discussed in TEAC meetings with all Participating Agencies.

9.4.4. Preferred Alternative. The Preferred Alternative may be developed to a higher level of detail in the Final EIS, in accordance with procedures specified in FHWA/FTA guidance for the Section 6002 process. If phased construction is anticipated, the higher level of design detail may be developed for a portion of the Preferred Alternative. As allowed under Section 6002, the higher level of design

detail may be prepared for the purpose of developing mitigation measures and/or for complying with permitting requirements (e.g., Section 404 permitting).

9.5. Lead Agency Decision. If there are disagreements about methodology, or about the appropriate level of design detail, FHWA and NCTA will seek to resolve those disagreements with the agencies having the concern and those with relevant expertise – for example, the HPO on historic resource issues. After consultation, the Lead Agencies will determine the methodology to be used in the NEPA document. The basis for that decision will be documented in the project file and provided to the Participating Agencies.

10. Selection of Preferred Alternative/LEDPA

10.1. Recommended Alternative. The NCTA may choose to identify a Recommended Alternative in the Draft EIS. The Recommended Alternative is only a recommendation and is not a final decision.

10.2. Timing for Identifying Preferred Alternative. The following actions will be completed before NCTA selects a Preferred Alternative:

- the Draft EIS has been issued and submitted to the State Clearinghouse;
- a Section 404 Public Notice Request has been submitted to USACE, and the Public Notice has been issued by the USACE;
- a public hearing on the Draft EIS has been held, and the comment period on the Draft EIS has ended.

10.3. Process for Identifying Preferred Alternative. The process for identifying a preferred alternative will include:

- the NCTA will prepare an information package containing an impacts comparison matrix, responses to substantive comments on the Draft EIS that relate to selection of the Preferred Alternative, and other pertinent information;
- the NCTA will provide the information package to the Participating Agencies at least two weeks prior to the TEAC meeting at which the package will be discussed;
- the Participating Agencies will be given a 30-day period following the TEAC meeting to provide comments on the information package, and there will be a discussion of the alternatives comparison package at a TEAC meeting; and
- if requested by the Participating Agencies, the NCTA will arrange for a field review of the alternatives.

10.4. Opportunity for Agency Input. The NCTA will provide FHWA and all Participating Agencies with a copy of the preferred alternative information package. The report will be discussed at a TEAC meeting. Agencies will be provided with a 30-day period to

comment on the report after the meeting (in addition to the comment opportunities provided under Section 10.1 above). Agencies will not be asked to concur on the Preferred Alternative. Agencies will be asked to submit any significant objections in writing to FHWA and NCTA on agency letterhead.

10.5. Lead Agency Decision. The NCTA and FHWA will formally identify the Preferred Alternative after considering all comments received from Participating Agencies, including both written comments and comments provided on the Draft EIS and in TEAC meetings.

11. Avoidance, Minimization, Mitigation, and Enhancement

11.1. Integration into Project Development. Opportunities to avoid, minimize, and mitigate impacts, and to enhance the impacted resources, will be considered throughout the process, including during initial development of alternatives. As allowed under Section 6002, the Preferred Alternative may be developed to a higher level of detail for purposes of developing mitigation measures and meeting permitting requirements.

11.2. Required Compensatory Mitigation. The Lead Agencies will consult with USACE and NCDENR (and other Participating Agencies as appropriate) to determine the type, size, and location of required compensatory mitigation for impacts to waters of the United States.

11.2.1. On-Site Mitigation. The potential for on-site mitigation for impacts to waters of the United States will be considered in the Draft EIS for the detailed study alternatives. This discussion will typically include a discussion of conceptual on-site mitigation locations. The potential for on-site mitigation will be discussed in more detail in the Final EIS.

11.2.2. Off-Site/Ecosystem Enhancement Program (EEP). The NCTA will coordinate with the Ecosystem Enhancement Program (EEP) during project development and design regarding the use of credits from the EEP's off-site mitigation sites to meet mitigation requirements for impacts to waters of the United States. The EEP also may carry out on-site mitigation on behalf of NCTA.

12. Section 404/401 Permitting and Other Permits/Approvals

12.1. Early Coordination. NCTA will conduct early coordination with the Participating Agencies to identify applicable permitting requirements and to determine the analysis and documentation required to satisfy those requirements. See Parts 6 and 9 above. Permits that may be applicable to this project include:

- Section 404/401 Permits
- Successful completion of Section 7 consultation
- Successful completion of Section 106 process (and Section 4(f), if applicable)

12.2. Comment Opportunities. The environmental review process includes multiple opportunities for comment by Participating Agencies, as described below:

12.2.1. Participating Agencies may submit comments at the TEAC meetings and in other meetings or field visits held during the environmental review process. NCTA will prepare meeting summaries for all substantive meetings with Participating Agencies. The meeting summaries will document comments provided by Participating Agencies.

12.2.2. Participating Agencies also will be invited to provide written comments at various points in the process as noted above. Agencies are encouraged to provide their written comments on agency letterhead; in particular, agencies are strongly encouraged to use letterhead when identifying issues of concern. However, all written comments submitted by agencies, including comments submitted by email, will be accepted and considered in decision-making.

12.2.3. If a Participating Agency raises an issue of concern, the Lead Agencies will confer with that agency, and with other agencies as appropriate, to address those issues.

12.2.4. Meeting summaries and written agency comments (regardless of format) be considered by the Lead Agencies in decision-making and will be included in the project files.

12.3. Jurisdictional Delineations. The NCTA will prepare the necessary documentation to obtain preliminary jurisdictional verification by the USACE (and, as appropriate, NCDENR) for all delineated wetlands and streams within a corridor along each of the detailed study alternatives (unless otherwise determined as part of the discussion of methodologies in accordance with Section 9 of this plan). These delineations will be used as the basis for comparing wetlands and stream impacts in the Draft EIS. The width of the corridor within which jurisdictional delineations are made will be determined through coordination with the Participating Agencies. Jurisdictional determination on Detailed Study Alternatives will be performed as preliminary, and once the Preferred Alternative is determined, the final jurisdictional determination will be conducted. NCTA will prepare the necessary documentation to obtain final jurisdictional verification (i.e., Rapanos jurisdictional determination forms) for the Preferred Alternative.

12.4. Pre-Application Consultation. The NCTA will engage in pre-application consultation, as appropriate, with each agency that is responsible for making a permit decision on the project.

12.5. Request for Public Notice. The NCTA will submit the Section 404 permit application to the USACE at the time the Draft EIS is issued. This application will typically be submitted prior to identification of a Preferred Alternative; therefore, it typically will not identify the specific alternative for which the permit is being requested. This submittal will enable the USACE to issue a public notice and to use the FHWA/NCTA

public hearing on the Draft EIS as the USACE's public hearing on the Section 404 application.

12.6. Public Hearing. The public hearing on the Draft EIS will also serve as the public hearing for the Section 404 permit application.

12.7. Refining the Permit Application. After selection of a Preferred Alternative, the NCTA will coordinate on a regular basis with the USACE, NCDENR, and other Participating Agencies as appropriate regarding all applicable permit applications for the project. This coordination may occur as part of the TEAC meetings and/or in separate meetings convened to discuss permitting issues. These meetings will include discussions of:

- avoidance and minimization measures
- compensatory mitigation
- review of hydraulic design
- review of stormwater management plans
- review of construction methods
- review of final permit drawings

12.8. Permit Application and Decision. After the permitting meetings described above, the NCTA will submit an updated Section 404 permit application to the USACE and a Section 401 certification request to NCDENR. Permit applications under other applicable laws will also be filed. All permit applications shall be filed in accordance with the respective agency permitting requirements in place at the time of application. All respective permitting agencies shall forward the permit applications to other agencies for review as required by the respective agency regulations and/or rules.

12.9. Permit Decisions. The permitting agencies will consider and act upon the permit applications in accordance with their procedures.

12.10. Permitting Delay. If a Section 404 permit (or any other permit or approval) is not issued within 180 days after the FHWA issues a Record of Decision (ROD) *and* a complete permit application is submitted, the USDOT will be required by Section 6002 to submit a report to the Congress – specifically, to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure in the House of Representatives. Reports must be submitted every 60 days thereafter until the issue is resolved. The same requirement applies to other permitting decisions.

12.11. Coordination After Permit Issuance. After permit issuance, NCTA will coordinate directly with permitting agencies and others as required by the terms of project permits. Such coordination may include issues such as reviewing final project plans, tracking compliance with permit conditions, and modifying permits to address changes to the project's design, construction methodology or construction timeframe.

Exhibit 1

PROJECT INITIATION LETTER
&
NOTICE OF INTENT

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PERDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

November 20, 2009

John F. Sullivan, III, P.E.
Division Administrator
FHWA North Carolina Division
310 New Bern Avenue, Suite 410
Raleigh, NC 27601-1418

RE: STIP Projects R-2721, R-2828, and R-2829
Notification of Project Initiation

Dear Mr. Sullivan,

In accordance with Section 6002 of SAFETEA-LU, the North Carolina Turnpike Authority (NCTA) is notifying the Federal Highway Administration (FHWA) that planning, environmental, and engineering studies for the proposed Southern and Eastern Wake Expressway project are underway. The project is included in the 2009-2015 North Carolina Department of Transportation (NCDOT) State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. These three projects are being developed as a single project in a single Environmental Impact Statement (EIS).

NCTA, a division of NCDOT, will prepare an EIS on the proposed southern and eastern portions of the Outer Loop around Raleigh and surrounding communities in Wake and Johnston Counties. The project extends from the vicinity of NC 55 at SR 1172 (Old Smithfield Road) near Apex to the vicinity of US 64/US 264 Bypass in Knightdale, a distance of approximately 28 miles. The proposed project would complete the Outer Loop.

It is anticipated that a Clean Water Act 404 Individual Permit will be required from the US Army Corps of Engineers (Corps). NCTA will coordinate throughout project development with the Corps to ensure that their concerns are addressed and incorporated into the EIS.

Enclosed, please find a Draft Notice of Intent to begin work on the environmental document for the Southern and Eastern Wake Expressway project. If you have any questions or would like to discuss the project in more detail, please contact Jennifer Harris at (919) 571-3004.

Sincerely,

Steven D. DeWitt, P.E.
Chief Engineer

cc: Ms. Deborah Barbour, P.E., NCDOT
Ms. Jennifer Harris, P.E., NCTA

NOTICES

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement; Wake and Johnston Counties, NC

December __, 2009

AGENCY: Federal Highway Administration (FHWA), DOT

ACTION: Notice of Intent (NOI)

SUMMARY: The FHWA is issuing this notice to advise the public that an Environmental Impact Statement (EIS) will be prepared for a proposed project in Wake and Johnston Counties, North Carolina.

FOR FURTHER INFORMATION CONTACT: Mr. George Hoops, P.E., Major Projects Engineer, Federal Highway Administration, 310 Bern Avenue, Suite 410, Raleigh, North Carolina 27601-1418, Telephone: (919) 747-7022.

SUPPLEMENTARY INFORMATION: Pursuant to Title 23, Code of Federal Regulations, Part 771, Environmental Impact and Related Procedures, the FHWA, in cooperation with the North Carolina Turnpike Authority (NCTA), a division of the North Carolina Department of Transportation (NCDOT), will prepare an EIS addressing the proposed completion of the Raleigh Outer Loop. The proposed study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. The proposed action is included in the 2035 Long Range Transportation Plan approved by the Capital Area Metropolitan Planning Organization (CAMPO).

This project is designated as three projects in the NCDOT State Transportation Improvement Program (STIP) – Projects R-2721, R-2828, and R-2829. These projects combine to form the southern and eastern portions of the Outer Loop around Raleigh and surrounding communities, completing the Outer Loop. The northern portion of the Outer Loop is open to traffic and the western portion, the Western Wake Freeway, is currently under construction. The southern portion of this project is proposed to tie into the Western Wake Freeway near Apex. The eastern portion of this project is proposed to tie into the northern portion of the Outer Loop at the US 64/US 264 Bypass in Knightdale.

The EIS for the proposed action will consider alternatives that include improving existing roadways as well as alternatives that involve building a new location facility. Multiple alternative

corridors for a new location facility may be evaluated. The analysis will also include a range of non-highway improvement alternatives, including the "No-Build" alternative (continuation of the existing condition), expanding transit service, transportation demand management (TDM), and transportation system management (TSM). As part of the EIS, NCTA will study the feasibility and impacts of developing the proposed project as a tolled facility.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State and local agencies. Scoping will occur over a series of meetings with the agencies and citizens informational workshops with the public. Information on the dates, times, and locations of the citizens informational workshops will be advertised in the local news media and newsletters will be mailed to those on the project mailing list. If you wish to be placed on the mailing list contact Jennifer Harris at the address listed below. The Draft EIS will be available for public and agency review and comment prior to the public hearing.

To ensure the full range of issues related to the proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments and questions concerning the proposed action should be directed to the FHWA at the address provided above or directed to: Ms. Jennifer Harris, P.E., Staff Engineer, North Carolina Turnpike Authority, at 5400 Glenwood Avenue, Suite 400, Raleigh, North Carolina, 27612. Telephone: (919)571-3000. Email: sewake@ncturnpike.org.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of Federal programs and activities apply to this program.)

Issued on:

George Hoops, P.E. – Major Projects Engineer
Federal Highway Administration
Raleigh, North Carolina

Consumptive Use of up to 1.999 mgd; Modification Date: October 28, 2009.

31. Novus Operating, LLC, Pad ID: Wilcox #1, ABR–20090803, Covington Township, Tioga County, Pa.; Consumptive Use of up to 0.999 mgd; Transferred Date: October 22, 2009.

32. Novus Operating, LLC, Pad ID: Brookfield #1, ABR–20090804, Brookfield Township, Tioga County, Pa.; Consumptive Use of up to 0.999 mgd; Transferred Date: October 22, 2009.

Authority: Public Law 91–575, 84 Stat. 1509 et seq., 18 CFR Parts 806, 807, and 808.

Dated: November 17, 2009.

Stephanie L. Richardson,

Secretary to the Commission.

[FR Doc. E9–28514 Filed 11–27–09; 8:45 am]

BILLING CODE 7040–01–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Wake and Johnston Counties, NC

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Intent (NOI).

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed project in Wake and Johnston Counties, North Carolina.

FOR FURTHER INFORMATION CONTACT: Mr. George Hoops, P.E., Major Projects Engineer, Federal Highway Administration, 310 Bern Avenue, Suite 410, Raleigh, North Carolina 27601–1418, *Telephone:* (919) 747–7022.

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Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State and local agencies. Scoping will occur over a series of meetings with the agencies and citizens informational workshops with the public. Information on the dates, times, and locations of the citizens informational workshops will be advertised in the local news media, and newsletters will be mailed to those on the project mailing list. If you wish to be placed on the mailing list, contact Jennifer Harris at the address listed below. The Draft EIS will be available for public and agency review and comment prior to the public hearing.

To ensure the full range of issues related to the proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments and questions concerning the proposed action should be directed to the FHWA at the address provided above or directed to: Ms. Jennifer Harris, P.E., Staff Engineer, North Carolina Turnpike Authority, at 5400 Glenwood Avenue, Suite 400, Raleigh, North Carolina 27612. *Telephone:* (919) 571–3000. *E-mail: sewake@ncturnpike.org.*

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of Federal programs and activities apply to this program.)

Issued on: November 23, 2009.

George Hoops,

Major Projects Engineer, Federal Highway Administration, Raleigh, North Carolina.

[FR Doc. E9–28626 Filed 11–27–09; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[WisDOT Project 1206–07–03]

Notice of Intent to Prepare a Supplemental Draft Environmental Impact Statement; USH 18 & 151, CTH PD to USH 12 & 14, Madison Urban Area; Dane County, WI

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Intent to Prepare a Supplemental Draft Environmental Impact Statement.

SUMMARY: The FHWA is issuing this notice to advise the public that a Supplemental Draft Environmental Impact Statement (SDEIS) is being prepared for transportation improvements to the USH 18 & 151 (Verona Rd) corridor from CTH PD to USH 12 & 14 in the Madison Urban Area, Dane County, Wisconsin, WisDOT Project 1206–07–03. The SDEIS is being prepared in conformance with 40 CFR 1500 and FHWA regulations.

SUPPLEMENTARY INFORMATION: The Federal Highway Administration (FHWA), in cooperation with the Wisconsin Department of Transportation (WisDOT), is preparing a Supplemental Draft Environmental Impact Statement (SDEIS) on improvements needed to provide capacity for existing and projected traffic demand, to reduce high crash rates, and to provide better connectivity between land areas adjacent to the highways on approximately 2 miles of existing USH 18 & 151 (Verona Road) from CTH PD (McKee Rd) to USH 12 & 14 (Madison South Beltline Hwy). The previous DEIS corridor included three focus areas: (1) The West Madison Beltline Hwy (USH 12 & 14 from USH 14 in Middleton to Todd Dr in Madison), (2) Interchange upgrades and new grade separations on the West Madison Beltline, and (3) the same

Exhibit 2

PARTICIPATING AGENCY INVITATIONS
&
AGENCY RESPONSES

U.S.Department
of Transportation
Federal Highway Administration

North Carolina Division

310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

August 17, 2010

In Reply Refer To:
HDA-NC

Mr. Eric Alsmeyer
US Army Corps of Engineers
Raleigh Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Alsmeyer:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

Your agency was identified as an agency that may have an interest in the project. With this letter, we are extending to your agency an invitation to be a participating agency with the FHWA in the development of the EIS for the subject project. This designation does not imply that your agency either supports the proposal or has any special expertise with respect to evaluation of the project.

FHWA also requests the participation of the US Army Corps of Engineers as a cooperating agency in the preparation of the Draft EIS and Final EIS, in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of the National Environmental Policy Act.

Pursuant to Section 6002 of SAFETEA-LU, participating agencies are responsible to identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of the above project include the following as they relate to your area of expertise:

MOVING THE
AMERICAN
ECONOMY

1) Provide meaningful and early input on defining the purpose and need, determining the range of alternatives to be considered, and the methodologies and level of detail required in the alternatives analysis.
2) Participate in coordination meetings and joint field reviews as appropriate.
3) Timely review and comment on documents provided for your agency's input during the environmental review process.

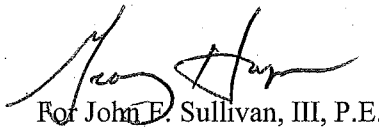
A federal agency who does not respond to this letter will automatically be designated as a participating agency. If you wish to decline, we ask that your agency submit a separate letter stating your reason for declining the invitation to Ms. Jennifer Harris, P.E., NCTA Director of Planning and Environmental Studies, at 5400 Glenwood Avenue, Suite 400, Raleigh, North Carolina 27612 by September 15, 2010. Pursuant to SAFETEA-LU Section 6002, any federal agency that chooses to decline the invitation to be a participating agency must specifically state in its response that it:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of the EIS, please contact Mr. George Hoops, FHWA Major Projects Engineer, at (919) 747-7022 or Ms. Harris at (919) 571-3004.

Thank you for your cooperation and interest in this project.

Sincerely,



For John F. Sullivan, III, P.E.
Division Administrator

cc: Mr. George Hoops, P.E., FHWA
Ms. Jennifer Harris, P.E., NCTA
Mr. Scott McLendon, USACE

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

September 15, 2010

Regulatory Division

SUBJECT: Action ID 2009-02240; TIP Project Nos. R-2721, R-2828 and R-2829, Triangle Expressway Southeast Extension

Mr. John F. Sullivan, III, P.E.
Division Administrator, North Carolina Division
US Department of Transportation
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

Dear Mr. Sullivan:

Please reference your August 17, 2010 letter requesting the participation of the US Army Corps of Engineers as a cooperating agency in the preparation of the Draft Environmental Impact Statement (EIS) and Final EIS for the proposed TIP Project Nos. R-2721, R-2828 and R-2829, Triangle Expressway Southeast Extension, in Wake and Johnston Counties, North Carolina. It is our understanding that this project is being developed and will likely be constructed under authority of the North Carolina Turnpike Authority (NCTA) as a toll facility.

Pursuant to the Council on Environmental Quality, (40 CFR 1501.6 Cooperating Agencies), we would be pleased to participate in the development of the necessary environmental document as a Cooperating Agency as you have requested, with the understanding that the Federal Highway Administration (FHWA) will act as the lead Federal agency. It is our intention to formally adopt the FHWA National Environmental Policy Act (NEPA) document, in whole or in part, provided it meets our requirements relative to Section 404 of the Clean Water Act and NEPA, when the Record of Decision (or Finding of No Significant Impact, as appropriate) is completed. Please note that other program commitments will preclude us from funding or writing any portion of the subject document. However, it is our intention to fully participate in the development of the necessary document throughout the EIS development process.

Should you have any questions, please contact the undersigned in the Raleigh Field Office at (919) 554-4884, extension 23.

Sincerely,

Eric C. Alsmeyer
Regulatory Project Manager

Copies Furnished:

Mr. Steven D. DeWitt
Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Mr. Brian Wrenn
NCDENR-DWQ
Wetlands Section
585 Waughtown Street
Winston-Salem, NC 27107

Mr. Gary Jordan
United States Fish & Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, NC 27636-3726

Mr. Christopher Militscher
USEPA Raleigh Office
Office of Environmental Assessment
310 New Bern Avenue, Room 206
Raleigh, NC 27601

Mr. Travis Wilson
Highway Coordinator
North Carolina Wildlife Resources Commission
1142 I-85 Service Road
Creedmoor, NC 27522

U.S. Department of Transportation
Federal Highway Administration

North Carolina Division

310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

August 17, 2010

In Reply Refer To:
HDA-NC

Mr. Gary Jordan
US Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Jordan

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

Your agency was identified as an agency that may have an interest in the project. With this letter, we are extending to your agency an invitation to be a participating agency with the FHWA in the development of the EIS for the subject project. This designation does not imply that your agency either supports the proposal or has any special expertise with respect to evaluation of the project.

Pursuant to Section 6002 of SAFETEA-LU, participating agencies are responsible to identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of the above project include the following as they relate to your area of expertise:

1) Provide meaningful and early input on defining the purpose and need, determining the range of alternatives to be considered, and the methodologies and level of detail required in the alternatives analysis.
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MOVING THE
AMERICAN
ECONOMY

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- Has no jurisdiction or authority with respect to the project;
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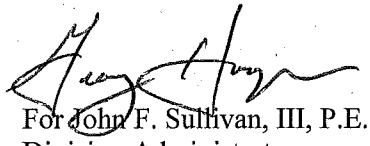
- Does not intend to submit comments on the project.

A federal agency that does not decline the invitation by the date specified above will automatically be designated as a participating agency.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of the EIS, please contact please contact Mr. George Hoops, FHWA Major Projects Engineer, at (919) 747-7022 or Ms. Harris at (919) 571-3004.

Thank you for your cooperation and interest in this project.

Sincerely,



For John F. Sullivan, III, P.E.
Division Administrator

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA
Mr. Brian Cole, USFWS

U.S. Department of Transportation
Federal Highway Administration

North Carolina Division

310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

August 17, 2010

In Reply Refer To:
HDA-NC

Mr. Chris Militscher
US Environmental Protection Agency
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Militscher:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

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MOVING THE AMERICAN ECONOMY

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Thank you for your cooperation and interest in this project.

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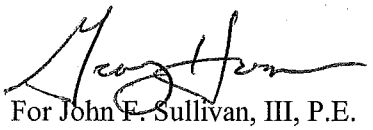

For John F. Sullivan, III, P.E.
Division Administrator

cc: Mr. George Hoops, P.E., FHWA
Ms. Jennifer Harris, P.E., NCTA
Mr. Ted Bisterfield, EPA-Atlanta

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

August 10, 2010

Mr. Travis Wilson
NC Wildlife Resources Commission
1142 I-85 Service Road
Creedmoor, NC 27522

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Wilson:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

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If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of the EIS, please contact Ms. Harris at (919) 571-3004 or Mr. George Hoops, FHWA Major Projects Engineer, at (919) 747-7022.

Thank you for your cooperation and interest in this project.

Sincerely,

Jennifer Harris

for Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA

We accept the invitation to become a participating agency.

Travis W. Wilson
Print Name

Signature

8-10-2010
Date

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

August 10, 2010

Mr. Brian Wrenn
NCDENR-Division of Water Quality
1650 Mail Service Center
Raleigh, NC 27699-1650

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Wrenn:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

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Thank you for your cooperation and interest in this project.

Sincerely,

Jennifer Harris

for Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA

We accept the invitation to become a participating agency.

Brian Uhrin
Print Name

Signature

1/20/11
Date

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

RECEIVED
AUG 13 2010
HISTORIC PRESERVATION OFFICE

August 10, 2010

CH 98-0457

Mr. Peter Sandbeck
State Historic Preservation Office
North Carolina Department of Cultural Resources
4610 Mail Service Center
Raleigh, NC 27699-4610

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Sandbeck:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

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Thank you for your cooperation and interest in this project.

Sincerely,

Jennifer Harris

for Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA
Ms. Renee Gledhill-Early, SHPO

We accept the invitation to become a participating agency.

Renee Gledhill-Earley, ERC/SHPO
Print Name

Renee Gledhill-Earley
Signature

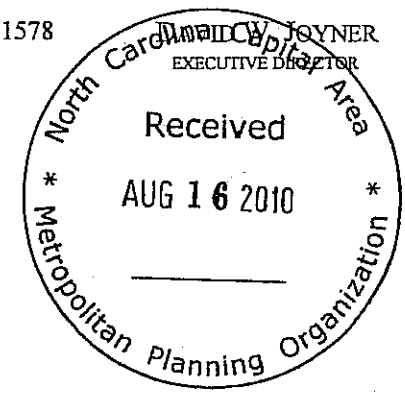
8.31.10
Date

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID C. JOYNER
EXECUTIVE DIRECTOR



August 10, 2010

Mr. Ed Johnson
Director
Capital Area Metropolitan Planning Organization
127 West Hargett Street, Suite 800
Raleigh, NC 27601

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. Johnson:

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2) Participate in coordination meetings and joint field reviews as appropriate.
3) Timely review and comment on documents provided for your agency's input during the environmental review process.

Please respond to this invitation prior to September 15, 2010. If you wish to accept this invitation, please sign in the space below and return a copy to Ms. Jennifer Harris, P.E., NCTA Director of Planning and Environmental Studies, at 5400 Glenwood Avenue, Suite 400, Raleigh, North Carolina 27612. If you wish to decline, we ask that your agency submit a separate letter stating your reason for declining the invitation.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of the EIS, please contact Ms. Harris at (919) 571-3004 or Mr. George Hoops, FHWA Major Projects Engineer, at (919) 747-7022.

Thank you for your cooperation and interest in this project.

Sincerely,

Jennifer Harris

for Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA

We accept the invitation to become a participating agency.

EDISON JOHNSON
Print Name

Signature

AUG. 17, 2010
Date

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

August 10, 2010

Mr. Sean McKenna
NCDENR-Division of Marine Fisheries
Pamlico District Office
943 Washington Square Mall
Washington, NC 27889

RE: Invitation to Become Participating Agency and Cooperating Agency
Triangle Expressway Southeast Extension
Wake & Johnston Counties/STIP Projects: R-2721, R-2828, R-2829

Dear Mr. McKenna:

The Federal Highway Administration (FHWA) in cooperation with the North Carolina Turnpike Authority (NCTA), a division of North Carolina Department of Transportation (NCDOT), is initiating the project development, environmental, and engineering studies for the proposed Triangle Expressway Southeast Extension project, also known as the Southern and Eastern Wake Expressway, in Wake and Johnston Counties. This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. The study area boundary begins in Wake County at NC 55 in the vicinity of Apex and Holly Springs. The boundary extends southward along NC 55 and turns eastward to parallel NC 42, crossing into Johnston County near Benson Road (NC 50). The boundary turns northward near Clayton, extending to US 64/US 264 Bypass, in Knightdale. The study area includes southeastern limits of Raleigh and the southern limits of Garner and Cary. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

Your agency was identified as an agency that may have an interest in the project. With this letter, we are extending to your agency an invitation to be a participating agency with the FHWA in the development of the EIS for the subject project. This designation does not imply that your agency either supports the proposal or has any special expertise with respect to evaluation of the project.

Pursuant to Section 6002 of SAFETEA-LU, participating agencies are responsible to identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of the above project include the following as they relate to your area of expertise:

1) Provide meaningful and early input on defining the purpose and need, determining the range of alternatives to be considered, and the methodologies and level of detail required in the alternatives analysis.
2) Participate in coordination meetings and joint field reviews as appropriate.
3) Timely review and comment on documents provided for your agency's input during the environmental review process.

Please respond to this invitation prior to September 15, 2010. If you wish to accept this invitation, please sign in the space below and return a copy to Ms. Jennifer Harris, P.E., NCTA Director of Planning and Environmental Studies, at 5400 Glenwood Avenue, Suite 400, Raleigh, North Carolina 27612. If you wish to decline, we ask that your agency submit a separate letter stating your reason for declining the invitation.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of the EIS, please contact Ms. Harris at (919) 571-3004 or Mr. George Hoops, FHWA Major Projects Engineer, at (919) 747-7022.

Thank you for your cooperation and interest in this project.

Sincerely,

Jennifer Harris

for Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. George Hoops, PE, FHWA
Ms. Jennifer Harris, PE, NCTA

We accept the invitation to become a participating agency.

_____
Print Name

_____
Signature

_____
Date

Giugno, Kiersten R

From: Hart, Kevin
Sent: Tuesday, January 25, 2011 3:56 PM
To: Giugno, Kiersten R
Cc: Deaton, Anne
Subject: RE: Southeast Extension (participating agency invitation)

Kiersten,
At this time the NCDMF will defer to the NCWRC on this project.
If you have any questions please let me know.
Kevin Hart

From: Giugno, Kiersten R
Sent: Wednesday, January 19, 2011 11:54 AM
To: Mckenna, Sean
Subject: Southeast Extension (participating agency invitation)

Sean - attached is an invitation for DMF to serve as a participating agency pursuant to Section 6002 of SAFETEA-LU. I do not believe NCTA has received a response from DMF. Please review and respond for our records.

Thank you,

Kiersten R. Giugno
Senior Transportation Planner

NCTA General Engineering Consultant
5400 Glenwood Ave., Suite 400
Raleigh, NC 27612

1578 Mail Service Center
Raleigh, NC 27699-1578

Tel 919.420.7558

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

APPENDIX B
Scoping Letters and Responses

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PERDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

January 25, 2010

Ms. Chrys Baggett
North Carolina Department of Administration
1301 Mail Service Center
Raleigh, NC 27699-1301

RE: Start of Study and Agency Scoping Meeting Notification
Southern & Eastern Wake Expressway, Wake and Johnston Counties
STIP Projects R-2721, R-2828, and R-2829

Dear Ms. Baggett,

The North Carolina Turnpike Authority (NCTA), a division of the North Carolina Department of Transportation (NCDOT), has initiated the project development, environmental, and engineering studies for the proposed Southern and Eastern Wake Expressway in Wake and Johnston Counties (see attached figure). As it is currently defined, the project would address the proposed completion of the Raleigh 540 Outer Loop, from NC 55 in Wake County in the vicinity of the Towns of Apex and Holly Springs, east to the US 64/US 264 Bypass, in the Town of Knightdale, a distance of approximately 28 miles. The proposed study area also includes the southeastern limits of the City of Raleigh, the southern limits of the Towns of Garner and Cary, and portions of the Town of Clayton and Johnston County. A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) was published on November 30, 2009 (Federal Register Vol. 74, No. 228, page 62629).

This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. These three projects are being developed as a single project in a single EIS. The three projects combine to form the southern and eastern portions of the Outer Loop around Raleigh and surrounding communities, completing the Outer Loop. The northern portion of the Outer Loop is open to traffic and the western portion, the Western Wake Freeway, is currently under construction. The southern portion of this project is proposed to tie into the Western Wake Freeway near Apex. The eastern portion of this project is proposed to tie into the northern portion of the Outer Loop in Knightdale.

While much of the project area is rural and agricultural in nature, the area's proximity to employment centers in Raleigh and Research Triangle Park is stimulating a transition to suburban land uses. Based on previous studies and natural systems screening, the project corridor includes a number of streams, wetlands, and floodplains, as well as potential habitat for four federally protected species: dwarf wedgemussel (*Alasmidonta heterodon*), Tar River spinymussel (*Elliptio steinstansana*), Michaux's sumac (*Rhus michauxii*), and the red-cockaded woodpecker (*Picoides borealis*).

NCTA plans to prepare an EIS for the Southern and Eastern Wake Expressway project in accordance with the National Environmental Policy Act (NEPA). The EIS will consider

alternatives that include improving existing roadways, alternatives that involve building a new location facility, and various non-highway alternatives. We would appreciate any information you might have that would be helpful in establishing the study area and project purpose and need, identifying preliminary corridors, evaluating the potential environmental impacts of those corridors, and establishing a viable range of alternatives for consideration. Also, please identify any permits or approvals or other requirements of your agency.

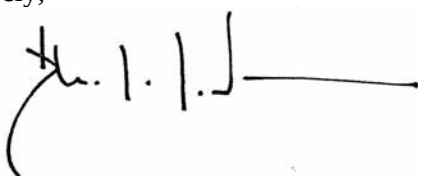
In lieu of strictly following the NCDOT's merger process, this project will follow coordination procedures authorized under Section 6002 of SAFETEA-LU for the environmental review process. The key difference in the two approaches is that under the Section 6002 process formal agency concurrence is not required at decision points in the study. However, NCTA still expects agencies to highlight issues of concern, particularly those that could affect later permitting decisions.

An agency scoping meeting will be held at the Turnpike Environmental Agency Coordination Meeting on February 16, 2010 in the NCTA Board Room (Address: 5400 Glenwood Avenue, Suite 400, Raleigh, NC 27612). This meeting will be from 8:30 AM to 10:30 AM. The purpose of the meeting will be to identify significant issues related to the proposed action that should be considered during the study process. We strongly encourage you or a representative of your agency to participate in this meeting; however, if your agency can not be represented, please provide written comments by March 31, 2010. Your response should be mailed to the following:

Ms. Jennifer Harris, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

If you have any questions concerning the proposed project, please call Ms. Harris at (919) 571-3004. Public inquiries about the project can also be made via e-mail at sewake@ncturnpike.org.

Sincerely,



Steven D. DeWitt, P.E.
Chief Engineer

Attachment: Project Study Area Figure

cc: Mr. David Joyner, NCTA
Ms. Jennifer Harris, P.E., NCTA
Ms. Reid Simons, NCTA
Mr. Roy Bruce, P.E., H.W. Lochner

STATE OF NORTH CAROLINA
TURNPIKE AUTHORITY

BEVERLY E. PURDUE
GOVERNOR

1578 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1578

DAVID W. JOYNER
EXECUTIVE DIRECTOR

February 4, 2010

ADDRESS

RE: Start of Study and Local Officials Scoping Meeting Notification
Triangle Expressway Southeast Connector
Wake and Johnston Counties

Dear ADDRESSEE,

The North Carolina Turnpike Authority, a division of the North Carolina Department of Transportation (NCDOT), is moving forward with planning, environmental and engineering studies for the proposed Triangle Expressway Southeast Connector, also known as the Southern and Eastern Wake Expressway, project in Wake and Johnston Counties.

This project is included in the 2009-2015 NCDOT State Transportation Improvement Program (STIP) as Projects R-2721, R-2828, and R-2829. These three projects are being developed as a single project in a single planning study. This project combines to form the southern and eastern portions of the Outer Loop around Raleigh and surrounding communities, completing the Outer Loop. The northern portion of the Outer Loop is open to traffic and the western portion, the Triangle Expressway, is currently under construction.

Construction of the Southeast Connector is currently scheduled to be completed in phases. Phase I is between NC 55 in Apex and Interstate 40 near the Johnston County line. Phase II continues the project at I-40 and ends at US 64/US 264 Bypass in Knightdale. The entire project is nearly 30 miles long.

The Turnpike Authority anticipates preparing an environmental impact statement (EIS) for the Southeast Connector project in accordance with the National Environmental Policy Act (NEPA). The EIS will consider alternatives that include improving existing roadways, alternatives that involve building a new location facility and various non-highway alternatives.

Beginning this month, the Turnpike Authority will provide monthly updates on the project at Capital Area Metropolitan Planning Organization (CAMPO) Transportation Advisory Committee (TAC) meetings, as well as at monthly Technical Coordinating Committee (TCC) meetings. At the February 17, 2010 TAC meeting, the Authority will provide an overview of the project, the proposed project study area and preliminary purpose and need for the project. In addition, the Authority will seek input from local representatives to identify potential issues related to the proposed action that should be considered during the study process.

The CAMPO TAC meeting is scheduled for February 17, 2010 at 4:00 P.M. in Suite 800 of The Professional Building, 127 West Hargett Street. We strongly encourage you or a representative to participate in this meeting and/or to provide written comments. Written comments are appreciated by March 26, 2010. Your response should be mailed to the following:

Ms. Jennifer Harris, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

If you have any questions concerning the proposed project, please call Ms. Harris at (919) 571-3000.

Sincerely,

Steven D. DeWitt, P.E.
Chief Engineer

cc: Mr. David Joyner, NCTA
Ms. Jennifer Harris, P.E., NCTA
Mr. George Hoops, P.E., FHWA
Mr. Roy Bruce, P.E., H.W. Lochner
Mr. Beau Memory, NCDOT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FEB 2 2010

January 25, 2010

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority/NCDOT
5400 Glenwood Avenue
Suite 400
Raleigh, North Carolina 27612

SUBJECT: EPA Comments on the Pre-Scoping Information, Notice of Intent to Prepare an Environmental Impact Statement and Section 6002 Draft Coordination Plan for R-2721/R-2828/R-2829, Southern and Eastern Wake Expressway Project, Wake and Johnston Counties

Dear Ms. Harris:

The U.S. Environmental Protection Agency (EPA) Region 4 Office is providing scoping comments for the above referenced project consistent with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The North Carolina Turnpike Authority (NCTA) as part of the North Carolina Department of Transportation (NCDOT) and the Federal Highway Administration (FHWA) are proposing to construct an approximately 30-mile, multi-lane toll facility between NC 55 near the towns of Apex and Holly Springs and US 64/US 264 Bypass in Knightdale. The proposed project is considered to be the completion of the Raleigh Outer Loop. The Southern and Eastern Wake Expressway projects are also referred to by some entities as the Raleigh Southern Outer Loop or Interstate 540. EPA notes that Exhibit 28 of the September 2, 2004, Strategic Highway Corridor Vision Plan that was adopted by the NCDOT shows the proposed projects as Interstate 640.

The NCTA presented information at a Corridor Study and EIS pre-scoping meeting on December 8, 2009, in which Mr. Christopher Militscher of my staff participated. The presentation included a project history that began in 1996 with NCDOT filing for a Protected Corridor for Southern Wake Expressway. The project was put on hold several times due to traffic forecasts. Thirty (30) parcels in Wake County have been purchased by NCDOT for a preferred corridor. EPA requested that the identification of the parcels and acreage be provided in the Draft Environmental Impact Statement (DEIS). Mr. Militscher also requested that NCTA and FHWA consider expanding the proposed Project Study Area to include areas between Lake Wheeler, Lake Benson, and the Town of Garner and existing Interstate 40/440.

The proposed project is expected to have significant direct impacts to jurisdictional wetlands and streams, protected water supply areas, protected mussel species, residences and businesses, prime and unique farmlands, air quality, etc. The proposed project is also anticipated to have significant indirect and cumulative effects to human and natural environmental resources in southern Wake County and western Johnston County.

The Notice of Intent to prepare a DEIS dated November 30, 2009, identifies that NCTA and FHWA will also examine the "No-build", expanding transit service, transportation demand management (TDM) and transportation system management (TSM) as non-highway improvement alternatives. The Notice of Intent does not state that these non-highway alternatives will be examined in combination with one another or combined with interim improvements or upgrades to other existing roadways in the project study area. Other NCDOT Transportation Improvement Program (TIP) projects should be identified and evaluated during scoping including I-5111, I-40 Widening in Johnston County and R-2609, US 401 Widening in southern Wake County (Part of Strategic Highway Corridor #42, NC 210 to I-40). EPA notes that improvements (e.g. Widening to multi-lanes) to several existing east-west routes in southern Wake County have not been identified in area transportation plans. Ten-Ten Road (State Route 1010) which is a major east-west route in southern Wake County starts in Apex and US 1 and ends at NC 50. It is mostly a two-lane facility. NC 42 begins at US 401 and NC 55 near Fuquay-Varina and joins with US 70 Business in Clayton. Except for a small segment around Exit 312 at I-40, most of NC 42 in southern Wake County and western Johnston County is a two-lane roadway. EPA believes that these routes are in need of improvements and upgrades, including additional turn lanes and possible extended multi-lane sections.

Overall, there appears to have been very few highway improvements to existing major roadways in southern Wake County in more than a decade. EPA acknowledges improvements to Tryon Road, the proposed extension of Timber Drive in Garner, the ongoing I-540 toll road that terminates at NC 55 north of Holly Springs, and the US 70 Clayton Bypass. EPA recommends that improvements to Ten-Ten Road, including a new location extension from NC 50 to the new I-40 Interchange for the US 70 Clayton Bypass be evaluated as a 'highway build alternative' combined with other non-highway measures as identified in the Notice of Intent.

Under the Section 6002 draft Coordination Plan dated December 1, 2009, EPA notes that in Section 10.3, Process for Identifying Preferred Alternative or Section 10.4, Opportunity for Agency Input, there is no reference to the U.S. Army Corps of Engineers (USACE) determination of the Least Environmentally Damaging Practicable Alternative (LEDPA). As with other NCTA-lead projects, EPA continues to recommend that the transportation agencies make better use of the well-established NEPA/Section 404 Merger 01 Process. EPA plans to be a Participating Agency as per Section 4.3 of the draft Coordination Plan.

EPA will continue to stay involved with this proposed project and will offer more specific scoping comments when additional information, such as traffic forecasts, are available for review. Please contact Mr. Christopher A. Militscher of my staff at 919-856-4206 or by e-mail at militscher.chris@epa.gov should you have any questions concerning these comments.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office

Cc: J. Sullivan, FHWA
D. Barbour, NCDOT
S. McClendon, USACE
B. Wrenn, NCDWQ

United States Department of the Interior

FEB 5 2010

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

February 3, 2010

Ms. Jennifer Harris, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

Dear Ms. Harris:

This letter is in response to your request for comments from the U.S. Fish and Wildlife Service (Service) on the potential environmental effects of the proposed Southern and Eastern Wake Expressway in Wake and Johnston Counties (TIP No. R-2721, R-2828, R-2829). These comments provide information in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

Overall, the project will have significant impacts on fish and wildlife resources, including impacts to streams, wetlands, upland forest and other habitat types. These impacts will be in the form of direct loss of habitat and fragmentation effects on remaining habitat. Although these habitats are already fragmented by multiple land uses, additional cumulative habitat fragmentation effects will occur. The negative effects of habitat fragmentation usually extend well beyond the project footprint. Forest fragmentation can lead to increased predation of some species and increased brown-headed cowbird (*Molothrus ater*) parasitism of the nests of neotropical migrant birds. Habitat fragmentation can also facilitate invasive and/or nonnative species colonization of fragmented lands. Roads also act as physical barriers to wildlife movement and cause significant wildlife mortality in the form of road-killed animals.

Section 7(a)(2) of the Endangered Species Act requires that all federal action agencies (or their designated non-federal representatives), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally threatened or endangered species. The North Carolina Natural Heritage Program (NCNHP) database lists four federally listed species for Johnston and Wake Counties: dwarf wedgemussel (*Alasmidonta heterodon*), Tar River spinymussel (*Elliptio steinstansana*), red-cockaded woodpecker (*Picoides borealis*) and Michaux's sumac (*Rhus michauxii*). While the Tar River spinymussel and red-cockaded woodpecker are unlikely to occur within the project study area, the dwarf wedgemussel and Michaux's sumac are both known to occur within the study area.

The Service is particularly concerned about impacts to the dwarf wedgemussel population in Swift Creek. The protected southern corridor and preliminary eastern corridor cross Swift Creek and its tributaries. This population of dwarf wedgemussel is at risk from direct effects associated

with construction of the project (e.g. erosion and siltation from construction area), and from indirect effects associated with the degradation of water quality from secondary development induced by the new road. Increased impervious surface and storm water runoff from additional development would likely further degrade the water quality within Swift Creek and its tributaries. The rapid development in the last 10-15 years within the watershed of Swift Creek below the Lake Benson Dam has already severely impacted the dwarf wedgemussel, with the result that the species is increasing more difficult to find. Additional cumulative impacts may occur in conjunction with the proposed widening of I-40 within this same study area (TIP No. I-5111). The Turnpike Authority should begin to develop a strategy to avoid contributing to the degradation of the water quality of the Swift Creek watershed.

The protected southern corridor and the preliminary eastern corridor appear to connect with I-40 at a particularly unfavorable location with regard to potential impacts to the dwarf wedgemussel. This location puts the interchanges with I-40 and US 70 Bypass on top of several tributaries to Swift Creek and also in close proximity to Swift Creek mainstem. The Service recommends additional alternatives be considered which locate the interchange(s) farther away from Swift Creek and its tributaries. In addition, the Turnpike Authority should explore innovative conservation measures to minimize effects to the species. Additional mussel survey data would be useful in assessing the current status of the dwarf wedgemussel within Swift Creek.

The Service anticipates a formal Section 7 consultation for this project. Sufficient time must be allowed for the completion of this process. From the time that a complete consultation initiation package is received, the Service has 135 days to provide a final Biological Opinion. However, communication regarding the consultation should be occurring long before formal consultation is initiated.

Since Michaux's sumac is known to occur within the project study area, surveys should be conducted within suitable habitat to determine the presence or absence of this species. The survey window for Michaux's sumac is May – October.

The Service appreciates the opportunity to comment on this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,

Gary Jordan

for Pete Benjamin
Field Supervisor

cc: Eric Alsmeyer, USACE, Wake Forest, NC
Travis Wilson, NCWRC, Creedmoor, NC
Chris Militscher, USEPA, Raleigh, NC
John Sullivan, FHWA, Raleigh, NC

North Carolina
Department of Administration

Beverly Eaves Perdue, Governor

Moses Carey, Jr., Secretary

March 30, 2010

Ms. Jennifer Harris
State of N.C. Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Re: SCH File # 10-E-4220-0283; SCOPING; Scoping notice for the Southern and Eastern Wake Expressway, STIP Projects R-2721,-2828 and R-2829. Completion of the 540 Outer Loop from NC 55 in Wake County to the US 64/US 264 bypass in Knightdale , approximate distance of 29 miles.

Dear Ms. Harris:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

Chrys Baggett (S76)

Ms. Chrys Baggett
State Environmental Review Clearinghouse

Attachments

cc: Region J

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail state.clearinghouse@doa.nc.gov

Location Address:
116 West Jones Street
Raleigh, North Carolina

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North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

MEMORANDUM

TO: Valerie McMillan
State Clearinghouse

FROM: Melba McGee
Environmental Review Coordinator

RE: 10-0283 Scoping, Southern and Eastern Wake Expressway in Wake County to US 64/264 Bypass in Knightdale

DATE: March 26, 2010

The Department of Environment and Natural Resources has reviewed the proposed project. The attached comments are for the applicant's consideration. More specific comments will be provided during the environmental review process.

Thank you for the opportunity to respond. If during the preparation of the environmental document, additional information is needed, the applicant is encouraged to notify our respective divisions.

Attachments

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 Internet: www.enr.state.nc.us

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One North Carolina Naturally

North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

March 22, 2010

MEMORANDUM

TO: Melba McGee, DENR Environmental Coordinator

FROM: Harry LeGrand, Natural Heritage Program

SUBJECT: Scoping – Southern and Eastern Wake Expressway (Completion of the 540 Outer Loop from NC 55 in Wake County to the US 64/264 Bypass in Knightdale), Wake County; STIP Projects R-2721, R-2828, and R-2829

REFERENCE: Project No. 10-0283

The Natural Heritage Program has a number of records of rare species, significant natural heritage areas, and conservation/managed areas within the project area. The comments below are arranged from west (NC 55) to east (US 64-264 Bypass), and they only relate to features in our database located within a mile of the proposed corridor, not for the entire study area boundary. Several maps are enclosed that show such features.

The proposed corridor would be located several tenths of a mile north of Middle Creek Park, owned and operated by Wake County. It appears that the park will not be impacted, if the highway is built where shown in the scoping notice.

The proposed highway will cross the Nationally significant Swift Creek (Wake/Johnston) Aquatic Habitat. This body of water contains numerous existing records of rare mussel species (see attached Swift Creek Aquatic Habitat material), including the Federally Endangered dwarf wedgemussel (*Alasmidonta heterodon*). Thus, it is extremely important that consultation with the U.S. Fish and Wildlife Service about the project and potential impacts to this species, as well as to other rare species, be done early in the planning process.

The proposed highway will also cross the Neuse River, near a small tract owned by Wake County, as open space land. In addition, there is a County-significant natural area identified as the Neuse River (Clayton) Forests that lies along a considerable stretch of the river. Though the impacts to the natural area are inevitable with a new bridge crossing, impacts to the river itself do not appear to be of Natural Heritage concern because of the apparent absence of rare species near the crossing and for a number of miles downstream. Nonetheless, it is important to keep sediment from reaching the river, as there are rare aquatic species locations in the river much farther south toward Clayton.

In general, the proposed route does not appear to impact any significant sites and rare species, away from Swift Creek and the Neuse River. However, there will likely be impacts to the forests along the Neuse River, and there is considerable concern for impacts to the waters of Swift Creek.

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 Internet: www.enr.state.nc.us

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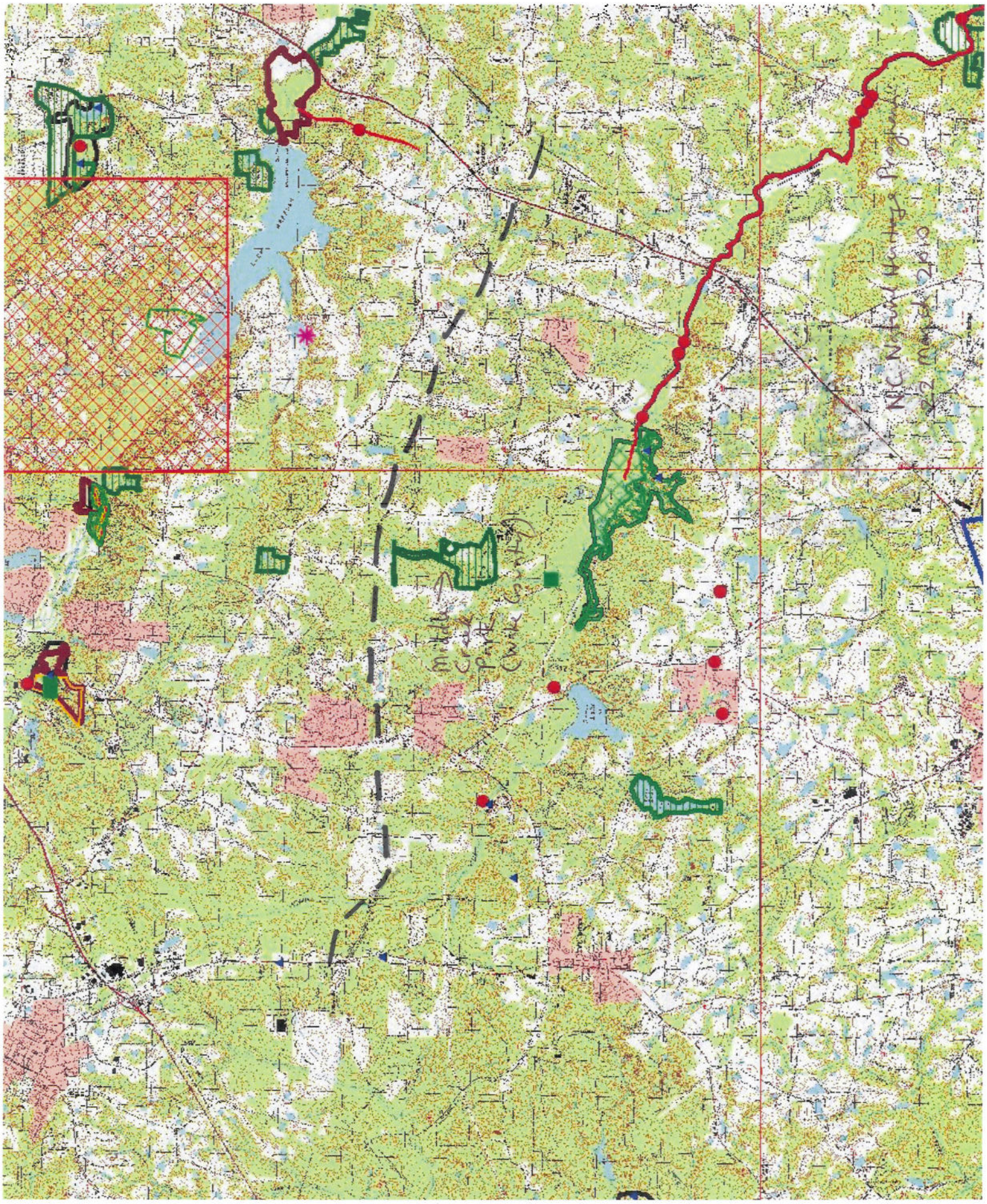
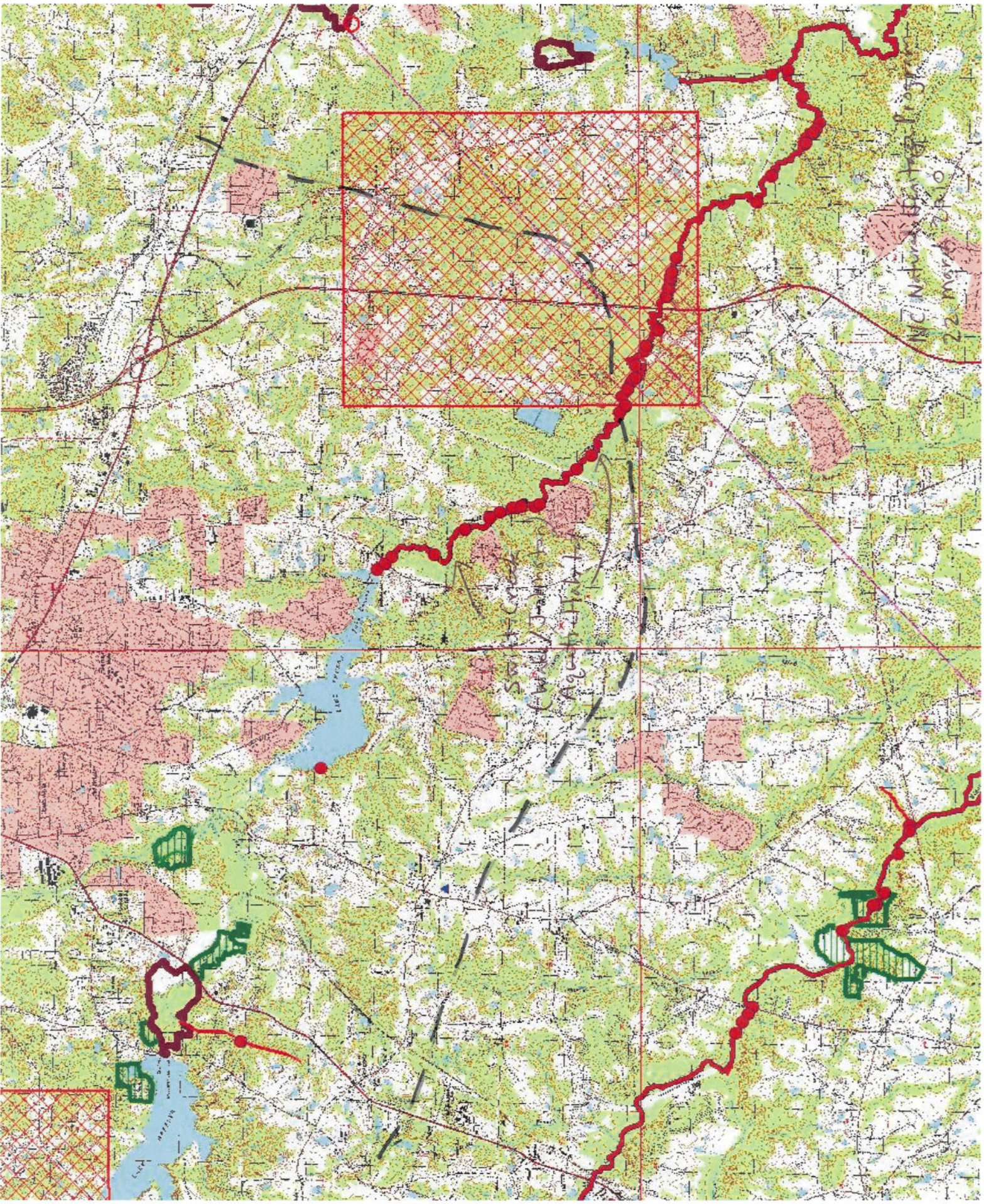
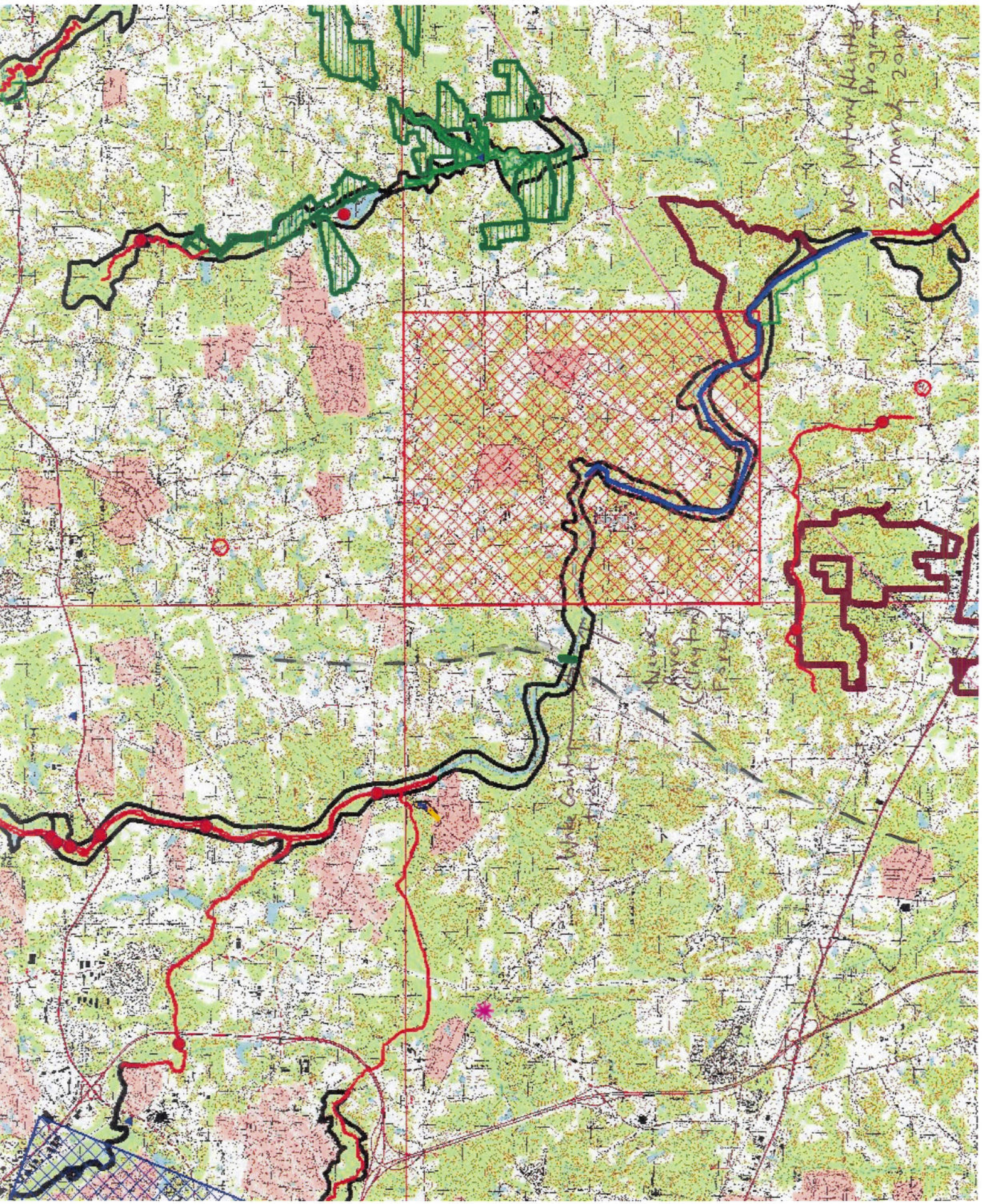
One North Carolina Naturally

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.

Enclosures






NC Natural Heritage Program
22 May 2018
White Cedar Swamp
Arthur Ellis (Cypress) Swamp

Significant Natural Heritage Area Report

22 March 2010

Name Swift Creek (Wake/Johnston) Aquatic Habitat

IDENTIFIERS

Site ID 781

Site Alias

Macro Site Name

Mega Site Name

Site Relations

Owner Abbr.	Owner	Owner Comments
PW	NC PUBLIC WATERS	

LOCATORS

County Johnston (NC)
Wake (NC)

Latitude 353455N **Longitude** 0783029W

Quad Powhatan
Edmondson
Garner

Watershed Upper Neuse

Directions This portion of Swift Creek is located in the Neuse River Basin of Johnston and Wake counties. The significant portion of the aquatic habitat includes the reach below Lake Benson Dam in Wake County to the confluence with Middle Creek in Johnston County. Also includes portion of White Oak Creek from the confluence with Swift Creek upstream to Austin Pond.

SITE DESCRIPTION

Minimum Elevation: **Feet** **Meters** **Survey** P

Maximum Elevation: **Feet** **Meters**

Site Description This aquatic habitat is contained entirely in the Piedmont Province. The rare species located in the creek include: dwarf wedge mussel, yellow lance, Atlantic pigtoe, green floater, triangle floater, Roanoke slabshell, squawfoot, eastern lampmussel, notched rainbow, Neuse River waterdog, and Carolina madtom.

Key Enviro Factors

Climate Description

Land Use History

Cultural Features

Additional Topics NW->SE VECTOR

SITE DESIGN

Site Mapped **Mapped Date**

Designer

Boundary Justification

Primary and Secondary Area 242.45 **Acres** **Primary Area** 242.45 **Acres**

Site Comments

Ground Survey Date 1998 **Aerial Survey Date**

SITE SIGNIFICANCE

Significance National

Site Significance Comments Endangered animal species; high quality aquatic ecosystem.

Biodivsig rating B1 - Outstanding

Biodivsig Comments

Other Values

Other Values Comments

Significant Natural Heritage Area Report

22 March 2010

Name Swift Creek (Wake/Johnston) Aquatic Habitat

Protection Urgency

Protection Urgency Comments

Management Urgency

Management Urgency Comments

REAL ESTATE/PROTECTION

Conservation Intentions High Quality Waters designation

Number of Tracts

Designation

Protection Comments No protection status

MANAGEMENT

Land Use Comments

Natural Hazard Comments

Exotics Comments

Offsite

Information Needs

Management Needs

Managed Area Relations

ELEMENT OCCURRENCES

Scientific Name	Common Name	G Rank	S Rank	EO Rank	EO ID
Noturus furiosus	Carolina Madtom	G2	S2	H?	9621
Alasmidonta heterodon	Dwarf Wedgemussel	G1G2	S1	BC	13799
Alasmidonta undulata	Triangle Floater	G4	S2	E	8700
Elliptio lanceolata	Yellow Lance	G2G3	S1	BC	21894
Elliptio lanceolata	Yellow Lance	G2G3	S1	BC	21890
Elliptio roanokensis	Roanoke Slabshell	G3	S1	E	6291
Elliptio roanokensis	Roanoke Slabshell	G3	S1	E	26000
Fusconaia masoni	Atlantic Pigtoe	G2	S1	AB	11695
Lasmigona subviridis	Green Floater	G3	S1	X?	15369
Strophitus undulatus	Creeper	G5	S2	E	14759
Strophitus undulatus	Creeper	G5	S2	E	6567
Villosa constricta	Notched Rainbow	G3	S3	E	5097

REFERENCES

Reference Code	Full Citation
U93SMI01NCUS	Smith, I.K., H.E. LeGrand, S.P. Hall, Z.E. Murrell, C.W. Nordman, and M.P. Schafale. 1993. Regional inventory for critical natural areas, wetland ecosystems, and endangered species habitats, of the Albemarle-Pamlico Estuarine region: Phase 3. NC Natural Heritage Program, Div. of Parks and Recreation, Dept. of Environment, Health, and Natural Resources, Raleigh, NC.
U92ALD01NCUS	Alderman, J.M. 1992. Station locations by species for proposed critical habitats. NC Wildlife Resources Report. Nongame and Endangered Wildlife Program, NC Wildlife Resources Commission, Division of Wildlife Management, Raleigh, NC.
U91ALD01NCUS	Alderman, J.M. 1991. North Carolina Status Surveys for Fusconaia masoni, Elliptio lanceolata, and Toxolasma pullus. Nongame Project Report to U.S. Fish and Wildlife Service. Nongame and Endangered Wildlife Program, NC Wildlife Resources Commission, Division of Wildlife Management, Raleigh, NC.

VERSION

Significant Natural Heritage Area Report

22 March 2010

Name Swift Creek (Wake/Johnston) Aquatic Habitat

Version Date 2003-02-24
Version Author Kopplin

NC NHP County Element Search Results

New Search

Returned Elements: 92 using: WAKE ALL

[Animal Assemblage 1] [Invertebrate Animal 17] [Natural Community 17] [Nonvascular Plant 4] [Vascular Plant 39] [Vertebrate Animal 14]

Major Group	Scientific Name	Common Name	State Status	Federal Status	State Rank	Global Rank	County - Status	Map - Habitat
Animal Assemblage	*Colonial Wading Bird Colony*	None	None	None	S3	G5	Wake - Current	Link
Invertebrate Animal	*Alasmidonta heterodon*	Dwarf Wedgemussel	E	E	S1	G1G2	Wake - Current	Link
Invertebrate Animal	*Alasmidonta undulata*	Triangle Floater	T	None	S2	G4	Wake - Current	Link
Invertebrate Animal	*Cambarus davidi*	Carolina Ladle Crayfish	SR	None	S2S3	G3	Wake - Current	Link
Invertebrate Animal	*Dibusa angata*	A Caddisfly	SR	None	S2	G5	Wake - Current	Link
Invertebrate Animal	*Elliptio lanceolata*	Yellow Lance	E	FSC	S1	G2G3	Wake - Current	Link
Invertebrate Animal	*Elliptio roanokensis*	Roanoke Slabshell	T	None	S1	G3	Wake - Current	Link
Invertebrate Animal	*Erynnis martialis*	Mottled Duskywing	SR	None	S2S3	G3	Wake - Obscure	Link
Invertebrate Animal	*Fusconaia masoni*	Atlantic Pigtoe	E	FSC	S1	G2	Wake - Current	Link
Invertebrate Animal	*Gomphus septima*	Septima's Clubtail	SR	FSC	S1S2	G2	Wake - Obscure	Link
Invertebrate Animal	*Lampsilis radiata*	Eastern Lampmussel	T	None	S1S2	G5	Wake - Current	Link
Invertebrate Animal	*Lasmigona subviridis*	Green Floater	E	FSC	S1	G3	Wake - Current	Link
Invertebrate Animal	*Lithophane lemmeri*	Lemmer's Pinion	SR	None	S1S3	G3G4	Wake - Obscure	Link
Invertebrate Animal	*Orconectes carolinensis*	North Carolina Spiny Crayfish	SC	None	S3	G3	Wake - Historical	Link
Invertebrate Animal	*Papilio cresphontes*	Giant Swallowtail	SR	None	S2	G5	Wake - Obscure	Link
Invertebrate Animal	*Schizura sp. 1*	A New Prominent Moth	SR	None	S1S3	GU	Wake - Obscure	Link
Invertebrate Animal	*Strophitus undulatus*	Creeper	T	None	S2	G5	Wake - Current	Link
Invertebrate Animal	*Villosa constricta*	Notched Rainbow	SC	None	S3	G3	Wake - Current	Link
Natural Community	*Basic mesic forest (piedmont subtype)*	None	None	None	S2	G5T3	Wake - Current	Link
Natural Community	*Coastal plain semipermanent impoundment*	None	None	None	S4	G5	Wake - Current	Link
Natural Community	*Coastal plain small stream swamp (brownwater subtype)*	None	None	None	S2S3	G5T3T4	Wake - Current	Link
Natural Community	*Dry-mesic oak--hickory forest*	None	None	None	S5	G5	Wake - Current	Link
Natural Community	*Floodplain pool*	None	None	None	S2S3	G3?	Wake - Current	Link
Natural Community	*Granitic flatrock*	None	None	None	S2	G3	Wake - Current	Link

Natural Community	*Low elevation seep*	None	None	None	S3	G4?	Wake - Current	Link
Natural Community	*Mesic mixed hardwood forest (piedmont subtype)*	None	None	None	S4	G5T5	Wake - Current	Link
Natural Community	*Piedmont longleaf pine forest*	None	None	None	S1	G1?	Wake - Current	Link
Natural Community	*Piedmont monadnock forest*	None	None	None	S4	G5	Wake - Current	Link
Natural Community	*Piedmont/coastal plain acidic cliff*	None	None	None	S2?	G4	Wake - Current	Link
Natural Community	*Piedmont/coastal plain heath bluff*	None	None	None	S3	G4?	Wake - Current	Link
Natural Community	*Piedmont/low mountain alluvial forest*	None	None	None	S5	G5	Wake - Current	Link
Natural Community	*Piedmont/mountain bottomland forest*	None	None	None	S3?	G5	Wake - Current	Link
Natural Community	*Piedmont/mountain levee forest*	None	None	None	S3?	G5	Wake - Current	Link
Natural Community	*Piedmont/mountain semipermanent impoundment*	None	None	None	S4	G5	Wake - Current	Link
Natural Community	*Ultramafic outcrop barren*	None	None	None	S1	G1	Wake - Current	Link
Nonvascular Plant	*Campylopus oerstedianus*	Oersted's Campylopus	SR-D	None	S1	G1G3	Wake - Historical	Link
Nonvascular Plant	*Cleistocarpidium palustre*	Prairie Pleuridium	SR-D	None	S1	G5?	Wake - Current	Link
Nonvascular Plant	*Sphagnum subsecundum*	Orange Peatmoss	SR-P	None	S1	G5	Wake - Historical	Link
Nonvascular Plant	*Tortula plinthobia*	A Chain-teeth Moss	SR-O	None	S1?	G4G5	Wake - Historical	Link
Vascular Plant	*Acmispon helleri*	Carolina Birdfoot-trefoil	SR-T	FSC	S3	G3	Wake - Current	Link
Vascular Plant	*Agastache nepetoides*	Yellow Giant-hyssop	SR-P	None	S1	G5	Wake - Historical	Link
Vascular Plant	*Buchnera americana*	American Bluehearts	SR-P	None	SH	G5?	Wake - Historical	Link
Vascular Plant	*Cardamine douglassii*	Douglass's Bittercress	SR-P	None	S2	G5	Wake - Current	Link
Vascular Plant	*Carex reniformis*	Kidney Sedge	SR-P	None	S1	G4?	Wake - Historical	Link
Vascular Plant	*Carex tetanica*	Rigid Sedge	SR-P	None	S1	G4G5	Wake - Historical	Link
Vascular Plant	*Cirsium carolinianum*	Carolina Thistle	SR-P	None	S2	G5	Wake - Historical	Link
Vascular Plant	*Clematis catesbyana*	Coastal Virgin's-bower	SR-P	None	S2	G4G5	Wake - Historical	Link
Vascular Plant	*Cyperus granitophilus*	Granite Flatsedge	SR-T	None	S2	G3G4Q	Wake - Current	Link
Vascular Plant	*Dichanthelium annulum*	Ringed Witch Grass	SR-P	None	S1	GNR	Wake - Historical	Link
Vascular Plant	*Dichanthelium sp. 9*	A Witch Grass	SR-L	None	S2	G2G3	Wake - Historical	Link
Vascular Plant	*Didiplis diandra*	Water Purslane	SR-P	None	S1	G5	Wake - Current	Link
Vascular Plant	*Fothergilla major*	Large Witch-alder	SR-T	None	S3	G3	Wake - Current	Link
Vascular Plant	*Gillenia stipulata*	Indian Physic	SR-P	None	S2	G5	Wake - Current	Link

Vascular Plant	*Helenium brevifolium*	Littleleaf Sneezeweed	E	None	S2	G4	Wake - Historical	Link
Vascular Plant	*Isoetes piedmontana*	Piedmont Quillwort	T	None	S2	G3	Wake - Current	Link
Vascular Plant	*Liatris squarrulosa*	Earle's Blazing-star	SR-P	None	S2	G4G5	Wake - Current	Link
Vascular Plant	*Lindera subcoriacea*	Bog Spicebush	T	FSC	S2S3	G2G3	Wake - Current	Link
Vascular Plant	*Magnolia macrophylla*	Bigleaf Magnolia	SR-P	None	S2	G5	Wake - Current	Link
Vascular Plant	*Matelea decipiens*	Glade Milkvine	SR-P	None	S2	G5	Wake - Current	Link
Vascular Plant	*Micranthes pensylvanica*	Swamp Saxifrage	SR-P	None	S1	G5	Wake - Current	Link
Vascular Plant	*Monotropsis odorata*	Sweet Pinesap	SR-T	FSC	S3	G3	Wake - Historical	Link
Vascular Plant	*Polygala senega*	Seneca Snakeroot	SR-D	None	S2	G4G5	Wake - Current	Link
Vascular Plant	*Portulaca smallii*	Small's Portulaca	T	None	S2	G3	Wake - Current	Link
Vascular Plant	*Pseudognaphalium helleri*	Heller's Rabbit-Tobacco	SR-P	None	S3	G3G4	Wake - Current	Link
Vascular Plant	*Pycnanthemum virginianum*	Virginia Mountain-mint	SR-P	None	S1?	G5	Wake - Current	Link
Vascular Plant	*Rhus michauxii*	Michaux's Sumac	E-SC	E	S2	G2G3	Wake - Current	Link
Vascular Plant	*Ruellia humilis*	Low Wild-petunia	T	None	S1	G5	Wake - Historical	Link
Vascular Plant	*Ruellia purshiana*	Pursh's Wild-petunia	SR-O	None	S2	G3	Wake - Historical	Link
Vascular Plant	*Sagittaria weatherbiana*	Grassleaf Arrowhead	SR-T	FSC	S2	G3G4	Wake - Historical	Link
Vascular Plant	*Scutellaria australis*	Southern Skullcap	SR-P	None	S1	G4?Q	Wake - Historical	Link
Vascular Plant	*Scutellaria nervosa*	Veined Skullcap	SR-P	None	S1	G5	Wake - Historical	Link
Vascular Plant	*Silphium terebinthinaceum*	Prairie Dock	SR-P	None	S2	G4G5	Wake - Historical	Link
Vascular Plant	*Solidago radula*	Western Rough Goldenrod	SR-P	None	S1	G5?	Wake - Historical	Link
Vascular Plant	*Symphyotrichum laeve var. concinnum*	Narrow-leaf Aster	SR-P	None	S2	G5T4	Wake - Historical	Link
Vascular Plant	*Thermopsis mollis*	Appalachian Golden-banner	SR-P	None	S2	G3G4	Wake - Current	Link
Vascular Plant	*Tradescantia virginiana*	Virginia Spiderwort	SR-P	None	S1	G5	Wake - Current	Link
Vascular Plant	*Trifolium reflexum*	Buffalo Clover	SR-T	None	S1S2	G3G4	Wake - Current	Link
Vascular Plant	*Trillium pusillum var. virginianum*	Virginia Least Trillium	E	FSC	S1	G3T2	Wake - Current	Link
Vertebrate Animal	*Aimophila aestivalis*	Bachman's Sparrow	SC	FSC	S3B,S2N	G3	Wake - Historical	Link
Vertebrate Animal	*Ambloplites cavifrons*	Roanoke Bass	SR	FSC	S2	G3	Wake - Current	Link
Vertebrate Animal	*Ambystoma tigrinum*	Eastern Tiger Salamander	T	None	S2	G5	Wake - Current	Link
Vertebrate Animal	*Condylura cristata pop. 1*	Star-nosed Mole - Coastal Plain Population	SC	None	S2	G5T2Q	Wake - Current	Link
Vertebrate Animal	*Haliaeetus leucocephalus*	Bald Eagle	T	None	S3B,S3N	G5	Wake - Current	Link

Vertebrate Animal	*Hemidactylium scutatum*	Four-toed Salamander	SC	None	S3	G5	Wake - Current	Link
Vertebrate Animal	*Heterodon simus*	Southern Hognose Snake	SC	FSC	S2	G2	Wake - Obscure	Link
Vertebrate Animal	*Lampetra aepyptera*	Least Brook Lamprey	T	None	S2	G5	Wake - Current	Link
Vertebrate Animal	*Lanius ludovicianus*	Loggerhead Shrike	SC	None	S3B,S3N	G4	Wake - Current	Link
Vertebrate Animal	*Myotis austroriparius*	Southeastern Myotis	SC	FSC	S2	G3G4	Wake - Historical	Link
Vertebrate Animal	*Necturus lewisi*	Neuse River Waterdog	SC	None	S3	G3	Wake - Current	Link
Vertebrate Animal	*Noturus furiosus*	Carolina Madtom	T	FSC	S2	G2	Wake - Current	Link
Vertebrate Animal	*Picoides borealis*	Red-cockaded Woodpecker	E	E	S2	G3	Wake - Historical	Link
Vertebrate Animal	*Sciurus niger*	Eastern Fox Squirrel	SR	None	S3	G5	Wake - Current	Link

NC NHP database updated on Friday, February 12th, 2010.
Search performed on Monday, 22 March 2010 @ 10:15:47 EDST
Explanation of Codes

NCDENR
North Carolina Department of Environment and Natural Resources
Division of Water Quality
Coleen H. Sullins
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

MAR 2010
RECEIVED
DCM

March 23, 2010

MEMORANDUM

To: Melba McGee, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

From: Brian Wrenn, Transportation Permitting Unit, NC Division of Water Quality BLW

Subject: Scoping comments on proposed Southern and Eastern Wake Expressway from NC55 to US 64/US 264 Bypass in Wake County, TIP Project Nos. R-2721, R-2828, and R-2829, State Clearinghouse Project No. 10-0283.

Reference your correspondence dated January 25, 2010 in which you requested comments for the referenced project. Preliminary analysis of the project reveals the potential for multiple impacts to perennial streams and jurisdictional wetlands in the project area. More specifically, impacts to:

Stream Name	River Basin	Stream Classification(s)	Stream Index Number	303(d) Listing
Lake Wheeler	Neuse	WS-III;NSW	27-43-(1)	
Lake Benson	Neuse	WS-III;NSW;CA	27-43-(5.5)	
Swift Creek	Neuse	C;NSW	27-43-(8)	Biological Integrity
Dutchman's Branch	Neuse	WS-III;NSW	27-43-4.5	
Sunset Lake	Neuse	B;NSW	27-43-15-(2)	
Bass Lake	Neuse	B;NSW	27-43-15-3	
Camp Branch	Neuse	C;NSW	27-43-15-5	
Rocky Branch	Neuse	C;NSW	27-43-15-4.5	
Bells Lake	Neuse	C;NSW	27-43-15-6	
Panther Branch	Neuse	C;NSW	27-43-15-9	
Terrible Creek	Neuse	B;NSW	27-43-15-8	
Middle Creek	Neuse	C;NSW	27-43-15	Biological Integrity, Low DO, Turbidity
White Oak Creek	Neuse	C;NSW	27-43-11	
Mahlers Creek	Neuse	C;NSW	27-43-9	
Walnut Creek	Neuse	C;NSW	27-34-(4)	Biological Integrity, Copper, PCB, Turbidity
Big Branch	Neuse	C;NSW	24-34-11	
Neuse River	Neuse	C;NSW	27-(36)	
Little Creek	Neuse	C;NSW	27-43-15-10	Biological Integrity
Gully Branch	Neuse	C;NSW	27-43-15-10-2	

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604
Phone: 919-733-1786 \ FAX: 919-733-6893
Internet: http://h2o.enr.state.nc.us/nowetlands/

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Buffalo Creek	Neuse	C;NSW	27-43-15-11	

Further investigations at a higher resolution should be undertaken to verify the presence of other streams and/or jurisdictional wetlands in the area. In the event that any jurisdictional areas are identified, the Division of Water Quality requests that the NC Turnpike Authority (NCTA) consider the following environmental issues for the proposed project:

Project Specific Comments:

1. All of the named streams in the study area have a supplemental classification of NSW waters of the State. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these streams. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in NCDOT's NPDES BMP Toolbox.

2. Swift Creek, Middle Creek, Walnut Creek, and Little Creek are listed as 303(d) waters of the State. They are listed for a variety of reasons including biological integrity, low dissolved oxygen, copper, PCBs, and turbidity. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* to reduce the risk of nutrient runoff to these creeks. Of particular concern is the listing for Middle Creek due to copper. A recent NCDOT study on stormwater runoff from bridges has shown that copper is a pollutant in stormwater runoff that frequently exceeds state standards. NCDWQ requests that road design plans provide treatment of the storm water runoff through structural best management practices as detailed in NCDOT's NPDES BMP Toolbox.

3. Review of the project reveals the presence of surface waters classified as Water Supply Critical Area (WS CA) in the project study area. Given the potential for impacts to these resources during the project implementation, NCDWQ requests that NCDOT strictly adhere to North Carolina regulations entitled *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) throughout design and construction of the project. This would apply for any area that drains to streams having WS CA classifications. Should a crossing be located within the WS CA, NCDOT will be required to design, construct, and maintain hazardous spill catch basins in the project area. The number of catch basins installed shall be determined by the design of the crossing. Runoff shall enter the basin(s) prior to flowing into the stream. The basin(s) shall be designed in consultation with NCDWQ.

4. This project is within the Neuse River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0233.

5. Due to the fact that this project is a new location road being constructed in areas with impaired streams and water supply watershed critical areas, NCDWQ will require a quantitative secondary and cumulative impacts analysis. This analysis shall quantitatively model impacts to water quality from secondary and cumulative development resulting from this road project. This analysis shall be conducted in consultation with NCDWQ.

6. It is NCDWQ's understanding that NCTA intends to develop this project using FHWA's SAFETEA-LU 6002 process. NCDWQ would prefer that NCTA, as a division of NCDOT, develop this project and all future projects under the multi-agency Merger Process. NCDOT along with its partnering and participating agencies, and under the direction of the Interagency Leadership Team, has expended considerable time and money to develop, implement, and streamline the Merger Process. Furthermore, NCDWQ is of the opinion that the Merger Process is a more accountable process that

results in projects that hold up under scrutiny of the NEPA process and Sections 404 and 401 of the Clean Water Act.

General Project Comments:

1. The environmental document shall provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.

2. Environmental assessment alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ *Stormwater Best Management Practices*, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.

3. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.

4. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 150 linear feet to any single perennial stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.

5. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.

6. If a bridge is being replaced with a hydraulic conveyance other than another bridge, NCDWQ believes the use of a Nationwide Permit may be required. Please contact the US Army Corp of Engineers to determine the required permit(s).

7. If the old bridge is removed, no discharge of bridge material into surface waters is allowed unless otherwise authorized by the US ACOE. Strict adherence to the Corps of Engineers guidelines for bridge demolition will be a condition of the 401 Water Quality Certification.

8. Whenever possible, NCDWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) shall not be placed in the stream when possible.

9. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes,

vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ's *Stormwater Best Management Practices.*

10. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

11. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species should be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.

12. Placement of culverts and other structures in waters, streams, and wetlands shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.

13. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel shall be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.

14. If foundation test borings are necessary; it should be noted in the document. Geotechnical work is approved under General 401 Certification Number 3624/Nationwide Permit No. 6 for Survey Activities.

15. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.

16. All work in or adjacent to stream waters shall be conducted in a dry work area unless otherwise approved by NCDWQ. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures should be used to prevent excavation in flowing water.

17. Sediment and erosion control measures shall not be placed in wetlands and streams.

18. Borrow/waste areas shall avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas could precipitate compensatory mitigation.

19. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (NC-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.

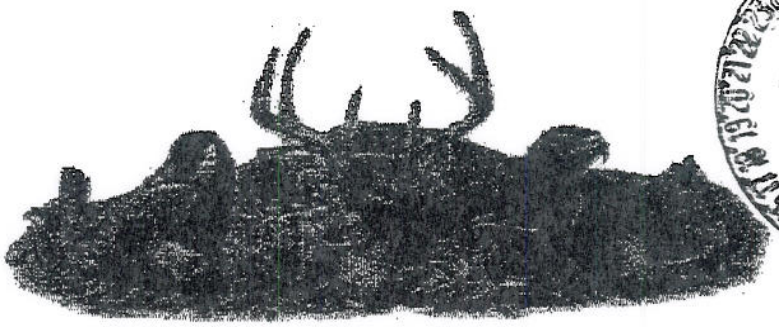
20. Heavy equipment shall be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.

21. In most cases, NCDWQ prefers the replacement of the existing structure at the same location with road closure. If road closure is not feasible, a temporary detour should be designed and located to avoid wetland impacts, minimize the need for clearing and to avoid destabilizing stream banks. If the structure will be on a new alignment, the old structure shall be removed and the approach fills removed from the 100-year floodplain. Approach fills should be removed and restored to the natural ground elevation. The area shall be stabilized with grass and planted with native tree species. Tall fescue shall not be used in riparian areas.

22. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

Thank you for requesting our input at this time. NCDOT is reminded that issuance of a 401 Water Quality Certification requires that appropriate measures be instituted to ensure that water quality standards are met and designated uses are not degraded or lost. If you have any questions or require additional information, please contact Brian Wrenn at 919-733-5715.

cc: Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Clarence Coleman, Federal Highway Administration
Chris Militscher, Environmental Protection Agency (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission
File Copy



MAR 2010
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North Carolina Wildlife Resources Commission

Gordon Myers, Executive Director

MEMORANDUM

TO: Melba McGee
Office of Legislative and Intergovernmental Affairs, DENR

FROM: Travis Wilson, Highway Project Coordinator
Habitat Conservation Program

DATE: March 16, 2010

SUBJECT: Response to the start of study notification from the N. C. Turnpike Authority regarding fish and wildlife concerns for the proposed Southern and Eastern Wake Expressway, Wake and Johnston Counties, North Carolina. TIP Nos. R-2721, R-2828, and R-2829, SCH Project No. 10-0283

This memorandum responds to a request for our concerns regarding impacts on fish and wildlife resources resulting from the subject project. Biologists on the staff of the N. C. Wildlife Resources Commission (NCWRC) have reviewed the proposed improvements. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

NCTA is proposing to construct a multilane facility on new location. We have review the project study area and identified multiple resources that should be considered for avoidance and minimization during the planning of this project. Potential impacts include new crossings of Swift Creek, Middle Creek and the Neuse River. Our records indicate the following state and federal listed species are located in these drainages:

Alasmidonta heterodon	Dwarf Wedgemussel
Alasmidonta undulata	Triangle Floater
Elliptio lanceolata	Yellow Lance
Elliptio roanokensis	Roanoke Slabshell
Fusconaia masoni	Atlantic Pigtoe
Lampsilis radiata	Eastern Lampmussel
Strophitus undulatus	Creeper
Villosa constricta	Notched Rainbow
Noturus furiosus	Carolina Madtom
Necturus lewisi	Neuse River Waterdog

Mailing Address: Division of Inland Fisheries • 1721 Mail Service Center • Raleigh, NC 27699-1721
Telephone: (919) 707-0220 • **Fax:** (919) 707-0028

The Neuse River at this location is also designated as an Anadromous Fish Spawning Area as well as an Inland Primary Nursery Area.

Furthermore we will reiterate the benefits of utilizing the NEPA/404 Merger Process for the planning and development of this project. The Merger process is the product of years of interagency coordination that has resulted in a valuable method for progressing transportation projects through planning by outlining expectations for the level of information and feedback provided by all parties at specific points in the process. Having participated in both the Section 6002 and Merger processes, the Merger process presents a consistent and predictable platform for decision making and documentation. However to help further facilitate document preparation and the review process, our general informational needs are outlined below:

1. Description of fishery and wildlife resources within the project area, including a listing of federally or state designated threatened, endangered, or special concern species. Potential borrow areas to be used for project construction should be included in the inventories. A listing of designated plant species can be developed through consultation with:

   NC Natural Heritage Program
   Dept. of Environment & Natural Resources
   1601 Mail Service Center
   Raleigh, NC 27699-1601.
   WWW.ncnhp.org

   and,

   NCDA Plant Conservation Program
   P. O. Box 27647
   Raleigh, N. C. 27611
   (919) 733-3610

2. Description of any streams or wetlands affected by the project. The need for channelizing or relocating portions of streams crossed and the extent of such activities.

3. Cover type maps showing wetland acreages impacted by the project. Wetland acreages should include all project-related areas that may undergo hydrologic change as a result of ditching, other drainage, or filling for project construction. Wetland identification may be accomplished through coordination with the U. S. Army Corps of Engineers (COE). If the COE is not consulted, the person delineating wetlands should be identified and criteria listed.

4. Cover type maps showing acreages of upland wildlife habitat impacted by the proposed project. Potential borrow sites should be included.

5. The extent to which the project will result in loss, degradation, or fragmentation of wildlife habitat (wetlands or uplands).

6. Mitigation for avoiding, minimizing or compensating for direct and indirect degradation in habitat quality as well as quantitative losses.

7. A cumulative impact assessment section which analyzes the environmental effects of highway construction and quantifies the contribution of this individual project to environmental degradation.

8. A discussion of the probable impacts on natural resources which will result from secondary development facilitated by the improved road access.

9. If construction of this facility is to be coordinated with other state, municipal, or private development projects, a description of these projects should be included in the environmental document, and all project sponsors should be identified.

Thank you for the opportunity to provide input in the early planning stages for this project. If we can further assist your office, please contact me at (919) 528-9886.

cc: Gary Jordan, U.S. Fish and Wildlife Service, Raleigh
Rob Ridings, DWQ, Raleigh
Eric Alsmeyer, USACE, Raleigh
Chris Militscher, EPA

FEB 18 2010
NC PWSS

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Inter-Agency Project Review Response

Project Number **10-0283**

County **Wake, Johnston**

Project Name **NC Turnpike Authority/NCDOT**

Type of Project **Scoping - Scoping notice for Southern & Eastern Wake Expressway, STIP Projects R-2721, R-2828 & R-2829. Complete 540 Outer Loop from NC55 to US 64/US 264 bypass, approx 29 miles**

Comments provided by:

☐ Regional Program Person

☒ Regional Supervisor for Public Water Supply Section

☐ Central Office program person

Name **Michael Douglas-Raleigh RO** Date: **02/12/2010**

Telephone number: 919-791-4200

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Transportation Mobility & Planning
DOH

Program within Division of Environmental Health:

☒ Public Water Supply

☐ Other, Name of Program: _____

Response (check all applicable):

☐ No objection to project as proposed

☐ No comment

☐ Insufficient information to complete review

☐ Comments attached

☒ See comments below

Any relocation of water mains must be approved by the Public Water Supply Section - Technical Services Branch prior to construction or relocation.

Return to:
Public Water Supply Section
Environmental Review Coordinator for the
Division of Environmental Health

FEB 15 2010

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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
10-0283
County
Wake, Johnston

Inter-Agency Project Review Response

Project Name **NC Turnpike Authority/NCDOT**

Type of Project **Scoping - Scoping notice for Southern & Eastern Wake Expressway, STIP Projects R-2721, R-2828 & R-2829. Complete 540 Outer Loop from NC55 to US 64/US 264 bypass, approx 29 miles**

☐ The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Environmental Health prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.

☐ This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.

☐ If this project is constructed as proposed, we will recommend closure of _____ feet of adjacent waters to the harvest of shellfish. For information regarding the shellfish sanitation program, the applicant should contact the Shellfish Sanitation Section at (252) 726-6827.

☐ The soil disposal area(s) proposed for this project may produce a mosquito breeding problem. For information concerning appropriate mosquito control measures, the applicant should contact the Public Health Pest Management Section at (919) 733-6407.

☐ The applicant should be advised that prior to the removal or demolition of dilapidated structures, an extensive rodent control program may be necessary in order to prevent the migration of the rodents to adjacent areas. For information concerning rodent control, contact the local health department or the Public Health Pest Management Section at (919) 733-6407.

☐ The applicant should be advised to contact the local health department regarding their requirements for septic tank installations (as required under 15A NCAC 18A. 1900 et. sep.). For information concerning septic tank and other on-site waste disposal methods, contact the On-Site Wastewater Section at (919) 733-2895.

☐ The applicant should be advised to contact the local health department regarding the sanitary facilities required for this project.

☐ If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Environmental Health, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.

☒ For Regional and Central Office comments, see the reverse side of this form.

Jim McRight	PWSS	02/12/2010
Reviewer	Section/Branch	Date

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: WAKE
JOHNSTON

F02: HIGHWAYS AND ROADS

STATE NUMBER: 10-E-4220-028
DATE RECEIVED: 02/03/2010
AGENCY RESPONSE: 03/23/2020
REVIEW CLOSED: 03/27/2020

CLEARINGHOUSE COORDINATOR
CC&PS - DIV OF EMERGENCY MANAGEMENT
FLOODPLAIN MANAGEMENT PROGRAM
MSC # 4719
RALEIGH NC

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N.C. Floodplain Mapping Program

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DEPT OF CULTURAL RESOURCES
DEPT OF TRANSPORTATION
TRIANGLE J COG

PROJECT INFORMATION

APPLICANT: State of N.C. Turnpike Authority
TYPE: National Environmental Policy Act
Scoping

DESC: Scoping notice for the Southern and Eastern Wake Expressway, STIP Projects R-2721,-2828 and R-2829. Completion of the 540 Outer Loop from NC 55 in Wake County to the US 64/US 264 bypass in Knightdale , approximate distance of 29 miles.

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☐ NO COMMENT ☒ COMMENTS ATTACHE

SIGNED BY: Jennifer Hoe DATE: 2/22/2010

The proposed alignment crosses multiple special flood hazard areas and FEMA regulated floodways. Each crossing within areas a floodway will require, prior to construction, either a:

(1) no rise certification for crossings that do not cause an increase in base flood elevations; or

(2) submittal and approval of Conditional Letter of Map revision for projects that increase base flood elevations.

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: WAKE
JOHNSTON

F02: HIGHWAYS AND ROADS

STATE NUMBER: 10-E-4220-0283
DATE RECEIVED: 02/03/2010
AGENCY RESPONSE: 03/23/2020
REVIEW CLOSED: 03/27/2020

MS HOLLY GILROY
CLEARINGHOUSE COORDINATOR
DEPT OF AGRICULTURE
1001 MSC - AGRICULTURE BLDG
RALEIGH NC

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AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☐ NO COMMENT ☑ COMMENTS ATTACHED

SIGNED BY: Holly Gilroy DATE: 2/19/2010

Steven W. Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services
Agricultural Services

Dewitt Hardee
Environmental Program Manager

Ms. Valerie McMillan
State Clearinghouse
N.C. Department of Administration
1301 Mail Service Center
Raleigh, North Carolina 27699-1301

February 19, 2010

State #: 10-E-4220-0283
RE: Southern and Eastern Wake Expressway

Dear Ms McMillan:

The footprint of the proposed Southern and Eastern Wake Expressway has potential of irreversible damage and increases the loss of prime farm and forest land thereby negatively impacting agricultural environmental balance in the immediate area. The US DOT and the NCDOT should give due consideration of routing and / or designs that reduce to loss of farm and forest land activities due to potential negative environmental and economic impacts by the placement of the road's footprint. Providing friendly and accessible agricultural crossover points for agricultural equipment and livestock in conjunction with the use of agricultural easements at access points and along the proposed right ways would lessen the negative impacts on the adjacent farms and forest land.

Farm and forest lands are natural resources with no mitigation process. These agribusiness resources cannot be replaced nor relocated once converted to other uses. Placement of the Expressway should give consideration of farms near existing Voluntary Agricultural Districts (VAD) designed to recognize and protect key agricultural production centers. Transportation planning priorities should considered highway placement and its potential negative impact on VAD and land resources. These plans should also negate the formation of incompatible and inaccessible land units that degrades agricultural production capabilities.

Agricultural production incomes from locally grown products have a considerable multiplier influence. It is estimated that for every 40 acres converted from agricultural production, one agribusiness job and its associated economic activity is lost indefinitely. Additional acreage loss is most likely to occur beyond the Southern and Eastern Wake Expressway footprint due to the subdivision and reduced agricultural production capacity from development pressures. Furthermore the costs of community services used by agricultural business are minimal and therefore are net contributors to county budgets. Both current and future cost for the conversion land from production agriculture is needed for an accurate evaluation which is not accurately recognized by the Farmland Conversion Impact Rating using Form AD 1006.

Based on the secondary, cumulative, and direct impacts, this project has potential to adversely impact the agricultural environmental and economic resources in the proposed area. The total negative impact on the environmental and agribusiness economy will be proportionately related to the total acres of farm and forest land taken out of production.

Respectfully,

Dewitt Hardee
Environmental Program Manager

E-mail: dewitt.hardee@ncagr.gov
1001 Mail Service Center, Raleigh, North Carolina, 27699-1001 (919) 733-7125 ● Fax (919) 716-0105
TTY: 1-800-735-2962 Voice: 1-877-735-8200
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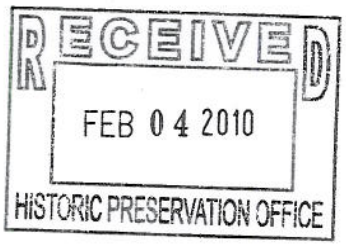
NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: WAKE
JOHNSTON

F02: HIGHWAYS AND ROADS

STATE NUMBER: 10-E-4220-0283
DATE RECEIVED: 02/03/2010
AGENCY RESPONSE: 03/23/2020
REVIEW CLOSED: 03/27/2020



MS RENEE GLEDHILL-EARLEY
CLEARINGHOUSE COORDINATOR
DEPT OF CULTURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
MSC 4617 - ARCHIVES BUILDING
RALEIGH NC

CH 98-0457

DAH
A - 2/5/10

S - RSL 2/10/10

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DEPT OF TRANSPORTATION
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PROJECT INFORMATION

APPLICANT: State of N.C. Turnpike Authority

Due 2/11/10

TYPE: National Environmental Policy Act
Scoping

DESC: Scoping notice for the Southern and Eastern Wake Expressway, STIP Projects R-2721,-2828 and R-2829. Completion of the 540 Outer Loop from NC 55 in Wake County to the US 64/US 264 bypass in Knightdale , approximate distance of 29 miles.

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If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☐ NO COMMENT ☒ COMMENTS ATTACHED

SIGNED BY: Renee Gledhill-Earley DATE: 2.10.10

FEB 05 2010

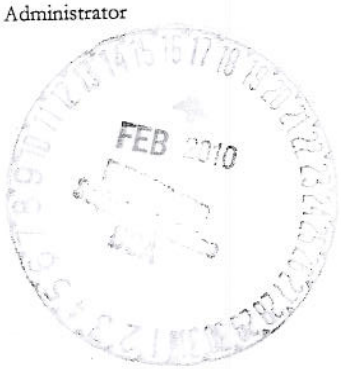
North Carolina Department of Cultural Resources

State Historic Preservation Office

Peter B. Sandbeck, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director



February 15, 2010

MEMORANDUM

TO: Jennifer Harris
North Carolina Turnpike Authority

FROM: Peter Sandbeck PBS for PBS

SUBJECT: Start of Study and Agency Scoping Meeting Notification, Southern And Eastern Wake Expressway, R-2721, R-2828 and R-2829, Wake and Johnston Counties, CH 98-0457

Thank you for your letter of January 25, 2010, concerning the above project. We have reviewed the information that accompanied your letter and offer the following comments.

The proposed study area for the Southern and Eastern Expressway contains numerous Native American and historic period archaeological sites, some of which may be eligible for inclusion in the National Register of Historic Places. In addition, much of the study area has never been surveyed to determine the presence or significance of archaeological resources. We recommend that you or your cultural resource consultants contact us as project corridors and alternates are developed for the project. We will then be able better able to evaluate the potential effects upon archaeological resources and the need for any additional archaeological investigations prior to project implementation.

In terms of historic buildings and districts, we urge your consultants to consult our maps and files for the latest updates to the Wake County inventory.

We look forward to working with you and your staff on this project. Representatives of our agency plan to attend the scoping meeting on February 16, 2010.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Steven D. DeWitt, NC Turnpike Authority
Matt Wilkerson, NCDOT
State Clearinghouse

OFFICE OF THE MAYOR

TOWN of CARY
P.O. Box 8005
316 North Academy Street
Cary, NC 27512-8005
tel: 919-469-4011
fax: 919-460-4910
www.townofcary.org

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MAR 2 2 2010
N.C. TURNPIKE AUTHORITY

March 17, 2010

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699

Subject: Comments on the Study of the Triangle Expressway Southeast Connector

Dear Ms. Harris:

On behalf of the Cary Town Council, I respectfully submit the following comments in response to your February 4, 2010 request for comments on the environmental impact study (EIS) process for the Triangle Expressway Southeast Connector from NC 55 in Apex to the US 64/US 264 Bypass in Knightdale. The comments are listed below and include phases of the project such as the environmental impact study process, design, and construction.

- The NCTA should work closely with the Town to establish a thorough and proactive communications plan. The NCTA should implement an aggressive public information and educational initiative for the potentially impacted residents and neighborhoods. The NCTA should hold regular meetings with the Town of Cary to present the communications plan and discuss concerns with the environmental impact study, construction effects on the quality of life, and traffic flow impacts among other issues. The NCTA should provide ample time for press releases such as community meetings, detours, and other pertinent information.

- The NCTA should investigate providing an interchange within the Town of Cary Comprehensive Planning Area. An interchange is currently proposed at the intersection of Kildaire Farm Road and Holly Springs Road. Due to growth and development, there may be too much traffic at a single point and an additional interchange may be needed in this area.

- The NCTA should closely investigate any impacts of moving the corridor off the protected alignment. This could negatively impact residential communities, proposed greenways, proposed parks, and proposed thoroughfare improvements. The NCTA should avoid impacting four current and proposed parks within the study area, including the existing Middle Creek Park and the proposed Barley Park. In addition, there are three greenways existing and proposed that cross perpendicular to the protected corridor. The greenway names are: Middle Creek Greenway, Camp

Branch Greenway, and Optimist Farm Greenway. There is an existing historical farm, the Olive Farm, located south of the protected corridor. In addition, there are several small historical buildings within the study area. There is an existing water treatment facility, the South Cary Water Reclamation Facility, located at the southern end of West Lake Road. Future thoroughfare improvements and development site plans have been planned with respect to the location of the protected corridor.

- The NCTA should address Town of Cary concerns about how changes to the protected corridor could impact the recently adopted Cary Comprehensive Transportation Plan. The Comprehensive Transportation Plan (CTP) was adopted by Town Council in 2008. The transportation network in Cary was analyzed for connectivity, social, economic, ecological, and traffic data with respect to the location of the protected corridor. Potential impacts to these components of the CTP should be considered through the EIS.

- The NCTA should work closely with Town of Cary to review and provide comments for the alternate alignments that will be included in the draft EIS. The NCTA should contact the Town of Cary in a reasonable amount of time prior to releasing the draft EIS for review and comments. The Town will review and provide comments to proactively form a communications plan to respond to the anticipated release of the draft EIS. The NCTA should continue to accept and review stakeholder comments throughout the EIS, design, and construction stages of the project.

- The NCTA should plan for and address noise impacts before, during and after construction. The NCTA should revise the NCDOT Traffic Noise Abatement Policy to plan for and provide noise barriers for all subdivisions approved, not just properties with building permits, prior to the record of decision (ROD). The NCDOT should revise this policy prior to the final EIS for the Triangle Expressway Southeast Connector, and the revised policy should apply for this project.

- The NCTA should work closely with the Town of Cary early in the process to identify and mitigate utility conflicts. Excavations and heavy construction operations over and around utility infrastructure have the potential to damage lines and disrupt service. Potential proposed and existing Town of Cary utility conflicts within the study area include: the South Cary Water Reclamation Facility, water towers, fiber optic cable, traffic signal cable, water and sanitary sewer service (see Attachment A for approximate existing and proposed water and sewer locations). Potential proposed and existing external utility conflicts include Progress Energy distribution lines, substations, and transmission lines. Other possible proposed and existing conflicts include Time Warner Cable, gas lines, and cellular towers, among others.

- The Town of Cary requests that the NCTA evaluate traffic impacts associated with construction. The NCTA should evaluate emergency response routes to ensure that service can be maintained. Traffic detour routes can lead to increased congestion and delays, which would increase driver inconvenience, confusion, and frustration. It is standard practice at the Town of Cary to give ample notice to drivers and residents of when, where, and how long a detour will be in place. In addition, the NCTA should give consideration to coordinating with schools and bus routes, coordinating signal work with the Town of Cary, coordinating the C-Tran bus route with the Town of Cary, and ensure that mobility is maintained through the construction area. The NCTA should evaluate and study the corridor for transit improvements, such as an HOV lane, buses, and rail.

- The NCTA should consider impacts to existing and proposed subdivision and site plans. Subdivisions and site plans will continue to be approved and lots platted throughout the EIS process. Subdivisions and site plans that are within 500' of the Triangle Expressway Southeast Connector protected corridor and the Town of Cary Comprehensive Planning Area as of March 8, 2010 are listed below (see Attachment B for the map of locations).

Subdivisions within 500' of the Protected Corridor and the Town of Cary Comprehensive Planning Area (List as of March 8, 2010)		
Subdivision Name	Acres	Lots
South Lake PH3	13.9398	15
Oxford Greene	32.6973	24
Clancy-Morrison	19.4583	5
Langston	77.802	72
Betty Truelove Daniels	6.81494	3
Belle Point	40.138	26
Brookshire Manor	23.4825	17
Jamison Park PH1	53.4068	136
Jamison Park PH2	78.0921	73
South Lake PH2	11.9468	12

Ms. Jennifer Harris, P.E.
March 17, 2010

Site Plans within 500' of the Protected Corridor and the Town of Cary Comprehensive Planning Area (List as of March 8, 2010)				
Site Plan Number	Project Name	Status	Acres	Use
00-SP-034	Middle Creek Park Softball Fields	Complete	90.23	Softball Fields
99-SP-153	Middle Creek High School	Complete	203	High School
99-SP-247	Middle Creek Park	Complete	203	Park

The Town would appreciate advance notification of any opportunities for additional public input on the EIS, including public workshops and hearings so that we may alert our citizens. We appreciate your consideration of our comments on this important matter. Please feel free to contact Kristen Dwiggins in our Engineering Department at (919) 462-3930 or via email at kristen.dwiggins@townofcary.org should you have any further questions relating to this issue. The Town of Cary looks forward to working with the Turnpike Authority on this important study process.

Best regards,

Harold Weinbrecht, Jr.
Mayor

THE TOWN OF Holly Springs NORTH CAROLINA

TOWN OF HOLLY SPRINGS
ENGINEERING DEPARTMENT
PO Box 8 Holly Springs, NC 27540
(919) 557-3938 • FAX (919) 552-9881

I-540 SOUTHEAST CONNECTOR
1st COMMENTS
3/25/2010

Please feel free contact Kendra Parrish, PE, CFM at 557-3931 or Kendra.Parrish@hollyspringsnc.us with any questions or comments regarding these comments.

Comments:

1. **Holly Springs supports the completion of the I-540 Southeast Connector!**

2. The Town of Holly Springs supports the location of the I-540 Southeast Connector in the current corridor protection area. If for some reason the location of I-540 cannot be located in this area we request that the new location be south of Holly Springs due to all of the existing development within the town limits.

3. Holly Springs is getting ready to embark upon a major multimodal Transportation Plan Update. We would like to meet with the Turnpike Authority a couple times throughout the process for coordination.

4. The planned interchange at Holly Springs Rd/Kildare Farm Road/I-540 needs special evaluation. What is in the corridor protection plan is not adequate to NCDOT design standards for on and off ramps. This presents a problem for Holly Springs because as development plans come in we know there needs to be more right of way however, NCDOT can not endorse a design due to NEPA.

5. Holly Springs requests a copy of the environmental investigation in our area for documentation.

6. Holly Springs prefers that the grade separated bridge over Sunset Lake Road be an overpass.

7. There are 3 greenway connections planned that cross I-540 and will need to be accommodated. These greenways are major connectors between adjacent municipalities. 1-behind the Scott's Laurel Subdivision off of Kildare Farm Rd, 2-Woodcreek Subdivision on Sunset Lake Road, 3-Area that runs parallel to Pierce Olive Road.

8. Adjacent to Middle Creek the Town has a major existing sewer trunk line. This will need to be preserved and factored into the road design.

THE TOWN OF Holly Springs NORTH CAROLINA

TOWN OF HOLLY SPRINGS
ENGINEERING DEPARTMENT
PO Box 8 Holly Springs, NC 27540
(919) 557-3938 • FAX (919) 552-9881

9. The overpass of Main Street (east of NC 55 Bypass) shall accommodate 100 ft right of way for a 4 lane median divided facility.

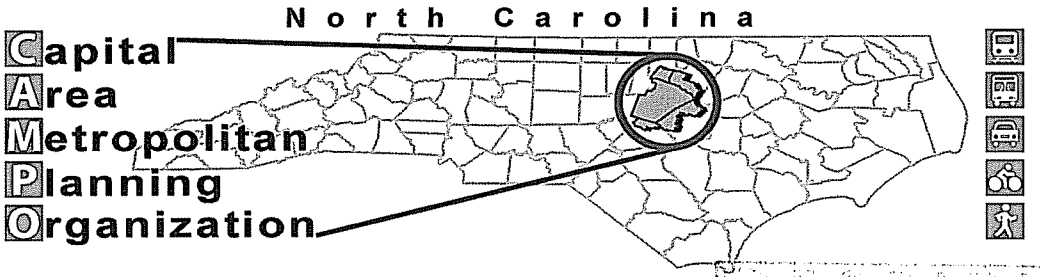
10. Sunset Lake Rd and Kildare Farm Rd are both 100 ft right of way with 4 lane median divided facilities as well.

11. Holly Springs would like to discuss noise walls and when the warrants will be evaluated. If needed what materials and height would be evaluated.

Questions:

1. If I-540 is relocated outside of the corridor protection area onto existing facilities that will be upgraded, will it still remain a toll road?
2. Will transit corridor be included with the I-540 design?

Thank you for the opportunity to comment on the process.



RECEIVED
MAR 2 2 2010
N.C. TURNPIKE AUTHORITY

March 18, 2010

Ms. Jennifer Harris, PE
Staff Engineer
North Carolina Turnpike Authority
5400 Glenwood Avenue
Raleigh, NC 27612

Re: Southern & Eastern Wake Expressway (STIP Projects R-2721, R-2828, and R-2829)
Notice of Intent Agency Response

Dear Ms Harris,

In reference to the Notice of Intent published in the Federal Register on November 30, 2009, this letter is to inform the North Carolina Turnpike Authority (NCTA) that the Capital Area Metropolitan Planning Organization (MPO) is supportive of the development of an environmental impact statement for the proposed action.

The Capital Area MPO wishes to continue to build upon the cooperative planning relationship established in the Memorandum of Understanding dated May 13th, 2007 (attached). As the designated agency responsible for the 3-C planning process under Section 134 of Title 23 United State Code and Chapter 136 of the North Carolina General Statutes, CAMPO looks forward to the opportunity to serve as a participating agency in the planning and design development process for this project.

The MPO encourages NCTA to develop and designate a preferred corridor and alignment in a timely manner in order to assist in proper transportation planning and coordination of development activities in this rapidly growing area. A designated corridor is also essential to expedite the acquisition of necessary right of way for the project, thus keeping overall project costs to a minimum.

Planning and design of this major transportation facility should be in harmony with the adopted regional Long Range Transportation Plan and Triangle Regional Model. This should include consideration for the long term needs of the transportation corridor by accommodating the ultimate cost effective design of this facility rather than incorporating design elements to minimize initial construction costs that will result in higher retrofits in the future such as resizing of bridges or interchanges once tolls are removed from the facility. The MPO recognizes that the current regional model has produced traffic volumes that are lower than the initial model that included this project. The MPO wishes to express the need for continued coordination with NCTA to ensure reasonable traffic volumes are included in an update of the Triangle Regional Model currently under development.

127 W. Hargett Street, Suite 800 Raleigh, NC 27601 Phone: (919) 996-4400 Fax: (919) 807-8517
www.campo-nc.us

The Southern and Eastern Wake Expressways are portions of the larger 540 Outer Loop project. As such these projects should be developed as a single design and right-of-way acquisition project to the extent possible. This will minimize long term project costs and result in an overall savings for the taxpayers. Any study of financial, economic and congestion impacts should include an analysis of the full completion of the Outer Loop.

The Southern and Eastern Wake Expressway will serve as the backbone of the transportation network in this area and should provide a balanced transportation facility design that includes multimodal considerations such as:

- Park and Ride facilities at major interchanges and other appropriate locations.
- Transit Vehicle toll exemption and priority.
- Transit vehicle and High Occupancy Vehicle priority through the use of designated lanes, toll stalls or other means.
- Coordination with existing and proposed bicycle and pedestrian facilities in the project corridor.

The MPO supports the inclusion of Intelligent Transportation System (ITS) components in the project design that are consistent with the adopted regional ITS architecture. This will maximize the transportation investment by enabling the most efficient management of traffic operations within the corridor.

The design of this new facility should minimize negative impacts to the Swift Creek Watershed and water supply area. To accomplish this, the ultimate facility design should include a toolbox of sustainable design elements such as use of BMPs throughout the project and consideration of onsite storm water treatment such as sustainable landscaping elements that are compatible with local soil type and drainage capability and that are native to the region.

The staff at CAMPO looks forward to working with NCTA to develop this vital transportation facility for the future. If you need any further assistance or have questions please contact my office at (919) 996-4400.

Sincerely,

Edison H. Johnson, Jr., PE, FITE
Executive Director, N.C. Capital Area MPO

cc: George Hoops, P.E. - Federal Highway Administration

APPENDIX C
Agency Meeting Summaries

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES
FINAL

Date: December 8, 2009
9:00 a.m. To 10:15 a.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Southern and Eastern Wake Expressway

Southern and Eastern Wake Expressway Spotlight:

Attendees:

George Hoops, FHWA
Christopher Militscher, USEPA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Rob Ridings, NCDWQ
Deanna Riffey, NCDOT-NEU
Erica McLamb, NCDOT-NEU
Rachelle Beauregard, NCDOT-NEU
Amy Simes, NCDENR
Missy Pair, NCDOT-PDEA
Steve Gurganus, NCDOT-PDEA-HEU
Dewayne Sykes, NCDOT-Roadway Design Unit
Tony Houser, NCDOT-Roadway Design Unit
Lonnie Brooks, NCDOT-Structure Design Unit
Jennifer Harris, NCTA
Christy Shumate, HNTB
Spencer Franklin, HNTB
Kevin Markham, ESI
Roy Bruce, Lochner
Kristin Maseman, Lochner
Karin Ertl, Lochner
Brian Eason, Lochner
Steve Browde, Lochner
Wendee Smith, Mulkey

Presentation Materials (Posted on TEAC website):

- Agenda
- Project Introduction PowerPoint Presentation
- Draft Project Study Area Map
- Notice of Intent
- Draft Section 6002 Project Coordination Plan
- Draft 2010 Calendar for Concurrence, Interagency, and NCTA Meetings

Purpose:
Introduce project and present draft project study area, Notice of Intent, and draft Section 6002 Project Coordination Plan for the project.

General Discussion:
The following information was discussed at the meeting:

- **Project Introduction:** Lochner gave a brief PowerPoint presentation to introduce the project and provide background information**.** Printed copies of the PowerPoint slides were provided to meeting attendees. Highlights of the presentation are as follows:

- Project length is about thirty miles, extending from NC 55 at the Western Wake Freeway/NC 540 to I-540 at the Knightdale Bypass.

- Initial project studies were conducted by NCDOT in the 1990s and a protected corridor for the Southern Wake Expressway has been filed. The protected corridor for R-2721 (NC 55 to US 401) was filed in 1996; the protected corridor for R-2828 (US 401 to I-40) was filed in 1997. To date, approximately thirty parcels have been purchased by NCDOT in order to preserve the corridor.

- In addition to the No-Build Alternative, multiple Build Alternatives, including alternatives on new location and upgrading existing roadway alternatives, as well as alternative modes, will be evaluated in this study. Alternative modes may include mass transit, transportation demand management, transportation system management, and others as identified.

- Key project issues that have been identified to date include potential impacts on area streams, the presence of federally-protected mussel species, potential indirect and cumulative effects, widespread residential development in the project area, and coordination with multiple jurisdictions. Other project issues will be identified through scoping and as the study progresses.

- Under the current draft schedule, the Draft EIS is scheduled for completion in early 2012, with a Record of Decision in late 2013.

Lochner then displayed a video simulation of an aerial flyover of the protected corridor for Southern Wake and a representative corridor for Eastern Wake to highlight locations of key area features. The representative corridor shown for Eastern Wake has not been protected—it is simply shown for reference purposes.

- **Notice of Intent:** NCTA provided printed copies of the Notice of Intent (NOI) for the project, which was published in the Federal Register on November 30, 2009. NCTA highlighted key information in the NOI, stressing that a range of alternatives will be evaluated for the project, including multiple new location and upgrade existing roadway alternatives along with several types of non-highway improvement alternatives.

- **Draft Project Study Area:** Maps showing the boundaries of the draft project study area were displayed and discussed. Lochner pointed out that the northern boundary of the study area in southern Wake County was set to avoid the Swift Creek watershed to the north, but to include Ten-Ten Road, an east-west facility. The western and southern boundaries were set to include NC 42 and NC 55, which together form a key east-west route through the study area.

  Following an initial request by EPA, the resource and regulatory agencies expressed interest in the proposed northern study area boundary shifted to the north to allow early consideration of potentially shorter alternatives closer to more heavily developed portions of the area. This shift, which would create a larger study area, may also allow evaluation of a larger number of potential locations for the crossing of Swift Creek. This could be helpful in considering how to best minimize impacts to federally-protected mussel species.

  NCDOT had a suggestion about the proposed southern study area boundary in light of potential issues at the I-40 interchange at NC 42. The study area will be shifted slightly in this area to include the area around the NC 42 and the Clayton Bypass.

- **Draft Section 6002 Project Coordination Plan:** In lieu of following the NCDOT's merger process, this project will follow coordination procedures authorized under Section 6002 of SAFETEA-LU for the environmental review process. The key difference in the two approaches is that formal concurrence is not required at decision points in the study. However, NCTA still

expects the agencies to highlight issues of concern, particularly those that could affect later permitting decisions. Printed copies of the draft Project Coordination Plan prepared for this project were provided. The plan contains a list of suggested cooperating and participating agencies for the project. Formal invitation letters will be sent to request formal agreement to act as cooperating or participating agencies. The current draft Project Coordination Plan will be finalized in the coming few months as the scoping process proceeds. After this, revisions can be made to the Project Coordination Plan at any time throughout the study as conditions warrant. Participants will be apprised of all revisions to the Project Coordination Plan and will be afforded opportunity to discuss the revisions.

Q&A:

1. *How much of the project study area is shown in the flyover video?*
   The width of the area shown is fairly small (roughly one mile wide)—the project study area is a lot wider than the area shown (as much as twelve miles wide in some locations).

2. *Why doesn't the study area include areas to the north of the existing northern boundary? Is the Swift Creek watershed a critical water supply watershed?*
   The existing northern boundary would keep any new location alternatives south of the Swift Creek water supply watershed. NCTA will determine if it is a critical water supply watershed.

   Note: Within the Swift Creek watershed, the Lake Benson watershed area has been designated by DWQ as a Critical Area (WS-III). The Lake Wheeler portion of the Swift Creek watershed is designated as WS-III, but not as a Critical Area.

3. *Could the study area boundary be shifted to the north? This could allow development of shorter new location alternatives.*
   The boundary could and will be shifted for the purposes of environmental constraints mapping and preliminary screening of alternative concepts.

4. *What existing facilities would this project likely alleviate traffic from? Is reduction of traffic congestion on existing facilities likely to be an element of the project purpose?*
   The project would likely draw traffic off of I-40, I-440, Ten-Ten Road, NC 42 and other adjacent facilities. Reduction of traffic congestion will likely be an element of the project purpose.

5. *The agencies would like information on the parcels already acquired by NCDOT under corridor protection.*
   All 30 parcels were acquired as a result of hardship requests from the original property owners. Key details of the acquired parcels will be provided.

6. *What happens to parcels acquired through corridor protection if the protected corridor is not chosen as the preferred alternative?*
   Each parcel is first offered for purchase to its original owner, then to adjacent property owners, and then to the wider public.

Previous Action Items:

- None

New Action Items:

- TEAC members will provide to NCTA comments on the draft Project Coordination Plan and the draft study area.
- Lochner will update the draft project study area boundary and NCTA will provide copies of updated maps.
- NCTA will determine the protective status of the Swift Creek watershed (*see above*).
- NCTA will provide details of parcels acquired by NCDOT under corridor protection; details will include acreage, location, and, if possible, purchase price.

Resolutions:

- None

Next Steps:

- Continue to consider potential adjustments to the draft study area boundary; begin to consider scoping issues.
- Next meeting will be the scoping meeting; it is tentatively scheduled for February 16, 2010.

Coordinate with HPO and NCWRC representatives, who were not able to attend this meeting, to provide information about this meeting and the upcoming scoping meeting.

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES

Date: February 16, 2010
8:30 a.m. To 10:15 a.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Triangle Expressway Southeast Extension Spotlight:

Attendees:

George Hoops, FHWA
Christopher Militscher, USEPA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Brian Wrenn, NCDWQ
Travis Wilson, NCWRC
Dolores Hall, NCOSA (via telephone)
Amy Simes, NCDENR
Mickey Sugg, USACE
Missy Pair, NCDOT-PDEA
Derrick Weaver, NCDOT-PDEA
Steve Gurganus, NCDOT-PDEA-HEU
Nilesh Surti, NCDOT-TPM
Dewayne Sykes, NCDOT-Roadway Design Unit
Aketa Emptage, NCDOT-OCR
Neal Strickland, NCDOT-Right of Way Branch
Tony Houser, NCDOT-Roadway Design Unit
Jennifer Harris, NCTA
Christy Shumate, HNTB
Kevin Markham, ESI
Roy Bruce, Lochner
Kristin Maseman, Lochner
Karin Ertl, Lochner
Steve Browde, Lochner
Wendee Smith, Mulkey

Presentation Materials (Posted on TEAC website):

- Agenda
- Revised Section 6002 Project Coordination Plan
- Revised Project Study Area Map
- Scoping Handout
- Community Characteristics Summary
- Draft Preliminary Purpose and Need
- Environmental Constraints Map and Legend
- Swift Creek Critical Watershed Area Map
- Area Socioeconomic Characteristics Maps

Purpose:
Obtain agency scoping comments; discuss preliminary statement of purpose and need.

General Discussion:
The following information was discussed at the meeting:

- **Project Name:** NCTA explained that the project name is under development. "Triangle Expressway Southeast Connector" and "Triangle Expressway Extension" have both been used as project names. The Notice of Intent for the project, which was published in November 2009, referenced the project as the "Raleigh Outer Loop." NCTA will need to make it clear when the project ROD is filed with EPA that the project's NOI referenced the earlier name. Regardless of the project name, NCTA will study the full range of alternatives during the NEPA study.

- **Revised Project Study Area:** Lochner presented the revised project study area map, showing the expanded study area boundary. The study area was revised following the December TEAC meeting per USEPA comments. The expanded study area incorporates the Swift Creek Water Supply Watershed area, the Town of Garner, and the NC 42/Clayton Bypass area in Clayton. NCTA stressed that the study area reflects the area within which new location alternatives will be considered. For the purposes of the overall NEPA project, upgrade existing facilities alternatives will be considered throughout the Raleigh area.

  NCDWQ has concerns about potential impacts to critical watershed areas by any alternatives developed in these areas. USFWS has concerns about potential impacts to endangered mussel species south of the Lake Benson dam. USEPA asked that the expanded study area boundary be retained rather than reduced to eliminate options that may impact the critical watershed areas.

- **Section 6002 Coordination Plan:** NCTA explained that the Section 6002 Coordination Plan has been revised slightly since the December 2009 TEAC meeting. Revisions were minor editorial changes. USEPA has recently provided input on the Plan to NCTA and this input will be incorporated into another revision. USACE asked that NCTA make every effort to provide agencies with TEAC meeting materials two weeks in advance of meetings where decisions will be required.

  Several agencies expressed a desire for the NCTA to follow the NCDOT merger process. Agencies indicated that the merger process allows for concurrent activity on the project while also facilitating linear decision-making, and that the merger process makes it clear what decisions are expected for each meeting. Agencies also indicated that the merger process has been fine tuned through the years through the collaborative work of various agencies and also includes a useful dispute resolution process.

  NCDOT noted that the merger process is Section 6002 compliant; however, neither NCDOT nor NCTA is required to follow merger. FHWA noted that NCTA should clearly identification of decision points prior to TEAC meetings. Both Section 6002 and the merger process flow through the same decision points and address the same issues. If new issues arise during either process, they must be addressed by the team. FHWA asked for agency ideas on ways to enhance the Section 6002 process. NCTA and FHWA has considered agencies' positions on using the merger process versus the Section 6002 process and has elected to continue to use the Section 6002 process in lieu of the merger process.

- **Scoping Handout:** Lochner reviewed this summary of the project, highlighting some of the key project issues that have been identified and noting key environmental constraints. Maps showing the locations of known environmental constraints were also displayed.

  USEPA asked for clarification on Limited English Proficiency (LEP) issues with regards to the project. Environmental Justice (EJ) and LEP are covered by two separate Executive Orders. NCDOT Office of Civil Rights asked to be actively included in the development of the project approach relative to EJ and LEP issues.

  NCDOT noted that voluntary agricultural districts (VADs) have their own public hearing requirements if they may be directly impacted by the project. NCDOT recommends that VAD hearings be held around the time of the corridor public hearing for the project. NCDOT

recommended that NCTA review Governor Hunt's 1981 Executive Order relative to Soil and Water Conservation District coordination for this project.

USEPA requested that only reasonable preliminary alternatives be brought to the agencies for consideration; options should be kept simple, without excessive crossover connectors and numerous alternative segments.

USEPA inquired about the status of the traffic forecasts for this project since this issue has delayed the project in the past. NCTA responded that the "no-build" traffic for 2035 is complete, and that data are already available for an analysis of a "build" alternative along the protected corridor. This information will be posted to Constructware. USEPA expressed concern about the range of percentage increases in predicted traffic volumes along segments of NC 42.

NCDWQ noted the significance of indirect and cumulative effects (ICE) associated with this project and the potential impacts on the numerous streams in the area. USEPA is also concerned about ICE and the ability of the area to support development from water supply and wastewater treatment capacity perspectives. The project team should collect information on the status of area wastewater treatment plants, including their capacity and permit status. The project team should also obtain information on the new Dempsey Benton wastewater treatment plant on NC 50. NCDOT recommended that a screening ICE report be prepared. NCWRC noted that effective addressing of ICE will require a strong cooperative approach with local governments. USFWS noted that Section 7 will be a major project issue.

- **Purpose and Need:** Lochner summarized the key study area characteristics underlying the need for the project and described preliminary concepts for the project purpose. The project purpose includes a primary goal, improving transportation mobility between areas south and east of Raleigh and areas west and north of the city, as well as other desirable outcomes.

  With regards to local government support for the project, which will be an important element of the project need, USEPA expressed concern that local communities in the study area are competing for growth and development with the expressed desire to grow and expand their municipal boundaries. USEPA is concerned that there is not a coordinated effort relative to growth management and the ability of the area to provide public services. USEPA expects serious environmental issues in the project area relative to water supply and wastewater treatment capacity because of this growth competition.

  USACE and USEPA noted that Research Triangle Park (RTP) and other areas west and north of Raleigh are not the only employment centers/trip destinations in the area; there are other strong trip attractors. USACE noted that this project provides connectivity for the entire 540 Loop.

  NCDOT suggested that the discussion of project need include a clear explanation about why the Capital Area Metropolitan Planning Organization (CAMPO) has included this project in its Long Range Transportation Plan (LRTP). NCDOT also recommended that economic development not be included in the project purpose and need as a desirable outcome.

- **General:** Future graphics and maps displayed at TEAC meetings should include the date when they were printed or last revised.

  NCTA has placed maps showing the locations of protected corridor parcels purchased by NCDOT on Constructware. NCTA has also posted spreadsheets listing details for each of these approximately 30 parcels.

Q&A:

1. *What is the definition of Limited English Proficiency?*

LEP individuals are unable to speak, read, or write in English. Project materials must be translated into another language if either 5% of the individuals in a community or 1,000 individuals in the community are classified as LEP.

2. *What is the large historic site shown on the constraints map on Old Stage Road just north of the protected corridor?*
   It is the Williams Crossroads site; it was placed on the State Study List but is not currently listed on the National Register.

Previous Action Items:

- TEAC members will provide to NCTA comments on the draft Project Coordination Plan and the draft study area.
- Lochner will update the draft project study area boundary and NCTA will provide copies of updated maps. (*Completed*)
- NCTA will determine the protective status of the Swift Creek watershed. (*Completed*)
- NCTA will provide details of parcels acquired by NCDOT under corridor protection; details will include acreage, location, and, if possible, purchase price. (*Completed*)

New Action Items:

- Agencies to review scoping handout and constraints mapping and provide to NCTA information about additional environmental issues and constraints.
- NCTA/FHWA to review process for agency coordination.
- Lochner will add STIP project R-2609 (US 401) to the list of other projects in the study area.
- Lochner will contact NCDOT Office of Civil Rights to coordinate on LEP and EJ considerations and analysis for the project.
- NCTA/Lochner will coordinate with County Soil and Water Conservation Districts.
- NCTA will place completed traffic forecast and analysis reports to Constructware.
- Lochner will collect information on study area wastewater treatment plants.

Resolutions:

- None

Next Steps:

- NCTA will continue to develop project purpose and need. Continue to consider potential adjustments to the draft study area boundary; begin to consider scoping issues.
- Develop Community Characteristics Report.
- Public workshops to be held in summer 2010.

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES

Date: August 10, 2010
10:00 a.m. to 11:30 a.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Southeast Extension

Triangle Expressway Extension Spotlight:

Attendees:

Rob Ayers, FHWA	Jason Moore, NCDOT-Roadway Design Unit
Christopher Militscher, USEPA	BenJetta Johnson, NCDOT-TMSD
Eric Alsmeyer, USACE	Chris Lukasina, CAMPO
Scott McLendon, USACE	Jennifer Harris, NCTA
Gary Jordan, USFWS	Christy Shumate, HNTB
Brian Wrenn, NCDENR-DWQ	Spencer Franklin, HNTB
Travis Wilson, NCWRC	Gail Tyner, ESI
Amy Simes, NCDENR (via telephone)	Joanna Rocco, URS
Renee Gledhill-Earley, NCDCR-HPO (via telephone)	Roy Bruce, Lochner
Missy Pair, NCDOT-PDEA	Brian Eason, Lochner
Herman Huang, NCDOT-PDEA, HEU	Kristin Maseman, Lochner
Doug Taylor, NCDOT-Roadway Design Unit	Karin Ertl, Lochner
Sam St. Clair, NCDOT-Roadway Design Unit	Steve Browde, Lochner
Tony Houser, NCDOT-Roadway Design Unit	Wendee Smith, Mulkey

Presentation Materials (Posted on TEAC website):

- Agenda
- Final Meeting Minutes – 2/16/10 TEAC Meeting
- Revised Section 6002 Draft Project Coordination Plan
- Draft Purpose and Need Statement
- Handout 1 – Alternatives Screening Methodology Summary
- Handout 2 – Qualitative First Tier Screening of Alternative Concepts
- Handout 3 – Quantitative Second Tier Screening of Alternative Concepts

Purpose:
Discuss purpose and need statement and alternatives screening process.

General Discussion:
The following information was discussed at the meeting:

- **Project Coordination Plan:** NCTA stated that a revised version of the Draft Project Coordination Plan has been posted to Constructware. The revisions were based on similar edits that were

made to the Project Coordination Plan for the Cape Fear Skyway project. NCTA distributed invitation letters to representatives of State agencies, asking for the agencies to become participating agencies under the Project Coordination Plan. FHWA will distribute a similar letter to representatives of federal agencies. Agencies are requested to submit to NCTA any final comments on the Project Coordination Plan before the next TEAC meeting on September 8, 2010.

- **Purpose and Need:** Lochner summarized the three key elements of the project need: the need for improved mobility in the project, underscored in the Capital Area Metropolitan Planning Organization (CAMPO) Long Range Transportation Plan (LRTP); the limited transportation options for efficient local and through travel in the region due to increasing congestion on existing freeways and a lack of alternative routes and travel modes; and existing and projected poor levels of service (LOS) on major roadways in the project area. Lochner summarized the project purpose as improving transportation mobility to enhance connectivity in the area and to provide additional high-speed, efficient regional transportation infrastructure for local and regional traffic. Other desirable outcomes include system linkage and support for federal sustainability and livability goals.

  NCDENR-DWQ asked how a reduction in congested vehicle miles traveled (one of the measures of effectiveness listed in the Draft Purpose and Need Report for meeting project purpose) would differ from improvement in LOS. HNTB explained that measuring changes in congested vehicle miles traveled provides information on congestion levels throughout the local transportation network. LOS only provides information on congestion levels for a specific link in that network.

  NCDENR-DWQ asked whether the study area for traffic analysis is different from the study area for alternatives development. NCTA explained that the limits of the study area for traffic analysis are broader than those for alternatives development because the former must consider more of the regional transportation network outside the immediate project area. NCDENR-DWQ stated that this discrepancy between the two study areas is confusing in the Draft Purpose and Need Report and suggested that this issue be clarified in the report.

  FHWA suggested that more information be provided about potential thresholds for meeting the project purpose under each of the measures of effectiveness listed in the Draft Purpose and Need Report. NCTA explained that it could be difficult to set thresholds that do not arbitrarily eliminate otherwise reasonable alternatives. CAMPO indicated that their LRTP includes measures of effectiveness but does not identify minimum requirements for meeting them.

  USEPA asked why information about US 401 is not included in the traffic figures in the Draft Purpose and Need Statement. HNTB explained that traffic data for existing conditions and no-build scenarios are available for US 401. HNTB will include this information in the figures.

  NCDENR-DWQ questioned the appropriateness of including the NC Strategic Highway Corridor vision as part of the need for the project. NCTA explained that this was included as supporting information to explain that current and projected LOS do not support that vision. NCTA will more closely examine this issue and consider revising the report text to clarify.

  FHWA asked how public involvement will be incorporated into purpose and need development. Lochner explained that public workshops to present this information, along with information about alternatives development will be held in late September. Project purpose and need will be finalized after considering all public and agency comments received. NCTA explained that agency comments received will also be considered in finalizing the project purpose and need. The Draft Purpose and Need Statement will be posted to the project website.

- **Alternatives Screening:** NCTA summarized the methodology used for screening alternative concepts and preliminary alternative corridors and then provided an overview of the results of screening alternative concepts (Qualitative First Tier Screening). NCTA stressed that improve

existing and hybrid new location/improve existing concepts may prove to be worthy of more consideration for this project than for past NCTA projects.

NCTA explained that for the first screening, alternative concepts were qualitatively compared to the no-build alternative. USEPA asked whether combinations of concepts could be considered as such combinations may be better able to meet elements of project purpose and need than each concept alone. USEPA also stated that "maybe" could be a more accurate answer than "yes" or "no" in qualitatively assessing whether each alternative concept meets each element of purpose and need.

NCDOT-PDEA asked if CAMPO has done any modeling to see how much transit ridership is needed to achieve quantitative improvements in, for example, area commute times. CAMPO indicated that in its traffic model the Southeast Extension is assumed to be a multimodal facility, with mass transit using the roadway along with cars and trucks. CAMPO expects that the Southeast Extension will be developed so that it is consistent with the LRTP.

FHWA asked why the measures of effectiveness for meeting the project purpose were not used to screen alternative concepts. NCTA responded that it would be difficult to quantify the ability of each alternative concept to meet the measures of effectiveness for the project purpose. Lochner added that the first tier screening of alternative concepts is meant to determine whether each concept would be able to fulfill the main points of the project and purpose and need; those that meet those points will then be subject to the quantifiable measures of effectiveness. Several agencies suggested that NCTA consider qualitatively screening the alternative concepts according to the measures of effectiveness. NCDENR-DWQ and NCWRC also suggested the NCTA consider eliminating the following two elements of the first tier screening: consistency with the NC Strategic Highway Corridor program and ability to improve system linkage. Several agencies also suggested that NCTA more clearly explain the first tier screening process.

FHWA asked whether CAMPO has any documentation of how mode choices for specific areas are made for the LRTP. CAMPO stated that regardless of mode, there is no east-west corridor in southern and eastern Wake County that can handle projected traffic volumes. CAMPO views the 540 Outer Loop as the backbone of the transportation network in this area.

Lochner presented preliminary alternative corridors currently under consideration. These include several new location alternatives, as well as improving existing facilities alternatives and hybrid new location/improve existing facilities alternatives. Lochner described preliminary impact estimates for these alternatives. NCTA recommended several alternatives for elimination based on magnitude of impacts on relocations and jurisdictional resources. USFWS asked that NCTA not eliminate Alternative O from further consideration at this point because, while it would require a large number of relocations and would directly impact the Swift Creek Watershed Critical Area, it is the only new location alternative that would avoid dwarf wedgemussel habitat. The agencies agreed to eliminate Alternatives B, D, F, H, K, and M from further consideration. These alternatives each use Segment 38, rather than Segment 9, at the eastern project terminus. In all cases, alternatives using Segment 38 would have greater impacts to jurisdictional resources and would require more relocations that similar alternatives using Segment 9. The agencies also agreed to eliminate Improve Existing Alternative #2 and Hybrid Alternative #2 (each includes upgrading and widening NC 55 and NC 42) due to the large number of relocations each would require. NCTA and Lochner will complete the third tier qualitative screening on the remaining alternatives.

Previous Action Items:

- Agencies to review scoping handout and constraints mapping and provide to NCTA information about additional environmental issues and constraints.
  [Scoping responses were received from USEPA, USFWS, NCDCR-HPO, NCDENR-DWQ, NCWRC, NCDENR-NHP, NCDENR-DEH, NC Floodplain Mapping Program, and NCDACS (NC Department of Agriculture and Consumer Services), as well as CAMPO, Cary, and Holly Springs.]

- NCTA/FHWA to review process for agency coordination.
  [After additional discussion, the NCTA and FHWA have determined that the Section 6002 Project Coordination Plan process will be followed for this project.]
- Lochner will add STIP project R-2609 (US 401) to the list of other projects in the study area.
  [Completed]
- Lochner will contact NCDOT Office of Civil Rights to coordinate on LEP and EJ considerations and analysis for the project.
  [Completed]
- NCTA/Lochner will coordinate with County Soil and Water Conservation Districts.
  [Completed]
- NCTA will place completed traffic forecast and analysis reports to Constructware.
  [Posted under 2010-02-16 folder.]
- Lochner will collect information on study area wastewater treatment plants.
  [This information has been added to study area environmental constraints mapping.]

New Action Items:

- FHWA to distribute letters inviting federal agencies to become cooperating/participating agencies under the Project Coordination Plan.
  [Distributed on August 17, 2010.]
- Agencies to provide final comments to NCTA on Project Coordination Plan by September 8, 2010.
- NCTA/Lochner to clarify distinction between traffic study area and project study area for alternatives development in Purpose and Need Report.
- HNTB to review existing and projected traffic for US 401 and add this information to traffic figures in the Purpose and Need Report.
- Agencies to provide comments on Draft Purpose and Need Statement by September 8, 2010.
- NCTA/Lochner to consider revising first tier qualitative screening of alternative concepts to clarify the link between this screening and the measures of effectiveness for project purpose.
- NCTA/Lochner to complete third tier qualitative screening of alternatives and present results at September TEAC meeting.
- Agencies to provide comments on alternatives screening methodology and draft alternative concepts by September 8, 2010.

Resolutions:

- None

Next Steps:

- TEAC meeting – September 8, 2010.
- Public workshops scheduled for September 21, 22, and 23, 2010.
- Revise Purpose and Need Statement following review of agency and public comments.
- Complete third tier quantitative screening for preliminary alternative corridors.

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES

Date: September 8, 2010
8:30 a.m. To 9:00 a.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Extension (Raleigh Outer Loop)

Triangle Expressway Extension Spotlight:

Attendees:

George Hoops, FHWA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Travis Wilson, NCWRC
Deloris Hall, NCDCR (via telephone)
Doug Taylor, NCDOT-Roadway Design Unit
Jennifer Harris, NCTA
Christy Shumate, HNTB
John Burris, HNTB
Joanna Rocco, URS
David Griffin, URS
Roy Bruce, Lochner
Brian Eason, Lochner
Kristin Maseman, Lochner
Wendee Smith, Mulkey

Presentation Materials (Posted on TEAC website):

- Agenda
- Draft Meeting Minutes – 8/10/10 TEAC Meeting
- Handout 4 – Alternatives Screening, Quantitative Third Tier Screening of Alternative Concepts
- Newsletter #2

Purpose:
Continue discussion on purpose and need statement and alternatives screening.

General Discussion:
The following information was discussed at the meeting:

- **Purpose and Need and Alternatives Screening Methodology:** NCTA has received comments on the draft Purpose and Need Report from NCDENR-DWQ. Comments on both purpose and need and the alternatives screening methodology will be accepted until after the September public workshops. A revised Purpose and Need Report and a draft Alternatives Report will then be completed and made available to agencies, local governments and the public for comments. Other agencies indicated they do not plan to submit written comments and will defer to NCDENR-DWQ's comments.

- **Alternatives Screening:** Lochner summarized the results of the quantitative third tier screening of alternatives carried forward from the second tier screening, which included nine new location alternatives, two improve existing facilities alternatives, and two hybrid new location/improve

existing facilities alternatives. This round of screening included more evaluation criteria and a more detailed examination of impacts than the second round of screening.

USFWS and NCWRC stated that National Heritage Program (NHP) occurrences should not be used in the impacts summary table in Handout 4 because the NHP GIS database is too general to provide useful comparative information. Instead, they suggested that federal and state listed species occurrences would provide more useful comparative information.

The agencies agreed to eliminate Improve Existing Alternative #3 and Hybrid Alternative #3 (each includes upgrading and widening Ten-Ten Road) because each of these would require much larger numbers of relocations than all other alternatives without providing clear advantages. In addition, because Improve Existing Alternative #1 and Hybrid Alternative #1 remain under consideration, viable alternatives are not limited to new location options at this point.

NCTA will discuss with NCDOT Roadway Design staff the nine new location alternatives, Improve Existing Alternative #1, and Hybrid Alternative #1 to identify geometric constraints and other design considerations influencing the further development of these alternatives. After presenting these alternatives to the public at the September workshops, NCTA expects to select Detailed Study Alternatives (DSAs) by November of this year.

- **Section 6002 Cooperating Agency Invitation:** USACE has received the FHWA letter inviting it to be a cooperating agency under the Project Coordination Plan and will sign and return it to FHWA soon.

Previous Action Items:

- FHWA to distribute letters inviting federal agencies to become cooperating/participating agencies under the Project Coordination Plan.
  [Letters were distributed on August 17, 2010.]
- Agencies to provide final comments to NCTA on Project Coordination Plan.
  [No additional comments were received.]
- NCTA/Lochner to clarify distinction between traffic study area and project study area for alternatives development in Purpose and Need Report.
  [Clarification will be included in revised Purpose and Need Report, available by mid-October, after the public workshops.}
- HNTB to review existing and projected traffic for US 401 and consider adding this information to traffic figures in the Purpose and Need Report.
  [This information was not included on the initial traffic figures because only segments that experienced more than 10 percent change in traffic between the No-Build and Build scenarios were modeled; however, this traffic information for US 401 will be added for information.]
- Agencies to provide comments on Draft Purpose and Need Report.
  [Written comments were received from NCDENR-DWQ. Other agencies indicated that they will not provide additional written comments.]
- NCTA/Lochner to consider revising first tier qualitative screening of alternative concepts to clarify the link between this screening and the measures of effectiveness for project purpose.
  [Clarification will be included in draft Alternatives Report, available by mid-October, after the public workshops.]
- NCTA/Lochner to complete third tier qualitative screening of alternatives and present results at September TEAC meeting.
  [Handout 4 presented at the September TEAC meeting includes the results of the third tier qualitative screening.]
- Agencies to provide comments on alternatives screening methodology and draft alternative concepts.
  [A draft Alternatives Report will be prepared following public workshops in late September and made available for agency and public review and comment.]

New Action Items:

- Lochner to revise alternatives impact table to replace Natural Heritage Program Occurrences as an evaluation criterion with separate breakouts of federal and state protected species.

Resolutions:

- None

Next Steps:

- Public workshops on September 21, 22, and 23, 2010.
- Revise Purpose and Need Report according to agency and public comments.
- Prepare draft Alternatives Report and circulate for agency and public review and comment.

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES

Date: November 2, 2010
9:30 a.m. To 11:30 a.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Triangle Expressway Extension Spotlight:

Attendees:

George Hoops, FHWA
Christopher Militscher, USEPA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
David Wainwright, NCDENR-DWQ
Travis Wilson, NCWRC
Amy Simes, NCDENR
Delores Hall, OSA (via telephone)
Regina Page, NCDOT Congestion Management (via telephone)
Deanna Riffey, NCDOT-Natural Environment Unit
Steve Gurganus, NCDOT-Human Environment Unit
Derrick Weaver, NCDOT-PDEA
Doug Taylor, NCDOT-Roadway Design Unit
Tony Houser, NCDOT-Roadway Design Unit
Chris Lukasina, CAMPO
Gerald Daniel, CAMPO
Steve DeWitt, NCTA
Jennifer Harris, NCTA
Christy Shumate, HNTB
John Burris, HNTB
Kevin Markham, ESI
Joanna Rocco, URS
Roy Bruce, Lochner
Kristin Maseman, Lochner
Doug Wheatley, Lochner
Steve Browde, Lochner
Wendee Smith, Mulkey
Tim Savidge, Catena Group
Mike Wood, Catena Group

Presentation Materials (Posted on TEAC website):

- Agenda
- Draft Meeting Minutes – 9/8/10 TEAC Meeting
- Handout 5 – Public Informational Meetings (Sept. 2010), Summary and Comment Analysis
- Handout 6 – Preliminary Alternative Corridors, Major Constraints/Issues
- Impact Table – Southeastern Extension Preliminary Alternative Corridors by Phase, Summary of Potential Impacts

Purpose:

Discuss revisions to purpose and need statement, summary of public comments and alternatives screening discussion.

General Discussion:
The following information was discussed at the meeting:

- **Purpose and Need Update:** NCTA stated that the revised version of Purpose and Need is on Constructware. The revisions address comments from earlier TEAC meetings and written comments from NCDENR-DWQ. Also, written responses to NCDENR-DWQ comments are posted to Constructware.

- **Alternatives Screening:** The Alternatives Development and Analysis Report is being prepared and should be distributed prior to next month's TEAC meeting.

- **Summary of Public Comments (Handout 5):** Lochner presented the summary of public responses to date, indicating that over 1,000 people attended the September Public Informational Meetings. To date over 2,000 comments have been received. Several neighborhood petitions have also been received with nearly 1,000 signatures. Most comments express support for the project located in the protected corridor and dismay over other new location alternatives. Some comments related to the perceived "fairness issue" of tolling only a portion of this loop facility.

  Lochner stated that the public comments are helpful in evaluating alternative corridors as they typically include details relative to human and natural environment impacts.

  Several local governments have passed resolutions regarding the project. Most indicate support for the project located in the project corridor. The Wake County Board of Commissioners resolution states opposition to the blue, purple, red, and pink corridors. The City of Garner resolution states opposition to the red corridor.

  NCTA explained that public involvement activities have included significant effort to educate the public on the project development process. That included explaining to citizens the role of the protected corridor in the study process.

- **Alternatives Screening Discussion (Handout 6):** Lochner summarized the major constraints and relative advantage of each corridor in the Phase I and Phase II areas, mentioning a few new constraints that have emerged since the Public Informational Meetings. There is a proposed mixed-use development (Randleigh Farm property) planned jointly by Wake County and City of Raleigh and purchased using open space funds. The green corridor in Phase II would bisect this property. Adjacent to Randleigh Farm is a potential historic site known to include remnants of a nineteenth century mill and with anecdotal evidence of Civil War significance. OSA suggested meeting with NCTA staff to review the known facts related to the historic significance of this property. To avoid or minimize impacts to the Randleigh Farm and the adjacent potential historic sites, two other corridor alternatives in the Phase II area were reintroduced. The tan corridor would impact Randleigh Farm along its eastern edge, reducing the amount of direct impacts to the site relative to the green corridor. The grey corridor would completely avoid the Randleigh Farm area, including an eastern swing into Johnston County.

  USACE asked whether there have been traffic projections for the various alternative corridors. HNTB stated that preliminary traffic projections are similar for the protected corridor (orange) and the blue and purple corridors to the south. The red corridor to the north is projected to serve smaller traffic volumes than the others. USEPA requested that traffic data be made available to TEAC members and NCTA agreed.

  NCTA asked for agency feedback on eliminating some of the preliminary alternative corridors from further consideration. In considering the red corridor, discussion turned to dwarf wedgemussel habitat in the Swift Creek watershed. USFWS indicated that the red corridor may be the only alternative with a chance for a "no adverse effect" determination for the species. The Catena Group has found fairly young dwarf wedgemussel individuals in Swift Creek in the vicinity of the Wake-Johnston County line, near the protected corridor. They have not yet surveyed the area between Lake Wheeler and Lake Benson, and there have been limited past surveys in this area. State listed

Turnpike Environmental Agency Coordination (TEAC) Meeting

MEETING MINUTES

Date: January 20, 2011
1:00 p.m. To 4:00 p.m.
NCTA Board Room

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Triangle Expressway Extension Spotlight:

Attendees:

George Hoops, FHWA (via telephone)
Christopher Militscher, USEPA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Brian Wrenn, NCDWQ
Travis Wilson, NCWRC
Delores Hall, OSA (via telephone)
Doug Taylor, NCDOT-Roadway Design Unit
Michael Bright, NCDOT-Utilities
Herman Huang, NCDOT-PDEA HEU
Ronnie Williams, Mayor-Town of Garner
Hardin Watkins, Town of Garner
Chris Lukasina, CAMPO
David Joyner, NCTA
Steve DeWitt, NCTA
Jennifer Harris, NCTA
Kiersten Giugno, HNTB
Spencer Franklin, HNTB
John Burris, HNTB
Kevin Markham, ESI
Roy Bruce, Lochner
Kristin Maseman, Lochner
Doug Wheatley, Lochner
Steve Browde, Lochner
Jay Bissett, Mulkey
Wendee Smith, Mulkey
Tim Savidge, Catena Group
Russ Owen, Garner resident
Jeff Swain, Garner resident

Presentation Materials (Posted on TEAC website):

- Agenda
- Handout 7 – Public Involvement – November 2010 through January 2011
- Handout 8 – Red and Pink Corridor Elimination
- Red and Pink Corridor Elimination slideshow

Purpose:
Continue discussion of alternatives

General Discussion:
The following information was discussed at the meeting:

- **Summary of Public Involvement (Handout 7):** Lochner presented the summary of public involvement activities between November 2010 and the present. Public involvement has centered around two main issues. The first was presenting and receiving comments on the Tan

corridor, an alternative added in the Phase II area to minimize impacts to the Randleigh Farm property and to avoid three large communications towers. NCTA held a Public Informational Meeting in December to solicit input on the Tan and Green corridors. NCTA has received nearly 300 public comments opposing the Tan corridor, mostly due to neighborhood impacts. Local residents have also submitted a petition opposing the Tan corridor, signed by over 700 people. On December 8, 2010, the Wake County Board of Commissioners sent a letter to NCTA asking that NCTA remove the Tan corridor from consideration. On January 5, 2011, the Raleigh City Council voted to send a letter asking NCTA to remove the Tan corridor from further consideration and to seek other alternative routes.

The second main issue in recent public involvement has been strong opposition to the Red and Pink corridors. In November, over 1,000 local residents attended a public meeting organized by Town of Garner to discuss the Red corridor. Attendees overwhelmingly expressed strong opposition to the Red corridor. In December, several hundred local residents attended a public meeting organized by the Springfield Baptist Church to address potential impacts of the Red and Pink corridors to church-owned property. Garner residents have submitted a petition signed by 356 people opposing the Red corridor. Springfield Baptist Church has submitted a petition signed by 1,086 people, and letters from 970 individuals, opposing the Red and Pink corridors. To date, NCTA has also received several hundred e-mail comments, letters, and telephone hotline comments opposing the Red corridor and several hundred comments opposing the Pink corridor. Garner's State Legislative delegation also submitted a letter asking for the Red and Pink corridors to be eliminated.

Lochner stated that the Town of Garner asked NCTA to look at another potential corridor that would follow I-40 north from the Orange protected corridor, but would turn eastward south of White Oak Road to avoid the Greenfield South Business Park and Springfield Baptist Church area. This was shown on maps as the Forest Green corridor. This corridor has not yet been presented to the general public.

- **Draft Alternatives Report:** Lochner explained that the Draft Alternatives Report is still being reviewed but is anticipated to be distributed to the agencies within a month.

- **Corridor Elimination Discussion (Handout 8):** Lochner presented a slideshow summarizing the development and evaluation of project alternatives to date. Following the November TEAC meeting, the Blue, Purple and Yellow corridors were eliminated from further study, the Pink corridor was modified to connect to the Orange protected corridor, and the Tan and I-40 corridors were added. Since then, the Forest Green corridor was developed, as described in the previous discussion. USACE asked what advantage the Forest Green corridor would provide over the Green corridor and NCTA explained that it would create an alignment following a portion of I-40 but avoiding the Greenfield South Business Park area farther north. It would also shift a portion of the I-40 interchange area out of the immediate vicinity of Swift Creek. USFWS stated that the Forest Green would not offer an avoidance or minimization option for Dwarf wedgemussel impacts.

  Catena provided a brief summary of recent Dwarf wedgemussel surveys. Biologists found three mussel species in Swift Creek between Lake Benson and Lake Wheeler, but none were rare species. Downstream of Lake Benson, biologists have found five Dwarf wedgemussel individuals. USFWS stressed that this number is representative and does not mean there are only five Dwarf wedgemussel individuals in this part of Swift Creek. In 2007 surveys in this area, biologists found seven individuals; in 2001 and 2002, they found one or two individuals. This suggests that the species is still reproducing in this part of Swift Creek, but does not provide enough information to make conclusions about long-term viability of the species.

Only one mussel was found in Mahler's Creek, a tributary of Swift Creek downstream of Lake Benson, but it was not a rare species. Current conditions in Mahler's Creek make it poor quality habitat for the Dwarf wedgemussel.

General natural resource habitat quality in Swift Creek between Lake Benson and Lake Wheeler is quite good; the area is largely forested.

Lochner then showed the Town of Garner's "Visual Letter to the North Carolina Turnpike Authority", a roughly 15-minute video explaining local officials' and residents' concerns about the Red corridor. After the video, Lochner summarized the key disadvantages of the Red corridor and Pink corridor and explained the reasons why NCTA recommends eliminating these two corridors as they are not reasonable corridor for detailed study in the EIS.

USFWS stated that it has no legal authority to tell NCTA not to eliminate the Red or Pink corridors. However, USFWS could not go on record agreeing with the Orange protected corridor as the Least Environmentally Damaging Practicable Alternatives (LEDPA) based on the information currently available. The recovery plan for the Dwarf wedgemussel, adopted in the early 1990s, requires a viable population of the species in Swift Creek. USFWS has to make judgments based on this goal. Unless we uncover information demonstrating that Swift Creek does not contain viable habitat that will promote the long-term survival of the species, the agency's decisions must err on the side of protecting the species and its habitat. This lack of information could push the USFWS towards a Jeopardy Opinion. It is imperative that the right questions be identified and answers found.

USFWS has applied for federal funding to do detailed studies of Dwarf wedgemussel viability in Swift Creek. These studies would include: 1) provide an accounting (compliance/success) of existing conservation measures in the Swift Creek watershed; 2) evaluate the effectiveness of existing conservation measures; 3) determine habitat and mussel population viability in Swift Creek. If the application for funding is denied, then the USFWS may ask the NCTA to fund the studies. NCTA is interested in further discussions with USFWS about these studies

If the Dwarf wedgemussel population is found not to be viable, but habitat is found to be viable, USFWS would consider captive propagation as a mitigation technique. The technology for this has already been developed at Virginia Tech.

USACE asked whether any monitoring has been done on the effectiveness of Dwarf wedgemussel impact mitigation for the Clayton Bypass project. USFWS replied that it was not aware of any recent monitoring efforts, although Johnston County did do some monitoring in the past.

USACE asked whether USFWS would need to wait until Section 7 consultation is complete to be able to support the protected corridor as the project LEDPA. USFWS replied that since the project is not going through the merger process, it does not have to provide concurrence on LEDPA. USFWS also stated that the Section 7 process can't be completed until after a LEDPA is selected. NCTA remarked that on the Monroe Bypass project, it selected a tentative LEDPA to be finalized pending the conclusion of Section 7 consultation.

USEPA remarked that much of the analysis presented today would be the kind of information that would typically be included in the Draft EIS and that typically, agencies wouldn't be asked to consider elimination of all but one alternative until the Draft EIS is published. USEPA also pointed out that it could be problematic from a 404 Permit standpoint to eliminate the Red corridor prior to preparing the Draft EIS since it would have lower wetlands impacts than the protected corridor. USEPA stressed that it would have concerns about NEPA compliance if the Red corridor is eliminated at this point.

NCTA explained that, due to its impacts and lack of public support, construction of the project in the Red corridor would have extreme difficulty being funded and likely never be built. NCTA also stressed that the community and economic impacts of waiting until 2012 to eliminate the Red corridor are highly significant.

USACE stated that it is concerned about eliminating the Red corridor at this point because it has the smallest amount of wetland and stream impacts. It could be difficult to issue a 404 Permit for the project knowing that this alternative was eliminated before it could be studied in detail for inclusion in the Draft EIS.

USEPA emphasized the need for stormwater controls at each crossing of Swift Creek (Red and Orange) to avoid potential contamination by a hazardous spill. This is an issue for water quality related the critical watershed area along the Red corridor and related to endangered species along the Orange corridor.

NCTA asked whether USACE would oppose elimination of the Pink corridor, too. USACE explained that it might not oppose eliminating it if the Red corridor remained under consideration.

USFWS stressed that federal agencies must fully comply with all applicable laws, statutes, policies, procedures, etc., and are under constant risk of being sued for not doing so.

There was some discussion about whether there may be other alternatives in the project study area that would meet the needs of NEPA while avoiding such major community impacts. The project team has not been able to identify any other alternatives that would avoid these impacts and despite extensive community involvement, there have been no suggestions from the public for new alternatives. Agency representatives were asked if they knew of any other potential alternatives NCTA should consider, but no such alternatives were suggested. It is possible that the Improve Existing Alternative, which would widen I-40, I-440 and US 64/US 264 Bypass up to twelve lanes, could be reintroduced into consideration. It was eliminated at the November TEAC meeting because of concerns about its feasibility and its ability to meet the project's traffic needs.

USFWS mentioned that it is more concerned with the indirect and cumulative effects of the project on loss of habitat than on direct impacts on the Dwarf wedgemussel.

NCDWQ stated that in the past, agencies have accepted letters of commitment as proof that agreed-upon mitigation strategies will be implemented. NCDWQ now requires stronger proof through enactment of local ordinances.

NCDWQ also questioned whether there was any relative advantage to the new Forest Green corridor. Lochner explained that this option would shift a portion of the I-40 interchange out of the Swift Creek area. USFWS did not feel that this shift would offer much advantage from a habitat impact standpoint. Each agency representative agreed that the Forest Green corridor and the I-40 corridor, which would connect the protected corridor to the Red corridor, should be eliminated from further consideration.

USACE requested a detailed explanation of the how the traffic analysis information shown in Handout 8 (comparing traffic volumes on project segments along the Red or Pink corridors and the protected corridor) was derived. There was also interest in more information about impacts of various alternatives on the existing roadway network. NCTA will provide this information.

As long as another option for minimizing Dwarf wedgemussel impacts is studied in detail, the agencies could support elimination of the Pink corridor since it would require out of direction travel, limiting it ability to meet the project's traffic needs.

Phase II (Eastern) Corridors: NCTA explained that in the time since the September public informational meetings, it has learned of additional constraints in the Phase II (eastern) project area. The project team has been exploring new and modified alternative alignments in this area. Lochner reviewed these, describing the Tan corridor, Brown corridor and Teal corridor. The Brown corridor would begin near the southern end of the Tan corridor, avoid Good Samaritan Baptist Church (impacted by the Tan corridor), and follow the general alignment of Brownfield Road, extending through sprayfields for a City of Raleigh water treatment plant and avoiding the Preserve and Long Branch Farm neighborhood. The Teal corridor would connect the Green corridor to the northern end of the Brown corridor.

USACE asked why the Tan corridor is still under consideration since the City of Raleigh has asked that NCTA eliminate it. NCTA responded that Raleigh has asked NCTA to look at other options besides the Tan corridor, but hasn't stated that the Green corridor should be selected.

There was some discussion about the three communications towers adjacent to the Green corridor. One of the guying wires for one of these three towers is within the corridor. NCTA has learned that the guying wire cannot be shifted without having to dismantle and relocate the tower. It could cost $15 million to $20 million to move the tower and take at least five years to complete permitting and construction prior to dismantling the current tower.

There was agency interest in further evaluation of the Brown corridor and elimination of the Tan corridor. NCTA mentioned that if new corridors in the Phase II area, such as the Brown corridor, are retained for further study, there will need to be public outreach to notify the community.

At the conclusion of the meeting Garner Mayor Ronnie Williams spoke about the enormous stress the Garner community is under while it waits for the Red corridor to be eliminated.

Previous Action Items:

- NCTA/Lochner will follow up with Delores Hall regarding Randleigh Farm property and adjacent potential historic site. *(Completed. NCDOT archaeologists have consulted with Dolores Hall; NCDOT then provided information to NCTA/Lochner*)
- Catena Group to survey Swift Creek above Lake Benson Dam and Mahler's Creek and review existing survey data for White Oak Creek and Little Creek. They will coordinate scope, etc. directly with Kevin Markham. *(Completed)*
- Lochner will eliminate the following corridors: blue, purple, yellow, grey, and options west of NC 55 Bypass (white). *(Completed)*
- NCTA will prepare a press release to publicize corridor eliminations; Lochner will develop an accompanying email distribution list. *(Completed)*
- Lochner will explore the following corridor modifications/additions: orange-to-pink; orange-to widen I-40 (to 10 lanes)-to red. Lochner will prepare basic impacts information and summarize major constraints. *(Completed)*
- NCTA will make traffic analysis for improve existing and hybrid options available to TEAC members. (*Completed*)
- NCTA/Lochner will complete Draft Alternatives Development and Analysis Report ASAP (*in progress*).

New Action Items:

- NCTA/Lochner will consider eliminating the Red and Tan corridors
- NCTA/Lochner will eliminate the Forest Green and Pink corridors
- NCTA will meet with USFWS and NCWRC to discuss Dwarf wedgemussel study needs and approach to Section 7 consultation.
- HNTB will prepare more detailed explanation of traffic impacts of Red corridor, including effects on existing roadway network.

- NCTA/Lochner will continue to develop corridor options for Phase II of the project for future discussion at a TEAC meeting
- NCTA/Lochner will distribute Draft Alternatives Development and Analysis Report ASAP.

Resolutions:

- None.

Next Steps:

- Complete Draft Alternatives Development and Analysis Report and circulate for agency review and comment.

Interagency Project Meeting

MEETING MINUTES
FINAL

Date: August 22, 2012
8:30 a.m. to 10:30 a.m.
NCDOT Century Center – Structure Design Conference Room C

Project: STIP R-2721, R-2828, and R-2929 – Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Attendees:

George Hoops, FHWA
Clarence Coleman, FHWA
Christopher Militscher, USEPA (via telephone)
Scott McLendon, USACE
Monty Matthews, USACE (via telephone)
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Rob Ridings, NCDWQ
Travis Wilson, NCWRC
Delores Hall, OSA (via telephone)
Amy Simes, DENR
Ronnie Williams, Mayor-Town of Garner
Hardin Watkins, Town Manager, Town of Garner
Ed Johnson, CAMPO
Chris Lukasina, CAMPO
Scott Slusser, NCDOJ
Greg Thorpe, NCDOT – PDEA
Eric Midkiff, NCDOT – PDEA
Jennifer Harris, NCDOT – PDEA
Harrison Marshall, NCDOT – PDEA-PICS
Tony Houser, NCDOT – Roadway Design Unit
Kevin Fischer, NCDOT – Structures Mgmt.
Phil Harris, NCDOT – NES
Colin Mellor, NCDOT – NES
Elizabeth Lusk, NCDOT – NES-PMG
Deanna Riffey, NCDOT – NES-PMG
BenJetta Johnson, NCDOT – TMSD
Mark Staley, NCDOT – Roadside Env. Unit
Art McMillan, NCDOT – Hydraulics
Matt Lauffer, NCDOT – Hydraulics
John Rouse, NCDOT – Division 4
Wally Bowman, NCDOT – Division 5
Kiersten Bass, HNTB
Fred Skaer, Dawson & Associates
John Studt, Dawson & Associates
Roy Bruce, Lochner
Kristin Maseman, Lochner
Jeff Schlotter, Lochner
Steve Browde, Lochner
Jay Bissett, Mulkey
Wendee Smith, Mulkey
Michael Wood, Catena Group
Tim Savidge, Catena Group
Nancy Scott, Catena Group

Presentation Materials:

- Agenda
- Handout 9 (revised) – FHWA Project Advancement Plan
- Handout 10 (revised) – Potential Purpose and Need Refinement
- Handout 11 – Potential Additional New Location Corridors
- Project Advancement Presentation

Purpose:
Present project status update; discuss project advancement; discuss purpose and need refinement.

General Discussion:
The following information was discussed at the meeting:

- **Project Status Update:** Lochner provided an update on project activities that have occurred since the last TEAC meeting in January 2011. NC Session Law 2011-7, which was passed in March 2011, has limited advancement of the project, although NCDOT has continued to coordinate with agencies to find a path forward. NCTA/NCDOT published the Draft Alternatives Development and Analysis Report (DADAR) in January 2012 and sent copies to the agencies. Several agencies submitted written responses to the report. To date, Detailed Study Alternatives (DSAs) for inclusion in the Draft Environmental Impact Statement (EIS) have not been finalized. FHWA has indicated that NCTA/NCDOT should identify a clear plan for moving the project forward—in response, NCTA/NCDOT prepared a Project Advancement Plan in July 2012 through collaborative efforts with local and regional partners. Dawson & Associates, a Washington DC based environmental policy firm, was engaged to guide and assist in developing the Advancement Plan.

- **FHWA Project Advancement Plan:** Dawson & Associates provided an overview of the Project Advancement Plan, explaining that agency acceptance, community support, and legal defensibility are key goals of the Plan. The major elements of the Plan are: 1) refinement of the project Purpose and Need Statement, 2) evaluation of additional alternatives, 3) revised screening of project alternatives, and 4) additional public involvement. Purpose and Need refinement is supported by SAFETEA-LU Section 6002, FHWA guidance, and MAP-21 considerations. Two elements—support for local planning objectives and financial viability—are being evaluated as NCDOT considers refining the Purpose and Need Statement.

- **Potential Purpose and Need Refinement:** Dawson & Associates explained that 404(b)(1) guidelines, which are one of the key elements of USACE's review of environmental documents, require evaluation of alternatives' "practicability" in light of the overall project purpose. Including local planning as part of the NEPA project purpose could be appropriate, but it is unlikely to be appropriate with respect to the 404 guidelines. It is suggested that the revised Purpose and Need Statement include both a statement of overall project purpose that would apply to 404 guidelines, along with a more detailed statement of project purpose under NEPA. The latter could be refined to include local planning considerations.

- **Potential Additional Alternatives:** Dawson & Associates explained that the alternatives screening process will be updated to include evaluation with respect to a refined Purpose and Need Statement. It will also include evaluation of new Alternative Corridors, possibly including Lilac, Plum, and a modified version of Red. The Lilac and Plum Alternative Corridors were identified as possible ways to minimize wetland impacts and impacts to Dwarf wedgemussel habitat in Swift Creek relative to the Orange Corridor Alternative, while also avoiding the community impacts associated with other alternatives. The modified version of the Red Corridor Alternative was identified to evaluate whether Section 4(f) impacts in the vicinity of the Red Corridor can be avoided.

- **Comments/Questions:**
  USACE stated that it is sensitive to local planning efforts with respect to this project, but that it must consider this factor at the appropriate step in the process. USACE also reminded the group that alternatives screened out of further consideration based on the NEPA project purpose could still be "practicable" under the 404 guidelines. USACE has not yet seen evidence allowing the agency to determine that the Red Corridor Alternative is not practicable from a 404 perspective and therefore allowing USACE to support dropping the alternative. However, USACE also stated that they believed that practicability information may be developed for the screening process, and the Red Corridor may be screened out since there is another alternative. USACE would prefer that the environmental process not separate the 404 process from the NEPA process.

  Several agencies stated that they have not yet seen a NEPA project successfully use local planning as a primary component of project purpose. FHWA indicated that it had tried in the past on other projects to use consistency with local plans as a primary project purpose but had encountered pushback from some of the agencies. As a result, consistency with plans was

sometimes used as a screening factor rather than as a primary project purpose. USEPA stated that NEPA documents often discuss whether alternatives are consistent with local plans, but do not require alternatives to match or mirror local planning objectives. USACE indicated that it would be problematic to have a local planning component front and center in the project purpose. USACE also pointed out that local plans are not developed according to NEPA.

There was some discussion about the impact of the Red Corridor Alternative on Section 4(f) resources. The project team explained that the Red Corridor Alternative would impact Section 4(f) resources, but a modified version of it (known as the Red Modified Corridor Alternative) would avoid them. However, the Red Modified Corridor only appears to meet the minimum roadway design standards.

USEPA asked what corridor width is being used to evaluate impacts at this stage and how those corridors were laid out. Lochner explained that impacts are being evaluated both for the 1,000-foot study corridors and for 300-foot conceptual right-of-way widths. The conceptual rights-of-way were laid out to minimize impacts to the greatest extent possible. Dawson & Associates explained that impact screening criteria are being refined and more information will be presented at a future agency meeting. USEPA asked for the uniquely different length of the Lilac Corridor Alternative and asked that information on the existing and new alternative corridors include information on the length of each color-coded corridor segment. The Lilac Corridor Alternative where it is uniquely different from other corridors is 9.2 miles long. Impacts will be reported for end-to-end project alternatives including the various color-coded corridors.

USFWS asked whether the I-40 interchange on the Plum Corridor Alternative would actually be two separate interchanges. Lochner confirmed that it would. NCDOT expressed concern at the close proximity of the two extra interchanges on Plum with respect to the NC 50 interchange and the US 42 interchange.

USACE asked for clarification about whether NC Session Law 2011-7 poses a problem for evaluating alternatives for impacts. Dawson & Associates explained that the desktop-level analysis that appears to be permissible relative to the law should allow a robust screening of impacts. USACE asked if NWI wetland maps would be used to screen for wetland impacts and the project team stated that they would.

USACE asked if FHWA has approved the Project Advancement Plan. FHWA responded that it is comfortable with the process as outlined in the Plan, but has not issued any formal approval. A letter (dated August 7, 2012) from FHWA to NCDOT relative to the advancement plan was provided to all participants in the revised Handout 9 at the meeting.

USEPA asked for a description of “Environmental Sensitive Zones” as indicated in the Johnston County 2030 Comprehensive Plan in Handout 10. The project team explained that this is a Johnston County designation. Lochner will provide more information about how this designation is defined in the Comprehensive Plan in future project documentation. CAMPO indicated that Johnston County does not extend water or sewer infrastructure into Environmental Sensitive Zones.

USEPA asked whether one of the new corridor alternatives impacts the City of Raleigh sprayfields near I-40. Dawson & Associates confirmed that the Lilac Corridor Alternative does impact this area, but also stated that this facility is being transitioned to a solid application facility and that an alternative could likely be designed consistent with the solid application facility. USEPA asked whether these sprayfields could be considered a Section 4(f) resource. FHWA stated that it did not appear that this site would be a Section 4(f) resource, but that it would verify this.

USACE confirmed that it would prefer to consider more than one alternative in the Draft EIS. If another corridor exists that minimizes jurisdictional impacts relative to the Orange Corridor

Alternative it could certainly be considered. USACE stressed that it is committed to finding a way for the project to move forward, that it has not made a preference regarding alternatives, and that it wants a document and decision that are defensible.

CAMPO asked for more clarification about why support for local planning objectives is too specific for the overall project purpose for 404 guidelines. Dawson & Associates explained that the overall project purpose needs to be broad enough not to automatically preclude alternatives. Several agencies reiterated this.

USEPA asked whether agency comment letters submitted in response to the January 2012 DADAR would receive formal responses. The project team confirmed that responses would be prepared as part of the next revision of the DADAR.

FHWA suggested reviewing the Section 6002 Project Coordination Plan to consider updating it to allow for written agency approval of the determination of DSAs in the environmental process and to revise the schedule included in the Plan.

USFWS suggested that future mapping of project alternatives show the Plum Corridor Alternative more fully, clearly showing that the traffic movements are bifurcated and result in roadway on both sides of Swift Creek.

Previous Action Items:

- NCTA/Lochner will consider eliminating the Red corridor and southern portion of the Tan corridor (Southern portion of the *Tan corridor was eliminated after January 2011 TEAC meeting; Red corridor remains under consideration)*
- NCTA/Lochner will eliminate the Forest Green and Pink corridors *(Completed)*
- NCTA will meet with USFWS and NCWRC to discuss Dwarf wedgemussel study needs and approach to Section 7 consultation *(Held initial meeting – additional coordination is ongoing)*
- HNTB will prepare more detailed explanation of traffic impacts of Red and protected corridor alignments, including effects on existing roadway network *(Completed)*
- NCTA/Lochner will continue to develop corridor options for Phase II of the project for future discussion at a TEAC meeting *(Completed)*
- NCTA/Lochner will distribute draft alternatives report *(Completed)*

New Action Items:

- NCDOT/Lochner will provide lengths for all of the color-coded Corridor Alternatives in future project documentation
- Lochner will provide more information about how the Environmental Sensitive Zone designation is defined in the Johnston County Comprehensive Plan in future project documentation
- NCDOT will review the Section 6002 Coordination Plan to determine whether any updates need to be made
- Lochner will revise maps of alternatives to display the Plum Corridor Alternative more fully
- Written comments on the Project Advancement Plan, if desired, should be submitted to NCDOT as soon as possible following this meeting

Resolutions:

- None

Next Steps:

- Investigate refinement of project purpose and need to include support for local planning objectives and financial viability

Interagency Project Meeting

MEETING MINUTES
FINAL

Date: December 12, 2012
8:30 a.m. to 9:00 a.m.
NCDOT Century Center – Hydraulics Conference Room

Project: STIP R-2721, R-2828, and R-2829 – Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Attendees:

George Hoops, FHWA
Christopher Militscher, USEPA (via telephone)
Eric Alsmeyer, USACE (via telephone)
Gary Jordan, USFWS
Rob Ridings, NCDWQ (via telephone)
Travis Wilson, NCWRC
Dolores Hall, OSA (via telephone)
Renee Gledhill-Early, HPO
Amy Simes, DENR
Amy Chapman, DENR
Hardin Watkins, Town of Garner
Ed Johnson, CAMPO
Chris Lukasina, CAMPO
Eric Midkiff, NCDOT – PDEA
Jennifer Harris, NCDOT – PDEA (via telephone)
Tris Ford, NCDOT – PDEA-PICS
Tony Houser, NCDOT – Roadway Design Unit
Rachelle Beauregard, NCDOT – NES-PMG
Deanna Riffey, NCDOT – NES-PMG
Matt Lauffer, NCDOT – Hydraulics
John Rouse, NCDOT – Division 4 (via telephone)
Wally Bowman, NCDOT – Division 5
Chris Murray, NCDOT – Division 5
Kiersten Bass, HNTB
Fred Skaer, Dawson & Associates (via telephone)
John Studt, Dawson & Associates (via telephone)
Roy Bruce, Lochner
Kristin Maseman, Lochner

Presentation Materials:

- December 7, 2012, letter from FHWA and USACE to NCDOT regarding the project

Purpose:

Discuss letter and project status.

General Discussion:

The following information was discussed at the meeting:

- NCDOT summarized the December 7, 2012, letter from FHWA and USACE to NCDOT. NCDOT explained that the letter indicates that the Project Advancement Plan (discussed at the August 22, 2012, Interagency Project Meeting) would not support USACE permitting requirements. The letter also indicates that both agencies do not support modifying the NEPA project purpose for this project to include local plan support. The letter also indicates that USACE believes that the Red Corridor will need to be studied in detail in the Draft Environmental Impact Statement (EIS) and that FHWA plans to rescind the project's Notice of Intent (NOI) due to the complication created by NC Session Law 2011-7. A new NOI can be filed once this issue is resolved.

- NCDOT confirmed that the State still intends to pursue the project as it is in the STIP and CAMPO's LRTP and expects that rescinding the NOI will create only a temporary pause in the project until a new NOI can be filed once the items raised in the letter are adequately addressed to allow for full NEPA compliance.

- USEPA asked if FHWA's increased emphasis on expeditious project development was part of the reason FHWA will rescind the NOI. FWHA stated that while efficiency is important, the lack of a clear path for project advancement in light of NC Session Law 2011-7 is the main reason for rescinding the NOI.

- USFWS expressed concern that the pause in the project could hinder continued studies on the Dwarf Wedgemussel (DWM) being funded through this project. The field season for the species will begin in the Spring; if the survey window elapses while the project is paused, an entire year could be lost from the perspective of this work. NCDOT indicated that it will try to see if this work can continue even while the NOI is rescinded because the work has value beyond just this project.

- USEPA asked if there have been efforts to address the problems created by NC Session Law 2011-7. CAMPO indicated that State legislators are aware of the problems and may work to address them during the 2013 legislative session.

- CAMPO has had conversations with FHWA about future land use modeling and its influence on indirect and cumulative effects (ICE) analysis. CAMPO is in the process of finalizing new forecasts using a new modeling method (Community Viz), which should produce more robust and defensible results. This could be incorporated into project analysis as documented in the Draft EIS.

Previous Action Items:

- NCDOT/Lochner will provide lengths for all of the color-coded Corridor Alternatives in future project documentation *(Completed)*
- Lochner will provide more information about how the Environmental Sensitive Zone designation is defined in the Johnston County Comprehensive Plan in future project documentation *(Completed)*
- NCDOT will review the Section 6002 Coordination Plan to determine whether any updates need to be made *(Completed)*
- Lochner will revise maps of alternatives to display the Plum Corridor Alternative more fully *(Completed)*
- Written comments on the Project Advancement Plan, if desired, should be submitted to NCDOT as soon as possible following this meeting *(Completed)*

New Action Items:

- None

Resolutions:

- None

Next Steps:

- To be determined

U.S. Department of Transportation
Federal Highway Administration

FEDERAL HIGHWAY ADMINISTRATION
North Carolina Division
310 New Bern Avenue, Suite 410
Raleigh, NC 27601
HDA-NC

DEPARTMENT OF THE ARMY
Wilmington District, Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403-1343
Regulatory Division/1145b

December 7, 2012

Mr. Terry R. Gibson, P.E.
Chief Engineer
North Carolina Department of Transportation (NCDOT)
1536 Mail Service Center
Raleigh, NC 27699-1536

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Dear Mr. Gibson:

This letter is in regards to the North Carolina Session Law 2011-7 (N.C.S.L. 2011-7) and its impact on the Triangle Expressway Southeast Extension project proposed by the North Carolina Turnpike Authority (NCTA). The law, which was passed on March 18, 2011, states that the Triangle Expressway Southeast Extension project shall not be located north of an existing protected corridor established by the North Carolina Department of Transportation (NCDOT) in 1995, except in the area of Interstate 40 East. Consequently, the law restricts the location of alternative corridors prior to the engineering and environmental analysis required by the National Environmental Policy Act (NEPA) and other Federal laws. Based on this restriction, Federal Highway Administration (FHWA) found it imperative that the process to advance the project be fully supported and concurred with by all Federal agencies. In an effort to do this, a series of meetings and discussions were held with multiple stakeholders to resolve issues and advance the project. Through these meetings, the following concerns have been identified by the Army Corps of Engineers (Corps) and FHWA regarding the approach and its ability to successfully advance the project under the requirements of NEPA and Section 404 (b)(1) Guidelines (40 CFR Part 230).

The NCDOT and NCTA, in consultation with Dawson and Associates, developed a Project Advancement Plan which included a proposal to evaluate refinements to the project purpose to reflect input from public involvement [possibly including local plan support and financial viability as elements of the NEPA project purpose] and an evaluation of additional potential alternatives. Both the Corps and FHWA have concerns that, for this project, including local plan support as a primary NEPA project purpose may inappropriately limit the study of a full range of Detailed Study Alternatives. The Corps believes that it would not support their requirement

under the 404 (b)(1) Guidelines (40 CFR Part 230) to analyze and objectively compare alternatives for this project that requires a Clean Water Act permit.

In the evaluation of alternatives, the Corps continues to believe that in regards to streams and wetlands, the Orange to Red to Green Alternative appears to be a less environmentally damaging alternative and should be included as an alternative to be analyzed in the Draft Environmental Impact Statement (DEIS). Please note that, at this time, the Corps is not able to make a decision on the practicability of any of the alternatives. That decision will not be made until after the Corps has issued a public notice (following publication of the DEIS) seeking comments from the public, Federal, State and local agencies, including any consolidated state viewpoint or written position of the Governor, on the Detailed Study Alternatives and the factors that the Corps considers in our public interest decision. The decision will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest, and will reflect the national concern for both protection and utilization of important resources. Factors, including the cumulative effects thereof, which may be relevant to the proposal that will be considered include, but are not necessarily limited to community cohesion, relocations, impacts to existing and proposed business centers, recreation, including parks, historic properties (Section 4(f) issues), water supply and conservation, ecological conservation, economics, aesthetics, general environmental concerns, wetlands, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. The Corps evaluation process for this project is consistent with the review for all other transportation projects in North Carolina, and with Section 404 of the Clean Water Act, including the 404 (b)(1) Guidelines (40 CFR Part 230).

Therefore, in consideration of the concerns above, the Corps and the FHWA believe the project can no longer move forward with the Project Advancement Plan and satisfy all Federal environmental requirements in a concurrent manner. As a result, the FHWA will withdraw the Notice of Intent (NOI), meaning we will no longer continue to develop the environmental impact statement and federally fund the project. Our withdrawal does not prevent the project from being reinitiated in the future. NCDOT or other applicant/sponsors may restart the project at any time by requesting a new NOI with sufficient support that all constraints have been relieved to allow compliance with NEPA.

Should you have any questions, please call George Hoops of the FHWA at (919) 747-7001 or Eric Alsmeyer of the Corps at (919) 554-4884, extension 23.

Sincerely,

For John F. Sullivan, III, P.E.
Federal Highway Administration
Division Administrator

Sincerely,

Steven A. Baker
Colonel, U. S. Army
District Commander

Copies Furnished:

Mr. David Joyner
Executive Director
North Carolina Turnpike Authority
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Mr. Eric Midkiff
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Mr. Mitch Vakerics
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Mr. Rob Ridings
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Mr. Chris Lukasina
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Mr. Heinz Mueller
Chief, NEPA Program Office
Office of Policy and Management
US Environmental Protection Agency
61 Forsythe St., SW
Atlanta, GA 30303

Mr. Gary Jordan
US Fish and Wildlife Service
PO Box 33726
Raleigh, NC 27636

Mr. Travis W. Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
NC Wildlife Resources Commission
1718 Hwy 56 West
Creedmoor, NC 27522

Mr. Peter Sandbeck
NC State Historic Preservation Office
4619 Mail Service Center
Raleigh, NC 27699-4619

Interagency Project Meeting

MEETING MINUTES
FINAL

Date: September 19, 2013
10:00 a.m. to 11:00 a.m.
NCDOT Century Center – Structure Design Conference Room C

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Attendees:

George Hoops, FHWA
Clarence Coleman, FHWA
Christopher Militscher, USEPA (via telephone)
Eric Alsmeyer, USACE
Henry Wicker, USACE (via telephone)
Gary Jordan, USFWS
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Amy Simes, NCDENR
Renee Gledhill-Early, SHPO (via telephone)
Ed Johnson, CAMPO
Jennifer Harris, NCDOT – PDEA
Eric Midkiff, NCDOT – PDEA
Tony Houser, NCDOT – Roadway Design Unit
Wally Bowman, NCDOT – Division 5
Tris Ford, NCDOT – HES
Greg Smith, NCDOT – HES
Deanna Riffey, NCDOT – NES
Mary Pope Furr, NCDOT – Historic Architecture
Steve McKee, NCDOT – Utilities
Don Proper, NCDOT – Utilities
Ed Reams, NCDOT – Utilities
Kyle Pleasant, NCDOT – Utilities
Robert Memory NCDOT – Utilities (on telephone)
BenJetta Johnson, NCDOT – TMSD
Nick Lineberger, NCDOT – TMSD
Rupal Desai, NCDOT – TPB
Andie Cozzarelli, NCDOT – TPB
Adam Snipes, NCDOT – TIP
Alla Lyudmirskaya, NCDOT - WZTC
Kiersten Bass, HNTB
Joe Milazzo, Regional Transportation Alliance
Fred Skaer, Dawson & Associates (via telephone)
John Studt, Dawson & Associates (via telephone)
Roy Bruce, Lochner
Kristin Maseman, Lochner (via telephone)
Jeff Schlotter, Lochner (via telephone)
Brian Eason, Lochner

Presentation Materials:

- Agenda
- Final Interagency Project Meeting Minutes – December 12, 2012
- Handout 12 – Project Status Update
- Handout 13 – Revised Draft Alternatives Development and Analysis Report Summary
- Handout 14 – Recommended Detailed Study Alternatives
- Handout 15 – Project Schedule
- Newsletter No. 3
- Frequently Asked Questions
- Presentation

Purpose:
Present project status update; discuss revised Draft Alternatives Development and Analysis Report; discuss recommended Detailed Study Alternatives.

General Discussion:
The following information was discussed at the meeting:

- **Project Status Update (Handout 12):** Lochner provided an update on project activities that have occurred since the TEAC meetings in January 2011, August 2012, and December 2012. In late 2010 and early 2011, efforts were underway to determine the Detailed Study Alternatives (DSAs) for full evaluation in the Draft Environmental Impact Statement (EIS). NC Session Law 2011-7, passed in March 2011, limited advancement of the project in the area of the Red Corridor. NCDOT continued to coordinate with agencies and local groups to find an effective path forward. A Draft Alternatives Development and Analysis Report was published in January 2012. Agencies submitted written comments on the draft report. Additional study corridors (Lilac and Plum) were developed and preliminarily evaluated. In December 2012, FHWA and USACE sent a joint letter to NCDOT indicating that full evaluation of the Red Corridor would be required to advance the project. NC Session Laws 2013-94 and 2013-183 were passed that repealed the 2011 law that limited project advancement. Following this two and a half year pause in the study, the immediate project objective remains to determine the DSAs for inclusion in the Draft EIS. Previously eliminated corridors have been reevaluated in conjunction with the additional corridors that were developed.

- **Revised Draft Alternatives Development and Analysis Report (Handout 13):** The January 2012 draft report was revised and updated to address agency comments and incorporate new project information and analysis. The current draft report was issued in early September for review and comment. The revised draft report contains responses to agency comments, evaluation of additional corridors (Lilac and Plum), and recommended DSAs. Agency comments on the September 2013 version of the draft report are due to NCDOT by October 21, 2013.

- **Recommended Detailed Study Alternatives (Handout 14):** Lochner presented the NCDOT rationale for recommending ten color-coded corridors as the building blocks for the DSAs. These ten color-coded corridors can be combined to form 17 unique end-to-end routes that make up the DSAs.

- **Project Schedule (Handout 15):** An aggressive schedule has been established for the project in order to expedite the selection of a Preferred Alternative in accordance with Section 2 of NC Session Law 2013-94. Some elements of study have been and will continue to be completed in segments or phases culminating in a Draft EIS in the spring of 2015 with Public Hearings that summer and the selection of a Preferred Alternative by fall of 2015.

- **Discussion:**
  USEPA sought clarification on how the NC Session Law 2011-7 restrictions were removed. NCDOT explained that the text that was added in 2011 was stricken with the 2013 legislation. There are now no legislative restrictions on any corridors under consideration for this project.

  There was interest in the current status of the additional mussel surveys and assessments that have been ongoing during this pause in the study process. The agreed upon work has progressed in accordance with the mutually defined scope of study. The work is not finished and is not ready for agency review at this time. NCDOT will provide additional information at a subsequent interagency meeting. This information will be fully documented for review and included in the Draft EIS.

  USEPA asked about added development in the Red Corridor during the pause in the study, particularly in reference to the Village of Aversboro subdivision and the Greenfield Business Park. The Village of Aversboro has continue to build and sell homes in the north phase of the development as that project moves towards completion and build-out. The two businesses that were in the process of developing in the Greenfield Business Park are complete and in operation.

The SHPO inquired about the way Section 4(f) resources are reported on the impacts chart. They would like to see separate impacts for historic resources and parks/recreation areas. All of the impacts on the table are park impacts and there are no historic impacts based on the available data used for the preliminary screening. This will be noted on the tables in the Draft Alternatives Development and Analysis Report and other relevant materials.

The NCDWR asked that the tables be expanded to include impacts for any Outstanding Resource Waters (ORW) or any High Quality Waters (HQW) in addition to the Critical Watershed Areas and the 303(d) streams. Subsequent to the meeting, it was reconfirmed that there are no ORW or HQW streams in the project study area.

The SHPO asked when historic architecture information would be available for the Purple and Blue Corridors. The survey work has not yet started. The SHPO requested the data be made available if the Purple and Blue Corridors will be considered for elimination.

NCDOT asked if there were any comments on the Draft Alternatives Development and Analysis Report or Recommended DSAs. No comments regarding these items were made during the meeting.

Previous Action Items:

- None

New Action Items:

- Agency review comments on the September 2013 Draft Alternatives Development and Analysis Report due to NCDOT by October 21, 2013.
- NCDOT will provide a status update on mussel surveys at a future interagency meeting.
- Impact tables to be adjusted to reflect no historic resource impacts and note that Section 4(f) impacts that are listed are for parks/recreational areas.
- Add impacts to ORW and HQW to tables, if appropriate. There are none of these resources in the study area. (*Completed*)

Resolutions:

- None

Next Steps:

- Public Meetings on recommended DSAs
- Agency comments on Draft Alternatives Development and Analysis Report
- November and/or December interagency meeting to discuss comments made by the agencies on the Draft Alternatives Report, review public comments, and select DSAs

Interagency Project Meeting

MEETING MINUTES
FINAL

Date: December 12, 2013
11:45 a.m. – 12:45 p.m.
NCDOT Century Center – Structure Design Conference Room C

Project: STIP R-2721, R-2828, and R-2829 – Complete 540, Triangle Expressway Southeast Extension

Attendees:

George Hoops, FHWA
Clarence Coleman, FHWA
Christopher Militscher, USEPA (via telephone)
Eric Alsmeyer, USACE
Jean Gibby, USACE
Thomas Brown, USACE
Gary Jordan, USFWS
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Amy Simes, NCDENR
Renee Gledhill-Early, SHPO (via telephone)
Dolores Hall, NCOSA (via telephone)
Ed Johnson, CAMPO (via telephone)
Eric Midkiff, NCDOT – PDEA
Jennifer Harris, NCDOT – PDEA
Richard Hancock, NCDOT - PDEA
Tony Houser, NCDOT – Roadway Design Unit
Tim Little, NCDOT – Division 4
Wally Bowman, NCDOT – Division 5
Nick Lineberger, NCDOT – TMSD
Tris Ford, NCDOT – HES
Deanna Riffey, NCDOT – NES
Matt Lauffer, NCDOT - Hydraulics
Kyle Pleasant, NCDOT – Utilities
Donald Proper, NCDOT – Utilities
Mark Staley, NCDOT – REU
Kiersten Bass, HNTB
Fred Skaer, Dawson & Associates (via telephone)
John Studt, Dawson & Associates (via telephone)
Roy Bruce, Lochner
Kristin Maseman, Lochner
Jeff Schlotter, Lochner
Michael Wood, Catena Group
Tim Savidge, Catena Group
Nancy Scott, Catena Group

Presentation Materials:

- Agenda
- Final Interagency Project Meeting Minutes – September 19, 2013
- Handout 16 – Public Meetings - Summary and Comment Analysis
- Handout 17 – Revised Draft Alternatives Development and Analysis Report
- Handout 18 – Detailed Study Alternatives
- Handout 19 – Section 6002 Coordination Plan Update
- Presentation

Purpose:

Present project status update and summary of public comments; discuss revised Draft Alternatives Development and Analysis Report; discuss recommended Detailed Study Alternatives.

General Discussion:

The following information was discussed at the meeting:

- **Project Status Update:** Lochner provided an update on project activities that have occurred since the Interagency Meeting in September 2013, when the revised Draft Alternatives Development Analysis and Report and the recommended Detailed Study Alternatives (DSAs) for

the project were discussed. Agencies were then asked to submit comments about the revised report and the recommended DSAs. The CAMPO Working Group met on October 3 to discuss the recommended DSAs. Three public meetings were held on October 14, 15, and 16 to present the recommended DSAs and to solicit public comments. To the extent possible, work including some field investigations and preliminary design, has continued on the project during this period in order to expedite the overall project schedule.

- **Public Meetings – Summary and Comment Analysis (Handout 16):** The three public meetings in October were very well attended and there has been extensive public comment about the recommended DSAs. The input from these meetings was combined with input received from the public in late 2010 and early 2011 on preliminary alternatives. To date, public comments about project alternatives reveal strong support for the project and the Orange Corridor, and strong opposition to the Red, Purple, Blue, and Lilac Corridors. Several local governments have also passed resolutions supporting the Orange Corridor and opposing others.

- **Revised Draft Alternatives Development and Analysis Report (Handout 17):** Four agencies responded to NCDOT's request for comments on the revised Draft Alternatives Development and Analysis Report; three agencies did not submit responses. The agency comments either explicitly or implicitly support proceeding with the recommended DSAs. None of the comments request eliminating, adding, or modifying any alternatives.

- **Detailed Study Alternatives (Handout 18):** Lochner reviewed the ten color-coded corridors that are the building blocks for the DSAs. These ten color-coded corridors can be combined to form 17 unique end-to-end routes that make up the DSAs. Based on the preliminary data available for the project, the previously recommended DSAs remain as viable feasible alternatives that appear to have sufficient merit to warrant further evaluation and study as part of the Draft Environmental Impact Statement. Therefore, all 17 of the previously recommended DSAs will be carried forward in the environmental study. Should additional project information become available as studies are completed that substantially alters the merits of any alternative, this decision could be reevaluated at that time.

- **Section 6002 Coordination Plan Update (Handout 19):** Lochner reviewed changes that have been made to the Section 6002 Coordination Plan for this project since its previous January 2011 version. Changes include an update to the project schedule and primary agency contacts.

- **Update on Dwarf Wedgemussel Studies:** The Catena Group reviewed the work that has been completed to date on the Dwarf Wedgemussel (DWM) studies requested by USFWS. This work is being documented in a technical report that will be submitted to NCDOT in February or March of 2014. The studies have included a review of existing conservation measures established for DWM as part of other projects in the Swift Creek watershed, characterization of the Swift Creek watershed with respect to DWM habitat, and an assessment of historical trends and current viability of the species in Swift Creek.

- **Discussion:**
  HPO reminded the group that their response letter to the revised Draft Alternatives Development and Analysis Report stated that the report did not include any mention of archaeological studies for the DSAs. NCDOT will indicate in the final report that the required archaeological studies will be completed and documented in the Draft Environmental Impact Statement.

  USEPA asked for clarification on why the "bulbouts" at different interchanges on the map of DSAs are different sizes. NCDOT explained that the bulbout areas correspond to the wider study corridor around the interchange areas and vary depending on the roadway geometry, existing facilities, and other constraints at each interchange area. The bulbout areas do reflect the relative magnitude of each interchange area. In particular, the size of the interchange areas at 540, I-40, and the US 70 Bypass were questioned since they are substantially larger than other

interchanges. The geometry of ramp movements in a freeway to freeway high speed interchange require more land area than a typical interchange. At 540, I-40, and US 70 Bypass there are three freeways converging at a single interchange.

NCDOT Utilities inquired about the basis of the preliminary wetland impacts along the Purple and Blue Corridors. These impacts are based on National Wetlands Inventory mapping data and the 300 foot preliminary right of way within the larger study corridor.

The NCDOT suggested that the agencies would not require any additional time (as described in Section 8.5 of the Section 6002 Coordination Plan) to review the Draft Alternatives Development and Analysis Report and the recommended DSAs in light of the public and local government comments made since the October public meetings. The reason provided by NCDOT included that the public comments remain consistent with those previously provided and therefore would not cause the need to make addition adjustments to the DADAR. USACE noted agreement that no additional review would be necessary based on the information presented during this meeting and no other agencies objected.

No agencies raised any objections to proceeding with the 17 end-to-end alternatives as DSAs, and no agencies asked for any additional alternatives to be considered.

Based on today's discussion, past Issues of Concern (per the Section 6002 Coordination Plan) have been resolved and that there are no outstanding issues regarding the project purpose and need, range of alternatives, alternatives screening, or DSAs. Additionally, no Issues of Concern relative to these four areas of the study were raised at the meeting.

USEPA informed the group that there is a new Executive Order (EO) pertaining to the impact of federal projects on children's health, and suggested that NCDOT seek guidance from FHWA regarding the need to address the EO in the Draft Environmental Impact Statement (EIS).

Previous Action Items:

- Agency review comments on the September 2013 Draft Alternatives Development and Analysis Report due to NCDOT by October 21, 2013 (revised to November 4, 2013). (*Completed*)
- NCDOT will provide a status update on mussel surveys at a future interagency meeting. (*Completed*)
- Impact tables to be adjusted to reflect no historic resource impacts and note that Section 4(f) impacts that are listed are for parks/recreational areas. (*Completed*)
- Add impacts to ORW and HQW to tables, if appropriate. There are none of these resources in the study area. (*Completed*)

New Action Items:

- NCDOT will indicate in the final Alternatives Development Analysis and Report that the required archaeological studies will be completed and documented in the Draft Environmental Impact Statement.
- Lochner will investigate the requirements of the new EO pertaining to the impact of federal projects on children's health and work with NCDOT and FHWA regarding the appropriate method for addressing it.

Next Steps:

- Public announcement of Detailed Study Alternatives
- CAMPO Working Group meeting – January 9, 2014
- Complete technical base studies on DSAs
- Prepare Draft Environmental Impact Statement

Interagency Project Meeting

MEETING MINUTES
FINAL

Date: November 13, 2014
9:00 a.m. – 11:00 a.m.
NCDOT Century Center – Structure Design Conference Room C

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Attendees:

Clarence Coleman, FHWA
Cynthia Van Der Wiele, USEPA
Gary Jordan, USFWS
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Dolores Hall, SHPO (via telephone)
Alex Rickard, CAMPO
Eric Midkiff, NCDOT – PDEA
Jennifer Harris, NCDOT – PDEA
Maria Baez, NCDOT – PDEA
Tony Houser, NCDOT – Roadway Design Unit
Maira Ibarra, NCDOT – Roadway Design Unit
Nick Lineberger, NCDOT – TMSD
Colin Mellor, NCDOT – NES
Deanna Riffey, NCDOT – NES
Rachelle Beauregard, NCDOT – NES
Matt Lauffer, NCDOT – Hydraulics
Charles Smith, NCDOT – Hydraulics
Kyle Pleasant, NCDOT – Utilities
Donald Proper, NCDOT – Utilities
Mark Staley, NCDOT – REU
Kiersten Bass, HNTB
Fred Skaer, Dawson & Associates (via telephone)
John Studt, Dawson & Associates (via telephone)
Roy Bruce, Lochner
Brian Eason, Lochner
Doug Wheatley, Lochner
Kristin Maseman, Lochner
Wendee Smith, Mulkey
Jonathan Scarce, Mulkey
Brian Dustin, Mulkey

Presentation Materials:

- Agenda
- Handout 20 – Approach to Interagency Coordination on Bridging Decisions
- Handout 21 – Hydraulic Conveyance Suggestions
- Handout 22 – Suggested Bridge Length Locations and Lengths
- Presentation

Purpose:

Present project status update and review bridging suggestions to be used in evaluating Detailed Study Alternatives (DSAs).

General Discussion:

The following information was discussed at the meeting:

- **Project Status Update:** Lochner provided an update on project activities that have occurred since the Interagency Meeting in December 2013, when the DSAs for the project were finalized. A CAMPO Working Group meeting was held on January 9, 2014. The project team has been completing various required technical studies and documenting the results of these studies in corresponding technical reports.

- **Approach to Interagency Coordination on Bridging Decisions (Handout 20):** There are a total of over 1,200 natural system sites, which include wetlands, streams or ponds, inside the study corridors along the roughly 100 total miles of the DSAs. Preliminary hydraulic analysis showed that there were 81 sites along the DSAs where hydraulic conditions and proposed designs require incorporation of a major hydraulic conveyance structure (defined as a 72-inch pipe or larger). Based solely on hydraulic analysis, 17 of these sites would require bridges, with the remaining 64 requiring culverts.

  To increase the efficiency of interagency coordination on bridging decisions, the project team reviewed the preliminary hydraulic recommendations and the characteristics of the natural systems sites along the DSAs to make additional suggestions for bridging. The project team compiled this information and distributed it as part of the Interagency Meeting information distributed on October 9, 2014, and presented this information to USACE and NCDWR in consultation on October 23, 2014, to receive input on those suggestions. Based on the consultation with USACE and NCDWR, two handouts were revised and distributed to the agencies on November 6, 2014.

- **Hydraulic Conveyance Suggestions (Handout 21):** Of the original 17 sites found to require bridging on the basis of preliminary hydraulic analysis, the project team suggested extensions of 7 of the bridges; additional bridging was not recommended at the remaining 10 sites.

  Of the 64 sites for which preliminary hydraulic analysis recommended culverts for hydraulic conveyance, the project team considered bridging 8 of the sites. Following consultation with USACE and NCDWR, 5 of the 64 sites were found to warrant additional interagency discussion. Following distribution of the Interagency Meeting information in October, USFWS requested that Site 74 be discussed during the Interagency Meeting.

- **Suggested Bridge Locations and Lengths (Handout 22):** The project team presented a detailed table compiling the original preliminary hydraulic recommendations and any suggested modifications for each hydraulic site along the DSAs. The project team also presented aerial mapping of the sites recommended for bridging (including those recommended for extended bridges), the sites where a bridge is suggested instead of the originally recommended culvert, and the sites noted by USACE, NCDWR, and USFWS for additional discussion.

- **Discussion:**
  The meeting discussion focused on certain hydraulic sites identified by agency representatives. For some of the sites, agency representatives requested a field visit in order to better understand conditions at the site—a field meeting is scheduled for December 2, 2014, to view these sites. Discussion according to site number as shown on the meeting handouts was as follows:

  Site 34 (Swift Creek, Red Corridor) – The project team recommendation was an extended bridge. USFWS asked if it would be feasible to lengthen the bridge further or to shift the service road proposed in this location in order to minimize the encroachment into the floodplain with the service road. Minimization of impacts in this area could be beneficial for dwarf wedgemussel habitat. The project team will investigate possible minimization and will also try to determine the property value of the adjacent undeveloped residential parcel. *A field review of this site was requested prior to making any final determinations about bridging at this site.*

  Site 35 (Yates Branch, Red Corridor) – NCDOT Roadway Design Unit staff indicated that the interchange design at this site may need to be modified to better accommodate the ramp terminals with respect to the end of the bridges. The interchange design will be coordinated with the NCDOT Roadway Design Unit now that approximate bridge lengths have been identified at this location.

  Site 63 (Tributary to Swift Creek, Orange Corridor) – NCDWR asked if it would be possible to make modifications at this site so that stream SEW (as shown on mapping) would be under the

bridge. These modifications could include extending the proposed bridge or possibly relocating the stream. This would require bridge extensions on both the mainline and the ramp. Mulkey noted that the stream is intermittent and that its quality may not warrant this modification. No additional changes will be needed at this site beyond what was suggested in the meeting materials.

Site 21 (Tributary to Swift Creek, Orange Corridor) – Habitat connectivity was raised by NCWRC and NCDWR as a consideration for this site. There was discussion about ways to maintain habitat connectivity while possibly shortening the bridge to reduce costs. At this site, NCDWR indicated that maintaining stream integrity would have a higher priority than minimizing the total wetland impact. *A field review of this site was requested prior to making any final determinations about bridging at this site.*

Site 24 (Tributary to Swift Creek, Orange Corridor) – USFWS and NCWRC indicated that it is important to consider this site from the perspective of aquatic and terrestrial habitat connectivity. Depending on the size, stability and condition of this stream, placing the mainline and the ramps on the north side of the site on bridges could be a preferred modification. *A field review of this site was requested prior to making any final determinations relative to bridging at this site.*

Site 33 (Tributary to Neuse River, Green Corridor) – The project team explained the proposed bridge could be shortened slightly, providing a cost savings, while only slightly increasing the wetland impact at the site. There was consensus that this would be a worthwhile modification.

Site 43 (White Oak Creek, Red Corridor) – The project team also proposed shortening the recommended bridge slightly to provide a notable cost savings, with a small increase in wetland impact. There was consensus that this would be a worthwhile modification.

Site 1 (Middle Creek, Orange Corridor) – This site, currently proposed to have a culvert, had been noted for further bridging consideration at the October 23 meeting with USACE and NCDWR. It was explained that there is substantial urban development in this area, with a culvert downstream of this location, and that a bridge would add roughly $3.5 million to the construction cost. *A field review of this site was requested prior to making any final determinations about bridging at this site.*

Site 3 (Rocky Branch, Orange Corridor) – USEPA asked why a culvert is proposed for this site instead of a bridge. It was explained that the interchange design in this location already minimizes the total project footprint in this area. To modify the design to include a bridge, the footprint would need to expand to accommodate the bridge ramps, which would increase impacts to wetlands and streams downstream of the site. The consensus at the meeting was that no bridging will be included at this site.

Site 4 (Camp Branch, Orange Corridor) – This site, currently proposed to have a culvert, had been noted for further bridging consideration at the October 23 meeting with USACE and NCDWR. Mulkey explained that this stream channel is notably incised and has minimal connectivity to nearby wetlands, so the quality of the site was relatively low, suggesting that a bridge would not be necessary. The consensus at the meeting was that no bridging will be included at this site.

Site 17 (Tributary to Guffy Branch, Orange Corridor) – This site is in the vicinity of a National Register historic site known as the Panther Branch School. HPO has requested that bridging not be incorporated in the vicinity of this site in order to minimize the project's visual impacts to the site. NCDWR suggested that alternative minimization techniques (other than bridging) could be considered at this site and expressed a willingness to work together with HPO to achieve impact minimization to both the historic site and the natural systems in this area. The consensus at the meeting was that no bridging will be included at this site.

Site 76 (Guffy Branch, Blue Corridor) – This site, currently proposed to have two culverts, was noted for further discussion about bridging. Agency representatives noted that this site's location along a continuous wooded segment of Guffy Branch make habitat connectivity upstream and downstream of the site an important consideration. USFWS and NCWRC have reviewed all of the hydraulic sites with respect to habitat connectivity considerations and noted this site and Site 74 (discussed below) as the two sites where this is a particularly important consideration. Lochner explained that notable design modifications would be needed at this site to accommodate a bridge. These modifications would include raising the profile at this site to the extent that it would also affect profiles of grade separated highways east and west of this site. NCWRC indicated that it will be very important for the project team to document the design constraints that would make bridging this site difficult and to note that further strategies for minimizing habitat connectivity impacts at this site will be considered if the Preferred Alternative includes the Blue Corridor. Alternative conveyance structures, such as dry floodplain barrels, might be preferable because they could accommodate some upstream/downstream permeability to wildlife. The consensus at the meeting was that no bridging will be included at this site at this time.

Site 74 (Little Creek, Blue Corridor) – This site, currently proposed to have a culvert, was noted for further discussion about bridging. As for Site 76, USFWS and NCWRC noted that this was one of the two sites noted where habitat connectivity considerations are an important factor. Mulkey indicated that the wetland at this site is isolated and the stream channel is somewhat incised. USFWS and NCWRC noted this site as a particularly good candidate for modification to provide a means for wildlife to cross the site. The agencies suggested that the project team investigate the possibility of a single span slab bridge at this site. The consensus at the meeting was that bridging will be included at this site.

All Other Sites – No issues of concern were raised at the meeting with the hydraulic conveyance suggestions for all other sites. Hydraulic conveyance for these sites will be as described in the meeting materials.

Meeting attendees also briefly discussed the timeframe for Section 7 consultation for the dwarf wedgemussel. NCDOT anticipates completing subsequent phases of the dwarf wedgemussel studies after the Draft EIS is prepared. It was noted that the Draft EIS will likely indicate that the Biological Opinion is unresolved, and then formal consultation with USFWS will begin once a Preferred Alternative is selected. USFWS noted that this sequence of events would not impede their ability to appropriately consider the Preferred Alternative or determine the LEDPA.

Previous Action Items:

- NCDOT will indicate in the final Alternatives Development Analysis and Report that the required archaeological studies will be completed and documented in the Draft Environmental Impact Statement. (*Completed*)

New Action Items:

- NCDOT will arrange a field review meeting on December 2, 2014. At this meeting, agency representatives will view Sites 1, 21, 24, and 34. Final determinations about bridging at these sites will be made during the field review meeting.
- Lochner will investigate possible minimization and modifications at Site 76 as noted above.

Next Steps:

- Complete technical study reports – January 2015
- Prepare Draft Environmental Impact Statement – Spring 2015

Interagency Project Field Meeting

MEETING MINUTES
FINAL

Date: December 2, 2014
8:00 a.m. – 2:00 p.m.
NCDOT Greenfield Parkway Offices

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension (Raleigh Outer Loop)

Attendees:

Eric Alsmeyer, USACE
Cynthia Van Der Wiele, USEPA
Gary Jordan, USFWS
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Charles Smith, NCDOT – Hydraulics
Ray Lovinggood, NCDOT – Hydraulics
Roy Bruce, Lochner
Brian Eason, Lochner
Wendee Smith, Mulkey
Jonathan Scarce, Mulkey
Brian Dustin, Mulkey

Presentation Materials:

- Field Handout of Maps and Table for the four sites to be visited.

Purpose:

This field review meeting is adjunct to the Interagency Meeting for the project held on November 13, 2014. During that meeting to review bridging suggestions to be used in evaluating Detailed Study Alternatives (DSAs), four hydraulic crossing locations were identified for field review prior to making final determinations about bridging at these sites.

General Discussion:

The following information was discussed during the field review:

- **Site 24 (Tributary to Swift Creek, Orange Corridor):** At the Interagency Meeting in November, USFWS and NCWRC indicated that Site 24 should be visited in the field in order to consider this site from the perspective of aquatic and terrestrial habitat connectivity. Depending on the size, stability and condition of this stream, placing the mainline and the ramps on the north side of the site on bridges could be a preferred modification. However, after visiting Site 24, all agreed to keep the bridging at this site as it was suggested at the Interagency Meeting in November. Should the Orange Corridor be the Preferred Alternative, floodplain culverts should be added under the mainline and the ramps on the north side of Site 24.

- **Site 21 (Tributary to Swift Creek, Orange Corridor):** Habitat connectivity was raised by NCWRC and NCDWR as a consideration for this site during the Interagency Meeting in November. There was discussion about ways to maintain habitat connectivity while possibly shortening the bridge to reduce costs. At this site, NCDWR indicated that maintaining stream integrity would have a higher priority than minimizing the total wetland impact. During the field visit, possible reductions in the suggested bridge lengths were discussed. It was agreed that the bridges should be shortened on both ends while maintaining the streams and associated buffers. On the west end, the bridge should be shortened to the extent practicable and still maintain streams and buffers. This will increase wetland impacts. On the east end, the bridge also should

be shortened to the extent possible and still maintain streams and buffers. There was discussion concerning possible alignment adjustments and shifts to improve the stream and wetland crossings at this site. The proximity of the NC 50 interchange, the Turner Farms subdivision, and hydraulic crossing Sites 20 and 21 make it difficult to adjust the alignment at Site 21.

- **Site 34 (Swift Creek, Red Corridor):** During the Interagency Meeting in November, the USFWS asked if it would be feasible to lengthen the suggested bridge further or to shift the service road proposed in this location in order to minimize the encroachment into the floodplain with the service road. The project team agreed to investigate possible minimization of the impact of the service road and agreed to estimate the property value of the adjacent undeveloped residential parcel. During the field visit, a revised plan for the service road was presented. The plan shifts the service road from one side of 540 to the other. This would require a bridge over 540 to access the undeveloped residential parcel. The estimated cost of the revised service road is approximately $4.5 million. An estimate of the value of the land south of 540 that would be landlocked without the service road is around $3.1 million. All agreed that the revised service road or buying the land was preferable to what was proposed previously for the service road. This concept will be presented to NCDOT Roadway Design and if they approve the design revision, the modified service road concept will be used. Next the group discussed the previously suggested bridge extension on the west end. All agreed during the field visit to drop the roughly 700 feet of bridge extension at this location. If the Red Corridor is the Preferred Alternative, floodplain culverts should be provided in the western area of the floodplain for equalization of flood flow.

- **Site 1 (Middle Creek, Orange Corridor):** This site, currently proposed to have a culvert, was identified as a site for field review, particularly the existing crossing of Middle Creek at Sunset Lake Road. During the field review meeting, there was a desire expressed to have the existing pipes under Sunset Lake Road be replaced with a bridge instead of the planned triple box culvert. There are several streams at the mainline crossing location. It was decided to provide a bridge at the mainline crossing of Middle Creek (main channel) with buffers. This can likely be accomplished with a roughly 90 foot long single span bridge. To minimize stream impacts, other streams in the area can be routed to the main channel. Additional design analysis will be needed to determine the bridge length that best accommodates the main stream and buffers. At the Sunset Lake Road crossing of Middle Creek, it was decided that a single-span cored-slab bridge should be provided instead of the triple box culverts suggested.

Previous Action Items:

- NCDOT will arrange a field review meeting on December 2, 2014. At this meeting, agency representatives will view Sites 1, 21, 24, and 34. Final determinations about bridging at these sites will be made during the field review meeting. (*Completed*)
- Lochner will investigate possible minimization and modifications at Site 76 as noted in the November Interagency Meeting notes. (*Completed*)

New Action Items:

- Lochner will coordinate with NCDOT Roadway Design on the planned changes to the functional design plans, particularly the service road shift at Site 34.
- Functional design plan revisions will be made at the above sites as indicated in the summary notes.
- Update the Hydraulics Study Report to include design analysis for Site 1A – Middle Creek at Sunset Lake Road.

Next Steps:

- Complete technical study reports – January 2015
- Prepare Draft Environmental Impact Statement – Spring 2015

Interagency Project Meeting

FINAL MEETING MINUTES

Date: August 19, 2015
2:15 p.m. – 3:30 p.m.
NCDOT Century Center – Structure Management Conference Room

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Eric Alsmeyer, USACE
Gary Jordan, USFWS
Rob Ridings, NCDWR
Dolores Hall, OSA*
Renee Gledhill-Earley, SHPO*
Chris Lukasina, CAMPO
Eric Midkiff, NCDOT PDEA
Jeffrey Teague, NCDOT Roadway Design
Neil Medlin, NCDOT NES
Jim Hauser, NCDOT NES
Chris Rivenbark, NCDOT NES
Tris Ford, NCDOT HES
Jamille Robbins, NCDOT HES
Drew Joyner – NCDOT HES*
Mary Pope Furr, NCDOT Historic Architecture
Matt Lauffer, NCDOT Hydraulics
Bill Elam, NCDOT Hydraulics
Craig Lee, NCDOT Hydraulics
Mark Staley, NCDOT REU
Mike Stanley, NCDOT STIP
Alan Shapiro, NCDOT Division 5
Joey Hopkins, NCDOT Division 5
Kiersten Bass, HNTB
Jennifer Harris, HNTB
Fred Skaer, Dawson & Associates*
John Studt, Dawson & Associates*
Roy Bruce, Lochner
Jeff Schlotter, Lochner

* Participated via telephone

Presentation Materials:

- Agenda
- Presentation

Purpose:
Project status, introduce the reader friendly format for the Draft Environmental Impact Statement (EIS), and next steps

General Discussion:
The following information was discussed at the meeting:

- **Project Status and Draft EIS Presentation:** Roy Bruce and Jeff Schlotter of Lochner gave a presentation on the current status of the Complete 540 project, an overview of the reader friendly approach to the Draft Environmental Impact Statement (EIS), and the next steps in the study process. The presentation was made available to meeting participants in advance of the meeting.
- **Public Hearings:** Eric Alsmeyer noted that the NCDOT Public Hearings for the project will not be an official USACE Public Hearing but will suffice for their needs at this stage of the project development. USACE will issue a Public Notice for the project and will participate in the NCDOT Public Hearings. It is the USACE's intent to issue the Public Notice approximately 3 weeks in advance of the Public Hearings. Eric Alsmeyer requested that the transcripts of the Public Hearings be provided to the USACE.
- **Interagency Meetings:** The need for an interagency meeting between the issuance of the Draft EIS and the Public Hearing was questioned. The purpose for this meeting is to present the results of the technical studies, to review the public involvement activities on the project, and to answer

questions on the project documentation. This meeting will be kept on the schedule as a placeholder and a final decision on holding the meeting will be made after the Draft EIS has been distributed. Eric Midkiff or his designee will coordinate with Eric Alsmeyer to determine if the meeting will be held. An alternative to holding this meeting prior to the Public Hearing would be to hold it after the Public Hearing and before the Preferred Alternative Report is prepared.

- **USEPA Coordination:** Since USEPA was not present for today's meeting, NCDOT will make sure that the presentation and the meeting summary are made available to them and will address any questions that USEPA may have after reviewing the meeting materials.

Previous Action Items:

- NCDOT will arrange a field review meeting on December 2, 2014. At this meeting, agency representatives will view Sites 1, 21, 24, and 34. Final determinations about bridging at these sites will be made during the field review meeting. *(Completed)*
- If the Blue Corridor is selected as the Preferred Alternative, Lochner will investigate possible minimization and modifications at Site 76 as noted. *(Pending)*

New Action Items:

- NCDOT will make sure that the presentation and the meeting summary are made available to USEPA. *(Completed)*
- NCDOT will address any questions USEPA has regarding the meeting materials. *(Pending)*
- Eric Midkiff or his designee will schedule an interagency meeting once the Draft EIS is approved. It will be scheduled to occur prior to the public hearing and at least two weeks after the Draft EIS has been made available to the resource agencies. *(Pending)*
- Eric Alsmeyer will coordinate with the resource agencies after the Draft EIS has been provided to the agencies to ascertain their preference for conducting the scheduled interagency meeting. *(Pending)*
- Eric Midkiff or his designee and Eric Alsmeyer will discuss resource agency preferences regarding the timing for the next interagency meeting and make a final determination on whether to hold an interagency meeting prior to the public hearing. Eric Midkiff or his designee will communicate to the decision to the resource agencies. *(Pending)*

Next Steps:

- Publish Draft Environmental Impact Statement – Summer 2015
- Hold Public Hearings – Early Fall 2015

Interagency Project Meeting

FINAL MEETING SUMMARY

Date: February 17, 2016, 1:00 p.m. – 3:00 p.m.
NCDOT Century Center – Structure Design Conference Room

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Eric Alsmeyer, USACE
Cynthia Van Der Wiele, Phd., USEPA
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Ken Riley, NMFS*
Renee Gledhill-Earley, HPO*
Amy Chapman, NCDWR
Chris Lukasina, CAMPO
Eric Midkiff, NCDOT PDEA
Richard Hancock, NCDOT PDEA
Rob Hanson, NCDOT PDEA
Tony Houser – NCDOT Roadway Design
Jeffrey Teague, NCDOT Roadway Design
LeiLani Paugh, NCDOT NES
Neil Medlin, NCDOT NES
Jim Hauser, NCDOT NES
Colin Mellor, NCDOT NES
Jamille Robbins, NCDOT HES
Drew Joyner – NCDOT HES
Herman Huang – NCDOT HES
Mary Pope Furr, NCDOT Historic Architecture
Matt Lauffer, NCDOT Hydraulics
Bill Elam, NCDOT Hydraulics
Craig Lee, NCDOT Hydraulics
John Pilipchuk, NCDOT Geotech*
Kyle Pleasant – NCDOT Utilities
Mark Staley, NCDOT REU
Mike Stanley, NCDOT STIP
Rupal Desai, NCDOT TPB
Doumit Ishak – NCDOT Congestion Management
Tom Childrey, NCDOT ROW
Alan Shapiro, NCDOT Division 5
Joey Hopkins, NCDOT Division 5
Dennis Jernigan, NCDOT Division 5
Keith Hanson, Contractor to NMFS
Kiersten Bass, HNTB
Jennifer Harris, HNTB
Fred Skaer, Dawson & Associates*
John Studt, Dawson & Associates*
Roy Bruce, Lochner
Kristin Maseman, Lochner

* Participated via telephone

Meeting Materials: Agenda, Handout #23 (Draft Preferred Alternative Report Exhibits), Public Information Meeting Brochure, and Presentation

Purpose: Project status, Draft Preferred Alternative Report review and discussion, next steps, and schedule

General Discussion: The following information was discussed at the meeting:

- **Project Status:** Roy Bruce gave a presentation on the current status of the Complete 540 project, the public and agency input received following release of the Draft Environmental Impact Statement (EIS), and the recommended Preferred Alternative for the project. The presentation included an overview of the Public Meetings and Public Hearing held in December 2015, a comparative review of the environmental impacts of the project's Detailed Study Alternatives (DSAs), and a review of the public and agency comments submitted. It also included a brief summary of the reasons why DSA 2 is recommended by NCDOT as the Preferred Alternative.
- **Draft Preferred Alternative Report:** Discussion on the information in the Draft Preferred Alternative Report included the following points:
  - NCHPO expressed appreciation for the efforts of NCDOT and their consultants with regard to avoiding impacts to historic resources.
  - USACE asked for clarification about why NCDOT prefers DSA 2 to DSAs 4 and 5, when the latter two DSAs would appear to minimize some impacts in comparison to DSA 2. Lochner explained that DSA 4 would impact the Clemmons Educational State Forest, with DSA 4 also affecting a

Section 4(f)-protected trail in the forest (DSAs 2 and 5 would avoid the forest and the trail). NC Forest Service and the USFWS felt impacts to Clemmons Educational State Forest are noteworthy. DSAs 4 and 5 would affect wastewater sprayfields at the Neuse River Wastewater Treatment Plant and would also affect a City of Raleigh policy training facility; DSA 2 would avoid these resources. Also, as compared to DSA 2, the Neuse River Trail would require more substantial realignments/improvements to accommodate the crossing by DSA 4 or 5. The wetland and stream impacts are relatively similar between DSA 2 and DSA 5.

- While USFWS staff was unable to attend the meeting, the agency provided verbal comments to Eric Midkiff in advance of the meeting. NCDOT presented those comments, which reiterated the agency's continued attention to potential effects on the dwarf wedgemussel (DWM), but also noted the ongoing coordination between NCDOT and USFWS in the multiphase DWM viability study. NMFS and NCWRC mentioned that there are moratoria that will limit construction in-water activities for this project; these are to protect fish species such as striped bass and American shad. The State moratorium is more stringent, limiting activity between February 15 and September 30. Further coordination on this matter will be appropriate as more detailed project plans are developed.
- Under the Section 6002 process, the agencies will continue to have input in further impact avoidance and minimization efforts after the Preferred Alternative is selected and the project development process continues.
- The USEPA has submitted preliminary written comments on the Draft Preferred Alternative Report and will be submitting additional comments after coordination with the agency's attorneys has concluded. At this time, USEPA does not have an environmentally-preferred alternative since, they note, impacts to the human and natural environment are speculative absent a preliminary design. The USEPA's primary concerns pertain to jurisdictional aquatic resources, relying on riparian buffers to protect water quality from additional non-point source pollutants, 303(d) stream impacts, TMDL issues, and the ability to satisfactorily protect endangered species, including the DWM.

- **Issues of Concern:** FHWA reiterated the definition of Issues of Concern from the SAFETEA-LU legislation. An issue of concern is any issue that could delay the project or could prevent an agency from granting a permit or other approval that is needed for the project. None of the agencies raised any issues of concern at the meeting.
- **Timing for Comments:** NCDOT previously noted to the agencies by email, dated December 4, 2015, that they would appreciate receiving written comments on the Draft Preferred Alternative Report and/or the identification of any Issues of Concern within 30 days from receipt of the Draft Preferred Alternative Report (March 2, 2016). USEPA indicated that their staff and attorneys will require the full 30 days from today's meeting as stated in the Complete 540 Section 6002 Coordination Plan for production of their written response. Therefore, the deadline for responses is March, 18, 2016.

Previous Action Items (from August 19, 2015 IAM):

- NCDOT will make sure that the presentation and the meeting summary are made available to USEPA. *(Completed)*
- NCDOT will address any questions USEPA has regarding the meeting materials. *(Completed)*

New Action Items:

- Agencies will submit written comments, identifying any Issues of Concern and noting any items about the Draft Preferred Alternative Report, by March 18. Agencies not planning to submit written comments should notify Kiersten Bass by email at kbass@hntb.com.
- Agencies will notify USACE about any Issues of Concern as soon as possible and prior to submitting written comments to NCDOT.

Next Steps:

- Finalize Preferred Alternative Report – Spring 2016
- Final Environmental Impact Statement – To be determined

Interagency Project Meeting

FINAL MEETING SUMMARY

Date: March 16, 2016
1:00 p.m. – 2:30 p.m.
H. W. Lochner Inc. – Conference Room

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Eric Alsmeyer, USACE
Cynthia Van Der Wiele, Phd., USEPA
Rob Ridings, NCDWR
Chris Lukasina, CAMPO
Brian Yamamoto, NCDOT PDEA
Nora McCann, NCDOT PDEA
Rob Hanson, NCDOT PDEA
Tony Houser, NCDOT Roadway Design
Keith Hanson, Contractor to NMFS
Kiersten Bass, HNTB
Jennifer Harris, HNTB
Roy Bruce, Lochner
Brian Eason, Lochner
Doug Wheatley, Lochner

Meeting Materials: Agenda, Presentation, Public Hearing Maps, and Functional Preliminary Plans

Purpose: Interagency informational meeting on the development of functional preliminary plans for the 17 Detailed Study Alternatives (DSA) for the project

General Discussion: The following information was discussed at the meeting:

- **Introductions and Overview/Purpose of the Meeting:** Donnie Brew welcomed all and thanked everyone for their attendance at the meeting. He reviewed the purpose of the meeting and led introduction of participants.
- **Presentation:** Roy Bruce gave a presentation that showed the progression of design from concept through functional preliminary plans for the 17 DSAs and how impact avoidance and minimization was a focus at each step of the process. The following items were discussed during and following the presentation:
  - All design was done to the same level of detail and following the same process for each of the 10 color-coded corridor segments that are then combined to form the 17 DSAs.
  - Multiple interchange designs were evaluated at each of the proposed interchange locations.
  - The selected interchange type at each of the interchange locations meets the operational requirements for the project and minimizes impacts to human and natural resources to the extent practical.
  - The design effort on this project was consistent with or exceeded other similar large-scale new location highway projects for NCDOT.
- **Example Locations and Corridor Reviews:** Brian Eason reviewed several locations along various color-coded corridor segments where impacts had been minimized during the design process through alignment shifts (within the 1,000 foot corridor), or bridging. Additionally, the functional preliminary designs in several of the color-coded corridor segments were reviewed. The following items were discussed during the corridor reviews:
  - Development of the next level of design (preliminary plans) will be done for the Preferred Alternative only. At this time, NCDOT has indicated their preference for DSA 2 (Orange-Green-Mint-Green).
  - The Section 6002 Coordination Plan has a provision for additional agency participation during development of the preliminary plans at a minimization meeting for the Preferred Alternative (a

Concurrence Point 4A type meeting in the Merger Process). This meeting will take place before additional design public meetings or hearings are held on the project.

- During the conceptual and functional design phases, each of the interchanges are typically represented as standard diamond interchanges with provisions for future loop ramps. These interchanges are reconsidered during preliminary design for functionality and minimization of impacts. For the Complete 540 project, most of the interchanges have already been reviewed and minimization has been incorporated into the current designs. This does not preclude discussion of further minimization during preliminary design for the preferred alternative.
- Shifting an alignment in a corridor was not a simple matter because avoidance or minimization of specific resources at one location added or increased impacts to resources at another location. There are many tradeoffs in impacts to the human and natural environment in locating a highway such as 540 in an urbanizing area.

- **Coordination with the City of Raleigh:** FHWA let the agencies know that there has recently been some coordination between the City of Raleigh, NCDOT, FHWA, and USACE relative to various infrastructure elements owned by Raleigh along the various color-coded corridors.
- **Meeting Conclusion:** FHWA asked the agencies present if they have, or are aware of, any Issues of Concern. None were noted.

Previous Action Items (from February 17, 2016 IAM):

- Agencies will submit written comments, identifying any Issues of Concern and noting any items about the Draft Preferred Alternative Report, by March 18. Agencies not planning to submit written comments should notify Kiersten Bass by email at kbass@hntb.com. *(as of March 18, 2016 no Issues of Concern regarding the recommendation of DSA 2 as the Preferred Alternative have been raised)*
- Agencies will notify USACE about any Issues of Concern as soon as possible and prior to submitting written comments to NCDOT. *(as of March 18, 2016 no Issues of Concern regarding the recommendation of DSA 2 as the Preferred Alternative have been raised)*

New Action Items:

- NCDOT and FHWA will review the comments on the draft Preferred Alternative Report and determine if there is need for an additional agency coordination meeting.
- NCDOT will address comments on the Draft Preferred Alternative Report either in the Final Preferred Alternative Report of Final EIS, as appropriate.

Next Steps:

- Announce selection of the Preferred Alternative – Spring 2016
- Finalize Preferred Alternative Report – Spring 2016
- Final Environmental Impact Statement – To be determined
- Record of Decision – To be determined

USEPA Comments Received Post Meeting:

Following the conclusion of the meeting, USEPA provided comments relative to the functional preliminary designs to FHWA. The comments were marked on a set of the Public Hearing Maps that had been provided by the study team to USEPA on 3/3/16. There were no comments on Sheets 3, 6B, 7A, 7B, 7E, 8, and the Key Map. The following are the comments received and responses.

Sheet 1

Comment: Orange Corridor between NC 55 Bypass and Sunset Lake Road - Avoidance here was "avoid subdivision and go on top of stream/wetland system" . . . Alignment does not appear to be "best fit"; looks like dead center.

Response: The existing alignment for the already constructed portion of the Triangle Expressway at NC 55 Bypass sets the beginning alignment for the project. The subdivisions Sunset Hills, Miramonte, and Fair Oaks were constructed immediately adjacent to the Protected Corridor. Avoidance of the stream and

wetlands in this area is not possible. Moving the alignment towards and into Sunset Hills will not likely reduce stream impacts as the stream impacts avoided near Miramonte will be replaced with additional stream impacts east of Sunset Hills. Similarly, moving the alignment towards and into Fair Oaks is a tradeoff of stream impacts. The situation for wetlands is similar. This crossing of Middle Creek (site 1) was discussed at the project Interagency Bridging Meeting on 11/13/14 and was also discussed during the agency field review on 12/3/14. The conclusion at those meetings was to bridge the main channel of Middle Creek with roughly 90 foot long bridges. Hydraulically this crossing requires a triple 11'x11' box culvert. This area is common to all 17 DSAs and can be reviewed further for additional minimization in the future.

Comment: Orange Corridor at the Holly Springs Road interchange – Why is all this needed for a high speed thru route?

Response: Kildaire Farm Road and Holly Springs Road both carry a relatively high amount of traffic as two-lane roads. The intersection that joins these two roads will be relocated in conjunction with the Complete 540 project. Each of these roads is planned for widening in the future as growth continues in the area. In order to accommodate the traffic volumes and movements associated with the Complete 540 project, improvements are needed along both Kildaire Farm Road and Holly Springs Road.

Comment: Orange Corridor at the Bells Lake Road interchange – Why massive interchange on a little secondary road?

Response: The Bells Lake Road interchange is included in the Capital Area Metropolitan Planning Organization's Metropolitan Transportation Plan for the region. This interchange is to provide access to the residences and businesses in this portion of the study area. The next interchange to the west is at Holly Springs Road about two miles away and the next interchange to the east is at Fayetteville Road also about two miles away. The size of the proposed interchange is smaller than a typical diamond interchange at a secondary road since all movements have been consolidated into two interchange quadrants. This consolidation was done to minimize impacts to streams, ponds, and wetlands.

Sheet 2

Comment: Orange Corridor and Red Corridor at the Fayetteville Road (US 401) interchange – Any other type of interchange design that'll work or has a smaller footprint?

Response: Several interchange configurations were developed and reviewed at these two locations. None of the other interchange configurations were smaller than the ones shown and met the operational needs for the interchange and this heavily traveled US highway with multiple access points to adjacent properties.

Comment: Red Corridor at the extension of Caddy Road – What is this all about?

Response: The existing intersection of Caddy Road and Fayetteville Road (US 401) would be in the interchange area and therefore must be relocated. This new connection could have been along the outside of the fill of the ramp in the southeast quadrant of this interchange and tie to an existing development access road away from the interchange. Alternatively, a new connection could be created by extending Caddy Road to Ten Ten Road east of Fayetteville Road. If the Red Corridor is part of the DSA selected as the Preferred Alternative, this property access road matter can be further addressed.

Comment: Red Corridor at Swift Creek crossing – How about bridging from wetland edge to wetland edge?

Response: This crossing of Swift Creek (site 34) was discussed at the project Interagency Bridging Meeting on 11/13/14 and was also discussed during the agency field review on 12/3/14. The conclusion at those meetings was to bridge Swift Creek with the size of bridge that is needed hydraulically. If the Red Corridor is part of the DSA selected as the Preferred Alternative, this bridge length can be reviewed further for additional minimization in the future.

Comment: Orange Corridor at Old Stage Road interchange – Why do you need a massive interchange for Old Stage Road? You're not going highway to highway.

Response: The proposed interchange is a diamond configuration that allows for future loops in both the northeast and southwest quadrants. This interchange type is the standard interchange form utilized by NCDOT for a "service" interchange. A "system" interchange that would allow for access from high speed highway to highway would be a different configuration and be a larger footprint. If the Orange Corridor is part of the DSA selected as the Preferred Alternative, this design can be discussed further relative to minimization of impacts.

Sheet 4

Comment: Red Corridor at Reedy Creek crossing – Doesn't look like best fit.

Response: Shifting the alignment to the north at Reedy Creek in the Red Corridor (site 38) would potentially reduce stream and wetland impacts at this location. The tradeoff would be substantially greater residential relocations in the Heather Ridge and Heather Hills subdivisions. Additionally, shifting the alignment to the north would also impact Timber Drive Elementary School and possibly conflict with existing Timber Drive.

Comment: Red Corridor at I-40 – Two massive interchanges this close together?

Response: The proximity of the existing US 70 and I-40 interchange to the proposed 540 and I-40 interchange is not ideal and requires the inclusion of collector distributor ramps along I-40 in order to allow the two interchanges to function together. These collector distributor ramps are included in the functional preliminary plans as part of the interchange complex.

Comment: Red Corridor at I-40 – Bridge the system from wetland edge to wetland edge.

Response: It is not clear from the comment what stream crossing is being referenced (possible sites 42, 43, or 44). However, if the Red Corridor is part of the DSA selected as the Preferred Alternative, this wetland crossing can be reviewed further for additional minimization in the future.

Sheet 5A

Comment: Orange Corridor at Juniper Branch – I'm seeing a design that is dead center rather than best fit. No bridging from wetland edge to wetland edge.

Response: The subdivisions of Crest of Carolina and Tavernier were developed up to the Protected Corridor in this location. The alignment in the center of the corridor at this location may be the best fit. Shifting to the south in the corridor would result in a similar stream impact and more wetland impacts. Plus this would likely result in an alignment that is closer to the Panther Branch School, which is listed on the National Register of Historic Places. Shifting to the north in the corridor would increase stream impacts and possibly somewhat reduce wetland impacts. This shift would impact the homes for a half mile along Contender Drive in Crest of Carolina. The bridging that is shown at Juniper Branch is as was discussed at the project Interagency Bridging Meeting on 11/13/14. If the Orange Corridor is part of the DSA selected as the Preferred Alternative, this bridging can be discussed further relative to minimization of impacts.

Comment: Orange Corridor at Benson Road (NC 50) interchange – Any other interchange design options?

Response: Several interchange configurations were reviewed at this location. The interchange that is included is a standard diamond interchange with the movements from the northern quadrant included in the western quadrant. This design was selected to minimize impacts on streams. Changing to a more urban interchange would increase stream impacts.

Comment: Orange Corridor at a tributary to Swift Creek – How about bridging the system?

Response: This crossing (site 21) was discussed at the project Interagency Bridging Meeting on 11/13/14 and was also discussed during the agency field review on 12/3/14. The conclusion at those meetings was to bridge the wetlands associated with this system at this skewed crossing. If the Orange Corridor is part of the DSA selected as the Preferred Alternative, this bridging can be discussed further relative to minimization of impacts.

Sheet 5B

Comment: Orange Corridor – No preliminary design here . . .

Response: Sheet 5B intentionally only shows the preliminary design for the Blue Corridor. Sheet 5A shows the design for the Orange and the Lilac Corridors. This was done in this manner to facilitate easier viewing of the corridors in this section of the project because of overlapping adjacent designs at the Benson Road interchange location.

Sheet 6A Inset O-G

Comment: Orange Corridor – Interchange design. Spanning structures.

Response: The exact meaning of this comment is unclear. Several interchange configurations were reviewed at this location where I-40, the Clayton Bypass, and 540 come together. This is a complicated system to system interchange. Additionally, entrance ramps to 540 were separated from other ramps because of 540 operating as a toll facility. At a tributary to Swift Creek west of I-40 (site 24) two ramps have bridges and the mainline and other ramps have a culvert. This crossing was discussed at the project Interagency Bridging Meeting on 11/13/14 and was also discussed during the agency field review on 12/3/14. The conclusion at those meetings is what is shown in the current plans.

Sheets 7C & 7D (duplicate comment & related response)

Comment: Red Corridor at Rock Quarry Road interchange – Big diamond for secondary road?

Response: The size of the proposed interchange is typical for a diamond interchange. This interchange form is the standard interchange form utilized by NCDOT. If the Red Corridor is part of the DSA selected as the Preferred Alternative, this design can be discussed further relative to minimization of impacts. Because there is no interchange provided on the Red Corridor at US 70 Business, the Rock Quarry Road interchange serves the US 70 Business traffic. To better accommodate this traffic, Rock Quarry Road is improved and extended to US 70 Business as part of this interchange. No interchange is provided on the Red Corridor at US 70 Business because of the close proximity to the existing interchange along US 70 Business at Greenfield Parkway, to the intersection of Auburn-Knightdale Road and Raynor Road with US 70 Business, and to the I-40 interchange along the Red Corridor.

Interagency Project Meeting

FINAL MEETING SUMMARY

Date: June 15, 2017
3:00 p.m. – 3:45 p.m.
NCDOT Century Center – Structure Design Conference Room

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Clarence Coleman, FHWA
Gary Jordan, USFWS
Monte Matthews, USACE
Cynthia Van Der Wiele, USEPA
Ntale Kajumba, USEPA*
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Chris Lukasina, CAMPO
Rodger Rochelle, NCTA
Brian Yamamoto, NCDOT Project Development
Nora McCann, NCDOT Project Development
Jim Hauser, NCDOT EAU
Deanna Riffey, NCDOT EAU
Jared Gray, NCDOT Biological Surveys Group
Herman Huang – NCDOT Community Studies
Mary Pope Furr, NCDOT Historic Architecture
Craig Lee, NCDOT Hydraulics
John Pilipchuk, NCDOT Geotech*
Chris Kreider, NCDOT Geotech*
Todd Lapham – NCDOT Utilities
Donna Jackson, NCDOT Utilities
Kevin Fischer – NCDOT Structures Management
Mike Stanley, NCDOT STIP
Scott Walston, NCDOT TPB*
Rupal Desai, NCDOT TPB*
Braden Walker – NCDOT Congestion Management
Tim Little, NCDOT Division 4
Alan Shapiro, NCDOT Division 5
Joey Hopkins, NCDOT Division 5
Brian Rogers, NCDOT Division 5 ROW
Kiersten Bass, HNTB
Jennifer Harris, HNTB
Ken Gilland, HNTB
Tim Savidge, Three Oaks Engineering
Nancy Scott, Three Oaks Engineering
Bill Hartwig, Dawson & Associates*
Dave Barrows, Dawson & Associates*
Tris Ford, RK&K
Lorna Parkins, Michael Baker
Emaly Simone, Michael Baker
Roy Bruce, Lochner
Kristin Maseman, Lochner

* Participated via telephone

Meeting Materials:

- Agenda, Presentation

Purpose:
Project status update; review quantitative indirect and cumulative effects analysis methods/results

Discussion:
The following information was discussed at the meeting:

- **Project Status:** Roy Bruce gave a brief presentation, reviewing the project's Section 6002 coordination to date, summarizing the project status, and describing the technical work and coordination that have occurred since the Preferred Alternative was identified in April 2016. Following the presentation on the quantitative indirect and cumulative effects (ICE) analysis described below, he described the anticipated project schedule.

  During the portion of the status update on protected species, USFWS emphasized that the yellow lance was proposed for listing in April 2017 and if there are no changes should be listed as "threatened" in April of 2018. USFWS also noted that there are no official updates on the

possible listing status for the Atlantic pigtoe, Neuse River waterdog, or the Carolina madtom. Roy noted that species surveys have been completed for each of these species in the project area.

- **Quantitative ICE Analysis**: Lorna Parkins gave a presentation summarizing the methods used in the project's quantitative ICE analysis and the results of the analysis.
- **Comments/Questions**:
  - USFWS asked whether the 2040 Build scenario in the ICE analysis took into account the anticipated construction phasing for the project. The project team responded that the modeling used in the analysis reflected anticipated 2040 conditions, at which time all segments of the Complete 540 would be constructed, based on the current construction schedule.
  - USFWS asked how the project's Biological Assessment (BA) will fit into the overall schedule. The project team responded that a working draft of the BA is under internal review and is anticipated to be ready to submit to USFWS in late summer. NCDOT and FHWA understand that the aggressive schedule may mean that the Final EIS may need to be published prior to issuance of the Biological Opinion (BO) by USFWS. USFWS agreed that as long as the BO is issued prior to the ROD, this should not be problematic.
  - NCDOT HES asked that the documentation of the quantitative ICE analysis be clear about how data are reported. It is important to note if reporting is a number (e.g., the estimated percent impervious for a watershed is 5 percent) or a percentage difference (e.g., the difference in percent impervious for the watershed between the Build and No-Build scenarios is less than one percentage point).
  - USFWS requested a copy of this meeting's presentation. This will be provided with the meeting summary distribution (see enclosed).
  - NCDWR asked if the ICE Report will be part of the Final EIS. The project team responded that the report is still being finalized, but that it will be incorporated in the Final EIS by reference and the report's findings will be summarized in the Final EIS. USFWS explained that it will need to be able to review a copy of the ICE Report before it can issue the BO.

Previous Action Items (March 16, 2016 IAM):

- NCDOT and FHWA will review the comments on the draft Preferred Alternative Report and any identified Issues of Concern and determine the need for an additional agency coordination meeting. *(Completed)*
- NCDOT will address comments on the draft Preferred Alternative Report and finalize the report. *(Completed)*

New Action Items:

- The presentation will be attached to the meeting summary and distributed to the meeting attendees.

Interagency Project Meeting

FINAL MEETING SUMMARY

Date: June 15, 2017
3:00 p.m. – 3:45 p.m.
NCDOT Century Center – Structure Design Conference Room

Project: STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Clarence Coleman, FHWA
Gary Jordan, USFWS
Monte Matthews, USACE
Cynthia Van Der Wiele, USEPA
Ntale Kajumba, USEPA*
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Chris Lukasina, CAMPO
Rodger Rochelle, NCTA
Brian Yamamoto, NCDOT Project Development
Nora McCann, NCDOT Project Development
Jim Hauser, NCDOT EAU
Deanna Riffey, NCDOT EAU
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Herman Huang – NCDOT Community Studies
Mary Pope Furr, NCDOT Historic Architecture
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John Pilipchuk, NCDOT Geotech*
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Rupal Desai, NCDOT TPB*
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Tim Little, NCDOT Division 4
Alan Shapiro, NCDOT Division 5
Joey Hopkins, NCDOT Division 5
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Ken Gilland, HNTB
Tim Savidge, Three Oaks Engineering
Nancy Scott, Three Oaks Engineering
Bill Hartwig, Dawson & Associates*
Dave Barrows, Dawson & Associates*
Tris Ford, RK&K
Lorna Parkins, Michael Baker
Emaly Simone, Michael Baker
Roy Bruce, Lochner
Kristin Maseman, Lochner

* Participated via telephone

Meeting Materials:

- Agenda, Presentation

Purpose:
Project status update; review quantitative indirect and cumulative effects analysis methods/results

Discussion:
The following information was discussed at the meeting:

- **Project Status:** Roy Bruce gave a brief presentation, reviewing the project's Section 6002 coordination to date, summarizing the project status, and describing the technical work and coordination that have occurred since the Preferred Alternative was identified in April 2016. Following the presentation on the quantitative indirect and cumulative effects (ICE) analysis described below, he described the anticipated project schedule.

  During the portion of the status update on protected species, USFWS emphasized that the yellow lance was proposed for listing in April 2017 and if there are no changes should be listed as "threatened" in April of 2018. USFWS also noted that there are no official updates on the

possible listing status for the Atlantic pigtoe, Neuse River waterdog, or the Carolina madtom. Roy noted that species surveys have been completed for each of these species in the project area.

- **Quantitative ICE Analysis**: Lorna Parkins gave a presentation summarizing the methods used in the project's quantitative ICE analysis and the results of the analysis.
- **Comments/Questions**:
  - USFWS asked whether the 2040 Build scenario in the ICE analysis took into account the anticipated construction phasing for the project. The project team responded that the modeling used in the analysis reflected anticipated 2040 conditions, at which time all segments of the Complete 540 would be constructed, based on the current construction schedule.
  - USFWS asked how the project's Biological Assessment (BA) will fit into the overall schedule. The project team responded that a working draft of the BA is under internal review and is anticipated to be ready to submit to USFWS in late summer. NCDOT and FHWA understand that the aggressive schedule may mean that the Final EIS may need to be published prior to issuance of the Biological Opinion (BO) by USFWS. USFWS agreed that as long as the BO is issued prior to the ROD, this should not be problematic.
  - NCDOT HES asked that the documentation of the quantitative ICE analysis be clear about how data are reported. It is important to note if reporting is a number (e.g., the estimated percent impervious for a watershed is 5 percent) or a percentage difference (e.g., the difference in percent impervious for the watershed between the Build and No-Build scenarios is less than one percentage point).
  - USFWS requested a copy of this meeting's presentation. This will be provided with the meeting summary distribution (see enclosed).
  - NCDWR asked if the ICE Report will be part of the Final EIS. The project team responded that the report is still being finalized, but that it will be incorporated in the Final EIS by reference and the report's findings will be summarized in the Final EIS. USFWS explained that it will need to be able to review a copy of the ICE Report before it can issue the BO.

Previous Action Items (March 16, 2016 IAM):

- NCDOT and FHWA will review the comments on the draft Preferred Alternative Report and any identified Issues of Concern and determine the need for an additional agency coordination meeting. *(Completed)*
- NCDOT will address comments on the draft Preferred Alternative Report and finalize the report. *(Completed)*

New Action Items:

- The presentation will be attached to the meeting summary and distributed to the meeting attendees.

Interagency Project Meeting

FINAL MEETING SUMMARY

Date: July 12, 2017
10:00 a.m. – Noon
NCDOT Century Center – Structure Design Conference Room

Project: STIP R-2721, R-2828, and R-2829 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:

Donnie Brew, FHWA
Gary Jordan, USFWS
Eric Alsmeyer, USACE
Rob Ridings, NCDWR
Travis Wilson, NCWRC
Chris Lukasina, CAMPO
Kenneth Withrow, CAMPO
Brian Yamamoto, NCDOT Project Development
Nora McCann, NCDOT Project Development
Jim Hauser, NCDOT EAU
Deanna Riffey, NCDOT EAU
Chris Rivenbark, NCDOT EAU
Leilani Paugh, NCDOT EAU
Jared Gray, NCDOT Biological Surveys Group
Herman Huang, NCDOT Community Studies
Mary Pope Furr, NCDOT Historic Architecture
John Pilipchuk, NCDOT Geotech*
Mark Staley, NCDOT REU
Doumit Ishak, NCDOT Congestion Mgmt.
Bill Elam, NCDOT Hydraulics
Matt Lauffer, NCDOT Hydraulics*
Kathy Smith, NCDOT ROW*
Rupal Desai, NCDOT TPB
Matt Wilkerson, NCDOT HEC
Richard Hancock, NCDOT Division 5
Neal Strickland, NCDOT ROW
Kiersten Bass, HNTB
Jennifer Harris, HNTB/NCTA
David Bass, HNTB
Michael Wood, Three Oaks Engineering
Nancy Scott, Three Oaks Engineering
Frank Fleming, Ecological Engineering
Bill Hartwig, Dawson & Associates*
Roy Bruce, Lochner
Brian Eason, Lochner
Christina Yokeley, Lochner

* Participated via telephone

Presentation Materials:

- Agenda
- Handout #24 - Impact Minimization for the Preferred Alternative

Purpose:

Project status update; review locations of project avoidance and minimization efforts.

Project Discussion:

The following information was discussed at the meeting:

- **Project Status and Meeting Purpose:** Lochner reviewed previous agency coordination for the project, summarizing the project status and describing the technical work and coordination that have occurred since the Preferred Alternative was identified in April 2016.
- **Design Changes from Functional to Preliminary:** Lochner summarized the differences between the functional designs (used to calculate the impacts reported in the Draft EIS) and the current preliminary designs. Key distinctions between the functional and preliminary designs are:

- Impacts based on functional designs were calculated within 40 feet of the construction limits (slope stakes) on each side, while current impacts based on preliminary designs were calculated within 25 feet of the construction limits.
- Preliminary designs include the results of a detailed service road study, where access for every impacted property was identified, while functional designs only included service road access provisions to large parcels.
- While the functional designs used a 2:1 maximum slope ratio, NCTA and the NCDOT Geotechnical Unit directed the project team to use 3:1 for maximum slopes in cuts for the preliminary designs due to issues with slope stability experienced by the adjacent Triangle Expressway project.
- The current preliminary designs incorporate horizontal and vertical alignment shifts to avoid and minimize impacts.

- **Prior Avoidance and Minimization:** Lochner explained that prior design decisions, including selection of layouts for each interchange and proposing to bridge eight wetland/stream sites beyond what is needed for hydraulic conveyance, have helped to avoid and minimize natural system impacts.
- **Retaining Walls:** Lochner explained that changing the cut slopes from a 2:1 maximum slope to a 3:1 maximum slope would create additional impacts to adjoining developed parcels. To avoid these additional impacts, the project team incorporated retaining walls in some locations**.**
- **Alignment Shifts:** Lochner reviewed each alignment shift that has been incorporated into the preliminary designs to avoid or minimize impacts following selection of the Preferred Alternative.
  - **US 401:** The horizontal alignment was shifted to the north about 110 feet to help minimize impacts to two streams and one wetland. This also reduced the impact to a cemetery adjacent to the interchange and Donnie Brook Road.
  - **Benson Road:** This alignment shift helped minimize impacts to two wetlands and one "WDN" stream.
  - **Swift Creek/Turner Farms:** This alignment shift resulted from a public request to minimize impacts to the Turner Farms subdivision. The functional designs would have affected several properties along Fantasy Moth Drive. Shifting the alignment slightly in this area helped eliminate partial property impacts along Fantasy Moth Drive, produced a more perpendicular crossing of Swift Creek, and minimized impacts to several wetlands and streams.
  - **I-40:** This alignment shift, which mainly occurs on the I-40 interchange ramps is a result of refinement of the interchange design. This shift results in smaller impacts to a wetland and a stream in this area.
  - **Auburn Knightdale Road:** The interchange ramp alignments in this area were revised to minimize impacts to three wetlands, one stream, and floodplains.
  - **US 64/264:** The proposed design of the interchange at US 64/264 was refined based on the latest traffic forecast and a modification to the interchange ramp flyover for US 264 WB to 540 SB. This refinement increased the overall footprint of the interchange which increased impacts to four wetlands, four streams, and one pond.
  - **Neuse River Crossing:** The functional designs included a culvert crossing for the existing Neuse River Greenway Trail. The City of Raleigh has since requested relocating the trail under the proposed bridge for the Neuse River crossing in lieu of a culvert. The preliminary designs reflect this change.
- **Comments/Questions**:
  - USFWS asked if the handout packet was the same as what was sent out with the meeting invite. Roy Bruce confirmed, that the handouts were the same.

- USACE asked if 3:1 cut slope recommendations were for the entire project or certain locations within the project. NCDOT explained that the current preliminary slope recommendations are for the entire project, but reiterated that these are preliminary recommendations and still subject to change. NCDOT Geotechnical Unit is currently working on finalizing the project geotechnical recommendations.
- USACE asked if the area shown on Figure 18 incorporated a retaining wall to reduce wetland impacts. Lochner explained that retaining walls were incorporated only in locations where the 3:1 cut slopes impacted developed neighborhoods and were not used to minimize wetland or stream impacts.
- USACE asked if the alignment shift shown on Figure 20 would impact the NCDOT Underhill Mitigation Site. NCDOT explained that while the shift does move the alignment slightly more inside the mitigation site, the site is being bridged.
- NCDOT EAU, asked if there was embankment (fill) at the Underhill Mitigation Site. The project team explained that because the mitigation site is being bridged, no embankment would be placed on this site under the current proposed preliminary designs.
- NCDOT EAU asked if any temporary impacts during construction for access would be allowed, such as a temporary causeway in the Swift Creek area. NCWRC stated there should be no causeway allowed in the Swift Creek area.
- NCDOT EAU mentioned that properties with substantial natural resources would be considered for preservation as part of the overall mitigation plan.
- USACE asked if the alignment shift shown on Figure 41 would increase wetland and stream impacts. NCDOT confirmed that it would increase the impacts, but reiterated that the alignment shift provides a safer design that consistent with driver expectations, and the additional impacts were also a result of the new two-lane ramp alignment necessary to accommodate the traffic volumes in the latest traffic forecast.
- USACE asked if the modification that takes the Neuse River Trail under the Neuse River Bridge would result in any additional natural resource impacts. During the meeting, NCDOT stated that there would be no additional impacts to wetlands and streams.

  Correction: *Following the meeting, the project team determined that relocating the Neuse River Trail would, in fact, increase impacts. See the table below for additional impacts associated with relocating the Neuse River Trail.*

Neuse River Trail Impacts (R-2829)						
Streams (lf)	Buffer Zone 1 (acres)	Buffer Zone 2 (acres)	Wetlands (acres)	Floodway (acres)	100 Yr Flood (acres)	500 Yr Flood (acres)
162	0.22	0.11	0.004	0.77	2.01	2.08

- USACE asked about the purpose of the two service roads near Poole Road (Figure 39), one just north of Poole Road and one just south. NCDOT explained that they both were to provide access to large parcels that were bisected by 540. USACE asked if these parcels had access issues prior to 540. Lochner responded that the parcels do have existing access to Hodge Road; since the parcels will be bisected by 540, the service roads will provide access to the portions of the parcels that would have otherwise been landlocked.
- NCDOT EAU noted that the area shown on Figure 39 south of Poole Road and east of 540 may be a suitable site for on-site preservation.
- NCWRC asked if the total impacts included impacts within the interchange. Lochner confirmed that these project impacts are inclusive of impacts inside the interchange.
- NCDOT Historic Architecture explained that 7 of the 168 surveyed archaeological sites are being carried forward for more analysis. Analysis on a Revolutionary War cemetery is

continuing. There is also continuing consultation occurring on a mill site that was previously considered potentially eligible (OSA does not consider the site to be eligible).

- NCDOT Historic Architecture explained that there were no adverse effect calls based on the functional designs. This should be confirmed once the final noise report is completed to determine if the recommended noise walls will have any impacts on historic properties.
- NCDOT Historic Architecture stated that NCDOT Division 5 has a project near the Donny Brook Road/Optimist Farm Road intersection that may need to be coordinated with the Complete 540 project.
- CAMPO asked if the Neuse River Greenway will remain open during construction. NCDOT indicated that the design-build contract could include a provision to maintain access through the project site for the greenway during construction. CAMPO requested that all existing greenways remain open during construction with the understanding that there may need to be some short-term closures for certain construction activities.
- USACE indicated awareness that there are several locations where the current preliminary design shows conflicts with the Colonial Pipeline, which will require relocation of the pipeline prior to 540 construction. There could be additional impacts associated with the pipeline relocation.
- NCDOT asked each agency team member to indicate any issues of concern that could potentially delay the issuance of a permit.
- NCDWR indicated that it has no current issues of concern, but stressed that the project designs include adequate right of way to accommodate stormwater management devices.
- NCWRC asked if there are any additional measures to avoid or minimize the impacts to the large stream (UT to Swift Creek) just east of NC 50. NCWRC questioned how stormwater would impact this area, given the proximity of the stream to the NC 50 interchange, and asked if there was opportunity for on-site mitigation. NCDOT explained and that this is one of the sites that the agencies visited during the December 2014 bridging meeting. Hydraulic conveyance requirements for this site are dual 6' x 5' box culverts. This site was not recommended for bridging during the agency review. Additional opportunities for further minimizing impacts to this stream will be considered further as design progresses.
- NCDOT Hydraulics asked if a temporary bridge will be allowed at Swift Creek. NCWRC agreed that this could be helpful.
- USACE asked if it is possible to realign the stream outside of Triassic Basin. No response was given.
- USFWS did not express any issues of concern and noted they are satisfied with the proposed avoidance and minimization measures, but explained that it needs to complete formal consultation on the Biological Assessment (BA). The BA should be ready for USFWS review by mid-August.
- FHWA, USACE, and CAMPO indicated that they had no issues of concern.
- Since USEPA was not present at the meeting, NCDOT and USACE will contact USEPA to discuss the avoidance and minimization efforts and determine if USEPA has any issues of concern relative to the project.
- NCDOT EAU stated that they will continue to seek on-site mitigation sites, where appropriate for each project.
- NCDOT explained that the current Draft STIP has funding for R-2721 and R-2828 beginning in in Fiscal Year 2020, but there is a push to have these projects advanced, particularly R-2721.

Action Items:

- NCDOT will provide agencies with a copy of this meeting's presentation and meeting summary ~ *completed*.
- NCDOT (B. Yamamoto) and USACE (E. Alsmeyer) will contact USEPA (C. Militscher) to convey information from this meeting and determine if USEPA has any issues of concern with the project ~ *completed*. Subsequent to this meeting, a coordination meeting with USEPA was held on July 25, 2017 to discuss avoidance and minimization for the project. A summary of that meeting follows.

Date: July 25, 2017
3:00 pm
NCDOT Century Center – Photogrammetry Conference Room

Project: STIP R-2721, R-2828, and R-2829 – Complete 540 - Triangle Expressway Southeast Extension

Attendees:
Donnie Brew, FHWA
Chris Militscher, USEPA
Brian Yamamoto, NCDOT Project Development
Nora McCann, NCDOT Project Development
Kiersten Bass, HNTB
Jennifer Harris, HNTB/NCTA
Roy Bruce, Lochner
Brian Eason, Lochner
Christina Yokeley, Lochner
USACE and NCDWR were notified of this meeting in advance of it being held

Presentation Materials:

- Agenda from the July 12, 2017 Interagency Meeting
- Handout #24 - Impact Minimization for the Preferred Alternative

Purpose:

In accordance with an action item from the July 12, 2017 interagency meeting for the Complete 540 project, Brian Yamamoto arranged this subsequent meeting to provide USEPA with a project status update and review locations of project avoidance and minimization efforts.

Project Discussion:

The following information was discussed at the meeting:

- **Complete 540 overview:** USEPA indicated that they had no issues of concern about this project. They do expect that their comments on the Draft Environmental Impact Statement (EIS) will be addressed as part of the Final EIS documentation. USEPA noted that at this time, they know of no issues with this project that would cause them to elevate this project or delay the permits for the project.
- **Climate Change and Global Warming Analysis:** USEPA noted that the Executive Order and prior guidance on climate change and global warming has been rescinded. Therefore, the USEPA comment on the Draft EIS relative to this matter can note this withdrawal in the response and note the comment. If NCDOT and FHWA wish to respond further, they should limit the response to non-speculative analysis. They may wish to address resiliency as it relates hydraulic design for the project and the conveyance of 100-year flood.
- **Environmental Documentation:** USEPA indicated appreciation for the organization and condensed nature of the Draft EIS for this project. The focus on the areas of significance in the

Draft EIS and the use of referencing to technical documentation was encouraged. USEPA referenced the CEQ NEPA Regulations section 1500.4 on reducing paperwork. This same approach is anticipated for the Final EIS for the project. The anticipated timing of the Final EIS in early 2018 and the Record of Decision in mid-2018 was discussed.

- **Avoidance and Minimization:** Lochner provided the same information from the July 12, 2017 interagency meeting in the form of the presentation and handout. USEPA complimented the study team for their efforts to avoid and minimize impacts along a 28-mile-long project. USEPA indicated that they had no issues of concern relative to the avoidance and minimization efforts to date.
- **Alignment Shifts:** USEPA requested to examine more closely the alignment shifts near US 401 and in the Swift Creek watershed. Lochner reviewed the alignment shifts in the areas that have been incorporated into the preliminary designs to avoid or minimize impacts following selection of the Preferred Alternative.
  - **US 401:** The horizontal alignment was shifted to the north about 110 feet to help minimize impacts to two streams and one wetland. This also reduced the impact to a cemetery adjacent to the interchange and Donnie Brook Road.
  - **Swift Creek/Turner Farms:** This alignment shift resulted from a public request to minimize impacts to the Turner Farms subdivision. The functional designs would have affected several properties along Fantasy Moth Drive. Shifting the alignment slightly in this area helped eliminate partial property impacts along Fantasy Moth Drive, produced a more perpendicular crossing of Swift Creek, and minimized impacts to several wetlands and streams.
- **FAST 41 Project List:** USEPA noted that this project is on the Federal Permitting Improvement Steering Council's (FPISC) FAST 41 list of projects on their permitting dashboard. Title 41 of the FAST Act was designed to improve the timeliness, predictability, and transparency of the Federal environmental review and authorization process for covered infrastructure projects. See www.permits.performance.gov/projects/southern-and-eastern-wake-expressway-n.
- **Comments/Questions**:
  - USEPA asked if the study team had information on relocation changes associated with the avoidance and minimization efforts. The initial interchange layout effort attempted to avoid and minimize both impacts to the human and natural environments. Relocation information from the Draft EIS is all that is available at this time. An updated right of way and relocation report is underway for the Preferred Alternative based on the preliminary design plans. There will be some increase in right of way because property access (service roads) has been fully addressed as part of the preliminary design. The use of retaining walls was considered to minimize right of way impacts in cut areas along the highway because of the geotechnical recommendation to use 3:1 side slopes in cut areas. These walls did not reduce relocations but reduced property acquisition from the backyards of homes that will be adjacent to the highway.
  - USEPA inquired about noise studies and sound barrier. Lochner indicated that the preliminary noise analysis and abatement considerations was being updated for the Final EIS based on current conditions.
  - USEPA requested an update on the efforts relative to protected species and the Biological Assessment (BA) for the project. NCDOT indicated that the BA should be ready for USFWS review by mid-August. There was some discussion on the planned propagation facility and the potential for take for the species.

Action Items:

- NCDOT will incorporate the summary of this meeting with the meeting summary for the interagency meeting on July 12, 2017 ~ *completed*.

APPENDIX D
Agency Comments on Draft Purpose and Need Statement and Draft Alternatives Development and Analysis Report

North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director

Dee Freeman
Secretary

September 7, 2010

MEMORANDUM

To: Christy Shumate, NCTA

From: Brian Wrenn, NCDWQ, Transportation Permitting Unit

Subject: Comments on proposed Purpose and Need Statement for the Triangle Expressway Southeast Extension in Wake and Johnston Counties, TIP Nos. R-2721, R-2828, R-2829.

NCDWQ has reviewed the Draft Purpose and Need Statement for the subject project. Below are our comments regarding the Draft Purpose and Need statement:

1. In Section 2.2 summary of Need for Proposed Action, Need #3, contains the following language in the last paragraph:

   "This type of congestion is not consistent with the purpose of the State's Strategic Highway Corridors Initiative, which is to provide a safe, reliable, and high-speed network of highways."

   Strategic Highway Corridor (SHC) initiatives are not appropriate problem statements for Purpose and Need statements. The problem is previously identified in Needs #1, #2, and earlier sections of Need #3. Any reference to SHC initiatives should be removed from the Purpose and Need Statement.

2. In Section 2.3 Purpose of Proposed Action, the opening paragraph details the purpose statement. It includes language regarding improving mobility in the study area. It was explained in the August 10, 2010 that the study area (for traffic analysis purposes) is bigger than the project study area (for alternatives analysis purposes). Use of such similar terminology is confusing. NCDWQ recommends that a clearer distinction be made between the traffic study area and the project study area.

3. In Section 2.3.2 Measures of Effectiveness for Meeting the Project Purpose, NCTA provides four measures for measuring the effectiveness of alternatives to meet the project purpose. NCDWQ is in agreement with these metrics. In Handout #2, NCTA provides criteria for alternatives screening. The screening criteria are different from the Measures of Effectiveness in Section 2.3.2, and include references to the SHC initiative and system linkage, neither of which is included in the project purpose. The screening criteria should not include language that references desired outcomes of the project. Desired outcome criteria should only be considered when analyzing detailed study alternatives at later stages of the selection process. The alternatives screening criteria should mirror the measures of effectiveness stated in the Draft Purpose and Need statement.

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604
Phone: 919-733-1786 \ FAX: 919-733-6893
Internet: http://h2o.enr.state.nc.us/ncwetlands/

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Thank you for requesting our input at this time. NCTA is reminded that issuance of a 401 Water Quality Certification requires that appropriate measures be instituted to ensure that water quality standards are met and designated uses are not degraded or lost. If you have any questions or require additional information, please contact me at 919-733-5715 or 336-771-4952.

cc: Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
George Hoops, Federal Highway Administration
Chris Militscher, Environmental Protection Agency (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission
File Copy

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

January 25, 2012

Jennifer Harris, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

Dear Ms. Harris:

This letter is in response to your January 13, 2012 Draft Alternatives Development and Analysis Report for the Triangle Expressway Southeast Extension project in Wake and Johnston Counties, North Carolina (TIP Nos. R-2721, R-2828, R-2829). The U.S. Fish and Wildlife Service (Service) provides the following comments in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543).

General Comments

As you know, the Service has been very involved in this project through the Turnpike Environmental Agency Coordination meetings. At these meetings, the Service has frequently stated its concern regarding the likely adverse effects of the project on the federally endangered dwarf wedgemussel (DWM, *Alasmidonta heterodon*) within the Swift Creek watershed (Neuse River basin). It is anticipated that the Federal Highway Administration (FHWA), as the lead federal action agency, will initiate formal Section 7 consultation by submitting to the Service an initiation package which includes a Biological Assessment (BA). In return, the Service will conduct an analysis to determine if the project will jeopardize the continued existence of the dwarf wedgemussel and issue a Biological Opinion (BO). Since there is a significant lack of information needed to develop the Environmental Baseline portions of the BA and BO, the NC Turnpike Authority (NCTA) has agreed to fund additional studies within the Swift Creek watershed to fill in the information gaps. We applaud the NCTA's decision to fund these studies, and we believe that the information obtained will expedite the Section 7 consultation and increase the probability of accurate conclusions.

In order to avoid a Jeopardy BO, the action agency must not "engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." In order for the Service to ultimately recover the DWM, the 1993 Dwarf Wedgemussel Recovery Plan requires, among other criteria, that a viable population (i.e. a population containing a sufficient number of reproducing adults to maintain genetic variability,

and annual recruitment is adequate to maintain a stable population) occur in Swift Creek. Therefore, maintenance of such a population in the post-project Swift Creek watershed is vitally important. We cannot understate the significance of this issue.

Rapid development within the Swift Creek watershed below the Lake Benson Dam over the last 10-15 years has severely impacted the DWM. Mussel survey data from this timeframe implies a declining population. It is currently unknown if the DWM population in Swift Creek is viable, or whether the habitat conditions are sufficient to maintain a viable population. We are hopeful that the aforementioned studies will answer these questions. Also, as part of the Service's recovery efforts for the DWM in North Carolina, a workshop was recently held to initiate the evaluation of statewide conservation actions for the species. Workshop participants included species experts from the Service, the NC Wildlife Resources Commission, NC Natural Heritage Program, North Carolina State University and environmental consultants. The long-term vision of the workshop was to provide a foundation for strategic planning for conservation of DWM in North Carolina. The next step coming out of this workshop is to develop predictive models useful for comparing the effectiveness of proposed actions. The Service and our partners plan to test the models on Swift Creek (Neuse Basin). Therefore, Swift Creek weighs very heavily in our plans to recover the DWM.

The Draft Alternatives Development and Analysis Report states that the NCTA continues to recommend the elimination of the Red Corridor Alternative, thus leaving only one remaining corridor alternative (Orange) within Phase I. We acknowledge and understand the NCTA's rationale for arriving at this conclusion, especially noting the Red Corridor's significant and disproportionate impacts on the human environment. The Orange Corridor, being the protected corridor with right-of-way purchases made many years ago prior to any comprehensive environmental analysis, obviously greatly minimizes impacts on the human environment. However, the Orange Corridor has great potential to adversely affect the DWM since it crosses Swift Creek, tributaries to Swift Creek, and a significant portion of the watershed. The Orange Corridor connects to I-40 at a particularly unfavorable location for the DWM. This location puts the interchanges with I-40 and US 70 Bypass on top of several tributaries to Swift Creek and also is in close proximity to the Swift Creek main stem. The DWM is at risk from direct effects associated with construction of the project (e.g. erosion and siltation from construction) and from indirect effects associated with the degradation of water quality from secondary development induced by the new road. Increased impervious surface and storm water runoff from additional development would likely further degrade the water quality of Swift Creek and its tributaries. Also, other proposed projects within the same study area such as the proposed widening of I-40 (TIP No. I-5111) and at least two bridge replacements on Swift Creek could cumulatively contribute to a decline in habitat quality for the DWM. In summary, the Service finds the Orange Corridor very problematic.

In the event that the Service issues a "No Jeopardy" BO (which remains to be determined), the action agency will be required to implement Reasonable and Prudent Measures (RPM) in order to minimize the effects of take on the species. The information developed from the additional studies being conducted will assist in the Jeopardy Analysis and in developing the RPM and the Terms and Conditions for implementing them. Although there is a wide range of RPM of different forms and scope which may be developed, one possible RPM may involve captive

propagation and augmentation of DWM in the Swift Creek watershed. Though much of the technical and procedural knowledge for propagating DWM has previously been developed, the Service and our partners lack a dedicated facility and staff to conduct DWM propagation on a large scale. The ability or the lack thereof, to propagate DWM and augment the population in Swift Creek may factor significantly in our analysis to determine whether this project will jeopardize the continued existence of the species.

Specific Comments

Page 4-5 states "the dam on the southeast side of Lake Benson acts as a barrier between populations of the species upstream and downstream of this point, precluding genetic exchange between these two populations." This statement would be true if there were DWM upstream of Lake Benson. To the best of our knowledge, the species has never been collected upstream of Lake Benson.

Page 5-16 states "Because the Orange Corridor Alternative would cross I-40 in this area, it has the potential to negatively impact habitat important for the survival of the Dwarf Wedgemussel in Wake County." We would add Johnston County to this, as most DWM observations have been in Johnston County, and the Johnston County portion of the Swift Creek DWM population is exposed to water quality degradation from a larger amount of the overall watershed.

The Service appreciates the opportunity to review this document. We look forward to discussing it at the next Turnpike Environmental Agency Coordination meeting. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,

for Gary Jordan
Pete Benjamin
Field Supervisor

Electronic copy:
Chris Militscher, USEPA, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
Eric Alsmeyer, USACE, Raleigh, NC
Scott McLendon, USACE, Wilmington, NC
George Hoops, FHWA, Raleigh, NC
Brian Wrenn, NCDWQ, Raleigh, NC

Maseman, Kristin

From: Alsmeyer, Eric C SAW [mailto:Eric.C.Alsmeyer@usace.army.mil]
Sent: Tuesday, February 14, 2012 1:23 PM
To: Bass, Kiersten R
Cc: Roberts, Tracy; Wrenn, Brian; Chris.Lukasina@campo-nc.us; militscher.chris@epa.gov; Midkiff, Eric; gary_jordan@fws.gov; george.hoops@dot.gov; Harris, Jennifer; Gledhill-earley, Renee; Wilson, Travis W.; McLendon, Scott C SAW
Subject: RE: Southeast Extension Alternatives Development and Analysis Report/AID SAW-2009-02240 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Kiersten: The Corps has the following comments on the Draft Alternatives Development and Analysis Report (DADAR) that was submitted on 1/9/2012.:

1) Please note that we have NOT reached a decision regarding your recommendation to eliminate the Orange to Red to Green alternative from further study in the draft EIS.

2) Figure 5-3, "Potential Impacts to Planned Parks and Recreational Facilities", should show a 300 foot optimized corridor (similar to Figure 5-4) to give a better depiction of how the facilities would likely be impacted by the corridor.

3) As we discussed at our meeting on December 20, 2011, Table 5-9 on page 5-36 should include a row for the Orange Corridor Alternative showing the values for "predicted" wetlands and streams, to allow a valid comparison between the Red and Orange Alternatives.

4) The results of the Prediction Methodology, in Table 1 of Appendix I, do not seem to demonstrate that the Prediction Methodology provided much, if any, more reliability at predicting wetland acreages than the NWI Wetlands. Statistical analysis to show the accuracy of the Prediction Methodology will be required before it can be used to compare the Red and Orange Alternatives.

Please reply or call if you have any questions or if I may serve you in any other way.

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://per2.nwp.usace.army.mil/survey.html to complete the survey online (Paper copies available upon request).

Eric Alsmeyer
Project Manager
Raleigh Regulatory Field Office
US Army Corps of Engineers, Wilmington District
3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587
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Classification: UNCLASSIFIED
Caveats: NONE

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

February 17, 2012

Regulatory Division/1145b

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Steven D. DeWitt, P.E.
Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Mr. DeWitt:

Reference the proposed North Carolina Turnpike Authority (NCTA) project known as the Triangle Expressway Southeast Extension toll facility (TIP Nos. R-2721, R-2828, and R-2829), from NC 540 currently under construction at NC 55 in Holly Springs, to existing I-540 north of Poole Road and Clayton, in southern Wake and northeastern Johnston Counties, North Carolina. Reference also my March 23, 2011 letter asking for additional information regarding alternatives; my meeting on December 20, 2011, with representatives of the North Carolina Department of Transportation, including the NCTA and its consultants, and of the Federal Highway Administration; and NCTA's submittal on January 9, 2012, of the revised Draft Alternatives Development and Analysis Report (DADAR), for the subject project.

We understand that Governor Perdue signed legislation (Senate Bill 165) on March 18, 2011, that restricted the study, planning, and development of the Triangle Expressway Southeast Extension from the area north of the protected corridor and west of Interstate 40 (the area of the Red and Pink Corridors). We believe that state law which restricts the consideration of reasonable and practicable alternatives does not preclude our requirement under the 404 (b)(1) Guidelines (40 CFR Part 230) to analyze and objectively compare alternatives for this or any project that requires a Clean Water Act permit. While we are sensitive to the potential impacts to communities, public recreation facilities, and an industrial park in the Town of Garner, associated with the Red Corridor, we believe that its elimination from further consideration compromises our ability to satisfy our statutory requirements under the Guidelines.

The DADAR recommends that the Orange to Red to Green Corridor not be included as a reasonable and practicable alternative for detailed study in the Draft Environmental Impact Statement (DEIS) because it has significant and disproportionate impacts on the human environment, has limited ability to meet traffic needs, and is not a feasible and prudent Alternative under Section 4(f) of the Department of Transportation Act of 1966.

Our permit program requires that we make a complete, thorough, and unbiased review of all factors associated with a proposed project within jurisdictional waters of the United States.

A major component of the review is the consideration of reasonable and practicable alternatives, required by both the National Environmental Policy Act (NEPA) and the Clean Water Act 404 (b)(1) Guidelines (40 CFR Part 230). The 404 (b)(1) Guidelines require that the Corps can permit a project only if the applicant demonstrates that other alternatives are not practicable, available or less environmentally damaging. Practicable relates to cost, logistics or technology. As is FHWA, we are required to satisfy the provisions of NEPA which include the requirement to develop an EIS to examine all reasonable alternatives to the proposal, with reasonable alternatives including those that are practical or feasible from the technical and economic standpoint, rather than simply desirable from the standpoint of the applicant. Table 5-2 in the DADAR, Preliminary Alternatives – Summary of Potential Impacts, describes impacts to 43.7 acres of wetlands, and 29,770 linear feet of stream, for a 300- foot right-of-way for the end-to-end Orange to Red to Green Alternative that includes the Red Corridor, based on map data including the National Wetlands Inventory. This compares to impacts to 88.1 acre of wetlands and 36,110 linear feet of stream for the end-to-end Orange to Green Alternative. Furthermore, the US Fish and Wildlife Service has indicated that construction within the Orange Corridor would result in an adverse impact to the federally endangered dwarf wedge mussel (*Alasmidonta heterodon*) and that formal consultation will be required. Based on this information, the Orange to Red to Green Alternative appears to be a less environmentally damaging alternative and should be included as an alternative to be studied the Draft Environmental Impact Statement (DEIS). Nothing in our administrative record for this project indicates that the Orange to Red to Green Alternative is not practicable under the 404 (b) (1) Guidelines.

We are being asked to eliminate every alternative segment for a major portion of the corridor, with the exception of one, including the elimination of the least environmentally damaging alternative, prior to the release of a DEIS and before we, the agencies and the public have had an opportunity to conduct a side-by-side comparison of the one remaining segment alternative with the Red Corridor, with the usual level of data that is available after the DEIS, including detailed wetland delineation information, functional design, an analysis of the indirect and cumulative impacts, and additional data related to our twenty-one public interest review factors. Where we have previously elected to eliminate alternatives from further consideration prior to release of a DEIS, 1) the eliminated alternative clearly had unacceptable impacts to either the natural or human environment as compared to other alternatives under consideration, *and* 2) there was a sufficient number of remaining alternatives that encompassed a range of impacts to both the natural and human environment that the alternatives could be reasonably compared. Therefore, we believe it is premature to eliminate what we believe to be the environmentally preferable alternative from further consideration

We understand that FHWA has determined that several 4(f) properties may be impacted by the Red Corridor. Furthermore, we are also aware of the restriction that Section 4(f) of the Department of Transportation Act of 1966 places upon FHWA including a stipulation that FHWA cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of land, or the action includes all possible planning to minimize harm to the property resulting from use. While this may be a consideration utilized by FHWA in determining a preferred alternative, we do not concur that the Department of Transportation Act should be used to define a reasonable range of alternatives under NEPA, and believe that it

cannot be used to eliminate alternatives that should otherwise be considered under the Clean Water Act 404(b)(1) Guidelines. We continue to believe that in order for the EIS to satisfy our respective agencies' responsibilities, it should rigorously explore and objectively evaluate the Red corridor. For the reasons discussed above, if the NCTA elects to complete its NEPA analysis and release a DEIS without including the Orange to Red to Green Alternative as an alternative for detailed study, and the NCTA intends to pursue Department of the Army authorization for this project, we may find it necessary to terminate our cooperating agency status with the FHWA and supplement the FHWA EIS with our own document.

Should you have any questions, please call Mr. Alsmeyer at (919) 554-4884, extension 23.

Sincerely,

S. Kenneth Jolly
Chief, Regulatory Division
Wilmington District

Copies Furnished:

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NCDENR
North Carolina Department of Environment and Natural Resources
Division of Water Quality
Charles Wakild, P.E
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

February 16, 2012

MEMORANDUM

To: Jennifer Harris, PE, Director of Planning and Environmental Services, Turnpike Authority

From: Brian Wrenn, Transportation Permitting Unit, Division of Water Quality BLW

Subject: Comments on the Draft Alternatives Development and Analysis Report related to the proposed Triangle Expressway Southeast Extension, Wake and Johnston Counties, Federal Aid Project No. STP-0540(19), State Project Nos. 6.401078, 6.401079, and 6.401080, TIP Project Nos. R-2721, R-2828, and R-2829.

This office has reviewed the referenced document dated received January 18, 2012. The NC Division of Water Quality (NCDWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. NCDWQ offers the following comments based on review of the aforementioned document:

1. NCDWQ agrees with carrying forward the alternatives identified in section 5.8, page 5-38. However, NCDWQ feels that the Red Alternative should continue to be studied through the DEIS.

2. Any alternatives in this analysis and the DEIS should be compared using data gathered through the same methodologies. Table 5-9, page 5-36 states that the data for the Red Alternative was gathered using a predictive model while the Orange Alternative data was based on delineated streams and wetlands. This is not a fair comparison and should be corrected to provide consistency throughout the analysis.

NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Brian Wrenn at 919-807-6365.

cc: Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office (electronic copy only)
George Hoops, Federal Highway Administration
Chris Militscher, Environmental Protection Agency (electronic copy only)
Gary Jordan, US Fish and Wildlife Service (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission
File Copy

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North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

February 20, 2012

MEMORANDUM

TO: Jennifer Harris
Planning and Environmental Studies
NC Turnpike Authority

FROM: Ramona M. Bartos RMB for Ramona M. Bartos

SUBJECT: Triangle Expressway Southeast Extension Project, R-2721, R-2828 and R-2829, Wake and Johnston Counties, CH 98-0457

Thank you for your memorandum of January 13, 2012, transmitting the Draft Alternatives Development and Analysis Report for the above cited project. We have reviewed the document and offer the following comments.

The elimination of an alternative based on its potential to affect historic resources appears to be premature in that the only historic resources considered to this point are those that are already National Register-listed properties. The possibility that National Register-eligible properties may or may not be present in any of the alternatives has not been taken into consideration. Thus, alternatives that may have as yet unidentified Section 106 and 4(f) properties in them may become unusable.

We would also note that while National Register-listed or eligible properties are mentioned as being protected by Section 4(f), the lack of detail in the several figures and text give the impression that only public parks are being given full consideration under the regulation.

With regard to archaeological resources, we have no issues that involve alternative selection and concur with the decision to retain the five preliminary study alternatives outlined in the report. As the project develops further, we will continue to consult regarding the need for archaeological investigations once the preferred alternative is selected. We look forward to working with you and your staff on this project.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Matt Wilkerson, NCDOT
Mary Pope Furr, NCDOT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

February 16, 2012

Ms. Jennifer Harris, P.E.
Director of Planning and Environmental Studies
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, N.C. 27699-1578

SUBJECT: Draft Alternatives Development and Analysis Report; Triangle Expressway Southeast Extension (Raleigh Southern Outer Loop); Wake and Johnston Counties; TIP Nos.: R-2721/R-2828/R-2829

Dear Ms. Harris:

The North Carolina Turnpike Authority (NCTA) and the Federal Highway Administration (FHWA) have requested comments on the above subject report in consideration of the Turnpike Environmental Agency Coordination (TEAC) process. The U.S. Environmental Protection Agency (EPA) is providing preliminary technical assistance comments as requested and consistent with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA).

EPA understands that the intent of this draft report is to document the alternatives development and screening process utilized by the NCTA and to present NCTA's findings of detailed study alternatives for the Draft Environmental Impact Statement (DEIS). The NCTA is also requesting that EPA provide any issues of concern that would result in the denial or significant delay in the issuance of any environmental permits for the proposed project. EPA has attached some NEPA technical assistance comments for the transportation agencies to consider as the NEPA process goes forward (See Attachment A).

EPA proposes to stay involved with the transportation, permitting and resource agencies under NEPA for the proposed project to help to ensure that a reasonable and appropriate range of alternatives under NEPA be evaluated. It is recommended that consideration of a non-toll combination or 'hybrid' alternative that will potentially meet some or part of the project purpose be carried forward for detailed study for comparative purposes under NEPA, such as Mass Transit, TSM and with specific roadways improvements. Additionally, the environmental benefits of Mass Transit "Hybrid" might also be evaluated in a comparative fashion to the new location DSAs (Orange to Green or Brown), including potentially air quality benefits, less impacts and disruption to neighborhoods, schools and places of worship, reduced natural resource impacts such as wetlands, streams, and endangered species habitat, etc. Under a Mass Transit 'Hybrid" option, the transportation agencies may also wish to consider evaluating

express bus services between major commuting and activity centers, public parking areas for commuters, etc. Please contact Mr. Christopher A. Militscher of my staff at 404-562-9512 or 919-856-4206 or by e-mail at militscher.chris@epa.gov should you have any questions.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office

w/ATTACHMENT A

cc: H. Wicker, Acting Chief, USACE-Wilmington District
E. Alsmeyer, USACE-Raleigh Field Office
B. Wrenn, NCDWQ
G. Hoops, FHWA

ATTACHMENT A

NEPA Technical Assistance Comments

Draft Alternatives Development and Analysis Report for

An Environmental Impact Statement

Triangle Expressway Southeast Extension (Raleigh Southern Outer Loop/I-540)

Wake and Johnston Counties, N.C.

TIP Nos.: R-2721, R-2828, and R-2929

Purpose and Need

Section 1.2.1 of the report summarizes the need for the proposed project, including '*goal for region's overall transportation system is to provide a cost-effective system that, among other things maintains long-term mobility for people and the movement of goods*'. This section refers the reader to Section 3.4.1 of the report. Neither this stated goal nor the subsequent section identifies an actual need or existing problem with the current transportation system. The second need statement in Section 1.2.1 refers to '*limited transportation options to provide sufficient capacity for efficient, high-speed local and through travel between rapidly growing communities south and east of Raleigh and major employment and activity centers along the 540 Outer Loop and along highways connecting to the Outer Loop, such as I-40, NC 147 and US 1/64*'. This is statement of need is not supported by data. The rationale for a 'parallel', high-speed corridor to existing I-40 is not documented in the report. This section also refers to '*limited transit options in the area*' and refers the reader to Section 3.2. Section 3.2 discusses the project study area traffic conditions. There are no details or any analysis of current or future transit in this section of the report under Purpose and Need. The third need statement in Section 1.2.1 includes poor levels of service (LOS). The LOS need was established using 2008 traffic data along I-40 between NC 147 and Lake Wheeler Road, and most segments of I-40 between White Oak Road and NC 42, most of NC 42, and NC 50 between NC 42 and US 70. The transportation agency predictions are that substantial portions of the roadway network in and near the project study area will deteriorate to LOS E or F by 2035. Figure 1-4 includes many multi-lane facilities outside of the project study area depicted on Figure 3-1. Many of the roadway segments identified in Figure 1-4 appear to have little to do with traffic conditions in the project study area and would be influenced by other network deficiencies and traffic patterns.

Traffic congestion as expressed by current (2008) LOS is depicted on Figure 1-3 of the report. Most of the roadway segments in the project study area are LOS A-C and LOS D. The potential causes of the LOS E along NC 42 have not been fully detailed. NC 42 is primarily a 2-lane rural route with no control of access. There were previously planned NCDOT Transportation Improvement Program (TIP) projects that were one time being considered to addresses the current deficiencies along NC 42 between US 401 and I-40. Spot transportation improvements along NC 50 could also address the sections which have 2008 LOS E.

The primary need of the proposed Outer Loop project appears to be future congestion in the 2035. The details of the traffic models and forecasts are not specifically identified in the report but appear to be generally based upon past development and population growth. Since 2009, the project study area's growth rate has substantially decreased from the two previous decades. In the last 3 years, the growth in southern Wake County has been well below previous years and new development is reported to have stagnated. There is no current demographic information in the report that would identify this significant socio-economic change in the project study area or when the current trend in development might be reversed.

The purposes of the proposed project are identified in Section 1.2.2 of the report. The first purpose is to *improve mobility during the peak travel period* and the second purpose is to *reduce forecast congestion*. Another desirable outcome that is stated in Section 1.2.2 includes, '*improve system linkage*'. This section refers to the '*final link in the 540 Outer Loop envisioned more than 40 years ago*'. The same 'line on the map for the 540 Outer Loop' from 40 years ago appears to the location of the Orange Corridor. The report does not have any specific measures as to how mobility will be improved during the peak travel period. Removing a signalized intersection can potentially improve mobility. It is difficult to understand a purpose of reducing forecasted congestion when the traffic modeling, growth projections and other assumptions are not identified in the report.

The 'system linkage' issue as part of a purpose and need statement is recognized by FHWA as being very problematic. EPA recommends that the transportation agencies refer to the FHWA's *Purpose and Need Guidance for FHWA-funded Projects in North Carolina (Version 2, February 2009)*. EPA and other Merger Team representatives attended this very valuable training sponsored by FHWA. From this Guidance (Page 17): "*It will be a rare situation where system linkage will be the primary purpose. We don't typically decide to link something just because we can*". From the statements in the report, however, it appears that system linkage is a primary purpose for the project. The report did not provide the supporting data required to identify any actual need concerning mobility (high-speed) or capacity issues along the existing roadways consistent with current guidance and policies.

For some additional information on Purpose and Need, please see the technical assistance information below and the website link:

Using Purpose and Need in Decision-making

As noted above, the purpose and need define what can be considered reasonable, prudent, and practicable alternatives. The decision-making process should first consider those alternatives which meet the purpose and need for the project at an acceptable cost and level of environmental impact relative to the benefits which will be derived from the project.

At times, it is possible that no alternative meets all aspects of the project's purpose and need. In such a case, it must be determined if the alternatives are acceptable and worthwhile pursuing in light of the cost, environmental impact and less than optimal transportation solution. To properly assess this, it is important to determine the elements of the purpose and need which are critical to the project, as opposed to those which may be desirable or simply support it, the critical elements are those which if not met, at least to some minimal level, would lead to a "no-build" decision. Determining critical needs could include policy decisions as well as technical considerations.

Other times, the cost or level of environmental impact are not acceptable and an alternative that only partially meets the purpose and need or the no-build alternative must be considered. If the costs are justified in relation to the transportation benefits, then a less than full-build alternative may be acceptable. http://www.environment.fhwa.dot.gov/projdev/tdmneed.asp

In addition to the aforementioned general guidance, an equally important component of the NEPA decision-making and public disclosure processes includes the evaluation of reasonable alternatives not within the lead transportation agency's area of expertise, such as mass transit options. One very important socio-economic benefit from Mass Transit options is the creation of numerous permanent jobs without the disproportionate requirement for infrastructure maintenance. Most highway construction projects provide only temporary employment during construction and very minimal permanent employment opportunities. Another obvious benefit of transportation agencies studying Mass Transit options and performing a reasonable comparison (40 CFR Section 1502.14) is that there are potentially fewer and less substantial indirect and cumulative impacts associated with most Mass Transit options compared to new location, multi-lane toll road alternatives. According to the FHWA, the maintenance of the existing 46,726 plus mile Interstate system and other multi-lane roadways is of a National interest and concern. Transportation agencies and policy-makers have been searching for the means to fund all of these "Every Day Count" priorities including thousands of bridge replacement projects. Conventional highway funding sources such as Federal and State sales taxes on fuels, highway trust fund taxes on vehicle inspections and emissions testing, and general revenue tax sources are not believed to be adequate to meet the demand for all of the new location, multi-lane highways and Interstates.

First Tier Screening of Alternatives Concepts

In Section 2 of the report, alternative concepts were considered as listed on Page 2-1, including TDM, TSM, Mass-Transit or Multi-modal Alternative Concepts and Build Alternatives. It is stated that "*those concepts that cannot be developed to meet the purpose of the project will be removed from further consideration*". The purposes of the project were narrowly defined in the previous section of the report. The highway 'threshold criteria' as further defined and as alluded to in the report to meet purpose and need were 'pre-disposed' to eliminate all but new location, multi-lane toll road alternatives. These potential issues were identified by resource and permitting agencies at previous TEAC meetings.

Section 2.2.1 discusses the ability to improve transportation mobility for trips within or traveling through the Southeast Extension project study area during the peak travel period. Two 'measures of effectiveness' (MOE) were identified in the report and used average speed and travel times. For average speed, the project study area does not include the main segment of I-40 (Figure 5-7). For travel times, the project study area does not include the main segment of I-40 (Figure 5-7). For average speed, "*Alternative concepts that that would result in the comparatively largest increase in average speed over current forecast conditions for 2035 would meet this MOE*". For travel times, "*The largest comparatively reduction in travel times for the typical user of the transportation system traveling through the project study area over current forecast conditions for 2035 would meet this condition*". Because mass-transit and multi-modal options in the project study area is either non-existent or severely limited to a few isolated locations within the project study area (Page 2-3), these MOE's are believed to be biased towards personal vehicle use and alternative concepts that promote new location, high-speed highways.

Section 2.2.2 discusses the ability to reduce forecast traffic congestion on the existing roadway network within the project study area. The poor LOS multi-lane sections of I-40 are not located in the defined project study area. Projected increases in traffic volumes are not quantified in this section. Three MOE's are identified in this section, including total vehicle hours traveled on average daily period, congested vehicle miles traveled on peak travel period, and congested vehicle hours traveled on peak travel period. These MOEs are for the major roadway network which includes congested areas outside of the defined project study area. Most of the MOEs relate to improving travel times and increasing vehicle speeds throughout the existing roadway network. The transportation agencies are promoting high-speed facilities in the project study area that is primarily rural and suburban between the two project termini. FHWA has conducted numerous safety studies concern high speed facilities: "*In 2008, there were 37,261 fatalities on our Nation's roadways. Of these; 11,674 (31 percent) were speeding-related!*". Source: http://safety.fhwa.dot.gov/speedmgt/

Also included on this FHWA website is a 2007 chart depicting fatality rates per road type: Interstate facilities in rural areas had a rate almost double that of Interstates in urban areas. This FHWA report also includes the following potentially relevant information:

Speeding—traveling too fast for conditions or in excess of the posted speed limits—is a factor in almost one-third of all fatal crashes and costs America approximately **$27.7 billion dollars** in economic costs each year. Speeding is a safety concern on all roads, regardless of their speed limits. Much of the public concern about speeding has been focused on high-speed Interstates.

Considering the extremely significant costs of fatalities associated with high-speed Interstate facilities, especially in rural areas, the proposed purpose of the project "*to provide sufficient (additional) capacity for efficient, high speed local and through travel*" (Page 1-2) the transportation agencies may wish to consider and evaluate this relevant safety issue in the DEIS.

Section 2.2.3 discusses the ability to improve system linkage in the roadway network in the project study area. The discussion includes the statement: "*the project would provide the key remaining link in the Outer Loop system*". None of the no-build alternative concepts can meet this narrowly defined criterion. Please refer to the following: "*Care should be taken that the purpose and need statement is not so narrowly drafted that it unreasonably points to a single solution" (FHWA Administrator: 7/23/03 Memorandum on Guidance on "Purpose and Need").*
http://www.environment.fhwa.dot.gov/guidebook/Gjoint.asp

The report notes that the traffic study area used for analysis of MOEs was different than the project study area (Page 2-9; "*to create the traffic study area*"). This two different study area approach is believed by EPA to be unprecedented in North Carolian. The rationale provided in this section of the report is potentially very biased towards new location highways. Under Section 2.1.4, there is future transit improvements cited that are substantially out of the project study area. Most of these future projects are included in 2025 and 2035 horizon years and do not specifically address any of the limited current congestion or future projected congestion in southern Wake County.

The report identifies several MOEs, including average speed, travel times, average daily VHT, congested VMT, and congested VHT. All of these measures and the undefined Triangle Regional Model (TRM) are biased towards eliminating TDM, TSM and Mass Transit/Multi-modal Alternative Concepts ("*Travel times could not be determined for TDM, TSM, and Mass*

Transit/Multi-Modal Alternative Concepts using TRM")).. An example can be found in Table 2-1 where the average daily speeds in the 'traffic study area', PM Peak Period, shows a 3.5 percent change for Hybrid #3 and a 5.7% change for a New location highway. Hybrid #3 was also subsequently 'screened out' by the transportation agencies. As identified on Page 2-14, only 50 area buses enter the 'traffic study area'. There is no connecting mass transit to most of the project study area. Commuters in the project study area (and beyond) have little to no choice but to take privately owned vehicles ("*There would need to be a twelve-fold increase in the number of buses serving the area to achieve the required threshold*", Page 2-15). Section 2.4.4 of the report provides the rationale for eliminating the Mass Transit/Multi-modal Alternative Concept, including the inability to improve mobility, reduce forecast traffic congestion, and improve system linkage. The report only identified buses as the potential means to accommodate commuters in the project study area. Light rail was not considered for the mobility analysis nor was a full comparative combination of alternatives, such as some TSM, some modest increases in express bus services from significant commuting areas and a light rail project connecting major commuting centers and destinations. The highway transportation agencies, including the North Carolina Turnpike Authority, might wish to further consult with other transportation officials (e.g., CATS and FTA) on the potential benefits of Mass Transit options for urban and suburban areas.

Forecasted congestion based upon out of date growth projections is not an existing transportation problem. A combination of light rail and some local roadway improvements would also potentially meet the purpose of improving 'system linkage' and potentially eliminate 'future congestion'. However, this concept was not fully evaluated in the report. Page 2-2 cites that "*The TSM Alternative will neither complete the Outer Loop system nor provide faster access to the I-40/I-540 network for residents in the project study area*". TSM was eliminated in the previous section of the report (i.e., Section 2.4.3). Most of the east-west section of I-40 is outside of the project study area. Most of I-540 is not included in the project study area. The report concludes that, ""*the Mass Transit/Multi-modal Alternative Concept would fail to meet the two primary elements of [the] project purpose: improving mobility and reducing congestion*". As previously identified in the report, there is minimal existing congestion within the project study area and the purpose is based on future 'forecasted' congestion. There are other transportation alternatives that can improve mobility, including light rail

Table 2-7 of the report provides a summary of quartile rankings of MOEs for Build Alternative Concepts. As anticipated from the previous TRM analyses, the New Location Freeway ranks 4 out of 4 for the six (6) total MOEs. However, the TRM analysis was evaluated as 'Freeway'. The proposed project is being proposed as solely as a toll facility. According to FHWA and NCTA team representatives; there is no other means of potentially funding the I-540/Raleigh Southern Outer Loop without tolling.

The Hybrid Alternatives Concepts (Hybrids 1, 2 and 3) were also developed using improve existing and new location segments to meet future capacity that is not supported by current traffic numbers (i.e., AADT). For example, Hybrid 1 is proposed to be improving existing roadways to 10-lane, controlled access facilities. Hybrid 2 and 3 are proposed as 6-lane, controlled access facilities. Capacity issues within the project study area were not fully identified or evaluated in the report. The traffic study area does not correspond to the project study area and the rationale included in the report is not substantiated by either facts or precedent. Hybrid 3 was

retained for the next level of screening but was never seriously considered by the transportation agencies (See section below).

It is also noted that the transportation agencies have mixed regulatory terminology regarding the development of alternatives and the first tier screening of alternative concepts (Page 1-3). The Council on Environmental Quality (CEQ) regulations on NEPA refer to reasonable alternatives (40 CFR Section 1502.14(a) and (c). A 'practicable' alternative is essentially a Clean Water Act Section 404(b)(1) Guideline term utilized under the U.S. Army Corps of Engineers' determination of the 'Least Environmentally Damaging Practicable Alternative' (LEDPA). The NCTA and FHWA are not utilizing the NEPA/Section 404 Merger process and the issue of practicability does not generally become a consideration until after the draft environmental document and the USACE's selection of the LEDPA. Without specific information on jurisdictional impacts, funding, etc., none of the current build Alternative Concepts in this report may truly be 'practicable'.

Development of Preliminary Corridor Segments

FHWA and NCTA should consider the proposed project in light of the requirements at 40 CFR Section 1506.1(a)(2). Page 3-2 includes the statement that several alternative corridors were developed and analyzed in the mid-1990's and public hearings were held to present the corridor proposed for protection ('Hard-ship' purchases totaling 36 parcels). The report does not fully address the early acquisition needs or what environmental features were identified during this development of a protected corridor. The report does not include the specifics or the relevant documentation for these pre-Notice of Intent (NOI) public hearings. Approximately 464 acres of right of way representing 32% of the needed protected corridor has already been purchased. Most of the purchased properties were reported in previous TEAC meetings to include undeveloped land along the Phase I portion of the proposed project (The 'Orange' corridor). The Orange Corridor represents approximately 17 miles of the total project length of approximately 22 miles. However, other reports, including the NCDOT website indicate that the proposed I-540/Raleigh Southern Outer Loop (Triangle Expressway Southeast Extension) is approximately 33 miles. An accurate length of the different Phases (i.e., I and II) of the proposed project should be included in a Draft Environmental Impact Statement.

The statement on Page 3-3 is noted regarding NCDOT's compliance with 23 CFR 710.501(b). EPA suggests that the transportation agencies may wish to provide a copy of the concurrence letter concerning 23 CFR 710.501(c)(2) compliance in the Draft EIS.

On page 3-5 of the report, it is stated that: "*Agency representatives, local governments and the public have not proposed many potential corridor segments beyond those currently under consideration*". It is most likely the responsibility of the transportation agencies to develop new corridors and alignments and not the parties cited above as they would be unfamiliar with Interstate design requirements, innovate funding solutions, etc. The transportation agencies potentially screened out Hybrid 3 Alternative Concept Segment by the statements made in Section 3.5.3 on Tolling.

This section of the report again differentiates between the project study area and the traffic area conditions beyond the boundaries of the project study area. The rationale provided on Pages 3-1 and 3-2 is not a reasonable approach. Several agencies during TEAC meetings

requested that the transportation agencies consider the inclusion of the project study area to the north side of I-40 between I-440 in the east and to US 1/US 64 to the west. Using traffic data for these areas outside of the project study area is not consistent with other N.C. Outer Loop projects studied under NEPA. The transportation agencies declined this recommendation and maintained that the reasoning for the differences of a project study area and a traffic study area would be fully addressed in the DEIS.

It is very important to note that the Preliminary Study Corridors are 1,000 feet wide as is noted in the first sentence in Section 3 of the report. Some other key issues identified in this report are the local planning organization requests to construct a 6-lane, new location toll facility and the recommendations for interchanges at Holly Springs Road, Bells Lake Road, US 401, Old Stage Road, NC 50, I-40, White Oak Road, US 70, Old Baucom Road, Auburn Knightdale Road, and Poole Road. In addition, there are also interchanges proposed at the termini at NC 55/I-540 and I-540. In total, 13 interchanges are proposed. There is no actual traffic data or public surveys demonstrating why commuters would leave local free roadways where there is little to no congestion and utilize a 6-lane toll facility. The relevant studies on building multi-lane, toll facilities in rural/suburban areas that have very few existing traffic problems are not referenced in this report. The local planning organizational 'need' for a 6-lane facility is not supportable when portions of I-40 between the RDU airport exit and the Lake Wheeler Road exit had been 4-lanes for decades and only recently a widening project to 6-lanes was completed on the most significant east-west corridor in N.C. Much of the transportation planning relies on the TRM. The assumptions and specific parameters used in these types of models are not disclosed in this report. The NCDOT webpage indicates there is no funding for the proposed project. From the NCDOT website, it appears that some of the statements provided in the report may conflict with the information being provided to the resource agencies. Please see:
http://www.ncdot.gov/projects/southeastextension/

Transportation demands, social and economic demands and mobility considerations are the basis for additional transportation infrastructure in southeastern Wake County. The proposed Southeast Extension would link the towns of Clayton, Garner, Fuquay Varina, Holly Springs, Apex, Cary and Raleigh. The project would increase the capacity of the existing roadway network and divert traffic from secondary roads in areas experiencing substantial growth.

The Southeast Extension project has been officially on hold following enactment of North Carolina Session Law 2011-7 (N.C. S.L. 2011-7) in March 2011. This law restricts the Turnpike Authority from considering alternatives for the Triangle Expressway Southeast Extension that are north of the protected "Orange" corridor. Since March 2011, our project work has been limited while we evaluate the implications of this law and how it impacts our ability to progress the project in accordance with the federal National Environmental Policy Act as well as the federal Clean Water Act.

Target dates for project milestones including publication of the Draft Environmental Impact Statement (EIS) will remain uncertain until ways can be identified to address agency concerns while meeting the requirements of N.C. S.L. 2011-7 and the National Environmental Policy Act. The

previously anticipated Draft EIS date of February 2012 is uncertain at this time due to the project having been delayed since March 2011.

The Southeast Extension study will consider various solutions for addressing area transportation needs. **These studies will consider several options, including improving existing roads and building a new roadway, along with non-roadway options such as mass transit.**

A protected corridor preserves the location of a new road from encroaching development. In the mid-1990s, the North Carolina Department of Transportation (NCDOT), under the Transportation Corridor Official Map Act, established a protected corridor for Phase I of the Southeast Extension between NC 55 in Apex and I-40 near the Johnston/Wake County line. The Turnpike Authority will evaluate the protected corridor, as well as other possible routes, as part of this study.

The report does not identify the social and economic demands for the proposed Raleigh Southern Outer Loop. The report does not demonstrate how a multi-lane toll facility will divert traffic from (free) secondary roads. The report does not address the Project Financial Feasibility Study for tolling. The NCDOT webpage is information is potentially not consistent with the report as mass transit and other options were screened out by the FHWA and NCTA in the first tier because it did not meet the primary purposes of the project (e.g., "*Complete the I-540/Outer Loop as was envisioned 40 years ago*"). The statement concerning the consideration of other options being studied appears to be somewhat confusing based upon the narrow statements of the project's purposes and the very strict screening criteria to eliminate all other alternative concepts that are not a new location, multi-lane, toll road. FHWA and NCDOT officials have previously expressed their concerns at other project meetings with maintaining North Carolina's current 1,014.78 mile Interstate system[1]. The DEIS may also wish to include the NCDOT TIP No. I-5111, I-40 Widening and Improvements in Wake and Johnston County, that is meant to add additional capacity to I-40 within the project study area.

Second Tier Screening of Preliminary Corridor Segments

As with several other turnpike projects, the transportation agencies presented a matrix of 'impacts' for over 40 different new location segments based upon 1,000-foot corridor information. None of the actual impacts from the 300-350 feet of needed right of way was studied or 'ground-truthed'. Some of the segments were as short as 0.35 miles (#35) while other segments were more than 11 miles (#26). For the Phase I area, there were realistically 5 corridors studied in the second tier, including Orange, Red, Blue, Pink and Purple as a 'cross-over' (Figure 4-3). The transportation agencies requested that all of the segments comprising Blue, Purple, Red and Pink be eliminated. The permit and resource agencies agreed to eliminate the Blue and the Purple. Some of the permitting and resource agencies requested that Red and Pink be retained with Orange as Detailed Study Alternatives for comparative purposes under NEPA, 40 CFR Section 1502.14(a).

Beyond the potential screening of some very 'unreasonable' alternatives under the Second Tier Screening process utilized by the transportation agencies, there is a very real

concern expressed by certain resource agencies at past TEAC meetings that reasonable alternatives are being eliminated at this pre-DEIS stage based upon unverified GIS level maps and data using 1,000-foot corridor impact information. Table 4-3 of the report presents the segment composition of the new location Preliminary Study Corridors. The transportation agencies eliminated 12 corridor segments at the Second Tier evaluation. Preliminary Study Alternatives are identified in Table 4-4 with information on the Orange to Red to Green segments left blank in the table ("The Red Alignment").

Third Tier Screening of Preliminary Corridor Alternatives

Table 5-1 represents screening criteria using both potential right of way impacts for certain resources (e.g., Residential and business relocations) and 1,000-foot corridors for other resources (e.g., Section 4(f) applicable resources). The transportation agencies efforts in this Third Tier screening exercise were identified as being problematic by several agencies. Impacts and estimates are being based upon 'potential' right of way locations within a 1,000-foot corridor. From a statistically analysis perspective, a 'typical 300-foot right of way' within 1,000 feet creates enormous potential errors in the impact data. Efforts to shift potential right of way alignments for various resources were potentially made for some Preliminary Corridor Alternatives and not for others.

A primary case to this point is identified on Page 5-6 of the report concerning the Critical Water Supply Area to Swift Creek. This section of the report stresses the impact (Calculated to 10.6 acres) to this environmental feature and impacts to 303(d) listed streams. For an objective analysis, the transportation agencies should evaluate other TIP projects with similar resource impact issues (e.g., TIP No.: U-3109; Critical Water Supply Area impacted; TIP No.: U-3321; several miles of 303(d) listed streams potentially impacted).

EPA notes the comments in the report concerning third tier screening results, impact comparison, public and agency input, third tier screening conclusions, justifications for eliminating the Pink and Red alternatives based upon various criteria, petitions received from different stakeholder groups, etc. EPA notes the DSAs identified in Figure 5-7 which shows the primary DSAs (Orange – Phase I; and Green or Brown – Phase II, with the minor corridor adjustments for using Mint Green, Teal and Tan Alternatives). The transportation agencies should also provide an explanation of the control of access differences between a 'freeway' type design and an 'expressway' design in the DEIS.

An Additional Reference:

[1] North Carolina Projects: One of the first Interstate 40 relocation projects was the construction of a southern bypass for Interstate 40 around Winston-Salem. Built and opened to traffic in 1993, Interstate 40 now bypasses downtown Winston-Salem. The former freeway alignment is now part of Business Loop I-40. A future Winston-Salem Northern Beltway is planned for construction starting in 2010 or later; this belt route would be designated as Interstate 74 and Interstate 274 once it opens to traffic. The Greensboro Urban Loop, which is partially constructed, currently carries Interstate 40 around downtown Greensboro. The portion of the loop that carries Interstate 40 was constructed south of downtown through the early to mid-2000s. The southeastern section opened on February 21, 2004, and the southwestern portion opened on February 21, 2008. With the opening of this bypass, Interstate 40 was relocated onto the bypass, and the old freeway alignment was re-designated as Business Loop I-40. Portions of the Greensboro Urban Loop are designated as part of Interstate 73, and the future northern half of the loop is tentatively designated Future Interstate 840. In North Carolina, a recent widening between the Durham

Freeway (Exit 279) and Interstate 540 (Exit 283) brings Interstate 40 up to seven lanes. This stretch receives 147,000 vehicles per day, so the widening is generally a welcomed sight. Expansion to eight lanes, which entails adding a fourth westbound lane, was completed on October 1, 2003. The $12 million project began in 2001.Even with these additional lanes other sections of Interstate 40 are planned for improvements as the area continues to gain population. Source: http://www.interstate-guide.com/i-040.html

Maseman, Kristin

From: Riffey, Deanna
Sent: Thursday, February 09, 2012 11:06 AM
To: Bass, Kiersten R
Subject: RE: Southeast Extension Alternatives Development and Analysis Report

Hello Kiersten.
I only have a couple of comments on the report:

1) Section 5.2.2.4 on page 5-17 – In the first paragraph, first sentence one important advantage is mentioned, but yet none are listed in this paragraph. If you skip on down to the 3rd paragraph then two advantages are mentioned and explained. A little confusing.
2) On figures I was looking for Bass Lake. It seems that Bass Lake was not colored blue like the other water bodies. The shape is there just not color.
3) Also on Figure 4-2, according to Table 4-1, I believe that segment 39 is not supposed to be shown on this figure like the other eliminated segments.

Deanna

From: Bass, Kiersten R
Sent: Thursday, February 02, 2012 9:57 AM
To: Roberts, Tracy; agamber@ncdot.gov; Johnson, Benjetta L; Wrenn, Brian; Ellis, Bruce O; Dagnino, Carla S; Chris.Lukasina@campo-nc.us; militscher.chris@epa.gov; Shumate, Christy; Chang, David S; Riffey, Deanna; Sykes, Dewayne L; Hall, Dolores; Keener, Donna; Ed.Johnson@ci.raleigh.nc.us; Lusk, Elizabeth L; Simes, Amy; eric.c.alsmeyer@usace.army.mil; Midkiff, Eric; gary_jordan@fws.gov; george.hoops@dot.gov; hwatkins@garnernc.gov; Harris, Jennifer; joe@letsgetmoving.org; samuel.k.jolly@usace.army.mil; kmarkham@esinc.cc; Kristin Maseman; Brooks, Lonnie I; Clawson, Marshall W; Pair, Missy; Beauregard, Rachelle; Gledhill-earley, Renee; Roach, Renee B; Ridings, Rob; Roy Bruce; scott.c.mclendon@usace.army.mil; Franklin, Spencer T; Gurganus, Stephen J (Steve) - HEU; Dewitt, Steve; tsavidge@thecatenagroup.com; Wilson, Travis W.; Ford, Tris B; Bowman, John W; wsmith@mulkeyinc.com; Barrett, William A; Lipscomb, Sharon M
Subject: RE: Southeast Extension Alternatives Development and Analysis Report

All, to date the NC Turnpike Authority has received one comment letter on the Draft Alternatives Development and Analysis Report for the Triangle Expressway Southeast Extension project. Comments received are from the US Fish and Wildlife Service and are attached for your use.

We look forward to receiving your comments over the next two weeks (comment deadline is February 16th). If you have questions or concerns, please do not hesitate to contact me.

Thank you,

Kiersten R. Bass
Senior Transportation Planner
NCTA General Engineering Consultant
1 South Wilmington St, Raleigh, NC 27601
1578 MS Center, Raleigh, NC 27699-1578
919.707.2725

From: Bass, Kiersten R
Sent: Friday, January 13, 2012 2:54 PM
To: Roberts, Tracy; Emptage, Aketa A; amy.simes@ncmail.net; agamber@ncdot.gov; Johnson, Benjetta L; Wrenn, Brian;

Ellis, Bruce O; Dagnino, Carla S; Chris.Lukasina@campo-nc.us; militscher.chris@epa.gov; Shumate, Christy; Chang, David S; Riffey, Deanna; Sykes, Dewayne L; Hall, Dolores; Keener, Donna; Ed.Johnson@ci.raleigh.nc.us; Lusk, Elizabeth L; eric.c.alsmeyer@usace.army.mil; Midkiff, Eric; gary_jordan@fws.gov; george.hoops@dot.gov; hwatkins@garnernc.gov; Harris, Jennifer; joe@letsgetmoving.org; samuel.k.jolly@usace.army.mil; kmarkham@esinc.cc; Kristin Maseman; Brooks, Lonnie I; Clawson, Marshall W; Pair, Missy; Beauregard, Rachelle; Gledhill-earley, Renee; Roach, Renee B; Ridings, Rob; Roy Bruce; scott.c.mclendon@usace.army.mil; Franklin, Spencer T; Gurganus, Stephen J (Steve) - HEU; Dewitt, Steve; tsavidge@thecatenagroup.com; Wilson, Travis W.; Ford, Tris B; Bowman, John W; wsmith@mulkeyinc.com; Barrett, William A
Cc: Johnson, Kristen M
Subject: RE: Southeast Extension Alternatives Development and Analysis Report

All, due to the file size of the Draft Alternatives Development and Analysis Report for the Southeast Extension project (recently sent on my behalf by Tracy Roberts) you will need to log on to Constructware to download the report: http://secure.constructware.com/

For those of you not familiar with how to locate the document in Constructware, please see the attachment for instructions or feel free to contact me for assistance. Similarly if you need assistance with logging into Constructware (username and/or password) please contact Kristen Johnson (kmjohnson4@ncdot.gov).

Thank you,
Kiersten R. Bass
Senior Transportation Planner
NCTA General Engineering Consultant
1 South Wilmington St, Raleigh, NC 27601
1578 MS Center, Raleigh, NC 27699-1578
919.707.2725

-----Original Message-----
From: Tracy Roberts [mailto:system@constructware.com]
Sent: Friday, January 13, 2012 2:43 PM
To: Emptage, Aketa A; amy.simes@ncmail.net; agamber@ncdot.gov; Johnson, Benjetta L; Wrenn, Brian; Ellis, Bruce O; Dagnino, Carla S; Chris.Lukasina@campo-nc.us; militscher.chris@epa.gov; Shumate, Christy; Chang, David S; Riffey, Deanna; Sykes, Dewayne L; Hall, Dolores; Keener, Donna; Ed.Johnson@ci.raleigh.nc.us; Lusk, Elizabeth L; eric.c.alsmeyer@usace.army.mil; Midkiff, Eric; gary_jordan@fws.gov; george.hoops@dot.gov; hwatkins@garnernc.gov; Harris, Jennifer; joe@letsgetmoving.org; samuel.k.jolly@usace.army.mil; kmarkham@esinc.cc; Bass, Kiersten R; Kristin Maseman; Brooks, Lonnie I; Clawson, Marshall W; Pair, Missy; Beauregard, Rachelle; Gledhill-earley, Renee; Roach, Renee B; Ridings, Rob; Roy Bruce; scott.c.mclendon@usace.army.mil; Franklin, Spencer T; Gurganus, Stephen J (Steve) - HEU; Dewitt, Steve; tsavidge@thecatenagroup.com; Wilson, Travis W.; Ford, Tris B; Bowman, John W; wsmith@mulkeyinc.com; Barrett, William A
Subject: Southeast Extension Alternatives Development and Analysis Report

The North Carolina Turnpike Authority (NCTA) has prepared a Draft Alternatives Development and Analysis Report for the Triangle Expressway Southeast Extension project. This report documents the alternatives development and screening process and presents NCTA's recommendations for detailed study alternatives. Environmental and resource and regulatory agency coordination regarding project alternatives has included Turnpike Environmental Agency Coordination (TEAC) meetings held in August, September, November 2010, and January 20, 2011. At the January meeting we discussed recommended alternatives to be studied in detail in the project's Draft Environmental Impact Statement.

A copy of the Draft Alternatives Development and Analysis Report is available for download for your review and comment. NCTA requests written comments from your agency on the report and specifically on the recommendations for detailed study alternatives as presented in the report. In addition, please specify, as applicable, any comments your

agency considers to be issues of concern that would result in the denial or significant delay in the issuance of any environmental permits.

NCTA plans to discuss this project on March 21, 2012. In order to maintain our project schedule, please provide comments on the draft report by February 16, 2012 so that we can assess your comments, make any necessary revisions to the draft report and distribute it prior to the March meeting.

Thank you for your continued participation in the study for this project. If you have any questions or comments, please do not hesitate to contact me at jhharris1@ncdot.gov or 919.707.2704 or Kiersten Bass at krbass@ncdot.gov or 919.707.2725.

Maseman, Kristin

From: Bass, Kiersten R <krbass@ncdot.gov>
Sent: Wednesday, February 08, 2012 11:31 AM
To: Maseman, Kristin
Cc: Bruce, Roy
Subject: FW: Project: R-2721, R-2828, R-2829: (Triangle Expressway Southeast Ext. Project, Wake and Johnston Counties)

-----Original message-----
From: "Memory, John R" <rmemory@ncdot.gov>
To: "Harris, Jennifer" <jhharris1@ncdot.gov>
Sent: Wed, Feb 8, 2012 16:20:45 GMT+00:00
Subject: Project: R-2721, R-2828, R-2829: (Triangle Expressway Southeast Ext. Project, Wake and Johnston Counties)

Ms. Harris,
I have reviewed the Draft Alternatives Development and Analysis Report for the above subject project. At this time, I have no comments due to information within the report reflects no information on potential utility conflicts. However, a major utility relocation is subject to impact areas outside the future project limits.

R. Memory

J. Robert Memory, CPM
State Utility Agent
NCDOT - Utilities Unit
1555 Mail Service Center
Raleigh, NC 27699-1555
Direct: 919.707.7191
General Office: 919.707.6690
Fax: 919.250.4151

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

Maseman, Kristin

From: Bass, Kiersten R <krbass@ncdot.gov>
Sent: Friday, February 17, 2012 4:18 PM
To: Maseman, Kristin
Subject: Fw: SE Ext. Alts Development and Analysis Report
Attachments: SE Ext Draft Alternatives Report_with HES-PICS comments_02-17-12.docx

Connected by DROID on Verizon Wireless

-----Original message-----

From: "Ford, Tris B" <tbford@ncdot.gov>
To: "Bass, Kiersten R" <krbass@ncdot.gov>
Cc: "Harris, Jennifer" <jhharris1@ncdot.gov>, "Roberts, Tracy" <teroberts1@ncdot.gov>
Sent: Fri, Feb 17, 2012 21:02:55 GMT+00:00
Subject: SE Ext. Alts Development and Analysis Report

Kiersten,

Please see attached HES-PICS' comments on the SE Extension Alternatives Analysis Report in track changes format. We apologize for missing the deadline by one day in delivering these comments and hope that they will be able to be incorporated as you all are inclined. Thanks for the opportunity to provide comment. If you have any questions feel free to contact me.

Hope things are going well for you and the family.

Thanks,

Tris

Tristram Burke Ford
Community Planner III
Public Involvement and Community Studies

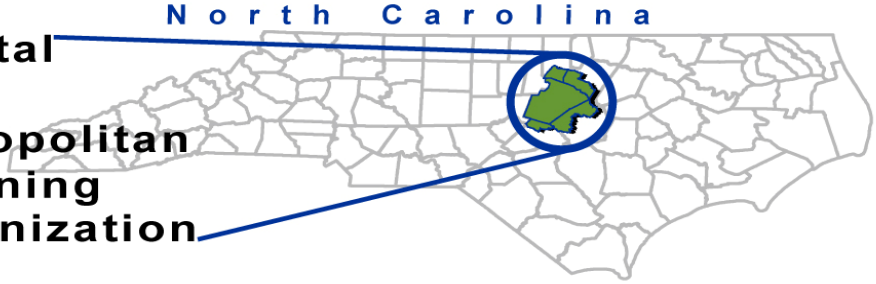
NCDOT-Human Environment Section
---
phone- (919) 707-6066
fax- (919) 212-5785

1598 Mail Service Center (mailing address)
Raleigh, NC 27699-1598

NCDOT Century Center Bldg. B (physical address)
1020 Birch Ridge Drive
Raleigh, NC 27610

Views expressed are my own and may not reflect any official policies of the North Carolina Department of Transportation.

North Carolina
Capital Area Metropolitan Planning Organization



February 15, 2012

Ms. Jennifer Harris, PE
Director of Planning & Environmental Studies
North Carolina Turnpike Authority
5400 Glenwood Avenue
Raleigh, NC 27612

Re: Triangle Expressway Southeast Extension Project, Wake and Johnston Counties (TIP Projects R-2721, R-2828, R-2829) Draft Alternatives Development and Analysis Report

Dear Ms Harris,

In reference to the draft Alternatives Development and Analysis Report released on January 13, 2012, this letter is to inform the North Carolina Turnpike Authority (NCTA) that the Capital Area Metropolitan Planning Organization (MPO) is supportive of the report's findings. The report includes recommendations to advance five alternatives for detailed study in the draft EIS. The MPO supports four of the five alternatives identified in Section 5.8 (p. 5-38).

At this time the MPO cannot support advancing the "Orange to Brown to Tan to Green" alternative for detailed study in the draft EIS. The MPO has previously submitted resolutions regarding the removal of the "Red" and "Tan" alternatives from further study. The draft Alternatives Development and Analysis Report prepared by NCTA further documents the adverse impacts to the cultural and human environment anticipated by these alternatives.

We feel it is critical that the North Carolina Department of Transportation continues to use the original protected corridor alignment illustrated on North Carolina Turnpike Authority maps adopted in 1996 and 1997 as the preferred choice for development and construction of the proposed NC 540 Turnpike in southern and southeastern Wake County.

We strongly urge the North Carolina Department of Transportation to construct the entire remaining portion of the outer loop as one project, rather than two. Wake County is the first and only County in the state of North Carolina to have parts of its urban loop constructed as a toll road because the aforementioned segments are region's urgently needed top priority projects that should not be delayed.

Planning and design of this major transportation facility should be in harmony with the adopted regional Long Range Transportation Plan as well as the natural and cultural environments. This new facility should minimize negative impacts to the Swift Creek Watershed and water supply area. To accomplish this, the ultimate facility design should include a toolbox of sustainable design elements such as use of BMPs throughout the project and consideration of onsite storm water treatment such as sustainable landscaping elements that are compatible with local soil type and drainage capability that are native to the region.

127 W. Hargett Street, Suite 800 Raleigh, NC 27601 Phone: (919) 996-4400 Fax: (919) 807-8517
www.campo-nc.us

The MPO would also ask that the report be updated with copies of the previously submitted resolutions (attached).

The staff at the MPO looks forward to working with NCTA to develop this vital transportation facility for the future. If you need any further assistance or have questions please contact my office at (919) 996-4400.

Sincerely,

Edison H. Johnson, Jr., PE, FITE
Executive Director, N.C. Capital Area MPO

cc: George Hoops, P.E. – Federal Highway Administration

RESOLUTION expressing THE NC CAPITAL AREA MPO'S POSITION REGARDING THE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE

On motion made by **Mayor Sears** and seconded by **Mayor Byrne** , and having been put to a vote, was duly adopted, the following resolution;

WHEREAS, the proposed southern and southeastern segments of the NC 540 Turnpike are an adopted element of the Capital Area Metropolitan Planning Organization's (CAMPO) 2035 Long Range Transportation Plan; and

WHEREAS, official corridor maps show a specific alignment, adopted by the North Carolina Board of Transportation, to block new development in the preferred path of the southern segment from N.C. 55 in Holly Springs to US 401 south of Garner on August 2, 1996 and the southern segment from US 401 south of Garner to Interstate 40 south of Garner on March 7, 1997; and

WHEREAS, the proposed freeway alignment has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for the towns of Fuquay-Varina, Garner, and Holly Springs; and

WHEREAS, Wake County is the first and only County in North Carolina to have its urban loop constructed as a toll road; and

WHEREAS, the southeastern segment is likely to be much more expensive on a per mile basis than the southern segment and as such will need the revenue coming from the southern segment to help pay for it; and

WHEREAS, the southeastern segment is the Capital Area MPO's urgently needed top regional priority and therefore should not be delayed until the northern segment of the loop is converted to a turnpike to help pay for it's construction

WHEREAS, the North Carolina Turnpike Authority is looking at new alternatives (defined as "red", "blue", and "purple")that would possibly have an adverse impact upon these towns, causing disruptions to existing homes and businesses; and

WHEREAS, the alternatives may be shorter and possibly cut construction cost; at the possible expense of environmentally sensitive areas as well as mar residential and commercial activities vital to the economic well being of the towns being impacted;

NOW, THEREFORE BE IT RESOLVED, the Capital Area MPO Transportation Advisory Committee supports the use of the original protected corridor alignment illustrated on North Carolina Turnpike Authority maps adopted in 1996 and 1997 as the preferred choice for the development and construction of the proposed NC 540 Turnpike in southern and southeastern Wake County; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee requests that the North Carolina Turnpike Authority include the Capital Area MPO as an active stakeholder in the alternatives analysis process; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee strongly urges the North Carolina Department of Transportation to construct the entire remaining portion of the outer loop as a turnpike in one phase rather than as two separate phases.

Adopted on this the 20th day of October, 2010

Joe Bryan, Chair
Director
Transportation Advisory Committee

Ed Johnson, Capital Area MPO
Transportation Advisory Committee Clerk

County of Wake
State of North Carolina

I, Diane Wilson, a Notary Public for said County and State, do hereby certify that on this, the 20th day of October, 2010, personally appeared before me, Joe Bryan, known to me by his presence, and acknowledged the due execution of the foregoing RESOLUTION STATING THE CAPITAL AREEA MPO'S POSITION REGARDING THE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE.

Witness my hand and official seal, this the 20th day of October, 2010.

DIANE WILSON NOTARY (Official Seal) PUBLIC EXPIRES 01/26/2011 WAKE COUNTY N.C.

Diane Wilson, Notary Public

My commission expires January 26, 2011

Comment from Regional Transportation Alliance

Summary
The Regional Transportation Alliance (RTA) supports the set of recommended Detailed Study Alternatives (DSAs) for the Triangle Expressway Southeast Extension as listed on Page 5-38 and shown on Figure 5-7 of the Draft Alternatives Development and Analysis Report. A primary reason for our support of the set of new location alternatives is that each of the recommended DSAs provide a direct interchange with Interstate 40 at the US 70/Clayton Bypass. Providing a direct interchange at that location is essential since:

- The US 70 Clayton Bypass is one of only two statewide tier freeways in the path of the proposed turnpike, the other being Interstate 40
- The design and ramp configurations for the existing I-40 / US 70 interchange specifically allow for a direct interchange with 540 at that location
- The provision of a direct interchange with three freeways (i.e., I-40, future NC 540, US 70) at a single point maximizes system connectivity by definition
- The provision of a direct interchange between three freeways minimizes the travel on existing roadways that would otherwise be required – primarily on I-40 – which enhances the fulfillment of the purpose and need for 540 to reduce congestion on the existing roadway network
- The inclusion of a direct interchange with I-40 and the US 70 Clayton Bypass will serve to maximize the independent utility of the Southern and Eastern Wake freeway segments, since either one, if built by itself, would result in a fourth freeway leg of the currently three-leg interchange

To highlight the importance of the direct interchange of the proposed turnpike with I-40 at the existing US 70/Clayton Bypass junction, the RTA requests that all future maps that show proposed or potential elements of the proposed Triangle Expressway Southeast Extension include the completed US 70/Clayton Bypass freeway.

Note:
Additional detail on the rationale for our comments and support can be found on the following pages.

Note:
Please note that we do not take a position of preference among the various combinations of potential Phase II, Eastern Wake Freeway section alignments east of I-40. Each of the remaining alternatives or combinations thereof east of I-40 will connect directly with the US 70 Clayton Bypass and continue to an interchange with I-540 and the US 64/264 Knightdale Bypass, so each of them provide comparable system connectivity.

Rationale for comments follows

Overview
The Triangle Expressway Southeast Extension is a proposed turnpike freeway in the Research Triangle region of North Carolina. The freeway will serve the areas south and east of the state capital city of Raleigh. The roadway would commence at the interchange (opening in December 2012) of Toll 540 at NC 55/Holly Springs bypass in southwestern Wake County. The freeway would continue in an easterly then northerly direction, terminating at the existing interchange of I-540 at the US 64-264/Knightdale Bypass in eastern Wake County.

System context
There are only two freeways in the statewide tier (the highest class of facilities along the entire North Carolina state highway system, see **Exhibit 1**) in the path of the proposed Southeast Extension: Interstate 40 – the most traveled freeway in the region and the only primary Interstate serving Wake County – and the US 70/Clayton Bypass. The freeways meet today at the western terminus of the US 70/Clayton Bypass near the Wake-Johnston county line at a completed interchange that opened in 2008. See **Exhibit 2.**

Both I-40 and the US 70/Clayton Bypass are posted at 70 MPH at that location. The I-40 interchange with the US 70/Clayton Bypass specifically assumed a direct connection with the future 540 freeway, and the designs, traffic forecasts, and ramp locations of that completed interchange specifically allow for such a connection. See **Exhibits 3 and 4.**

Existing corridor protection
The "Southeast Extension" is a convenience term used by the NC Turnpike Authority to describe the proposed Southern Wake and Eastern Wake freeways. The Southern Wake freeway currently has corridor protection between NC 55 in southwestern Wake County and the now-existing interchange between I-40 and the US 70/Clayton bypass near the Wake/Johnston County line. The Eastern Wake freeway currently has limited corridor protection for about one mile north of the interchange of I-40 and the US 70/Clayton bypass. The corridor protection approved in 1997 for the eastern terminus of the Southern Wake freeway, and the corridor protection for the southern terminus area of the Eastern Wake freeway (resulting from the Southern Wake freeway 1997 corridor protection), specifically assumes and allows for a direct interchange between 540 and I-40 at the then-proposed US 70/Clayton bypass. See **Exhibit 5.**

System connectivity and relief to existing roadways
Our understanding is that the purpose and need of 540 is to improve transportation mobility in the project area and to reduce congestion on the existing roadway network. Having future 540 converge at the same location with I-40 and the US 70/Clayton Bypass via free-flow ramps would clearly be superior from a system connectivity standpoint since it enables a direct interchange. As an example, westbound travelers from US 70/Clayton Bypass would be able to continue west on 540 without ever entering I-40 – thus allowing a direct connection between two statewide tier freeways without requiring travel on a third statewide tier freeway. The direct connection will reduce volumes and delays on I-40 and relieve the merging and weaving maneuvers that would otherwise ensue without such a robust linkage.

The corollary is that any new location corridor alternative that did not include a direct interchange with I-40 at the US 70/Clayton Bypass would necessarily create a scenario that would require the use of an intervening freeway (I-40) to connect from an existing statewide tier freeway (US 70/Clayton bypass) to a proposed one (the future 540 "Southeast Extension" freeway). Our understanding is that not providing a direct connection between 540 with I-40 at US 70/Clayton Bypass would have a substantial adverse impact on the roadway network, with volumes on portions of I-40 south of I-440 more than 25% higher than would occur with a direct interchange – again contrary to the purpose and need of 540 of reducing congestion on the existing roadway network.

Interdependent but distinct segments, with independent utility and a common convergence point

While the Southern Wake and Eastern Wake freeways are currently being studied as a single corridor by the NC Turnpike Authority, the "Southeast Extension" is a convenience term for two interdependent but distinct freeway segments, as noted above. The Southern Wake and Eastern Wake freeways could have been studied separately from each other, perhaps in sequence instead of concurrently – just as the Northern Wake and Western Wake freeways were analyzed and then constructed under separate timetables.

If the Southern Wake freeway – the section with corridor protection – would have been proposed to have been studied first, it is instructive to consider what the easternmost terminus point (project alternatives convergence point) would have been. Under that scenario, our expectation is that all proposed study corridors would have logically been required to converge at the existing I-40 interchange with the US 70/Clayton bypass. This is the location where the only two freeways on the statewide tier in the entire proposed 540 freeway path already converge – and this convergence point would be congruent with the existing configuration of the I-40/Clayton Bypass interchange that already allows for a future connection with 540 at that location, as noted above and as shown in Exhibits 3 and 4.

Further, if the Southern Wake freeway were then approved for construction and subsequently opened to traffic, with the Eastern Wake freeway delayed for a period of time, the Southern Wake freeway would clearly have independent utility. It would provide (in concert with the new Toll 540 and Toll 147 to the north and west) a direct freeway bypass of the I-40 exits serving Raleigh, Cary, and RTP. In addition, it would provide a direct, free-flow connection with the US 70/Clayton Bypass freeway. That independent utility would clearly be maximized with a direct connection with I-40 at the US 70/Clayton Bypass.

(Note: The above comment is not advocating that the Southern Wake and Eastern Wake freeways should have been studied or should be constructed separately, only that that they could have been considered separately, just like the Northern and Western Wake freeways were, in order to highlight the importance of convergence at I-40 and the US 70/Clayton Bypass.)

(Note: The above comment is not advocating that 100% of the ultimate Southern Wake freeway alignment must remain within the corridor protection envelope, only that the eastern terminus point of the Southern Wake freeway, if studied as an independent project, would likely have been the I-40 interchange at the US 70/Clayton bypass which is the eastern end of corridor protection.)

Summary

The Regional Transportation Alliance (RTA) supports the set of recommended Detailed Study Alternatives (DSAs) for the Triangle Expressway Southeast Extension as listed on Page 5-38 and shown on Figure 5-7 of the Draft Alternatives Development and Analysis Report. A primary reason for our support of the set of new location alternatives is that each of the recommended DSAs provide a direct interchange with Interstate 40 at the US 70/Clayton Bypass. Providing a direct interchange at that location is essential since:

- The US 70 Clayton Bypass is one of only two statewide tier freeways in the path of the proposed turnpike, the other being Interstate 40
- The design and ramp configurations for the existing I-40 / US 70 interchange specifically allow for a direct interchange with 540 at that location
- The provision of a direct interchange with three freeways (i.e., I-40, future NC 540, US 70) at a single point maximizes system connectivity by definition
- The provision of a direct interchange between three freeways minimizes the travel on existing roadways that would otherwise be required – primarily on I-40 – which enhances the fulfillment of the purpose and need for 540 to reduce congestion on the existing roadway network
- The inclusion of a direct interchange with I-40 and the US 70 Clayton Bypass will serve to maximize the independent utility of the Southern and Eastern Wake freeway segments, since either one, if built by itself, would result in a fourth freeway leg of the currently three-leg interchange

Request to include existing US 70/Clayton Bypass freeway on all future project maps
An opportunity to further clarify the essential linkage of US 70/Clayton Bypass exists. See **Exhibit 6** for the current 540/Southeast Extension project map, dated March 2010, and still the current map available via the NC Turnpike Authority web site for the Southeast Extension project. Note that the map does not include the US 70/Clayton Bypass as either an existing or proposed freeway, even though the freeway was open to traffic in June 2008, prior to the commencement of the 540/Triangle Expressway Southeast Extension study work in 2010. Exhibit 2, described previously, shows a regional vicinity map showing the US 70/Clayton Bypass and other area freeways. It would greatly simplify the ability to emphasize the direct linkage between 540 and I-40 at the US 70/Clayton Bypass that each of the recommended Detailed Study Alternatives provide if the existing US 70/Clayton Bypass were shown on Southeast Extension project maps. Therefore, to highlight the importance of the direct interchange of the proposed turnpike with I-40 at the existing US 70/Clayton Bypass junction, the RTA requests that all future Southeast Extension project maps also include the completed US 70/Clayton Bypass freeway.

Exhibit 1 – Statewide Tier facilities in vicinity of proposed Southeast Extension; blue portions of US 70 southeast of Raleigh are existing freeway

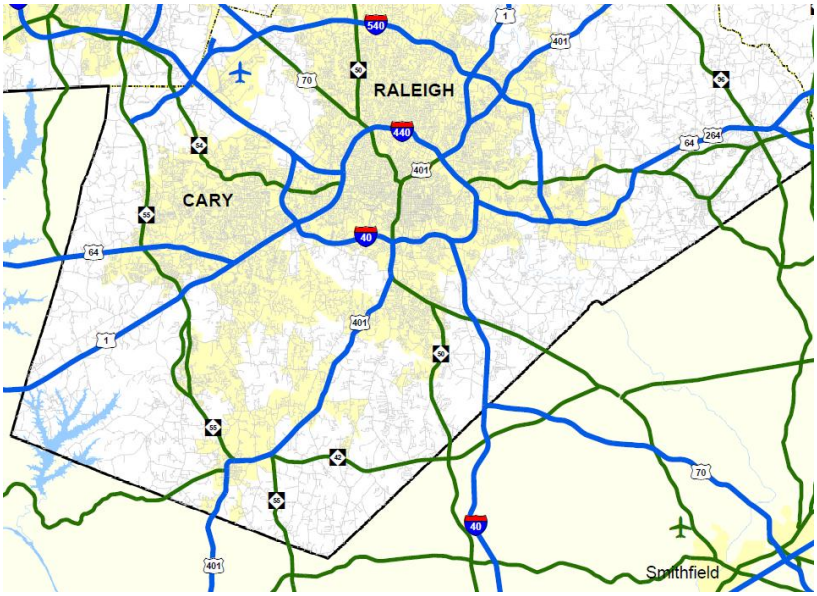


Exhibit 2 – Southeast Extension vicinity map, showing US 70/Clayton Bypass *(courtesy Mapquest.com)*

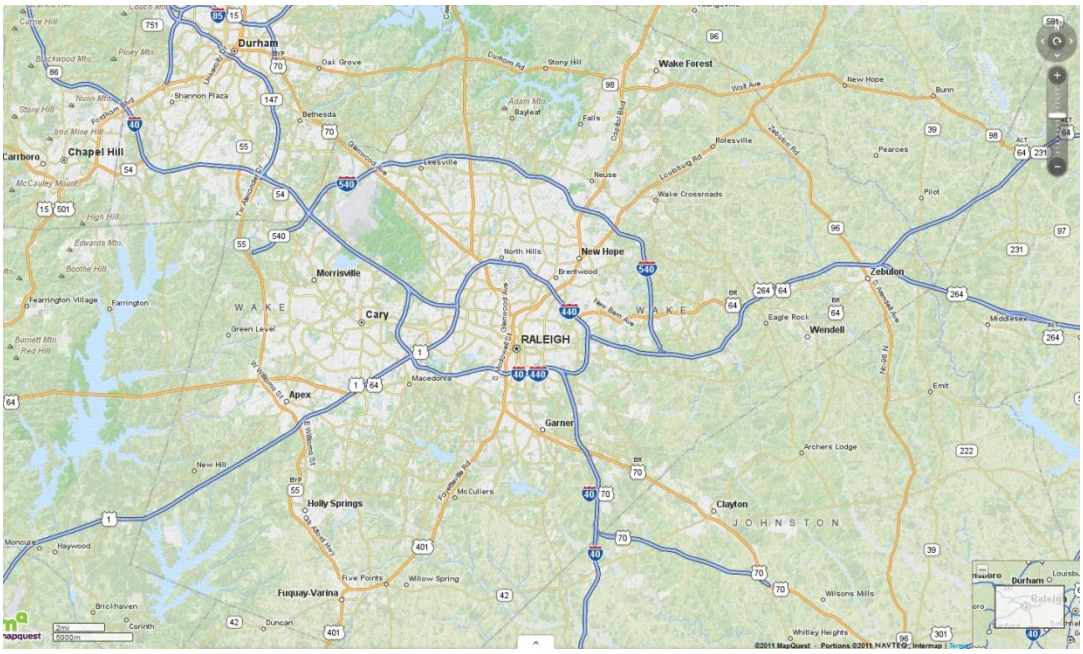


Exhibit 3 – Ultimate design of US 70/Clayton Bypass interchange with I-40 and future 540 freeway

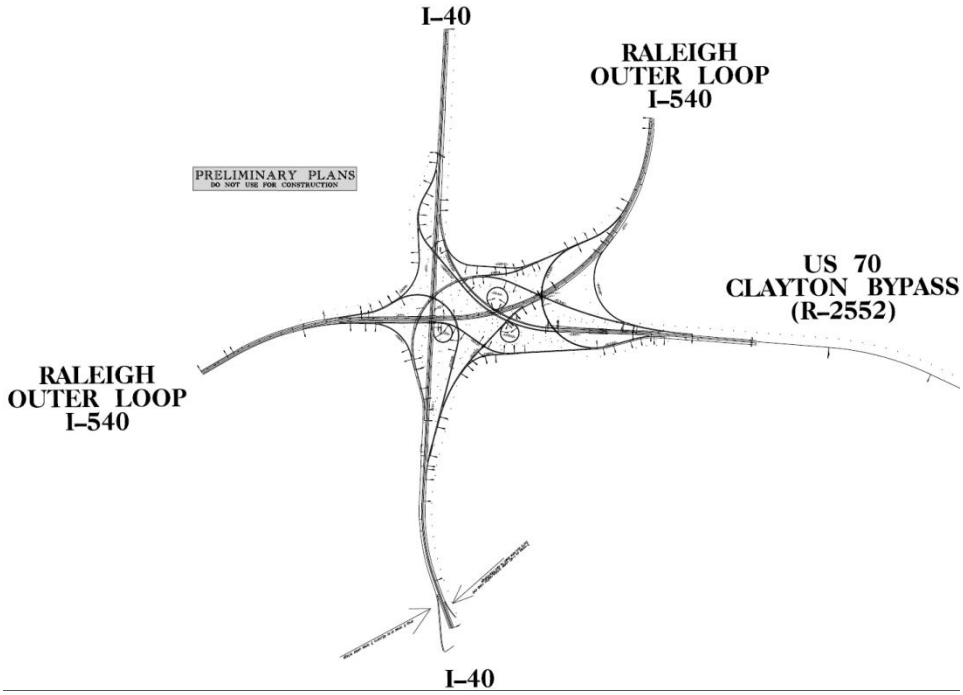


Exhibit 4 – Traffic volume projections used for design of US 70/Clayton Bypass interchange at I-40, showing connection with future 540 freeway as well as initial construction prior to 540 connection

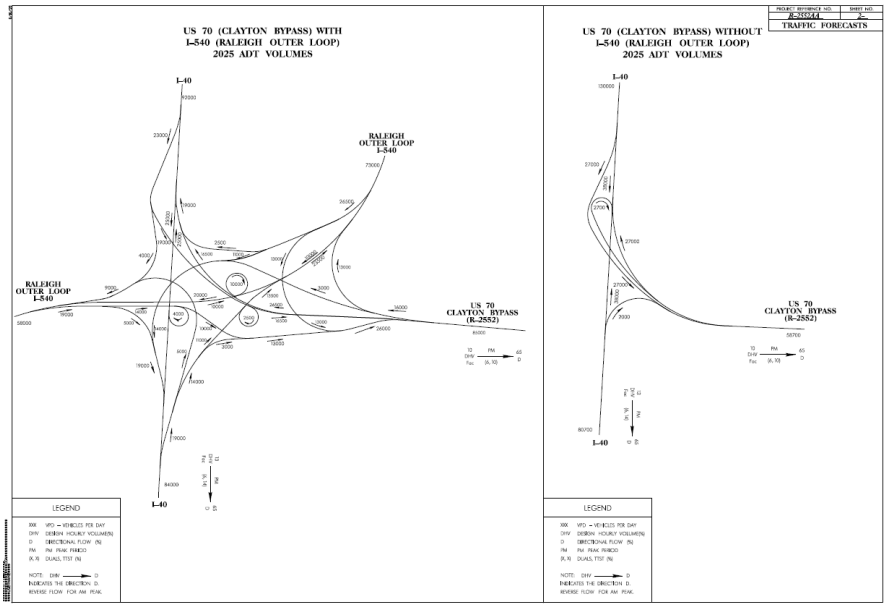


Exhibit 5 – Current 540 corridor protection envelope, showing area in vicinity of existing I-40 interchange with US 70/Clayton Bypass

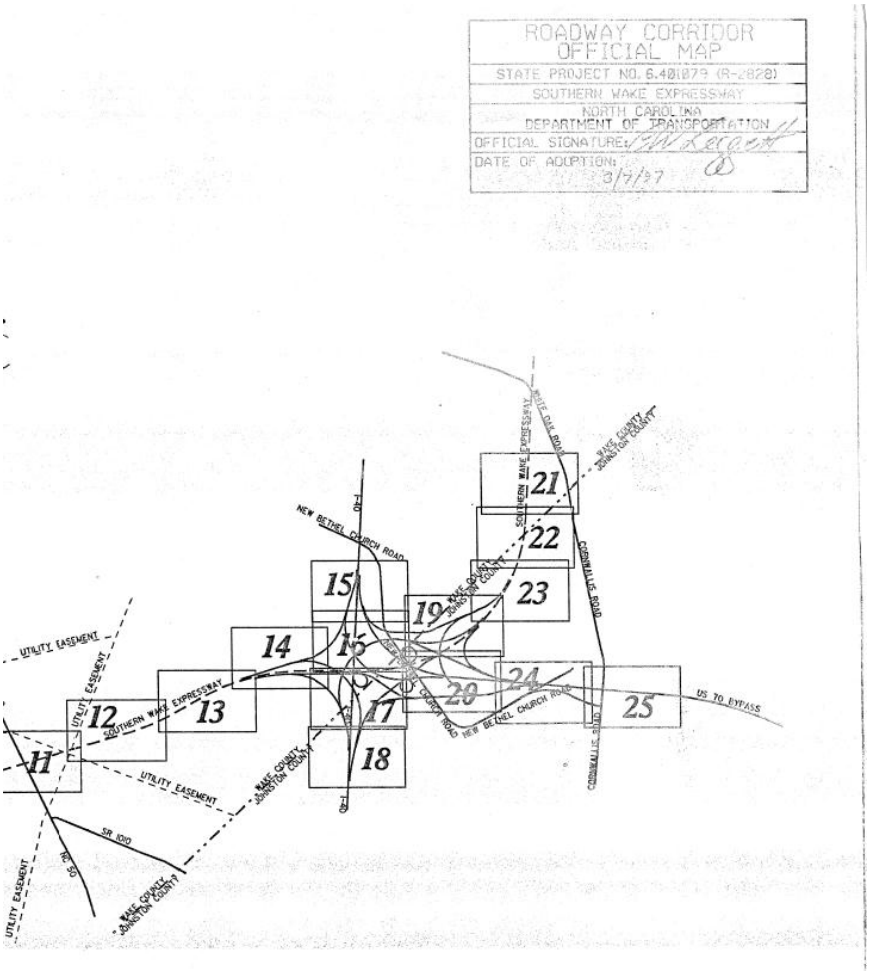
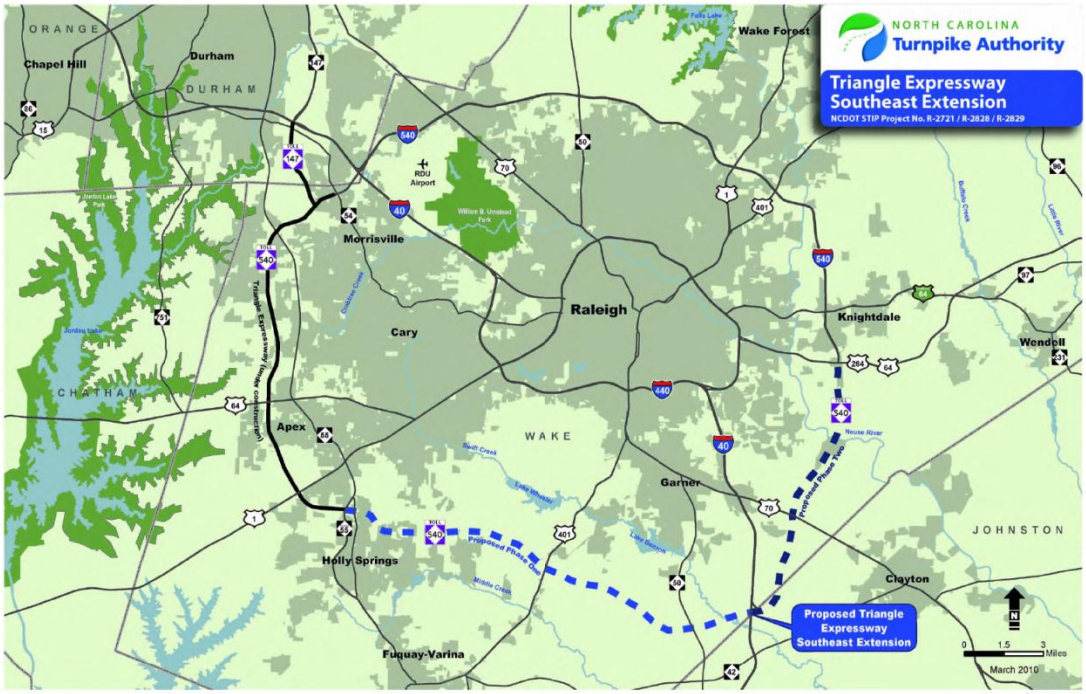


Exhibit 6 – Southeast Extension project map, dated March 2010
(Note: US 70/Clayton Bypass, opened to traffic in June 2008, is not shown on map. The existing US 70/Clayton Bypass freeway is located in the area currently occupied by the "Proposed Triangle Expressway Southeast Extension" bubble. See Exhibit 2 for more specific location information of US 70/Clayton Bypass).



SOUTHERN ENVIRONMENTAL LAW CENTER

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601 WEST ROSEMARY STREET, SUITE 220
CHAPEL HILL, NC 27516-2356

Facsimile 919-929-9421

February 24, 2012

Ms. Jennifer Harris
NC Turnpike Authority
1 South Wilmington Street
Raleigh, NC 27601
jhharris1@ncdot.gov

Re: Southeast Extension - Alternatives Development and Analysis Report

Dear Ms. Harris:

This letter concerns the Draft Alternatives Development Report (the "Report") prepared for the Triangle Expressway, Southeast Extension project, presented to state and federal resource agencies on January 17, 2012. The letter follows our previous correspondence regarding this project of April 6, 2011, attached to this letter for your convenience. While the Report was only recently made available to us, making it impossible to comment as requested February 16, 2012, we are providing these comments as promptly as feasible.

As explained below, the Report does not serve to advance compliance with environmental study or permitting requirements, either procedurally or substantively. The North Carolina Turnpike Authority ("NCTA") remains constrained by the law enacted last session prohibiting the study of a reasonable range of alternatives, which has rendered progress on compliance with key federal requirements impossible. N.C. Gen Stat. 136-89.183(a)(2). We urge NCTA not to continue to expend taxpayer funds to plan for or study, the Southeast Extension, unless and until the legislation artificially constraining the study of alternatives is repealed.

As noted in our previous comments, both the National Environmental Policy Act ("NEPA") and the Clean Water Act ("CWA") require agencies to consider a reasonable range of alternatives to any proposed major federal action. Under NEPA, agencies are required to prepare an Environmental Impact Statement ("EIS") that rigorously explores and objectively evaluate *all* reasonable alternatives. 40 C.F.R. § 1502.14(a). Until FHWA has issued a Record of Decision ("ROD"), no action can be taken on the project that would "[l]imit the choice of reasonable alternatives." 40 C.F.R. § 1506.1(a)(2). Similarly, consideration of a reasonable range of alternatives is a fundamental prerequisite to obtaining either a 401 state water quality certification, or a 404 federal CWA permit. 15A N.C. Admin. Code 02H .0506(b)(1); 40 C.F.R. § 230.12(a)(3).

In the recently distributed Report, NCTA attempts to overcome the requirements imposed by NEPA and the CWA by eliminating the routes that the North Carolina legislature has

forbidden from being studied, namely the "Red" and "Pink" routes, at a very early stage in the environmental review process. This is impermissible under federal law. First, the environmental analysis completed to date does nothing to substantiate the finding that the preferred "Orange" alternative is the Least Environmentally Damaging Practicable Alternative ("LEDPA") as required by the CWA. Second, the limited analysis of the "Red" and "Pink" alternatives presented in the Report is insufficient under NEPA and fails to adequately document the environmental impacts associated with those alternatives. Further, the attempt to eliminate alternatives is made too early in the environmental review process to allow for public notice and comment, violating both NEPA and the CWA.

Selecting the LEDPA

As explained in our previous correspondence, we are concerned about the proposed elimination of all alternatives north of the "Orange" route because those alternatives would have substantially fewer environmental impacts. Rather than demonstrate a reasonable basis for eliminating these alternatives, however, the Report serves to illustrate why they should be kept for further study. For example, while the "Red" route would impact 43.7 aces of wetlands and 29,770 feet of streams, impacts from the "Orange" route will be far higher–88.1 acres of wetlands and 36,120 feet of streams. In addition, as the Report acknowledges, the "Red" route "appears to be the best option for avoiding impacts to important Dwarf wedgemussel habitat . . . and therefore has the most potential to avoid impacts to this [federally endangered] species." Report at 5-22.

Further, by eliminating alternatives closer to the existing urbanized area, there is a greater potential for the highway to induce sprawling growth and increased traffic, leading to a range of added water quality, air quality and other environmental concerns. In the same vein, it is essential that any future study should not only analyze these less damaging new location highway routes, but also include robust consideration of functional alternatives involving upgrades to the existing highway network in the study area. The consideration of upgrade alternatives presented in the Report is insufficient to satisfy NEPA.

In response to concerns from the U.S. Army Corps of Engineers (the "Corps") regarding its ultimate permitting responsibilities, NCTA has engaged in limited additional analysis of the "Red" and "Pink" routes. However, this additional analysis does nothing to temper the Corps' concerns regarding the premature elimination of the less damaging alternatives. Indeed, the new, albeit limited, GIS analysis performed indicates that the preferred "Orange" route would impact almost twice as many "above average" quality wetlands than the "Red" route. Report at 5-36.

By contrast, NCTA has presented very little to support the elimination of the less damaging "Red" alternative and has certainly failed to establish that the "Orange" route is the LEDPA. The Report gives a number of justifications as to why the "Red" route should be eliminated. Some of these reasons, such as the state law mandate not to study the alternative, are irrelevant to the environmental review process. Others, such as the ability of the "Red" route to satisfy the transportation needs in the study area and the complex interplay between 4f, the CWA and the Endangered Species Act, raise issues which must be fully presented for detailed public and agency scrutiny, as envisaged by the NEPA and the CWA.

Insufficient Analysis

The additional analysis presented in the Report performed at the behest of the Corps is insufficient to satisfy NEPA and the CWA. For example, the Report illustrates that NCTA performed a GIS analysis of the *predicted* wetlands that the "Red" route would potentially impact. The analysis did not include any on-the-ground verification and has only 75-85% accuracy. Report at 5-36. This limited study is not sufficient for the purposes of NEPA and the CWA, which require a much more rigorous and accurate study of the affected environment and the potential environmental impacts of alternatives. 40 C.F.R. §§ 1502.15-16; 40 C.F.R. § 230.10.

NEPA provides that the analysis of the affected environment "shall be commensurate with the importance of the impact." 40 C.F.R. § 1502.15. The proposed Southeast Extension is expected to impact a very large acreage of wetlands, many thousands of feet of streams, and the habitat of federally endangered species. These impacts are extremely significant, as demonstrated by the numerous concerns raised by resource agencies including the Corps and the U.S. Fish and Wildlife Service. Such significant impacts must be carefully studied with on-the-ground analysis; short-cut predictions based on GIS models with limited accuracy will not suffice, particularly when they do not even predict a lower level of impact for NCTA's proposed LEDPA.

Public Review and Comment

A core purpose of NEPA is to provide resource agencies and the public with high quality, accurate information so they may be fully informed and engaged in the decisionmaking process. 40 C.F.R. § 1501. As part of this process, an agency pursuing a major federal action is required to fully document the impacts from a reasonable range of alternatives in a Draft EIS. 40 C.F.R. § 1502.14. These alternatives can then be reviewed and commented upon by resource agencies and the public. 40 C.F.R. § 1503.1. The lead agency is then required to consider these comments when crafting a Final EIS and when ultimately settling on a selected alternative in the final ROD. 40 C.F.R. § 1503.4. Similarly, the CWA requires that individual permit decisions be made "after notice and opportunity for public hearings." 33 U.S.C. § 1344 (a).

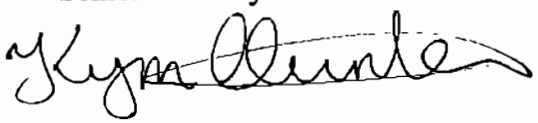
In the Report, which thus far has only been made available to resource agencies and not the public, NCTA attempts to eliminate a number of alternatives before a DEIS has been published. Such early elimination renders any later public review and comment meaningless. Whatever resource agencies and the public have to say about the various alternatives will have no meaning if NCTA has already predetermined which alternative it will select. Comments concerning the "Red" and "Pink" alternatives are rendered irrelevant while NCTA is prohibited by state law from studying them further.

In sum, NCTA's attempt to eliminate alternatives prior to comprehensive study via the Report is inconsistent with the requirements of both NEPA and the CWA. Rather than demonstrate why these alternatives should be eliminated, the Report underscores why, in fact, the less environmentally damaging alternatives must be kept for further study. Moreover, the Report contains insufficient analysis to make any decision regarding elimination at this early stage. Further, the attempt to eliminate alternatives at this stage hamstrings the public's ability to

engage in scrutiny of the agency's process and conclusions. Until NCTA can provide the federally required analysis, it should refrain from expending any further resources to study this project as required under federal law, which has been rendered legally impossible by the legislation adopted last session.

Sincerely,

David Farren
Senior Attorney



Kym Hunter
Associate Attorney

Cc: (via e-mail and US Mail)

Eugene Conti, NCDOT
David Joyner, NCTA
Clarence Coleman, FHWA
John Sullivan, FHWA
S. Kenneth Jolly, USACE
Scott McLendon, USACE
Eric Alsmeyer, USACE
Brian Wrenn, NCDWQ
Gary Jordan, USFWS
Heinz Muller, USEPA
Chris Millitscher, USEPA
Jennifer Derby, USEPA
Travis Wilson, NCWRC
Delores Hall, OSA
Renee Gledhill-Early, HPO
Ed Johnson, CAMPO
Chris Lukasina, CAMPO

Enclosure

SOUTHERN ENVIRONMENTAL LAW CENTER

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April 6, 2011

Via Email and U.S. Mail

Mr. Eugene Conti,
North Carolina Secretary of Transportation
1550 Mail Service Center
Raleigh, NC 27699-1550

Re: Southeast Extension- Elimination of the Red Route

Dear Secretary Conti:

This letter concerns the recently passed Senate Bill S165 which was signed into law on March 18, 2011. The bill amends N.C. Gen Stat. 136-89.183(a)(2), to include language to prohibit any alternatives to the proposed Southeast Extension Toll road that lie to the North of the designated "Orange" route, including the previously considered "Red" and "Pink" routes. In light of the passage of this bill, the North Carolina Turnpike Authority ("NCTA") no longer has the ability to complete the legally required review of feasible alternatives for the project under the National Environmental Policy Act ("NEPA"), for submission to, and approval by, the Federal Highway Administration, as compliant with federal law. We urge, therefore, that NCTA cease to plan for, and expend funds to study the Southeast Extension, unless and until the legislation is repealed.

Under federal law, a reasonable range of alternatives must be considered with reference to the fundamental project purpose. NEPA requires agencies to specify the "underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. § 1502.13. Agencies are required to prepare Environmental Impact Statements ("EIS") that rigorously explore and objectively evaluate *all* reasonable alternatives that could achieve the underlying project purpose and need. 40 C.F.R. § 1502.14(a). A recent articulation of the project purpose and need for the Southeast Extension states that the project is to:

> improve transportation mobility both within the project study area and on the surrounding roadway network. The project would also enhance connectivity between rapidly growing communities south and east of Raleigh and major employment centers within the Triangle Region in order to provide additional high-speed, safe and efficient regional transportation infrastructure for both local commuter trips and regional interstate and intrastate travel. Other desirable outcomes of the project include providing system linkage by completing a controlled-access, high-speed circumferential facility around the

> outskirts of Raleigh and decreasing commute times for project study area residents, enhancing the livability and sustainability of the Triangle Region.[1]

It is clear that the alternatives under consideration by NCTA prior to the passage of the legislation constitute reasonable means of meeting this project purpose, and, thus, cannot legally be eliminated from study under NEPA. 40 C.F.R. § 1502.14(a). Indeed, until FHWA has issued a Record of Decision, no action can be taken on the project that would "[l]imit the choice of reasonable alternatives." 40 C.F.R. § 1506.1(a)(2). The recent attempt under state law to eliminate study alternatives does nothing to alleviate FHWA's responsibilities under federal law, the supreme law of the land. U.S. Const. art.VI, cl. 2.

These concerns are not limited solely to the NEPA process. In a letter dated January 26, 2011, the US Army Corps of Engineers ("Corps"), in accordance with SAFETEA-LU Section 6002, indentified an "Issue of Concern" regarding the proposal to eliminate the "Red" and "Pink" routes as reasonable alternatives for further study. Among other concerns, the Corps noted that the Clean Water Act requires that individual permit decisions be made "after notice and opportunity for public hearings." 33 U.S.C. § 1344 (a). Indeed, without considering a reasonable range of alternatives, it will be impossible for the NCTA to obtain either a 401 state water quality certification, or a 404 federal Clean Water Act permit. 15A N.C. Admin. Code 02H .0506(b)(1); 40 C.F.R. § 230.12(a)(3).

Our concerns about the elimination of all alternatives north of the "Orange" route are further heightened because those alternatives would have had substantially fewer environmental impacts. For example, while the "Red" route would impact 43.7 aces of wetlands and 29,770 feet of streams, impacts from the "Orange" route will be far higher–88.1 acres of wetlands and 36,120 feet of streams. Moreover, where the "Red" route would have greatly minimized, if not eliminated entirely, impacts to the federally endangered dwarf wedgemussel (*Alasmidonta heterodon*), the "Orange" route will have substantial impacts on that species. Furthermore, by eliminating alternatives closer to the existing urbanized area, there is a greater potential for the highway to induce sprawling growth and increased traffic, leading to a range of added water quality concerns, and potentially adversely impacting the region's ability achieve compliance with federal air quality standards.

In fiscal terms, the eliminated routes would have greatly minimized the heavy costs of mitigation for the wetlands and stream impacts. Elimination of the shorter routes under consideration also will increase the construction and maintenance costs of the project. Indeed, it is essential that any future project study include robust consideration of functional alternatives to a new toll highway involving the existing highway network in the study area. Such alternatives would likely cost less far less than construction of a new location alternative.

Finally, we note a recent statement by a NCDOT spokesperson in the Garner News on March 29, 2011, copy attached, stating "We were never going to build the red route. It was only for study." This characterization of the NEPA process as a study to justify foreordained decisions violates the core purpose of that statute. NEPA regulations require that an EIS be implemented to assure that it "will not be used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5. Moreover, regulations demand that EIS's be prepared early enough to ensure that they "can serve practically as an important contribution to the decision making process." Id. The clear inference of the statement to the Garner News, however, is that the agency is engaged in closed-door decision making prior to

[1] Draft Preliminary Purpose and Need for the Southeast Extension, October 2010.

the analysis of environmental and other impacts of different alternatives, similar to concerns we have raised in comment letters and litigation regarding other NCTA projects.

Sincerely,

David Farren
Senior Attorney

Kym Hunter
Associate Attorney

Cc: (via e-mail and US Mail)

David Joyner, NCTA
Clarence Coleman, FHWA
John Sullivan, FHWA
S. Kenneth Jolly, US Army Corps of Engineers
Brian Wrenn, NC Department of Natural Resources, Division of Water Quality
Pete Benjamin, US Fish and Wildlife Service
Heinz Muller, USEPA, Region, IV
Chris Millitscher, USEPA, Raleigh, NC
Travis Wilson, NCWRC
Ed Johnson, Capital Area Metropolitan Planning Organization (CAMPO)
Chris Lukasina, Capital Area Metropolitan Planning Organization (CAMPO)
Senator Dan Blue
Senator Richard Stevens
Representative Deborah K. Ross
Representative Darren G. Jackson
Representative Rosa Gill
Representative Jennifer Weiss

Town of Garner

900 7th Avenue · Garner, North Carolina 27529
Phone (919) 772-4688 · Fax (919) 662-8874 · www.GarnerNC.gov

March 7, 2012

Mr. Steve DeWitt, P.E., Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Re: Triangle Expressway Southeast Extension Alternatives Development & Analysis Report

Dear Mr. DeWitt:

This letter is to advise you of the Town of Garner's position regarding the Triangle Expressway Southeast Extension Alternatives Development & Analysis Report dated January 13, 2012.

The Town of Garner would like to reiterate the statements and concerns noted in: a) our letter dated October 20, 2010 addressing our initial concerns with the devastating human impacts of the red route; b) our Resolution (2010) 2072 dated October 4, 2010 supporting use of the original protected corridor design illustrated as orange on NCTA maps; and c) our letter dated January 9, 2012 detailing the significant negative impacts on numerous public parks in the Town of Garner.

As you know, the Garner community cannot withstand the negative consequences of construction and/or study of the red route. It is destructive to our community and the prospect of study brought our growth and economic development progress to a standstill during 2010.

While a devastating transportation option such as the red route is being actively and publicly studied, no home buyer is interested in buying a house (new or resale) in the road's path and no industry, bank, or developer is willing to invest in any project in or near the route's study area.

Since the NC General Assembly passed legislation on March 18, 2011 disallowing the NCTA to study any route north of the orange corridor, the following positive economic impacts have occurred in the Town of Garner:

Residential

- Sales resumed at the Village of Aversboro, one of the hottest residential projects in Wake County.
- This community has seen 15 house closings since March 18, 2011. Value of these residential sales totals $4,424,000.
- 7 additional home sales are currently pending (waiting to close or under construction).
- An additional 17 lots have been sold to builders by the developer for the next round of construction. This totals $1,190,000 in value.

Commercial/Industrial

- Strategic Behavioral Health, LLC of Memphis, Tennessee announced they would build a brand new facility in Garner.
- Their investment will total approximately $8 million. This project is currently under construction with a late 2012 opening date. The venture capital fund backing this project refused to allow the project to continue until the red route was removed.
- This new facility will employ 200 employees with an average wage of $50,000.
- Penske Truck Leasing Service Center had broken ground just prior to announcement of the red route as a study alternative going through their brand new site. Their corporate management in Pennsylvania was devastated to learn of the possible destruction of their brand new investment in NC.
- Their facility investment totals $3 million and 12 jobs.

Totals

The discontinuation of the study of the red route has resulted in **$16,614,000** in **new investment** in Garner and adds tremendously to our tax base. **212 permanent jobs** and numerous short-term construction jobs are created for the Research Triangle region.

All persons that have engaged in conversation about the red route agree that the red route is horribly detrimental to the Town of Garner and is not worthwhile for construction. Therefore, it seems to be extremely foolish to continue studying it. It is a waste of public dollars and creates irreparable harm to the entire Garner community; current residents, active residential developers, and industrial tenants (current and future) are severely harmed.

It is notable that CAMPO, the Capital Area Metropolitan Planning Organization, representing 18 area municipalities and 5 counties, completely agrees with and supports the Town's position and beliefs on this matter.

The Town is pleased with the Triangle Expressway Southeast Extension Alternatives Development & Analysis Report and commends the NCTA for taking the Garner community concerns to heart in its recent work.

The notable remarks about the **red route that were pleasing to the Town include the following:**

> From page 5-22: "Despite these advantages (mentioned in preceding paragraph) of the red corridor alternative, it is the opinion of NCTA that the numerous disadvantages of the Red Corridor Alternative are so extensive and significant that they outweigh this advantage."
>
> 6.5 pages of text follow outlining why the red corridor alternative is a bad idea. The headings are as follows: a) does not serve traffic needs; b) disproportionate community impacts; c) impacts to Swift Creek watershed area; d) impacts to Section 4-F applicable resources (town parks); e) negative impacts to local economic base; and f) opposed by local governments and local community.
>
> The report also discusses the 6 alternate routes proposed by Town of Garner and the one route suggested by Joe Milazzo of Regional Transportation Alliance (RTA) that follows existing I-40 & US 64.

From the Town's perspective, the bottom line is on page 5-38. The NCTA report identifies five alternatives for additional detailed study in the next phase – Draft Environmental Impact Statement (EIS). These are the options that NCTA plans to move forward with:

1. Orange to Green
2. Orange to Green to Mint Green to Green
3. Orange to Brown to Tan to Green
4. Orange to Brown to Green
5. Orange to Green to Teal to Brown to Green

The Town is extremely pleased that none of these alternatives say red or pink.

We are hopeful that our colleagues at the various state and federal resource agencies will see this matter the same way the citizens of Garner do. The human impacts are too severe to continue with any further study of the red route.

The Town understands that the federal regulatory officials continue to be concerned about wetland impacts. Of course the red route has less wetland impacts – it traverses and obliterates 13 residential neighborhoods, 4 Town parks, and our primary industrial park – Greenfield South. By definition, residential communities, active parks, and industrial areas are located on high ground outside of low-lying, swampy areas. A route through Downtown Raleigh would produce lower wetland impacts, but that is also an unwise option. It is doubtful that the original intent of NEPA was for all new highway routes to go through densely developed suburban or urban areas. If the amount of wetlands is the driving force for route selection decisions, then very few new routes will be built in less populated areas.

For the good of the Research Triangle Region, a vital and important economic engine for the State of North Carolina and the Southeastern United States, Highway 540, Raleigh's Southern Loop, needs to be constructed. Our region does not need to replicate the gridlock, traffic congestion, and associated problems of our neighbors in Atlanta and Washington, DC. Continuing to delay progress on Highway 540's designated route (orange protected corridor) from 15+ years ago is unwise and detrimental.

Thank you for your time and effort involved in preparing the recent Triangle Expressway Southeast Extension Alternatives Development & Analysis Report. Please contact me at 919-773-4407 if you have any questions or need additional information.

Sincerely,

Hardin Watkins

Hardin Watkins
Town Manager

Maseman, Kristin

From: Maseman, Kristin
Sent: Thursday, January 09, 2014 1:03 PM
To: Maseman, Kristin
Subject: FW: Complete 540 - Draft Alternatives Report Comments

---

From: Ridings, Rob [mailto:rob.ridings@ncdenr.gov]
Sent: Monday, October 21, 2013 1:34 PM
To: Kiersten Bass
Subject: RE: Complete 540 - Draft Alternatives Report Comments

Kiersten,
I have no comments on the Draft Report. I think when we narrow down the number of alternatives and do thorough reviews of the potential impacts of each, and then move to pick a LEDPA, DWR will have a good deal to say. But everything I saw on the Draft Alternatives Report looked pretty good to me so far.
Thanks,
Rob Ridings
DWR

e this communication, please delete this message and any attachments. Thank you.

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient and receive this communication, please delete this message and any attachments. Thank you.

North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory
Secretary Susan Kluttz

Office of Archives and History
Deputy Secretary Kevin Cherry

October 10, 2013

Kristin Maseman
H. W. Lochner, Inc.
2840 Plaza Place, Suite 202
Raleigh, NC 27612

Re: Revised Draft Alternatives Development and Analysis Report, Triangle Expressway Southeast Extension, R-2721, R-2728, R-2729, Wake and Johnston Counties, CH 98-0457

Dear Ms. Maseman:

Thank you for your letter of September 5, 2013, transmitting the Revised Draft Alternatives Development and Analysis Report for the above cited project. We have reviewed the document and offer the following comments.

Page 5-3, under the section entitled "Historic Resources Criteria" discusses only historic architectural resources and states that an architectural survey will be conducted after selection of the Detailed Study Alternatives. This section should also include a discussion of archaeological resources and a commitment for an archaeological survey after selection of the project corridor.

Overall, the document is well-written and comprehensive. We concur with your selected alternatives for further study.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or renee.gledhill-earley@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

for Ramona M. Bartos

Maseman, Kristin

From: Alsmeyer, Eric C SAW <Eric.C.Alsmeyer@usace.army.mil>
Sent: Monday, November 04, 2013 4:01 PM
To: Kiersten Bass; 'militscher.chris@epamail.epa.gov'; Wicker, Henry M JR SAW; 'gary_jordan@fws.gov'; 'rob.ridings@ncdenr.gov'; 'travis.wilson@ncwildlife.org'; 'amy.simes@ncdenr.gov'; 'Gledhill-earley, Renee (renee.gledhill-earley@ncdcr.gov)'; 'ed.johnson@campo-nc.us'; 'thouser@ncdot.gov'; 'wbowman@ncdot.gov'; 'tbford@ncdot.gov'; 'driffey@ncdot.gov'; 'mfurr@ncdot.gov'; 'Mckee, James S (smckee@ncdot.gov)'; 'dproper@ncdot.gov'; 'gasmith@ncdot.gov'; 'Reams, Edwin D (ereams@ncdot.gov)'; 'Pleasant, Kyle A (kpleasant@ncdot.gov)'; 'Memory, John R (rmemory@ncdot.gov)'; ''joe@letsgetmoving.org' (joe@letsgetmoving.org)'; 'Johnson, Benjetta L (benjettajohnson@ncdot.gov)'; 'Lineberger, Nicholas C (nclineberger@ncdot.gov)'; 'Desai, Rupal P (rpdesai@ncdot.gov)'; 'Snipes, Adam J (ajsnipes@ncdot.gov)'; 'alyudmi@ncdot.gov'; 'ancozzarelli@ncdot.gov'; 'Staley, Mark K (mstaley@ncdot.gov)'
Cc: 'Clarence Coleman'; 'George Hoops'; 'Jennifer Harris'; 'emidkiff@ncdot.gov'; Bruce, Roy; Maseman, Kristin; Eason, Brian; Schlotter, Jeff; 'jstudt@dawsonassociates.com'; 'fskaer@dawsonassociates.com'
Subject: RE: Complete 540 - Draft Alternatives Report Comments (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Kiersten: The Corps has no comments on the latest Draft Alternatives Report at this time, and is satisfied that the alternatives proposed for further study meet the Corps' requirements under Section 404 and NEPA.

Please reply or call if you have any questions or if I may serve you in any other way.

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://per2.nwp.usace.army.mil/survey.html to complete the survey online (Paper copies available upon request).

Eric Alsmeyer
Project Manager
Raleigh Regulatory Field Office
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From: Kiersten Bass [mailto:kbass@hntb.com]
Sent: Monday, November 04, 2013 1:31 PM
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APPENDIX E
Public Hearing Transcript

OFFICIAL PUBLIC HEARING TRANSCRIPT
Public Hearing Transcript

Complete 540 – Triangle Expressway Southeast Extension Project
T.I.P. Nos. R-2721, R-2828, and R-2829

December 7-8, 2015

Coy Batten: Hello my name is Coy Batten. I live at 1507…excuse me…1507 North Gleneagle Drive in Garner. And I'm here, of course to review the maps and I've already reviewed the EIS at the Planning Department in Garner. And I am totally opposed to the Red Route.

Now, I realize that the completion of 540 is necessary to provide the transportation needs of this area and the people that are travelling. And I realize that the impact on the wetlands and the habitat of the Dwarf Wedgemussel has to be given special emphasis, but it's unbelievable the lives that this 540 Route is going to change. It's not just the 4 or 500 that's going to be moved, it's the thousands and thousands that is going to have to live there with these sound barriers and the traffic noise and, and, all the stuff that's going.

I just hope that some other alternatives can be, can be evaluated, well the other alternative will be evaluated and this Red Route eliminated, because if the Red Route is selected for the completion of 540, I hope the outer loop will never be constructed. And this is Coy Batten. Thank you very much. Bye, bye.

Nick Gervase: My name is Nick Gervase from 408 Settlecroft Lane in Holly Springs. I'm also the President of the Brackenridge Pointe Homeowners Association. I have three points tonight.

Number 1, it's clear from your data from the environmental study the Orange Route that goes to…from Holly Springs 55 over to 401 and out further, there's at least 5 or 6 Orange Routes that clearly are the least expensive of all the routes by hundreds of millions of dollars. In addition, the Orange Routes take up the least parcels, for instance some at 141 for Alternative 1. Alternative 8 is 1,213 almost a 500 parcel difference.

So, on 2 fronts, you're taking up less people's homes, you're disrupting less people, you're disrupting less subdivisions and on the financial side, the Orange Route is far less expensive than any of the other routes.

Last, I'd like to say that for 21 years, the North Carolina Department of Transportation has been telling people where to build and where not to build. You picked the Orange Route years ago, people did not build for the most part where the Orange Route was, we built elsewhere. It would not be ethical to change the highway location from orange to something else after telling people where they should be building their homes. That would be wrong. And we certainly expect the North Carolina DOT, as an ethical

organization and they'll stay where the original plan, the lowest cost plan, and the plan that causes least disruption in all of the towns of southern Wake County. Thank you very much.

Matt Murphy: My name is Matt Murphy, 600 Redhill Road, Holly Springs, 27540. I attended the meeting on Tuesday evening, December 8th.

I am in favor of Alternative Number 1, orange to green, on the basis that it's the alternative to which land use has been restricted for 20+ years. Developers and home purchasers and businesses have made decisions for many, many years on the basis of that route being protected. To my understanding, it's the option that disrupts the least number of businesses, impacts the least number of homes, and provides cost effectiveness as well.

Any version of the purple and blue combination is not a viable alternative on the basis of the number of homes that are disrupted, businesses that are disrupted. It seems to have an extraordinarily high impact. It also, in my estimation, opens the state to potential lawsuits on the basis of so many neighborhoods and developments having been located in a way that was seemed to have been clear after the Purple Route was taken back off the table, I think around 2010.

So, I'm strongly in favor of Alternative Number 1, strongly opposed to anything having to do with purple or blue. In fact, would like to see purple and blue removed from consideration on the basis that it is such an inferior choice to other options.

John Lydon: Hello, my name is John Lydon. I reside at 7516 Orchard Crest Court, Apex, 27539. I'm commenting in regards to the Bells Lake Expansion and the 540 Exit to Bells Lake. The Bells Pointe community will be impacted significantly.

Bells Pointe community consists of Bells Pointe Court and Orchard Crest Court and it comes off of Bells Lake Road. The widening of the road would basically destroy half of the neighborhood. Each house is on septic and the proposed land acquired by the county will take away any room for septic and the repair barrier; thus forcing the acquisition of every house on that side of Bells Lake. Therefore, the result will basically be destroying the entire neighborhood which consists of 26 homes, friends and family, everyone great friends with each other, great neighborhood, kids playing…just a beautiful, beautiful area.

And to be destroyed, by a simple road, the amount of lives that would be impacted is numerous. It's ridiculous, the amount of lives that would be impacted, the whole neighborhood being destroyed. Now, each house on the opposite side of the street that's…that does not back up to Bells Lake Road would then be forced to be open to Bells Lake Road and no *(inaudible)*. There will be no children playing. There will be no walking in the street. The neighborhood would be open to anyone who wants to come and go. Crime would probably increase. It's just a horrible, horrible proposal.

I hope you take my comments seriously. I moved here from New York for a better life. I'm a retired police sergeant. I found Bells Pointe. It took me a year to find it and I fell in love with it. My wife and I, we truly, truly love it and our kids love it. We've made so many friends and it would just be devastating. I've already experienced 911, the 2nd tower almost fell on me. I survived that and I really don't need to go through this again. I appreciate you taking the time and listening to my comments and I hope that, that the expansion will not affect my neighborhood at all. Thank you.

William Debrauwer: My name William Debrauwer. I live at 2609 Thurrock Drive, Apex, North Carolina 27539. My comment is my preference would be for the Orange Route to Highway 401. East of that I have personally no opinion of other than I would prefer it impact, have the least impact on individual homeowners, in other words, people living in houses. But for the Orange Route, that would have the least impact on us.

I definitely do not endorse the Red Route. I used to live in Garner. I have a lot of friends there. I think that Red Route is just atrocious and I hopefully that it never comes to fruition. Also, I'd like to say that this needs to be moved ahead. I'm not very happy with the way the state is handling, how we're basically holding people's property hostage. The Map Act, back, I think that's wrong. You either buy the property and if you don't use it, sell it or let those folks do, you know, what they want with their property. I mean you can't…it's wrong. It's wrong for the state to hold those people hostage, basically with regards to their property rights.

So, hopefully that gets fixed too. Anyway, you know, Orange Route all the way to 401 and then what happens east of 401 the least impact to nobody. Thank you.

Hearing Adjourned.

Jamille Robbins, Moderator
Public Involvement Unit
December 7-8, 2015

Typed by Neighborhood Solutions

OFFICIAL PUBLIC HEARING TRANSCRIPT
Public Hearing Transcript

Complete 540 – Triangle Expressway Southeast Extension Project
T.I.P. Nos. R-2721, R-2828, and R-2829

December 9, 2015

Alright, good evening ladies and gentlemen. Can everyone take their seats? Can you hear me. *(Audience states no.)* Can you hear me now? How's that? Is that better? *(Audience states yes.)* Can you hear me in the back? Just one second. How's that now? A lot better? *(Audience states yes.)*

Alright. Well, good evening ladies and gentlemen. I would like to welcome you all that are here and those joining us via the live webcast to the North Carolina Department Transportation's Formal Corridor Public Hearing for the Complete 540 Project, also known as Transportation Improvement Program project numbers R-2721, R-2828, and R-2829. My name is Jamille Robbins. I am a Public Involvement Officer with the Department of Transportation and I will be your moderator for tonight's public hearing.

Real quick some housekeeping, restrooms are out the door to the left and just past the sign-in table there's a hallway, there are restrooms there. There are also restrooms just outside to the right in that hallway. If you have a cell phone on, please turn to silent. These are formal proceedings. We are recording and you don't want to interrupt that with a ringtone.

As far as ground rules go, I used to have a long laundry list of rules for public hearings and I realized they all can be condensed into just one main rule and that is the "golden rule". That is to treat others as you would like to be treated and that is very appropriate in a public forum such as this, especially when we get to the public comment period; because there are different opinions on this project. If someone gets up to speak and their comments are different from your opinions, don't boo them or heckle them from the crowd. Please provide them the same respect that you would like if you got up to speak.

Alright real quick, I do want to recognize the staff that are here tonight. It's too many to go name by name in the interest of time. But all of the people in green shirts have done a lot of work. A lot of hard work went into the preparation of these public meetings and public hearings. So, I just wanted to recognize them.

I do want to recognize a few people in particular. Our Division Engineer, Mr. Joey Hopkins and our Division Construction Engineer, Mr. Dennis Jernigan. I also would like to recognized our NCDOT Project Planning Manager, Mr. Eric Midkiff and our NCDOT Roadway Project Manager, Mr. Tony Houser. And I would also like to recognize our Director of the Turnpike Authority, Mr. Beau Memory.

And I would be remiss if I didn't recognize all the hard work by our consultant team, H.W. Lochner and HNTB; Mr. Roy Bruce, Jeff Schlotter, and Kristie Maseman and Mrs. Kiersten Bass and Jennifer Harris with HNTB.

We also have several local officials, elected officials here tonight. Our State Representative, Nelson Dollar is here and State Senator Chad Barefoot and I know we have several Mayors from Holly Springs, Fuquay, and the Town of Garner here tonight and their town councils and town staff. So, I would like to thank them all for coming out tonight as well.

So, let's go ahead and get started. And I will do a brief overview of what to expect from tonight's hearing. We'll start with the purpose of tonight's hearing and your role in that process. We'll do a project overview. We'll talk about the project alternatives. We'll talk about the cost and impacts of those alternatives, the right-of-way acquisition process, and the next steps in the project development process, and then we get to the most important part of tonight and that's the public comment potion. Again, this is a public hearing and we've come out to hear what you have to say.

The ***purpose of tonight's hearing*** is simply to make you, the public, a part of the project development process. This is an important step in our continuing efforts to make you a part of this process. So, specifically tonight we want to get your input on the Draft Environmental Impact Statement that was prepared and is the environmental document that is prepared for this project.

We'll talk a little bit about the "why" of the project. In transportation terms that is known as the ***purpose and need***. We'll present the detail study alternatives to you and get your input on those alternatives. Now, the main focus of this round of public hearings is to select the location for this project, so selecting an alternative. Currently, we have 17. We want to get that down to one alternative. And so your input is vital in that aspect.

We really don't want to get into any design questions tonight because that's really not the focus of this public hearing. I know you've seen the ***public hearing maps*** and you've seen functional designs in those corridors. A lot can change when we actually get into the next phase of this project.

Now copies of the Draft Environmental Impact Statement or DEIS and the maps that you've seen here tonight have been available at the following locations and all of this is in your handout. Now, does everyone have a handout? Okay. And copies of the DEIS only have been available at the following locations.

Now, I can't stress enough the importance of ***public participation*** in this process. And you participate by making your voices heard. You do that several ways. We've provided a lot of different options for you to provide input. You can submit written comments here tonight. In each packet, there was a ***comment form***. You can fill that out and leave it here tonight. You have until January 8th to submit comments. You can go home, take time to formulate your ideas, and send those in to us. You can submit comments via email. You

can fax your comments to us. You could also submit your comments via the on-line public engagement software tool we're using, known as MySidewalk. You can also engage with your fellow citizens on that site. And also on our project website, we have an interactive comment form that you could fill out. And you can also have your comments recorded here tonight during this formal preceding. And also, we had oral comment station at the public meetings this week. So, if you didn't want to write your comments, you were able to just speak into the mic at the oral comment station and we'll have those transcribed as well.

In an effort to broaden the outreach and participation for citizens we are streaming the presentation live via the web. And for those of you that are attending via the webcast, you can submit your comments in the question box. And we will take those in as public comments.

Some maybe asking ***what is done with my input***? Well in about six to eight weeks from now NCDOT staff from various branches, all of which play a role in the development of this project, will convene to discuss each and every comment that have been received through the public comment period. Again, that is January 8th. So, we'll go through each and every one of those comments and prepare a response to those comments. And we will incorporate public comment into our decision on recommending an alternative.

Now, I want to be clear that the Department cannot just take public comment into consideration when making these decisions. We have to balance that against good, sound, engineering criteria. We have to balance that with safety, which is our number one goal, impacts to the natural and human environment. We have to look at cost and traffic service as well. So, it's a very complex balancing act. But we do have a lot of practice in it. But what that allows us to do is put the best product we can on the ground for the citizens of North Carolina.

Now, as I stated earlier, we do hope to come out of this ***post hearing*** meeting with a recommended alternative. Following the post hearing meeting, we will meet with our agency partners. Those are various state and federal regulatory and resource agencies, such as U.S. Army Corp of Engineers, the U.S. EPA, U.S. Fish and Wildlife Service, the State Historic Preservation Office, the Capital Area Metropolitan Planning Organization, CAMPO, just to name a few. But we will meet with them to discuss all the public and agency comments. And we hope to come out of that meeting with a preferred alternative.

Following the selection of the ***preferred alternative***, we will do a major media blitz to announce that selection and the reasons for that selection. We'll send a newsletter out to everyone on the mailing list. It will also be announced on the website. We'll work with the local municipalities as well to get the word out. It is not lost on us that a lot of people have been in convert by this project; living with the shadow of this project coming for quite a while. So, we do hope to make that decision in the spring. We hope to reach a selected alternative in the Spring of 2016.

Now, this is a Federal-Aid Highway Project. Traditionally, under that program, the feds pay 80% of the cost of the project and the state pays 20%. But CAMPO or Capital Area Metropolitan Planning Organization identified the Complete 540 Project as a toll facility. So, tolling is an additional funding source for this project. And by committing to tolling, we will be able to deliver this project many years ahead of traditional funding sources.

Now, let's get back to the "why" of the project. Again, in transportation terms that is the ***purpose and need*** for the project. Now, this area, the Raleigh-Cary area has grown by 52% since 2000 and it is continuing to grow. North Carolina is a great place to live. This is a great area. So, people are coming. We are seeing a lot of development in the area. And with all that growth it puts a strain on our existing transportation structure. And so, with that we need more route choices. We also need to reduce the congestion on our existing roadway network. So with the said, the purpose of this project is twofold.

(1) to improve the mobility within and through the project study area during peak travel periods and
(2) reduce forecast congestion on the existing roadway network within the project study area.

Now, a secondary benefit is the improved system linkage or system connectivity within the exiting roadway network.

Now, the proposed improvements are consistent with the Long-Range Transportation Plans for the local municipalities within the study area, local governments within the Capital Area Metropolitan Planning Organization or CAMPO, again, as well as NCDOT have included this project in their adopted plans.

Again, the project is the completion of the 540 Outer Loop around the greater Raleigh area. This will extend the project from it western terminus or endpoint at NC 55 eastward to its current eastern endpoint at U.S. 264. It is proposed as a six lane median divided freeway with full control of access. That means access to and from the new roadway will be via interchange only. That means no private driveways will be allowed to connect to the roadway. And as I said before, it is identified as a toll facility just like you have on NC 540 now. The tolling will be captured electronically as it is today.

Let's talk about the ***detail study alternatives***. You'll see they're 10 color coded segments that can be combined in various ways to assemble 17 detail study alternatives. There are four western routes and there are five eastern routes. And so, we'll go through each detail study alternative and I will just kind of point out some of the major advantages and disadvantages for each one. And instead of using "detail study alternative", I'll use the acronym DSA, okay.

So, detailed study alternative 1 consists of the combination of the Orange and the Green Routes. Now an advantage that all of the Orange Routes have is that it follows a protected corridor that has been protected since 1995. So development within that corridor has been limited. And as a result, the Orange Routes have the fewest relocations compared to other routes.

One of the disadvantages of the Orange Route is that it has higher wetlands impacts. It also crosses a portion of Swift Creek adjacent to or through a livable habitat for a federally protected species, which is the Dwarf Wedgemussel.

And the Green Route avoids any use of any public lands. However, it would impact a small communications tower and it may impact one of a group of large communication towers. It also bisects the Randleigh Farm property. It is a plan mixed use community. It goes right through the middle of that.

Now, DSA 2 is the orange, green and mint combination. The mint impacts the communication towers as well. But it shifts the impacts to the Randleigh Farm property further to the east, more to the eastern edge of that property.

DSA 3, which is the orange, brown, tan, green combination. The tan corridor shifts impacts to the Randleigh Farm property to the east as well. It also avoids the communications tower…communication towers. *(Ooh, I keep saying communications tower.)*

The disadvantage of the tan corridor is that it could cause more disruption to more homeowners. It also impacts eligible and historic property, known as the Baucom-Stallings House. And it also impacts the northwest corner of the Clemmons Educational State Forest.

DSA 4 is the orange, brown, green combination. The Brown Route avoids the communication towers and avoids the Randleigh Farm property. The disadvantages of the Brown Route is that it impacts several municipal properties, the Raleigh Police Department's Training Facility, the Sprayfield and Neuse River Water Treatment Plant. Those are the two main impacts there.

DSA 5, the orange, green, teal, and brown combination. The teal avoids the Randleigh Farm property as well but it will still impact those communication towers. And it would impact the Sprayfield and the Neuse River Waste Water Treatment Plant as well, and the RPD *(Raleigh Police Department)* training facility.

DSA 6 is the orange, red, green combination. The benefits to the Red Route is that it has the least amount of wetland impacts. It also crosses upstream of the Dwarf Wedgemussel habitat. However, it does impact two watersheds. And those Red Routes also have 69% more residential relocations as compared to the Orange Route. It also impacts two eligible historic resources, Dr. L. J. Faulhaber *(I hope I'm saying that correctly.)* Farm and the Bryan Farms Historic District. And it also has serious negative impacts on land use and planning objectives and desired development patterns.

DSA 7 is the orange, red, mint, and green combination. *(Lets go back. I skipped one.)*

Alright, Detailed Study Alternative 8, actually 8-12 have the purple blue combination. The benefits of the purple blue combination in combination with the lilac have fewer

wetland impacts. The purple blue combination also provides better access to the growing areas near Fuquay. The disadvantages of the purple blue combination, again, detailed study alternatives 8-12 is that it results in 108% increase in residential relocations over the Orange Routes. It also affects some planned parks in Sunset Oaks Park in the southeast regional park. It also has negative impacts to the Town of Holly Springs and Wake County Land Use Plans. And the lilac corridor directly impacts the Dempsey E. Benton Water Treatment Plant.

So, DSA 9, again, is the orange, purple, blue, lilac, green, and mint combination. DSA 10 is the orange, purple, blue, lilac, brown, tan, green combination. DSA 11 is the orange, purple, blue, lilac, brown, green combination. Twelve is the orange, purple, blue, lilac, green, teal, brown combination. *(Oops, I went too far.)*

Now, DSA 13 is the orange, actually 13-17 all use the full lilac corridor. As a result, it has 76% more relocations over the Orange Routes. So, DSA 13 is the orange, lilac, green. DSA 14 is the orange, lilac, green, mint. DSA 15 is orange, lilac, brown, tan, green Sixteen is orange, lilac, brown, green and DSA 17, finally is the orange, lilac, green, teal, brown.

Now, for more information…more detailed information on those impacts, feel free to pick…You can view this online. This is the Draft Environmental Impact Statement and all the different impacts are listed in here.

So, let's talk a little bit about the ***project costs and impacts***. This evaluation matrix is in your handout. I'm not going to take the time and go through that entire matrix, but I will touch on two important factors in that. That is the cost. The costs estimate for the various alternatives range anywhere from roughly $2.2 billion to $2.6 billion. The lowest is Alternative 2, nearing $2.2 billion and the highest is Alternative 12 nearing $2.6 billion. Relocations range anywhere from 243 to 569 relocations. The lowest being Alternative 4 and the highest being Alternative 9.

Now, Section 4(f) is a federal law that offers protection to publically owned parks, recreation facilities, wildlife refuges, and historic sites. There is a provision in Section 4(f) that states that if you have a minor impact to a Section 4(f) property that an avoidance alternative is not needed as long as you can prove that it is a minor impact, also known as a "de minimis" impact. And we have three of those properties. One is the Middle Creek School Park. The other is the Watershed Extension Loop Trail in Clemmons Educational State Forest and the Neuse River Trail.

A little bit about the ***right-of-way acquisition phase or process***. Again, it's still a little early to be talking about right-of-way acquisition. We first want to begin to pick the location of this project. Those corridors that I just went through are all 1000-feet in width. The actual project would only be about a 1/3 of that size, so around 300-feet. Again, wider at interchange locations.

So, when we study that 1000-feet area so that we know those environmental constraints within those corridors. So, when we start moving towards more detailed designs, we know what's out there. And in essence the actual roadway design could snake anywhere in-between that 1000-feet corridor.

But, I still want to let you know about our right-of-way acquisition phase. We will be back out with a design public hearing. And we will be looking at the particular impacts of design on properties at that time and that'll be a more appropriate time to be concerned about the right-of-way acquisition.

But once decisions are made regarding final design, the limits of the project will be staked in the ground. And if you are an affected property owner, a Right-of-Way Agent will arrange a meeting with you to discuss the project with you, how it affects you and your rights as a property owner. If permanent right-of-way is required from you, then an appraisal will be done on your property. And the current market value of that property at its highest and best use will be offered as monetary compensation.

Now, during this process, the Department must:

treat all tenants and owners equally;
we must fully explain the owner's rights;
we must pay just compensation in exchange for property rights; and
we must provide relocation advisory assistance.

That is if you are a relocatee, if you are going to be displaced as a result of this project, additional assistance in the form of advice and monetary compensation is available. Now, we do have our Right-of-Way Agents here. They are the experts on that subject. So, if you have any detailed right-of-way questions, feel free to meet with them after the public hearing. Or if you have any right-of-way questions, just send those again with your comments.

Next steps, the Draft EIS review and public comment ends on January the 8th. Again, we hope to have had a preferred alternative selected in the Spring of 2016. The final EIS, which is the next environmental document and the Record of Decision, which is the final environmental document in this process. The dates have yet to be determined. But we do know that those documents have to be and will be completed in time for us to meet the anticipated LET date or construction contract award date in 2018.

Now, the project will be awarded as a ***Design-Build*** project. The Design-Build process is still a fairly new project delivery method for the Department of Transportation. It differs from our traditional project delivery method, which is we go through planning and design. We complete the final design plans and right-of-way plans for the project. Then we allot 18-24 months to purchase all of the right-of-way needed to construct that project. And then we begin construction.

Well, the industry realizes there are a lot of efficiencies that could be made up in that timeframe. So, what the Design-Build process allows us to do is contract with a team of

designers and contractors to be responsible not only for the final design of the project but the right-of-way acquisition of the project as well as the construction of the project. So, in essence a Design-Build Team could be constructing in one portion of the project, buying right-of-way in another, and finishing the final design in yet another portion of the project.

And we've seen that lead to faster completion dates. We've also seen a lot of innovative designs come out of the Design-Build process that further reduce costs and impacts. And we've also seen quick resolutions to issues that arise during to the construction phase. And anyone that has been involved with construction whether it be a home improvement project or some major construction project, it's not a question of "if" an issue will arise, it's when. So, the Design-Build process is a very efficient and a very good process for us.

Alright, enough of me talking. We have reached the most important part of the public hearing and that is the ***public comment*** phase. We're asking everyone to come up to the mic that is in the middle of the room here. When you come up, please state your name and address. And I will call everyone up in the order in which we received these sign-ups.

And one other thing I failed to mention, minutes of that post hearing meeting where we go through each and every comment and prepare a response, a summary of those minutes will be prepared. So, if you want to see what was discussed at that meeting and the responses to the various comments, put a note on your comment that you would like a copy of those post hearing meeting minutes, alright.

Moderator: Alright, our first speaker is Mr. Joe Milazzo.

TRACKING ID – O-06

Joe Milazzo: Good evening. I'm Joe Milazzo. I'm Executive Director of the Regional Transportation Alliance Business Coalition. RTA is a regional program of the Greater Raleigh and Chamber of Commerce. We support the complete 540 initiative and the completion of all remaining sections of the proposed 540 Freeway in southern and eastern Wake County.

540 southeast extension turnpike will help create a resilient transportation network in the southern part of our county with commuting, freight, transit, and more. I'd like improvements to secondary roadways with traffic signals. This new stop light free roadway will provide free flow rapid mobility across Wake County; both during peak periods and throughout the day.

Since the extension of 540 is proposed to be constructed as a toll road, the Turnpike Authority will be able to manage the *(inaudible)* throughout the day as traffic grows in the future. For example, they could consider providing off-peak discounts or other measures to optimize traffic flow.

Extending 540 into southern Wake County would also create an opportunity to support future express car service in the area. Even today, the Triangle or Regional Transit

Agency frequently uses portions of the existing 540 Triangle Expressway Turnpike during peak periods to avoid congestion on I-40 and keep transit schedules on time.

While our organization has not endorsed any of the specific corridor alternatives, we urge North Carolina DOT, Federal Highway Administration, and the many partner resources agencies to select a corridor and the appropriate mitigation that will protect the environment while maintain broad support from the community.

RTA would like to thank NCDOT and the many federal state partners for their leadership on this project and for the opportunity to speak with you this evening. Thank you.

Moderator: Thank you Joe. Next we have State Representative, Nelson Dollar. Also, I forgot to mention, we're asking everyone to keep their comments to three minutes. If you're going to run over, once we've exhausted the list of speakers, you can come back up and speak if you like.

TRACKING ID – O-07

State Representative Nelson Dollar: Thank you. I'm Nelson Dollar. I live at 125 Long Shadow Lane in Cary. I'm a member of North Carolina House serving in District 36, which covers a large segment of the study area.

I want to personally thank DOT and their consultants for their engagement, their professionalism, and how they've been reaching out to the public. It's very much appreciate it.

I've had the opportunity to review the Draft Environmental Impact Statement and more than ever I support completion of 540 along the Orange Route. Senator Barringer, who also represents a good portion of this area was unable to be here this evening, but she wanted me also express her strong support for 540 along the Orange Route.

Completing 540 is important. It's vital. It's been on the books for decades. It is important to note that all of the decisions have been made by the state, by the county, by local municipalities, by cities, by businesses, by individuals, families, with the expectation that this critical transportation artery would be built along the Orange Route. That's been the expectation for 20 years. And there are a host of landowners who really have limited use of their property over this period of time because this was a protected corridor. They certainly paid a substantial price in many ways for protection of the project already. So, we need to follow that.

The entire concept of planning ahead for transportation infrastructure needs and demands, we need to keep faith with the people to build this highway where we've told them where it was going to be built. Nevertheless, an environmental process does require examining the alternatives as has been discussed tonight. That having been done, I believe again, the Environmental Impact Statement supports building along the Orange Route.

The General Assembly has long opposed, for example, the Red Route. I commend Mayor Williams and the Town of Garner and their advocacy on this issue. And they certainly have my continued commitment to ensure that the legislative action to stop any use of the Red Route in what I believe would be the highly unlikely event that that alternative would actually be chosen.

As it has been mentioned to the danger of the Dwarf Wedgemussel is a prime reason why the Red Route was being evaluated. But the impacts on the citizens in Garner would be enormous and far outweigh the marginal environmental benefits of not crossing Swift Creek closer to the mussel terrain. The Red Route, I'm sure, will be discussed by a number of many other citizens here tonight in terms of the details of that.

Then the question becomes the alternate route to the south and that's the Purple Blue Route. In 2011, this route was removed from consideration by DOT. It should be rejected again. That should be removed. The Purple Blue Route would cost hundreds of millions of dollars more to construct. It would require the purchase of approximately 70% more parcels and has been mentioned in the discussion already tonight, double the number of relocations of homes and businesses. More relocations of homes and businesses than any of the other alternatives. I can say with confidence that the purple blue alternative would also find very strong opposition in the General Assembly.

Every potential route does have impacts. Nevertheless, let's keep faith with the citizens with you here in this room, let's keep the plan that was laid out 20 years ago. We need to complete 540 on the Orange Route. I certainly believe that the Draft Environmental Impact Statement supports the Orange Route as the best alternative for the health and benefit of our citizens and our community. Thank you.

Moderator: Thank you. Next we have State Senator Chad Barefoot. Following Mr. Barefoot, we have Mark Helwig.

TRACKING ID – O-08

State Senator Chad Barefoot: My name is Chad Barefoot. I live at 8513 Battery Crest Lane, Wake Forest, North Carolina and I represent Garner, Willow Springs, Fuquay-Varina, and most of southeastern southern Wake County in the North Carolina State Senate.

I'm here tonight to speak in favor of the original protected corridor, which was commonly referred to as the "Orange Route" designated by DSAs 1-5. The Orange Route has been the preferred route for over 20 years in southeastern Wake County and I believe the Department of Transportation should recommend this preferred alternative route to be built. 540 is extremely important and critical to our economic future in this area of Wake County and we must build it.

But I know the reason we are here tonight and going through this process is due in part to the discovery of the Dwarf Wedgemussel. And that some of the proposed routes are still under consideration because of their environmental impact scores. But as the Department

makes its decision, I beg you to take into consideration the human impact of some of the proposed alternatives, especially alternatives that include the Red Route.

The Red Route does not make common sense and any of the other routes don't either. The fact that we are here considering a route that would bulldoze a dozen neighborhoods is senseless. Destroying nationally registered historic places is not progress. The reason the Red Route impacts less wetlands than the alternatives is because its full of people. So, I encourage the Department to think of our citizens, to think of our people, consider the lives of businesses that would be impacted by this decision, as I know you will. And I hope that the engineers will place a high priority on the human impacts of these alternatives. And I ask you tonight to recommend the Orange Route.

Moderator: Thank you, sir. Next is Mark Helwig followed by Jerald Morton.

TRACKING ID – O-09

Mark Helwig: Good evening. My name is Mark Helwig and I serve as Vice Chair of Freeways for the Regional Transportation Alliance Business Coalition. The RTA represents the regional business community on transportation issues, policies, and priorities that are vital to the continued success of our market.

The RTA's top priority is the new freeway, the completion of 540 between Holly Springs and I-40/U.S. 70 Clayton Bypass and we support the completion of all remaining portions of the Raleigh Outer Loop between Holly Springs Bypass and the I-495 and U.S. 264 Knightdale Bypass.

By completing the 540 in southern Wake County, will be an essential part of our future transportation backbone from the moment it opens to traffic creating vital linkages to major freeways and other roadways in the Triangle. The extension of 540 will relieve overburden secondary roads from congestion including North Carolina 42, 55, Ten-Ten Road, and reduce the traffic local travelers have to compete with on their local roadways.

The Triangle Expressway Turnpike is already providing travelers with a mobility option that they may not have had otherwise seen for decades. As a result, it is helping preserve our areas economic vitality and quality of life. The completion of 540 will continue that success and serve us well both now and as we continue to grow.

I would like to thank the North Carolina Department of Transportation and the various federal and state partners for their leadership on this project and for the opportunity to speak this evening. Thank you.

Moderator: Thank you, Mr. Helwig. Jerald Morton followed by Matthew Starr.

TRACKING ID – O-10

Jerald Morton: Good evening. I live at 5423 Brushy Meadows Drive, Fuquay-Varina over here on the old Crooked Creek Golf Course. My position is I'm Chairperson

for North Carolina Citizens Against Toll Roads. We are not against the roads. We are against the tolls and that's what I'm speaking from tonight.

We had 14 different taxes in some form or another that goes to the Highway Trust Fund, the Highway Fund, *Power Bill),* and the roadwork that you see today around North Carolina. Every driving citizen pays that. So, that's where I'm coming from. My sources are the Legislative Toll Road Binder from February 24, 2014. I have a Turnpike Authority report from 2014. I have the North Carolina State Constitution, Section 5, Page 17, paragraphs 1, 2, 3, and 5. And that's where I'm coming from tonight.

I would like to say that the current toll road of the Triangle Expressway, the Triangle Parkway are 12.6-miles and the Western Wake Expressway of 14-miles has lost in the last 4 years, $177,562,000…$177,562.000. People are not driving the road. In 2011, the road lost $3.2 million dollars of operating costs and we paid $35,600,000 of interest. In 2011, excuse me, in 2012, the road lost $11,531,000 and we paid $35,600,000 of interest. In 2013, the road lost $11,232,000 and we paid $35,600,000 in interest. In 2014, the road lost $9,199,000 and we paid $35,600,000 in interest. Over four years on the Triangle Expressway, the road has lost $35,162,000 and we have paid $142,400,000 in interest for a total net loss of $177,562,000.

You're going on to build more toll roads is inexcusable. To build three sections of toll roads borders insanity. To allow nine unelected officials, known as the Turnpike Authority, to levy a toll road tax on you violates the North Carolina State Constitution, Section 5, under finance, paragraphs 1, 2, 3, and 5. That has to be done by voting of the public. That has not been done, okay.

Also, only the General Assembly is allowed to levy a tax and it cannot be delegated. And all taxing has to be uniform. That means that if the Turnpike Authority or the General Assembly tolls one road they have to toll every road in the state. It's just like sales tax. It's like state income tax and purchasing tax. Any tax has to be uniformed across the state. It says so in the state constitution, okay.

I would like to say this…this double taxation to drive a road amounts to extortion. Pay this again or we won't let you drive the road. It's government extortion at its worst. We ask that all toll roads be changed to open roads. That all tolling be stopped. That the Quick Pass Office be closed, employees furloughed, and all the money returned to the Highway Trust Fund to work on our roads like Old Stage, Lake Wheeler, Sunset Lake, and so forth, instead of paying for double *(Moderator: Sir?)* government services.

And in closing, I would like to say that we have a current surplus of $440,000,000 in the General Fund, $337,000,000 was allocated for roads in northern Wake by Senator Barefoot, which I applaud, and there's a $1 billion surplus in the Commerce Department. With that much money, we need roads, but we don't need tolls as a surplus. Thank you.

TRACKING ID – O-11

Matthew Starr: I'm Matthew Starr, 2308 Florida Court, Raleigh 27615. Good evening. I'm Matthew Starr. I'm your Upper Neuse Riverkeeper based out of Raleigh. I'm going to tell you a little bit about myself before I get into the water quality impacts of this proposed project.

As a riverkeeper, my job is to protect the water quality of the Upper Neuse River Basin. I do not work for the government nor do I work for a private company. I work for clean water. I'm a native North Carolinian, I spent my early years in Garner. My mother was a math teacher at Garner Senior and I fondly remember Coach Stewart taking me into the locker room when I was a kid to meet great players of the *(inaudible)*, so really fond memories.

So, believe me when I say I want to see a vibrant North Carolina and Garner. But I don't want to see it done at the great cost of destroying our water quality. We're looking at potential impacts of the streams, creeks, river, and wetlands that are within the proposed project. You seem to realize that this project will have a huge negative impact on our water quality. But the information laid out in the Draft Environmental Impact Statement, the supporting documents, building an Orange Route is not legally possible due to the impact on water resources.

The Orange Route would be detrimental to the Swift Creek Watershed. Continued protection of this watershed is important on a few different levels and because of this local government have taken great steps to ensure that we have as little impacts as possible. Building the Orange Route will undermine those protections. In fact, 250 acres of the watershed already has exceptional under significant heritage area, which is the highest ranking.

Another important designation for Swift Creek Watershed is that it is one of 25 areas in North Carolina that is essential to the continuous survival of our endangered species. In fact, the watershed supports 13 rare species. Not only is it important to keep exceptional parts of the watershed exceptional, but steps need to be taken so that already polluted or impacted areas are not further degraded.

Portions of Swift Creek itself are listed on the state's 303(d) List, which is a list of impaired or polluted bodies of water. And it's listed for its biological integrity. This means that conditions in the stream are putting stress on small creatures that form the basis of the aquatic food chain that's important to those 13 rare species. Building the Orange Route will exasperate this problem.

Let me be clear, I'm not in favor of the Red Route either. All of the options are very destructive and have extremely high cost and for *(inaudible)* low benefit. I would like to see the DOT take a harder look at upgrading the existing roads. Thank you.

Moderator: Thank you Mr. Starr. Next we have Joyce Exton or Ecstein. Alright, next Tim Sarpolus. Following Tim Sarpolus is Frann Sarpolus.

TRACKING ID – O-12

Tim Sarpolus: I'm Tim Sarpolus. I live at 3709 James Land Drive. It's a Clayton mailing address, but I'm inside of the County. I just wanted to mention something from our heart. I've been living there, we started building 10 years ago and on our side of the picture, we don't have as much representation. You've heard a lot about the Orange Route already from high level people.

But I live on the side that matters to me about the Green Route. And we do have representation, but they're not all speaking up. But I just want to mention that the green route has also been on the map for 20 years. When we decided about building 10 years ago, we took that into consideration and a lot of other people did too. So, they built thinking, well if the routes going to go on that Green Route and that's where it's going to be so I can build my house.

Now, they want to come and plow through my Avalon Subdivision and you know we've got to decide if we're going to relocate or not. And I think well, "it's really not going to come through your yard, but it's going to be just over there". Well, in addition to having a negative impact on Avalon Subdivision, it's already been mentioned that it will have a negative impact if they put the Brown or Tan Route in on the Clemmons Educational State Forest. And it will also have a negative impact on Pine Hollow Golf Course and that hasn't been mentioned. And they may not think, well, tit for tat, it would affect them that much, but it will affect Pine Hollow Golf Course.

Also, one of those houses right there on the edge of Avalon Subdivision is 150 years old. So, it should be considered as an historic thing too. At any rate…

Moderator: Speak into the mic.

Tim Sarpolus: So, along the way we started this fight five years ago when you all were having these meetings. And the Wake County Commissioners, Mr. Matthews is here tonight can affirm, they affirm support for the original Green Route. And stated so and wrote a letter concerning that.

And I do want to thank Ronnie Williams for wearing his orange tie tonight because that helps affirm that he wants the Orange Route. I also want to thank all of you all. I didn't think about this ahead of time, but I want to thank all of you all green shirt wearers because you want to remind us that it's the Green Route or no route at all. Thank you.

Moderator: Frann Sarpolus followed by Mayor Ronnie Williams.

TRACKING ID – O-13

Frann Sarpolus: I'm Frann Sarpolus at 3709 James Land Drive. I'm Tim's wife. Thank you for letting all of us speak tonight here and thank you for all of the work you all have put into this effort.

One of the things I really want to address is that it's not been 20 years since that thing was put on the map. In 1990, there was a dotted line put around the Raleigh area maps. It's been there since 1990 and all of us who have those maps can see it. So, it's 25 years now that that's been on there. And people are taking that into consideration as my husband said moving here.

But I will address the two negative impacts that were mentioned for the Green Route a little earlier by our speaker here. He said the two negative impacts of the Green Route were two communication towers and the other was the fact that it bisects the Randleigh Farm properties. Well, for number one for the communication towers…that is a hard thing to say, sir.

NCDOT purchased property from Capital Area Broadcasting Company back when I was working at Broadcasting Company and that was for property for the Green Route on the dotted line, which you can see on the map where they owe that property by going to wakecounty.gov. And you can see who owes that property, which is NCDOT right next door where the guidelines are. Now, if they let those guidelines come in and encroach on their property where NCDOT has property, they really made that decision knowing that that dotted line was already there. So, we can't really help that now. If that's going to encroach on those towers, somebody should have thought about that when they were putting that tower up the second time it fell. They let those lines go over there on the NCDOT property.

The second thing about that Randleigh properties, was when we went to the Commissioners back in 2010, Phil Matthews was on the board back then. They were already aware of the fact that the Randleigh Farm division or properties was going to be on that route where that green line is. And they weren't concerned about that even though there was some to do about the fact that they have maybe gone and asked the NCDOT for alternate routes. That's when all the other routes, which ones, the brown…not the brown, but the mint, tan, teal, and yes the brown.

That's not exactly when they came on. They came on when the Commissioners wrote a letter and the Raleigh City wrote a letter to NCDOT to say, the Commissioners said, like my husband said, "we affirm the Green Route; we oppose the Tan Route". Raleigh City said, "we oppose the Tan Route" as it is now. So, what did they do? They changed the color. They changed it to brown.

The Brown Route is still right on top of the Tan Route, which goes over our house. Whether it's tan or whether it's brown, it should still be green. And so I'm making the point that if the two concerns are for the Green Route are these towers and Randleigh, they all knew it when they put the properties there. Thank you.

Moderator: Thank you Mrs. Sarpolus. Next we have Ronnie Williams followed by Mayor John Byrne.

TRACKING ID – O-14

Mayor Ronnie Williams: You know what I feel like? I feel like I'm in a box of Crayola Crayons. But let me do something while I can since you all are assembled and I got your attention. Let me wish all of you all a Merry Christmas. Celebrate for the right reason.

In the Book of Proverbs, we read where there is no vision, the people parish. Those that have decided to build this road have vision. And their vision should be acknowledged and complimented. I looked at my email this morning on my computer and back in 2009, since that time my computer is full of Red Route, Red Route, Red Route. I'm darn tired of it.

The 400 and some odd houses that are going to be taken down, the four parks in the town, none of it is worth it. We've been here before. We're here again. I'll be brief. It's late. God bless you. Go Orange Route.

Moderator: Thank you Mayor Williams. Following Mayor Byrne, we have Buck Kennedy.

TRACKING ID – O-15

Mayor Byrne: I wish I knew that.

Moderator: Make sure that you speak into the mic. I heard that you can't make out…they can't hear as well.

Audience Members: Can you take the mic off the stand?

Moderator: Yeah, it's a wireless mic so you can take it off.

Audience Member: Can you take it off the stand?

Moderator: That will work.

Mayor Byrne: Yeah, I'm not going to take but a moment. Fuquay-Varina is for the Orange Route. We've been through the Orange Route for 20 some years. We have sent resolutions. We've endorsed it. The Mayor of Fuquay endorsed it. We've done everything we can to keep our eyes on the true target, you know, the Orange Route.

And you know, I think this, when we talk about costs, there are a lot of people in this room that have already got money invested in the Orange Route. Those number don't show up anywhere. They've had it for many, many years, an investment for all of us, you know, in the Orange Route.

You know, just in closing, I'd like to thank the Mayor of Garner and the Mayor of Holly Springs for their leadership on this. The Town of Holly Springs have endorsed the

Orange Route. The Mayor of Holly Springs has endorsed the Orange Route. We're all together on this and I feel very comfortable that this is the very best thing for us.

We are a protected species. We're human beings and we should be recognized. We should be recognized for being here tonight and this process that we go through. Even though it's taken a very long time, it's a steady process. And I appreciate NCDOT's effort and keeping us focused on the target. Thank you very much.

Moderator: Thank you Mayor. We have Buck Kennedy followed by Douglas Ball.

TRACKING ID – O-16

Buck Kennedy: My name is Buck Kennedy. My wife and I live at 121 Monabreeze Way in Garner. Just so happens that my wife and I live in a residence in a subdivision that would be negatively impacted by the Red Route. I'm a retired professional engineer and I'm currently serving as a Council Member for the Town of Garner.

With respect to the events tonight, all of the former speakers have been very polite. I will try to be polite. You will quickly understand a very deep sense of frustration with this whole process. But speaking on behalf of the town, Garner supports the completion of the 540 Expressway. We urge construction to be along the original protected corridor known as the Orange Route.

We'd like to think that the town's commitment has been demonstrated in the past to be responsible and sensible as it relates to conservation. You seem to be forward looking as stewards of the environment by setting aside hundreds of acres of open space, including Lake Benson Park and White Deer Park. The latter featuring a LEED Gold certified nature center, which are a habitat for a wide variety of species. In fact, a wildlife rescue rehabilitation group uses White Deer Park as a site to release owls and raptors back into the wild.

A couple of comments on the facts on the situation, it never bare repeating too many times. Just within the corporate limits of the Town of Garner along the Red Route, it will disrupt 14 neighborhoods involving at least 435 residents where people live. I don't think there are any mussels there; as well as 12 businesses, two non-profits, four current or future parks plus our YMCA that's about to go under construction.

I've got to stop and tell you too, think we you disrupt 435 families. How many hundreds of students are going to be displaced? And what do you think it does to their educational environment? The Red Route blasts right through our industrial park or one of our industrial parks and through the most desirable future growth area. It'll set Garner back decades just like when they rerouted Highway 70 and split Garner into in the '50s. I cannot imagine that you would allow this…that DOT can allow this or the environmental community in general can allow this to happen again.

But the remainder of my comments will be based on past experiences and they'll show you…offer a little bit of my frustration. During my 40-year career as a professional engineer, I was successful in improving Wake Water Treatment facilities and protected streams, rivers, and public water supplies with verifiable results.

I was introduced to the EIS or the environmental review process in 1976. I'll tell you and I have to admit that my naivety about good and bad and right and wrong was exposed and blasted out of the water at that early age. In the last few years though, Garner has suffered the shadow of the Red Route that's been cast over our citizens who are very afraid of and they've been frustrated by the recommendation that has been made.

We've feel like we've already be held hostage as much as the Orange Route folks have felt that for two decades particularly as our development community has been stymied by this shadow that's been held over us. We've already suffered. I'll say this, the environmental review process, while well intended is a prisoner of our own making. Reviews are far too time consuming and are fraught with numerous unintended consequences. The results which are damaging to the human environment.

I cannot imagine the frustration and yes even the agony of property owners along the Orange Route corridor who for decades has been held hostage on their own land waiting for some decision to take place so that they can move on with their lives. And I've personally have heard the anguish of many of you who have a target on your back if you live in a corridor that proposed Red Route, an unconscionable recommendation. I cannot imagine why it was done.

I could ask the question and I could get a positive response on how many of you feel negatively impacted already. How many of you have lost sleep over the process? Who among you have had your confidence shaken in the regulatory review process? All unintended consequences.

But putting aside the skepticism, I also have confidence. I've got confidence that someone or some few in authority will determine that human life shall prevail over the mussels. I am confident that the DOT will recommend the appropriate route. And I'm also confident that the Red Route will never be constructed.

Moderator: Thank you. Mr. Ball.

TRACKING ID – O-17

Douglas Ball: My name is Douglas Ball. I'm at 10229 Ten-Ten Road, Raleigh. I'm here on behalf of the business community and the Garner Chamber of Commerce to support the Orange Route that have been on the books for over 25 years. We've built neighborhoods, lives, communities around this route and we need this roadway built to support our businesses around the Garner area.

It's been significant damage that has been caused to our citizens by the delay of construction of this Orange Route. We find unacceptable. And certainly we find unacceptable the continued human impacts of this proposed Red Route.

Moderator: Thank you Mr. Ball. Up next we have Jeff Swain followed by Hardin Watkins.

TRACKING ID – O-18

Jeff Swain: Good evening all. I'm Jeff Swain, residing at 263 Shady Hollow Lane in the Village of Aversboro, which will be entirely decimated by the Red Route should such ever occur. And I'm here this evening representing our homeowners' association. I'm also a member of the Garner Planning Commission and spent about 35 years in community and economic development work in state and local government.

It's about five years that we've been involved or at least in Garner and the Red Route. We woke up one morning shocked and surprised to see that there was a line on the maps, knowing that the protective corridor for at that point virtually 20 years. We had a meeting at our clubhouse where we were told by our transportation planner they did not know that the Village in Aversboro was there; in real time…in real life. A pretty incredible statement.

Nevertheless, feeling threatened, we survived. We got the prohibition for building the Red Route from the State Legislature. I thank Nelson Dollar and Chad Barefoot for their remarks this evening. But due to the need for the DEIS that prohibition had to be repealed and so here we are tonight.

Let me tell you a little bit about the Village at Aversboro. We are a 55+ community that was constructed. Our developer, incidentally, was Douglas Ball. It was developed under the Federal Housing and Older Persons Act. Now, we don't think 55+ is particularly old these days, but nevertheless that was the provision under which we were able to develop the Village at Aversboro. And so, for a number of us at that village we believe this may well be our last**(0032)** home. Although, we never want to acknowledge that or perhaps that may be another move, but in particular there's a number of people there who perhaps it is their final home that they will own and live in.

We have 250 or so residents; 147 homeowners and it's a wonderful friendly group of active people. It's one of the most convenient locations in Wake County. A few minutes from downtown, close to shopping, close to healthcare facilities, close to entertainment venues, we all really love and treasure being in the Village at Aversboro.

At the same time, we who live there are contributing, we believe, significantly to the quality of life environment. Many of us are involved in community activities, giving back to the community of Garner, giving back and contributing to Garner's quality of life. Active in the Garner Senior Center, involved with the Relay for Life, involved with the Community of Hope, I could go on and on in terms of the organizations that many of our community residents are involved in.

And just imagine the Red Route, as I said, we would be disseminated. What a remarkably high cost in human terms and in economic terms? For us the choice and our focus is red versus orange west of I-40. And we do understand the need for the DEIS, even though it should have been done 20 years ago, which others in this room have heard me saying for the last five years. But now that we have the DEIS, we believe even looking at the technical information presented therein and some of it has been mentioned tonight, the choice is clear. And we do fully expect those who are responsible for the planning and we already know that the folks at CAMPO, the Capital Area Transportation Organization have endorsed the Orange Route.

So, we expect that all of those who in the past have supported the Orange Route, whether they be elected officials or transportation planners, are going to honor their commitment to build the Orange Route. And within the next what 120 days, we're going to expect to see that preferred alternative be the Orange Route and get the Red Route finally out of the mayor's computer.

Moderator: Thank you Mr. Swain. Mr. Watkins. Following Mr. Watkins is Lou Beaman.

TRACKING ID – O-19

Hardin Watkins: Hi, my name is Hardin Watkins, Town Manager for the Town of Garner. I live at 134 White Deer Trail in Garner not too far from the path of the Red Route. You've already heard a wide array of perspectives from the Garner community. You've heard from Mayor Williams, Council Member Kennedy, Mr. Douglas Ball, who is the developer and active chamber participant in our community, Mr. Jeff Swain, representing one of our homeowner's associations, and many others in the community. We also appreciate Senator Barefoot, our Senator expressing his comments this evening as well.

There's a common message here. We support the Orange Route wholeheartedly. We're opposed to the Red Route 100%. The Town of Garner has worked for years, Mayor Williams shared, to keep the Red Route from being built. Our efforts are well documented. We urge all the DOT Officials as they review the records, as you forward those records to others that need to see those, to review the previous record as well as what's gathered in this most recent process. To see the large volume of opinions and information that provide value data about why the Red Route is a bad idea. It's well documented, please make sure they get passed on for our sake.

Just to recite the numbers one more time, we're talking about 14 neighborhoods in Garner, four town parks, industrial park opportunities that are lost in our most marketable and most active industrial parks, 435 residential relocations, 12 business relocations, 2 non-profits have to be relocated; that's a total of 451 relocations. And again, as compared to the orange, you'll see it's 243 relocations. The Red Route impacts are devastating to Garner. I think that point has been made many times.

I want to reiterate a point Mr. Kennedy made as well. We are environmental stewards in Garner. There are numerous programs. We are happy to share those to all that are interested. We have demonstrated a commitment to responsible and sensitive conservation in trying to do our part to protect the environment in our community.

So, let me begin to close. Thanks to all of the DOT and Federal Officials for your hard work, **(00033)** especially I want to thank my colleague, Eric Midkiff, at the DOT. Eric has been our contact for several years and we appreciate the great work that he has done to keep us informed about the process. Thanks to our community partners. As Mayor Williams mentioned, this has been an exercise in relationship building. We want to thank Mayor Byrne of Fuquay, Mayor Sears of Holly Springs and their colleagues of those towns for standing with us through this process. Also, I want to thank our friend, Mr. Joe Molazzo, from the Regional Transportation Alliance for his support and understanding of the Garner prospective years ago as well.

Our growth plans in Garner are contingent on the development of 540 along the Orange Route. Wise planning is the way to go and it's what everyone thinks this is the right thing to do. This region decided that 20 years ago and was very smart to lay out a route for our future outer perimeter. It's the right way to do things. And as others have said, people have made business and personal decisions based on the path shown. We have been doing that for decades.

The orange corridor makes sense, so I'm going to borrow a slogan from my friends at the Regional Transportation Alliance and say, "let's get moving" with the Orange Route. So, our message for our friends at DOT and Federal Highway is please select the Orange Route as the preferred alternative. Thank you for listening.

Moderator: Thank you Mr. Watkins. Lou Beaman. Mr. Lou Beaman. Okay, George Lipscomb. I don't know if I said it before written comments…however you submit your comments, they all carry the same weight.

TRACKING ID – O-20

George Lipscomb: I'm George Lipscomb. I live at 3708 Foxstone Drive in Raleigh, Zip Code 27603. I'm here today to offer my strong opposition to the extension of 540. And I would urge the Department…

Moderator: Could you speak into the mic a little bit more? We can't hear you.

George Lipscomb: I would urge the Department of Transportation to revisit the alternatives that we offered when we first came into the room and looked at their presentation and that they dismissed so easily.

Green Route, Red Route, Purple Route that are listed up here. All of those routes have tremendous problems with them. They displace people. They cause damage to the environment. So, what are we doing? Whatever route is determined for connecting this highway, communities, homeowners, businesses, and the environment will suffer the

effects. This highway will result in the destruction or relocation of homes, increase noise and other pollutants, property infringement by government, and reduce development patterns. And for what?

As some of you probably know, replicable studies show that large highway projects designed to reduce traffic congestion actually beget more congestion. Don't believe me. Lived in Los Angeles been to Washington, DC. They peruse all of the literature produced by researchers without vested interest in road and highway construction. Provide support for that claim. The most recent article I found is from a publication city plan dated November 11, 2015 entitled "California DOT admits that more roads mean more traffic". The article puts forth the concept of induced demand. That in short indicates that more roads mean more traffic in the both the short and long term. And most of that traffic is new to what existed on the old roads prior to the construction of a new highway.

There are a number of reasons why induced demand occurs, but the one that concerns me most is that of shifting development patterns. The idea of pattern shifted to residential and agricultural to industrial use that is influenced by the easy access to a high speed road has citizens worried about their property values. I simply don't want to live in close proximity to a 24/7 warehouse trucking operation and I doubt others do either.

550 will be a toll road. Like a growing number of citizens, I'm against toll roads in North Carolina. Aside from being an additional tax, toll roads in North Carolina maybe financed through a P3 or Private Public Partnership contracts, which appeared to be the poster child, when you read the information…when you read the literature, for crony capitalism. These long term contracts, 50 years or more, that have caused scrutiny by with N&O and citizens watchdog groups.

Finally, since you have decided, DOT, to build this ill-advised road through the space that we live in, you're spoiling the environment, and causing the displacement of citizens, I urge you to select a route that will do as little harm to our lives as possible. And I urge you to eliminate the Red Route from consideration.

Moderator: Thank you, sir. Next we have Scott Manning followed by Andy Wittman.

TRACKING ID – O-21

Scott Manning: Thank Jamille. Good evening. My name is Scott Manning and I'm the Executive Director of Holly Springs Chamber of Commerce. We enthusiastically support the completion of 540 for our southern and eastern Wake County.

Having recently being recognized as a leader in Wake County for job growth, Holly Springs and our businesses have benefited from the existing Triangle Expressway and we look forward to the completion of the 540 Loop, as it will enable expanded and sustainable growth for years to come.

It is no surprise that site selectors consider freeway access as one of the major factors when making decisions on the location of new businesses and proactive efforts to enhance our transportation network will certainly add to the allure of southern and eastern Wake County to those groups and others considering our area for expansion.

Additionally, the Chamber supports the Orange Route as it's been a long preserved corridor and believe it to be the path that causes the less disruption for our member businesses, as well as one of the most cost effective options.

The Holly Springs Chamber of Commerce would like to thank the NCDOT and the various federal and state partners for their leadership on this project and for the opportunity to speak this evening. Thank you.

Moderator: Thank you, sir. Next we have Andy Wittman followed by Bruce Wittman.

TRACKING ID – O-22

Andy Wittman: Hello everyone. I wanted to first thank the DOT for what they've done so far putting together the Draft Environmental Impact Statement. I think they've done a very good job of showing how everything works.

As a little bit of background, my parents' house is on the Red Route and I've been looking at this project for the last five years. And I think DOT has made big progress over these last five years taking a more data driven approach to how a route is selected and what factors are used in route selection.

If you guys take a look at the comparative evaluation matrix, there are some pretty important numbers on there. The biggest difference between wetland impacts and people displacements, you see a difference between 19.6 and 24.2 acres of wetlands on the Orange Route versus the Red, Blue, or Purple Routes. You also see a difference between 326 and 208 additional relocations. That's the difference between the Orange Route and the Red, Blue, and Purple Routes. I think it's pretty obvious that this huge number of relocations outweighs the environmental benefits of the Red Route, Blue Route, and the Purple Route.

I believe that most importantly with all of these relocations is the impact to the community, the community cohesion, putting a road right through the middle of the Town of Garner is going to do massive amount of damage. So, if you look at the data and you look at the options, if one of the routes has to be built, then I believe that the Orange Route should be built with proper protections for the environment. Thank you.

Moderator: Thank you, Mr. Wittman.

Andy Wittman: I'm sorry. The name is Andy Wittman. The address is 2201 Woodnell Drive. Thanks.

Moderator: Thank you. Mr. Bruce Wittman followed by Tom Guy.

TRACKING ID – O-23

Bruce Wittman: Hello there. My name is Bruce Wittman, 2201 Woodnell Drive, Raleigh, NC 27603. We've been dealing with the Red Route for five years. The Red Route will bisect our neighborhoods just like Garner. I feel like a Garner junior.

You know, you think about quality of life when you talk about the wetlands. And what concerns me about the Red Route is how close the 540 would be to Lake Benson and if there was a chemical spill, it would be detrimental not only to Garner but to the Town of Raleigh, which uses Lake Benson as a water supply. So, when you talk about quality of water and quality of life, I think you should not consider the Red Route. You should consider the Orange Route. And I'm very proud of my son. Thank you.

Moderator: Thank you, Mr. Wittman. Next we have Tom Guy followed by Stephanie Hairr.

TRACKING ID – O-24

Tom Guy: Good evening. I'm Tom Guy, 5321 Fantasy Moth Drive, Garner, North Carolina. I'm probably the only one who spoke tonight that lives on the Orange Route. The one thing I wanted to ask…

Audience Member: Speak into the mic.

Tom Guy: The one thing I wanted to ask and we live in Turner Farms. I'm also on the Board of the HOA there. No matter which way they go whether it's orange or lilac, it's going to affect our neighborhood. It will greatly effect on the lilac side. It will affect probably 50 homes. On the orange side, originally, we were told that the route was going to go further to the southeast, which borders the Swift Creek.

I would ask that the Orange Route be moved or looked at east of 50. That the engineers look at moving it approximately 200 to 300-yards to the southeast, which will not impact Turner Farms at all other than the fact that we need to add a noise barrier. I spoke with a gentleman earlier about the noise barrier and he said it's very doable. That the engineers could look at the plan.

I appreciate Senator's Barefoot input. I would have to say though from an HOA Board Member that we've had no contact with the County Commissioners, our representatives and we've had no one approach us from the State House or Senate. It would have been nice in the last three to five years if someone from local government, since we do not live in a municipality, would've come and approached our HOA. We are a large neighborhood affected by the Orange Route and the Lilac Route.

The other thing I would like to say is that several years ago I thought I was building my final home as others had. We love the neighborhood and moved out into Garner for the simply reason it was a wonderful place to live, thriving community, and had great room

for growth; only to find out at closing after 18 months that we would potentially be in the Orange Route.

Once the final proposal was put out this past year, we found out that the right-of-way goes across my new home, my wife and I hopefully final home. Those of us over 49 can appreciate that last home. So, I would also echo the fact that the environmental impact is a worthy cause. We all want to do that. We all want to protect our environment. But the simple fact that if 540 is moved a little bit further towards the Johnston County, southeast line, then come around on the green side like Tim was talking about earlier, it would impact less folks. It will impact a little more wetland, but it will impact less human folks. I appreciate it. Thanks for letting me speak.

Moderator: Thank you, sir. Next we have Stephanie Hairr. Alright, Linda Raynor.

TRACKING ID – O-25

Linda Raynor: Hi, I'm Linda Raynor. I live in the Avalon Subdivision at 3804 La-Varra Drive and I'm neighbor of Tim and Frann, who spoke earlier. We've been…our house is located in six of the 17 DSAs. Either on the Tan Route (3, 10, and 15) or the Brown Route (4, 11, and 16).

My husband and I started building our home in 1990. So, we were the actually second house there in the Avalon Subdivision. And so our lot was on a quiet cul-de-sac with very little traffic. We have woodlands and wetlands behind us and farmlands behind that. And then we have the homes across the street back up to the Pine Howell Subdivision and the Pine Howell Golf Course. So, when we're sitting on our back deck, we can hear the trickling of the stream. And when we're sitting on our front porch, we can hear the ping of the golf balls. And my sons and granddaughters have always enjoyed playing on the cul-de-sac because there's not a lot of traffic.

Okay, so when we went to build and select our house, we were aware of the proposed Green Route. And we thought, well hey that's pretty far away from where we want to build and it would probably increase the value of our home plus Highway 70 was right there too. So, we understand that the other alternatives were developed because of the Randleigh property plus it was planned development. So, they wanted to move potential routes further to the east. So, they came up with the brown and the tan, which like I said would go right over our neighborhood.

So, because this development of the Randleigh property is only planned, I believe that concerns of impacting the existing topography and the current land use should take higher precedence in the selection of the preferred alternative. Not just a planned neighborhood for mixed use.

So, both the brown and the tan segments also contain many (inaudible) streams that will be impacted, acres of wetlands and farmlands, and they will need to be disturbed and they also contain several of those Section 4(f) resources that were mentioned earlier. So,

we carefully planned and tried to select a good location to build our home. But the preliminary drawings also show that our cul-de-sac is going to be demolished and the road is going to be extended to the back property.

So, where there was no traffic through there, there's going to be more traffic. There will be a road on the front of my property and the side of my property and then the highway behind my lot. So, we're kind of wedged in and it looks like a bad situation. So, the proposed layout of the Tan and Brown Segments negatively impact our home, the streams, the wetlands, the farmlands behind my house, the amount of traffic on my street, and the peacefulness of my neighborhood.

So, on the eastern portion of 540, I'm for the original green location. There's another route called the mint color, so either one of those Alternatives 1 and 2 and as Jamille also said earlier, Alternative 2 is actually the least expensive. Thank you.

Moderator: Thank you. Next we have Scott Taylor followed by Walter Simpkins.

TRACKING ID – O-26

Scott Taylor: Sorry, I'm a little bit taller here. My name is Scott Taylor. I live at 150 Gussett Drive in Garner, North Carolina. And like a lot of you, five years ago I woke up and read the paper and said "oh my gosh, this thing right in my front yard" practically. We bought that house 10 years ago. I actually moved here from southern California, so I know a little bit about what this is like.

Hey, we thought we were getting away from the hustle and bustle and everything else and here we are a few minutes from the country. We're a few minutes from downtown. And now it's right in our front lap. And the worst part is that when they do this, they won't take my house. They're going to take the house next door. What's that going to do for my property value?

Audience Member: It's going to go down.

Scott Taylor: It's going to kill it. And I'm not getting compensated for that. And nowhere in this study does it take that into consideration. That is a huge hassle.

And I understand that it has to happen. I understand that Wake County is growing. It's growing very fast. And like I said I grew up in Orange County, California, which grew like this 30 years ago…40 years ago. They built toll roads there too. But they built them in areas that were undeveloped. That was broad and where the growth was going to happen. The growth is not going to happen in the middle of Garner. It's already happened. It's going to happen south of Garner.

We need to stop the Red Route and we need to bring the Orange Route. Thank you.

Moderator: Thank you, sir. Walter Simpkins followed by David Ennis.

TRACKING ID – O-27

Walter Simpkins: I'm Walter Simpkins, 10172 Joe Leach Road, Raleigh, NC. I am a human. I'm not a mussel. I live right in the middle of the Orange Route. I have lived there since 1942. My family had been there since 1933. I am in favor of the Orange Route but I'm in favor of them getting on with the project.

Audience Member: Amen.

Walter Simpkins: I have been held prisoner since 1990, December 1990, when I attended the first hearing right here in Wake Tech. And that's 25 years ago this month.

Audience Member: Jesus.

Walter Simpkins: Since 1997, they've had my hands tied where I couldn't do nothing. I run off and built another house to try to get into it to be held prisoner to where I couldn't do anything. Just stand there and stay home. My question to DOT is why is it taken 18 or 19 years to get to this point with the environmental study? Why wasn't the environmental study started in 1997?

Audience Member: Right?

Walter Simpkins: Now, what will DOT do with the property it now owns in the Orange Route if it don't take the Orange Route? Is it just going to devalue my property that much more if they don't take it? My point is to go ahead with the Orange Route and not wait 10 more years or 5 more years. Do it and let me get on with this before you go to another route.

And the one that I want to oppose the most is the Blue Route. It goes right through the church and the cemetery where I'll probably be buried in before this ever happens. And where a lot of my neighbors have already been buried in before this could happen. They're already there. They've waited in line and they didn't make it. I want to know if the time table is firm. I want to know if you could confirm this and move right on with it.

Are there any detailed right-of-way plans around and how do I get a hold to them? I'm all for the Orange Route but I'm all for getting it behind me and getting on with the program. And don't go where I'm going to be buried.

Moderator: Thank you, sir. Next we have David Ennis followed by Lindy Brown.

TRACKING ID – O-28

David Ennis: My name is David Ennis. I live at 1298 Greenleaf Road in Angier, which is part of Johnston County. Seventeen years ago, I purchased some property in Wake County and was informed by DOT that I had to have a buffer for the expressway

that was coming around. So, 4.5 acres or 5.4 acres was left out. And I've been sitting on that property since 1999, paying taxes on it.

And when the subdivision was completed and the streets were approved and DOT took over the streets then the land became landlocked. I cannot get on my own property now because I don't have access to it. So, my question is this if the Orange Route is not the route that is chosen, what happens to the property that has already been purchased in the Orange Route? What would happen to that? Because it has been property purchased on both sides of my property.

And in turn to what would happen to my property that I don't have access to, it's not worth a hill of beans to anybody. When it comes to the expressway being moved, the land itself was potential 3 lots to 4 lots, which could bring a substantial amount of money. But that money has been left aside. I don't have as much invested in it as most of you people do because you live in that area. But it still affects us financially. And I'm in favor of the Orange Route for that purpose. And there are some questions that need to be answered about land that was already purchased and why it was purchased and what going to happen to it. And the land that hasn't been purchased, what's going to happen to it. Thank you.

Moderator: Thank you, sir. Next we have Darlene Kinsey.

TRACKING ID – O-29

Lindy Brown: Good evening. My name is Lindy Brown and I come before you wearing two hats. I'm your former Wake County Commissioner from 2006 to 2010. I also come as a resident of Upchurch Place, which is off Jordan Road. I live at 1512 Upchurch Woods Drive.

I have to say that the Town of Holly Springs, Fuquay-Varina, Garner, during my time as County Commissioner supported the resolution for the Orange Route. I would ask the residents of Upchurch Place, please stand and at this time. These are just a few of our residents that are here. We are in total support of the Orange Route.

However, after close study of the 540 Southeastern Expressway, we have found several concerns that I will list as below. First, regarding water quality, I ask DOT is there evidence of increased sediment in the water supply following similar construction project like this one? Our residents need to understand what the plan is to prevent or the likelihood of this reoccurring. Or if it does occur, even after necessary precautions are taken, where are the plan of action?

In reference to traffic and logistics, I ask DOT how would the Orange Route affect the traffic in the immediate area of our subdivision? Will there be a traffic feasibility study done? What type of interruption in traffic can be expected as a result of the additional construction? How will our community access the new 540 Extension? Is there a possibility of an exit ramp? What changes will occur to the existing Jordan and Ten-Ten Road? According to your Corridor Public Hearing Map, Sheet 5 A & B of 8, it shows that

Jordan Road will be expanded 300-feet. If that occurs, please explain how the right-of-way impact our property owners in Upchurch Place. Also, will this impact the current entrance of subdivision? I ask that question because we do have a school turnaround bus route and that is going to be a major problem.

And lastly, in reference to traffic noise, will a noise impact study be provided to our community by DOT? And if so, please explain to the extent that you will get input from the citizens or the residents of Upchurch Place. I ask that you continue to support the Orange Route. However, please be careful DOT. Please come to the citizens and talk to them.

And lastly, as a County Commissioner, this same public hearing came up and to my surprise I saved 42 letters from residents that are dated October 2010 that I would like DOT to put in the record. And they supported the Orange Route. Thank you.

Moderator: Thank you Mrs. Brown. Next we have Darlene Kinsey followed by Ramona McGee.

TRACKING ID – O-30

Darlene Kinsey: Hi everyone. I was worried about speaking in front of a crowd, but there's not that many people left here.

Moderator: Can you speak into the mic?

Darlene Kinsey: Can you hear me?

Audience Members: Yes.

Darlene Kinsey: Okay, so I'm Darlene Kinsey at 1412 Upchurch Woods Drive. And I live in the Upchurch Place Subdivision off of Jordan Road. And I would be negatively impacted should the Blue Route be approved.

While I understand and appreciate the difficult decision that you need to make, I ask that you continue to pursue the approval of the Orange Route and not the Blue Route. I know that this was a personal request but I'm sure that you can appreciate that this is a very personal issue for all of us in this room.

When I moved into my home 10 years ago, I was informed about the proposed Orange Route and I accepted that it would be built in the not so distant future. But then when the Blue Route was announced, you know, I was very surprised. It ran straight through our living room and I was faced with the possibility of losing my home.

Now, with the revised Blue Route proposal, the houses across the street from me will be demolished. And honestly, I don't know which is the worst of those two options. I really don't want to have the beautiful homes across the street be replaced by a six lane highway or a stone wall. I don't want my friends and neighbors to be replaced with

traffic, debris, and trash from careless drivers. I don't want the sweet sound of my neighbors' kids laughing and playing in our cul-de-sac to be replaced by 18 wheelers and dump trucks all hours of the day and night.

But most of all, I don't want to watch the value of my property plummet because my front door will be about 4 to 500-feet away from 540. So, again I ask that you consider the homes that will be demolished, the families that will be uprooted, and the tranquility and peaceful living at Upchurch Place, which would be destroyed should the Orange Route not be approved. Thank you.

Moderator: Thank you, Mrs. Kinsey. Next is Ramona McGee followed by Kym Hunter.

TRACKING ID – O-31

Ramona McGee: Hello, my name is…can you hear me? Hello, my name is Ramona McGee. I am here with the Southern Environmental Law Center representing the Clean Air Carolina, non-profit; address PO Box 5311, Charlotte, North Carolina 28299.

Clean Air Carolina is a non-profit organization working to ensure clean air quality for all North Carolinians through education and advocacy. And by working with our partners to reduce sources of pollution. A large part of Clean Air Carolina's work is focused on how transportation resources are spent all over our state, which impacts the air quality and health of our communities.

As to the complete 540 project under consideration, we are mindful of a need for a solution. But we do not believe this project is the answer. A costly and environmentally damaging and neighborhood disrupting toll road will not solve the transportation problems of Wake and Johnston Counties.

To be clear, we're not in favor of the Red Route. We're not in favor of the project as it is presented in the DEIS. Instead, we would like to see a solution that we could all use and appreciate like, excuse me, upgrades to the existing roadway network. Right now the project is estimated to cost at least $2 billion and as much as $2.5 billion. Where that money will come from is unclear. The DEIS does not tell us how much the toll will be or how much of this price tag will be shouldered by taxpayers. And it is not at all clear that all costs are even accounted for in the DEIS estimates.

Even setting aside the troubling funding questions, the costs outweigh the benefits. The majority of the people who will use the toll road will save less than 10 minutes in travel time. In other words, NCDOT wants taxpayers to fork over $250,000,000 for each minute of travel time saved. And then charge users a toll to use the road.

Additionally, it is not clear how much time, if any, will be saved by drivers who cannot afford to take the toll road. Of course, these dollar figures also don't get the devastating relocation impacts we've been hearing about that are associated with this road. And any and all of the currently study alternatives will cause hundreds of residential relocations. A

travel time savings of less than 10 minutes cannot justify the environmental, community, and dollar costs associated with this proposed road.

Again, we agree that something must be done. But a costly toll road is not the answer. We reject the toll road and we urge NCDOT to consider other options. Thank you.

Moderator: Thank you. Next we have Kym Hunter followed by Albert DiMillio.

TRACKING ID – O-32

Kym Hunter: Hi, good evening. My name is Kym Hunter and I'm with the Southern Environmental Law Center at 601 West Rosemary Street in Chapel Hill and I represent the Neuse Riverkeeper with Sound Rivers who you've heard from tonight and also Clean Air Carolina.

And as Ramona just mentioned, we're very sincere in our desire to do something for this community. We want to see transportation improvements in this community and we often and frequently advocate for more resources to come to Wake County and to our state's urban areas.

However, we'd like to see a solution that doesn't have the devastating environmental and human impacts that every single one of these 17 alternatives presented tonight will have. We believe NCDOT is providing you with a false choice. We've heard a lot today about people versus mussels. Either you have to devastate a community or destroy the natural environment.

Well, we urge you to reject this false choice and look for other better solutions. I represent a lot of environmental groups on transportation and that is all over the state and think that if anyone here is qualified to speak for the environmental community. We've heard today, you know, how the environmental community doesn't care about people living in Garner or people living on the Blue and Lilac Routes. We do. We don't want to see the Red Route built. We were not the ones who put the Red Route on the map.

We've never been in favor of this toll highway. And at $2.5 billion this would be I think the most expensive road in the state. It would have very minimal benefits. And you'd have to pay a toll for the pleasure of using that road. We would like to see DOT take a fresh look at alternative solutions that could better benefit everybody in the community.

We've been asked to think about the human impacts here tonight. We agree. Every single one of these options has hundreds of relocations. It is interesting to me to hear so much concern about the relocations in Garner, but completely ignore that 279 relocations *(inaudible)* with the Orange Route.

In short, nobody it appears wants the Red Route. But this isn't a public vote. There are important state and federal environmental laws in play and we do not believe that the

Orange Route can legally get permits to be built. So, where does that leave us? The Orange Route is illegal. Nobody wants the Red Route. Let's look for a better solution.

Moderator: Thank you, Mrs. Hunter. Albert DiMillio followed by Barney Oakes. No Albert DiMillio? Barney Oakes.

TRACKING ID – O-33

Barney Oakes: My name is Barney Oakes. I live at 7813 St. Annes Way in Fuquay-Varina. I am not as articulate as any of these speakers that have been up here tonight by far. And they have given you probably all of the reasons that I would have stated as well.

I am in favor of the Orange Route. That's with due respect to those that are on the Orange Route. I think there've been some mention of the impacts of those folks and you need to keep that in consideration I believe.

However, there are a couple of things here. I've not heard anyone talk about a solution if we have to build this thing and the driving thing is this mussel or whatever they are, the Dwarf Wedgemussels. Somebody said we could take a few of those things and put them in an aquarium environment and you could propagate them. And they propagate well in there. But they don't do it because in a natural environment because the streams are polluted.

Then why do we really have to do this? It looks like with the federal direction and impacts, we're going to have to do something. Take them out of there, propagate them and then use some money to clean up the streams. You know, so that we don't end up in a situation where we have to make a choice of mussels or people. Try finding a way…a solution that mitigates them. I think that's part of what we don't do a good job of is mitigating.

I live on the Purple Route. If this thing comes through there, I'm going to be like the gentleman, I'm going to be right on the edge. They'll take my property and I'm going to have a berm or a wall or something. But my question is, I'm on a well system. My well probably isn't going to be any good. So, you know, the pollution…the pollution in the air from the traffic going up and down the roads. And they're going to build an access road. And that's how I'm probably going to have to leave the community out on that access road. Well that's going to make where I live like a cut through like the young lady said with a lot of traffic on the road.

So, there's not any good solutions to anything. We've got to find some that mitigate some of these bad things. We all know that those Dwarf Wedgemussels have been classified as an endangered species. I'm cautiously optimistic that my community and myself will not become an endangered species like them. Thank you.

Moderator: Thank you, sir. We have Steve Munie followed by Phil Matthews. Steve Munie. Phil Matthews. Phil Matthews.

TRACKING ID – O-34

Phil Matthews: Good evening. I know we're winding down here. We've had some great speakers and…

Moderator: Please state your name and address.

Phil Matthews: Yes sir. Phil Matthews, 1901 Navan Lane, Garner, North Carolina and I'm very glad to be here. I appreciate you guys putting this on. Briefly, everybody has talked about some many different things.

But I'm just talking about let's get this project going. I know that some of you people they're lives have been on hold for 20 and 25 years, which has been corrected tonight and it's a good thing to know. But around the Garner southern area, homes, people have been trying to sale homes. They can't sell their homes. People are wanting to buy homes, but they're scared to buy homes because they don't know what's going to be in their backyard, as been mentioned some many times tonight.

Potential businesses coming into our area providing jobs, they're not quite sure where they should build their businesses at because it might go away in a short period of time. And coming over here tonight I came down Old Stage Road. I would encourage the DOT to come through Old Stage Road between 7 and 8 o'clock in the morning, Highway 401, Highway 50 if you can get on it and Ten-Ten, you're taking your live in your own hands. These are the issues and that's why we need this thing going quick.

Wake County, I know because serving as a County Commissioner for many years, we're growing Wake County 60 people a day, 60 people a day. And we've exceeded a million people a year ago. Things are happening fast here. We can't keep putting it off. As mentioned earlier, as County Commissioners were voted to support the Orange and Green Route as initially was put out there. I know the state and some other municipalities have done the same thing.

All I want to say is let's get this project going. People have been waiting for 25 years and the people are still moving in. The longer we wait the harder it's going to get. The people have a right to get on with their lives and not wait to get into the graveyard as the gentleman said a little bit earlier.

So, thanks for having this. Thanks for hearing us out. As one of the song's "let's get this party started". Let's get this thing happening. So, thank you very much.

Moderator: Thank you Mr. Matthews. Next Lawrence Zettelmaier followed by Chris Olszak.

TRACKING ID – O-35

Lawrence Zettelmaier: My name is Larry Zettelmaier and I was actually born and raised here a long time ago when this was a small town, no beltline and it was W. W. Technical Institute. That's a long time ago.

The first thing we've got to do is get this show on the road, now. It's causing too much delay. We also need to start working on I-40 West. Like the man said about Ten-Ten and 401 and Highway 50, you're taking your life in your hands. They're not going to improve those roads and we cannot wait another six years before we start on the Orange Route in this sector over here between 401 and I-40.

The Orange Route has been studied to death. Time to move on. Time to make decisions. People want to file lawsuits, let get them filed and let's get them out of here and move on. We're all are going to be dead before it's all over with and no one seems to care.

The Legislature in their mishandling of everything has for years designated 25% of the governor's highway tax fund taxes out of your fuel pumps at the gas station to go into the general slush fund and that's why there's no money. And they did it again this summer, 25% of fuel taxes goes to the general slush fund. That money needs to be put back to the highways and get something done.

The Orange Route, obviously, everybody here best bet, they want it. Let's do it let's move on. Sir, I thank you. Take care

Moderator: State your name. I mean your address.

Lawrence Zettlemaier: I'm sorry. I'm Larry Zettlemaier, 1401 Upchurch Woods Drive, Raleigh, North Carolina 27603. And again, I was born and raised here and a lot of people can't say that.

Moderator: Thank you, sir. Chris Olszak followed by Mary Alice Arvin.

TRACKING ID – O-36

Chris Olszak: Good evening. My name is Chris Olszak. I live at 301 Wonderview Lane, Holly Springs, North Carolina 27540. I'm the President of the HOA from Sunset Oaks.

And as a resident representative of Sunset Oaks, I'd like to…and a neighborhood of 633 homes in the Town of Holly Springs and the largest as well as the most densely populated sub-division along the proposed Purple Route. We would respectfully like that the NC DOT and the partner agencies go ahead and move forward with this project as many have said tonight, to go ahead and move forward with the Orange Route and be opposed to the Purple Route and all DSAs and those being 8, 3,12 that include the Purple Route.

Just briefly, I know there's a lot of data that's been shared. You shared at the beginning. There's multiple reasons of why we should not select the Purple Route and the DSAs that encompasses that. It's the highest overall cost, the largest use of land and most

relocations, as you said by more than double and again, the most linear feet of impacted stream.

But overall to our community and specific, again, we were developed by more than 10 years ago in accordance with the Town of Holly Springs Long Term Planning Development Plans and had this been studied back then, I'm sure our neighborhood would not have perhaps been built or had it been, we would have a more acceptable buffer between us and the proposed purple corridor. As such we don't, so therefore many of our neighbors our friends and families and children in our neighborhood will be impacted if the Purple Route or any of the DSAs that encompass it are selected.

So, we would again ask that you remove that from selection and do so as you did in November of 2010 when we first found out that we were in the way of this new proposal corridor. There again, as you stated back in that time in November 2010, there were no key advantages over the orange corridor at that time. As your most recent study has done and as we've been through this I'm sure as you have heard everybody is kind of come over fatigued of studies and comment periods, so again, we're here for the 3rd time in 5 years to state, again, as you stated in your DEIS, there is no key advantage over the orange corridor that's been proposed and protected for the last 20 years.

Again, had we, what was I going to say…if again, the Town of Holly Springs I would talk to all of my fellow residents of the Town of Holly Springs as well. We have already, as a town acquired right-of-way dedications for the protected corridor along the orange path, which is a great benefit to our town. It comes out of cost savings to us if we were to have to move those to the Purple Route. Again, that would come at a detriment for throw away costs requiring right-of-way dedications for the purple corridor and then doing that, we again would have the planning and investment of the water, the sewer, the transportation infrastructures for the town that would have to be mitigated, re-planned and re-developed, at an expense to modify these that again, we had not planned for.

So, I would say to our town and our residents to cover these new investments and expense what would take place? Would it be the increase of taxes, the mitigation or the loss of services that are already provided by the town, as well as the ability for us to see the city growth and the tax base in our community.

And finally, I would say that as we talk about the financial impacts to the community, the community distrust that is being impacted, so that as we look at this path right out our front door or the back door, the elimination of our homes, the environmental nuisances, present during highway construction, the close proximity to the completed highway and the noise barriers, would be a devaluation of our properties of those that remain. Again something that was not necessarily taken into consideration into the impact study.

And then finally, I'll just kind of wrap-up because I know I'm being asked to, I would say that again, we understand that the reason that we're in consideration was given to the mitigation of the wetlands impacts and as we see it. We'd ask you to think logically. To act rationally when it comes to the preservation of wetlands, but most importantly, the

preservation of communities that have already been properly developed and the preservation of the livelihoods of residents of the Town of Holly Springs and specifically that of the Sunset Oaks Neighborhood. Thank you very much for your time.

Moderator: Thank you, sir. Mary Alice Arvin followed by Matt McGinnis.

Audience Member: Armin? You said Armin.

Moderator: Arvin. I'm sorry.

Audience Member: Okay.

TRACKING ID – O-37

JoAnn Hunter: I'm JoAnn Hunter at 9104 Fanny Brown Road and I'm speaking for Mary Alice Arvin at 7600 Lake Wheeler Road. On the behalf of Mary Alice and myself, I entered this room tonight with very little knowledge on toll roads, but I got an education from the gentleman earlier and I'm sure you did too.

Our question is, why is the south 540 having to pay tolls when the north 540 pays no tolls? We helped pay for 540 North, then I find out tonight, we shouldn't even have a toll. So, I've changed my mind since I been here. I don't want a toll. So, we are wanting that questioned answered. Why do we have a toll when we don't need it? And if this study proves that we've lost money with the toll, common sense tells you what to do.

I mean, you have…but another thing I wanted to point out too, I moved from Ten-Ten Highway and I promise you 10,15 minutes some mornings trying to get out of the driveway. I moved from Ten-Ten to Fanny Brown Road thinking, oh well, this is going to be short road, you know at least I'll be able to the highway, get somewhere, quick. No way.

This idea of fixing the secondary roads like Ten-Ten, that's one of your major, major. Major…if you don't believe it, go over there and look every day. You're not going to do anything to Ten-Ten without a big, big backup and think about big, big backup to traffic trying to get to work and back home.

Now, the next point that I want to make about 540. The Orange Route of Walter, he's been a family friend and everything. We all know that we have been made prisoners of the 540 project and we accepted the Orange Route whether we wanted to or not because we've had to live with it so long as prisoners, like staying in a prison, you know you got to get acclimated to it, don't you. So, you live with it.

Alright, I got one more comment to say to you at the Department of Transportation North Carolina. The federal government is educated far beyond their intelligence. Y'all got more sense than they got so do what you need to do. Get on with it.

Moderator: Thank you. Next we have Matt McGinnis followed by our last speaker Peter Hochstaetter.

TRACKING ID – O-38

Matt McGinnis: Hello, good evening. Just a few brief comments. Most everyone that is still left has probably heard many of these, but I just wanted to be on the record. I myself have been in 408 Edgepine Drive, Holly Springs, North Carolina. I'm in Sunset Oaks.

Moved into that home in 2006 and then realized shortly thereafter, yeah hey the purple line and it's going to go straight through your neighborhood. And like many of you, take homes away, impacts to the local environment, impacts the neighborhood that I bought. And for me, I've been dealing with this too, five, six years and feel like yes, it's time to get on with it.

So, I want to echo many of the sentiments I heard here tonight. If you force me to choose, I'm choosing the Orange Route. This is where I bought my home and was planning on was the Orange Route, so Orange Route.

The other thing I wanted to mention too was some of the legal challenges that may or may not come up with the Orange Route. If there are those legal challenges, what happened to the upgrade 440 plan that I saw years ago, where was that one? I don't see it anymore. That's something worth considering.

So speaking specifically to the Purple Route, it's the costliest to the taxpayers. It's the costliest to human life, and families, specifically as regards relocation and local area schools, during the construction and after the construction. Middle Creek is just five minutes away. Some folks who have families and have children that live in this neighborhood, that 5-minute drive will turn into a 20 or 25-minute drive just to get to that school during the construction period at least, at minimum.

Impacts the Holly Springs Park, I believe that's a 4(f) de minimis impact. That park is planned. That park is not in-place, but that park was moving in. That's why I bought in that neighborhood. They were going to put a park in the bottom of that neighborhood. It impacts the Holly Springs long term vision plan. It's an impact to Wake County traffic and county growth planning.

Outside of that I mention some of the personal impacts to me. This has been a yoke around my neck, 5 or 6 years. I had 2 opportunities to sell my home. I backed off twice because I know I wasn't getting market value for that house. Why? Because no one knew where the road was going. So, let's do the Orange Route and move on.

The last thing I want to mention to you as several of you have mentioned, tolls. I live in the south man, what's up? I don't live up north. There's not supposed to be any tolls down here. So let's not have toll roads. I specifically do not drive the toll road so I will drive north on 540. I live, I'm sorry, I work, practically live in the northern part of the

County right on Six Forks Road. I drive 540 until Exit 1 and I take it and I pick up 40 and I head south or I take Six Forks all the way down to 440 and I suffer the traffic. Why? I drove 540 one time, 10 minutes faster, 10 miles out of the way, $5 one-way. That doesn't make any sense. So, I drive that daily, not only is that a tax on me, it's a tax on my income. So, no tolls. Thanks. That's where I leave it. Thanks everyone.

Moderator: Thank you, sir. Last but not least Peter Hochstaetter. Peter Hochstaetter? Alright. Is there anyone else that would like to speak at this point? Going once…State your name.

TRACKING ID – O-39

Tim Sarpolus: I'm Tim Sarpolus, 3709 James Lane Drive. I forgot one thing. I cut myself short. When we were going through this five years ago, there was just a Tan Route and the Tan Route just all of a sudden appeared. But then we got involved with some other folks and trying to get some attention to this and one of them was from the Good Samaritan Baptist Church and he must have talked to somebody good enough that they said they couldn't change things. They had to keep all this on the table but they came up with the Brown Route and down at the bottom end, the Tan Route turned and made a big sharp turn and so we're aware of that. We just want you all to know we realize that somebody talked to somebody that got them to change the route to avoid Good Samaritan Baptist Church and I'm all in favor of that. You know it's an old historic Baptist church, been there a long, long time. But my neighborhood has a value too just as much as that church.

Moderator: Thank you Mr. Sarpolus. Anyone else?

Rebecca Patterson: Can everyone hear me?

Audience Member: Turn it up a little bit.

Rebecca Patterson: Is that better?

Audience Member: Yes.

TRACKING ID – O-40

Rebecca Patterson: Hi my name is Rebecca Patterson. I live at 1200 Golden Horseshoe Circle in Morrisville. I came here tonight to learn more about this process about the roads. I'm a prospective home buyer so I wanted to attend this really important meeting to help me decide the best options, moving forward next year.

Just a couple of things, I do support from what I learned, the first three routes, the orange. One minor point just want to bring out looking at the Red Routes, it doesn't make sense from a visual perspective on the map because it's so close to 440. Why would you have a super, you know, 540 toll road right next to 440? Isn't it the whole purpose is to have a highway or infrastructure to include outer line communities like Fuquay or similar somewhere in that vicinity? Sorry, about that I'm a little nervous. So, I just wanted to

make that little point of include the outline areas, perhaps the first three routes would be the best for the Orange Route. So, thank you.

Moderator: Thank you, ma'am. Anyone else? Alright. Going once…twice…alright, well with that I thank you all for coming out tonight and all of you that attending via the live webcast. Please drive home safely.

Hearing Adjourned.

Jamille Robbins, Moderator
Public Involvement Unit
December 9, 2015

Typed by Neighborhood Solutions

APPENDIX F
Newsletters

Triangle Expressway
SOUTHEAST EXTENSION

NORTH CAROLINA
Turnpike Authority

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

PLANNING STUDY *and* ENVIRONMENTAL IMPACT STATEMENT

MARCH 2010

SOUTHEAST EXTENSION: FINDING A SOLUTION

The North Carolina Turnpike Authority has embarked on a study to explore options for addressing transportation needs with the proposed Triangle Expressway Southeast Extension project. Rapid population growth in Wake and Johnston counties is forecast to increase strain on existing roads. As part of this study, the Turnpike Authority will investigate potential solutions for meeting current and future transportation needs in this area.

The Triangle Expressway, from Interstate 40 at NC 147 in Durham County south to NC 55 Bypass near Apex, is currently under construction and is scheduled to open to traffic in late 2012. The Southeast Extension would extend the Triangle Expressway and complete the 540 Outer Loop. It will be studied as a toll facility and likely would be constructed in phases. Phase I is between NC 55 in Apex and Interstate 40 near the Johnston/Wake County line. Phase II continues the project at Interstate 40, ending at US 64/US 264 Bypass in Knightdale. The entire project is nearly 30 miles long.

The Southeast Extension study will consider various solutions for addressing area transportation needs. These studies will consider several options, including improving existing roads and building a new roadway, along with non-roadway options such as mass transit. With extensive community participation, the Turnpike Authority expects to identify and finalize a route for the Southeast Extension and begin construction of Phase I in 2014.

What is an EIS?

The National Environmental Policy Act (NEPA) requires federal agencies to prepare an Environmental Impact Statement (EIS) for major federal actions that are expected to significantly impact the environment. *(For more information go to **http://environment.fhwa.dot.gov/index.asp**.)*

An EIS is a detailed report that defines the transportation problem, discusses the range of possible solutions considered, discloses the impacts possible solutions would have on the human and natural environments, summarizes involvement with the public and other stakeholders, and aids in making decisions about the project.

The EIS process includes the following four major milestones:

1. **Notice of Intent (NOI):** The NOI is published in the Federal Register, signaling the initiation of the EIS process (Nov. 2009 for this project).
2. **Draft EIS:** After publication of the Draft EIS, there are public hearings and a formal comment period.
3. **Final EIS:** The Final EIS addresses comments received on the Draft EIS and identifies the preferred route for the project.
4. **Record of Decision (ROD):** The ROD identifies the selected route for the project, explains why it was chosen, and provides information on ways to minimize and compensate for project impacts.

COMMUNITY PARTICIPATION: THE KEY TO A SUCCESSFUL OUTCOME

Community participation is a core element of the transportation planning process. A successful Southeast Extension study will depend on engaging community members and stakeholders to identify area transportation needs, quality of life concerns, community values and potential project solutions.

We encourage you to participate actively in the Southeast Extension study. There are several different ways you can participate and stay informed:

- **Participate in public workshops and events.** The Turnpike Authority will hold public workshops and events throughout the study process to provide information and receive your input about the project. We plan to hold the first series of workshops this summer.
- **Request a small group meeting.** The Turnpike Authority is available to meet with interested community organizations, neighborhood associations and others throughout the project's development. Please contact the Turnpike Authority to arrange a small group meeting.
- **Contact us with questions and comments.** You can contact the Turnpike Authority by phone, e-mail or traditional mail. You are also welcome to discuss the project with us via our project blog. *(Please see back page for contact information.)*

WHERE IS THE PROJECT STUDY AREA?

The map (below/above) shows the study area for the Southeast Extension project. The Turnpike Authority will consider a range of project routes within this study area. The complete study area includes parts of southern and eastern Wake County and northern Johnston County, as well as parts of eight municipalities — Apex, Holly Springs, Cary, Fuquay-Varina, Garner, Raleigh, Knightdale and Clayton — along with several rural communities, such as Willow Spring and McCullers Crossroads.

The route shown for Phase I is the protected corridor for this part of the project. Phase II does not have a protected corridor; the route shown for Phase II is one potential route and is shown for reference.

PROTECTED CORRIDOR: ONE OF SEVERAL POSSIBLE ROUTES

A protected corridor preserves the location of a new road from encroaching development. In the mid-1990s, the North Carolina Department of Transportation (NCDOT), under the Transportation Corridor Official Map Act, established a protected corridor for Phase I of the Southeast Extension between NC 55 in Apex and Interstate 40 near the Johnston/Wake County line. The Turnpike Authority will evaluate the protected corridor, as well as other possible routes, as part of this study. The study area map on the opposite page shows the location of the protected corridor for Phase I.

WHAT'S NEXT?

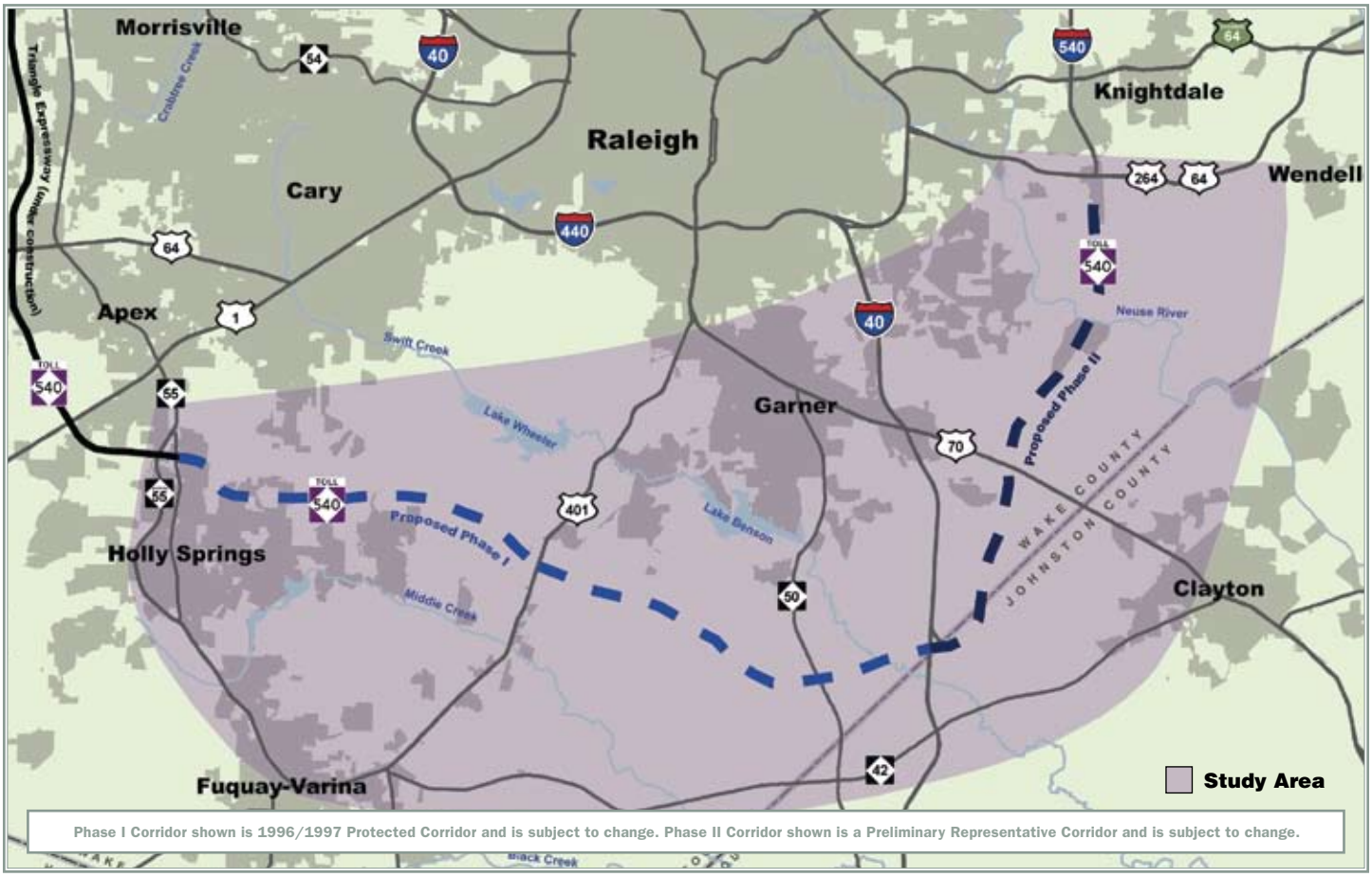
The Turnpike Authority is currently collecting project area data, identifying local needs and beginning to develop concepts shaping the project's purpose. The study team will soon begin identifying possible routes, conducting environmental field studies and documenting community characteristics. The Turnpike Authority will hold public input events throughout this study and plans to hold the first series of public workshops this summer.

The Turnpike Authority expects to identify the most reasonable routes for the project later this year and will document the potential impacts of these routes in a Draft Environmental Impact Statement (EIS). The publication of the Draft EIS and the remaining project milestones are tentatively scheduled as follows:

• Draft Environmental Impact Statement	2012
• Final Environmental Impact Statement	2013
• Final Approval of Project Route (Record of Decision)	2013
• Phase I Construction Begins*	2014
• Phase II Corridor Protection	2014
• Phase I of Southeast Extension Open to Traffic	2019

** Contingent upon availability of funding.*

Study Area Map



NORTH CAROLINA
Turnpike Authority

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Triangle Expressway Southeast Extension
P. O. Box 30923
Raleigh, NC 27622

Let Us Know What You Think!

Your thoughts and questions are important to us. We encourage your input and there are many ways you can reach us:

Web | Visit our website at **www.ncturnpike.org/projects/southeast/** and our project blog at **southeastextension.blogspot.com**.

E-mail | Send us a comment via e-mail to **southeast@ncturnpike.org**.

Telephone | Call our toll-free hotline at **1-800-554-7849**.

Letter | Send your letter to:

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Triangle Expressway
SOUTHEAST EXTENSION

NORTH CAROLINA
Turnpike Authority

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

PLANNING STUDY *and* ENVIRONMENTAL IMPACT STATEMENT

ISSUE 2 ■ SEPTEMBER 2010

JOIN US FOR INFORMATIONAL MEETINGS ON THE SOUTHEAST EXTENSION!

N.C. Turnpike Authority schedules three meetings to update residents

IN JANUARY, the N.C. Turnpike Authority **(NCTA) began studying the possibility of a new toll road called the *"Southeast Extension"* that would connect to the Triangle Expressway, another toll road currently under construction in Wake and Durham counties. This new road would span nearly 30 miles through southeastern Wake County and connect the NC 55 Bypass near Apex to the US 64/264 Bypass in Knightdale.**

NCTA engineers and other representatives would like to update you on this proposed new road, answer your questions, and hear what you think. Please plan to attend one of the meetings.

These meetings will be in an open-house format, so you can arrive at your convenience. The same information will be presented at each of the three workshops, which are being held in different parts of the project study area.

Tuesday, Sept. 21, 2010, 4pm–7pm
Wake Technical Community College
Student Services Building, Rooms 213/214
Raleigh, NC 27603

Wednesday, Sept. 22, 2010, 6pm–9pm
Holly Springs High School
5329 Cass Holt Road
Holly Springs, NC 27540

Thursday, Sept. 23, 2010, 4:30pm–7:30pm
Barwell Road Community Center
3935 Barwell Road
Raleigh, NC 27610

Project Schedule

• Draft Environmental Impact Statement	2012
• Final Environmental Impact Statement	2013
• Final Approval of Project Route (Record of Decision)	2013
• Phase I Construction Begins	Contingent on funding
• Phase II Corridor Protection	Contingent on funding
• Phase I of Southeast Extension Open to Traffic	To be determined

In compliance with the Americans with Disabilities Act (ADA), NCTA will provide auxiliary aids and services for disabled persons who wish to participate in these workshops. To receive special services, please contact the project team by phone (800) 554-7849 or email southeast@ncturnpike.org. Please provide adequate notice prior to the date of the meeting so that arrangements can be made.

WHAT IS BEING STUDIED?

Three different plans that involve building or expanding roads to address growing traffic in southern Wake County are under consideration by NCTA at this time. There is also the fourth option of not building a new road or expanding existing roads, which is under consideration as well.

OPTIONS

1. **Build a New Roadway**
   Construct a new roadway between NC 55 near Apex to the US 64/US 264 Bypass in Knightdale. Several possible routes are under consideration as new location build alternatives (see map, opposite page).

2. **Improve Existing Roadways**
   Widen Interstate 40 from west of Raleigh to the Clayton area, Interstate 440 from Interstate 40 to the US 64/US 264 Bypass, and the US 64/US 264 Bypass from Interstate 440 to the eastern study area boundary.

3. **New Road Construction/Improve Existing Road Option**
   Construct a new roadway between NC 55 near Apex to Interstate 40 near the Wake/Johnston County line; and widen Interstate 40 from Interstate 440 to the Clayton area, Interstate 440 from Interstate 40 to the US 64/US 264 Bypass, and the US 64/US 264 Bypass from Interstate 440 to the eastern study area boundary.

NEXT STEPS

Each of these options is being studied. Some of the study criteria include:

- *What is the potential impact to existing homes, businesses, parks and other places people live, work, learn or play?*
- *How will building or expanding roads impact the natural environment?*
- *Will these options help reduce traffic congestion?*
- *What do residents, elected officials, government agencies and others think?*

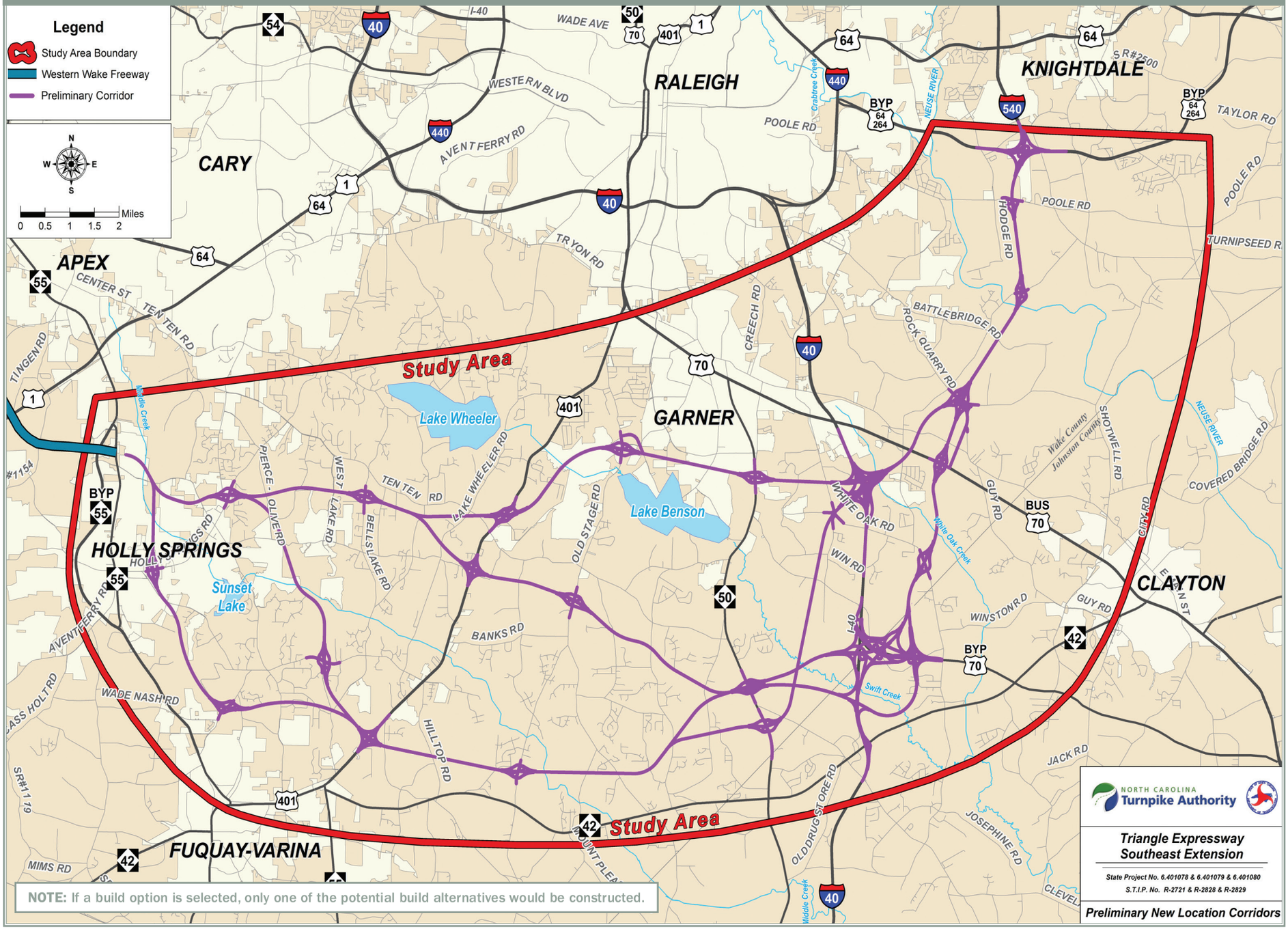
Your input is important in this step!
Join us for the informational meetings to offer your thoughts and opinions.

After this initial study, a smaller number of options will be studied in greater depth. More information about which options were selected, and the reasons why they were selected, will be available after November 1 on the NCTA website *www.ncturnpike.org/projects/southeast/documents.asp.*

In-depth studies of each option will begin in early 2011. Once all the research is done, a recommendation of which option best meets the needs of the community will be made. This information will be described in the Draft Environmental Impact Statement (EIS), which should be released in 2012. During this process, and even after the Draft EIS is released, public input will be accepted.

Potential New Location Build Alternatives

(As of September 2010)



NOTE: If a build option is selected, only one of the potential build alternatives would be constructed.

NORTH CAROLINA Turnpike Authority

Triangle Expressway Southeast Extension

State Project No. 6.401078 & 6.401079 & 6.401080

S.T.I.P. No. R-2721 & R-2828 & R-2829

Preliminary New Location Corridors

NORTH CAROLINA
Turnpike Authority

Triangle Expressway Southeast Extension
P. O. Box 30923
Raleigh, NC 27622

Let Us Know What You Think!

Your thoughts and questions are important to us. We encourage your input and there are many ways you can reach us:

Web | Visit our website at **www.ncturnpike.org/projects/southeast/** and our project blog at **southeastextension.blogspot.com**.

E-mail | Send us a comment via e-mail to **southeast@ncturnpike.org**.

Telephone | Call our toll-free hotline at **1-800-554-7849**.

Letter | Send your letter to:

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Complete 540
Triangle Expressway Southeast Extension
PO Box 30923
Raleigh, NC 27622

Let Us Know What You Think!

Your thoughts and questions are important to us. We encourage your input and there are many ways you can reach us:

Web | Visit our website at **www.ncdot.gov/complete540**

and our project blog at **complete540.blogspot.com**

E-mail | Send us a comment via e-mail to **complete540@ncdot.gov**

Telephone | Call our toll-free hotline at **1-800-554-7849**

Letter | Send your letter to:

Mr. Eric Midkiff, P.E.
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Complete 540
Triangle Expressway Southeast Extension

Planning Study *and* Environmental Impact Statement

Issue 3 ■ September 2013

Study Resumes to Complete 540

The Complete 540 study for the Southeast Extension of the Triangle Expressway has resumed following a delay of more than two years.

The N.C. General Assembly recently enacted new legislation (NCSL 2013-94 and 2013-183) that reversed NCSL 2011-7, which placed the study on hold, limiting the ability of the North Carolina Department of Transportation (NCDOT) to comply with certain federal requirements.

The Complete 540 project would provide a more direct route and quicker access to Research Triangle Park, the Raleigh-Durham International Airport, and major employment and activity centers along 540 for rapidly growing communities south and east of Raleigh.

In early August, the NCDOT study team resumed work on the project to collect information about how the various route locations proposed for completing 540 would affect the area environment. Information about future traffic volumes, development patterns, community features, natural resources, possible noise impacts, and other features is being collected and studied. NCDOT will also collect information from area residents and other local stakeholders to get local perspectives on the project.

The overall goal of the study is to understand how the project would benefit the region, and how the various routes proposed for it would impact the area and those who live and work there. With this information at hand, the best possible route location for completing 540 can be determined.

Fall 2013 Public Meetings

Mon., Oct. 14, 2013, 4:00 pm–7:00 pm
Wake Tech Community College
9101 Fayetteville Road
Raleigh, NC 27603

Tues., Oct. 15, 2013, 4:00 pm–7:00 pm
Barwell Road Community Center
3935 Barwell Road
Raleigh, NC 27610

Wed., Oct. 16, 2013, 6:00 pm–9:00 pm
Holly Springs High School
5329 Cass Holt Road
Holly Springs, NC 27540

Share Your Thoughts!

Three separate public meetings are being held in the project study area. The purpose of these meetings is to provide the latest information about the Complete 540 study. NCDOT staff and consultants will be there to receive your comments and answer your questions. These meetings will be in an open-house format, meaning you may attend at any time during the posted hours. Formal presentations will not be made at the meetings. The same information will be available at each of the three meetings, which are being held in different parts of the project study area for the convenience of all who would like to attend.

In compliance with the Americans with Disabilities Act (ADA), NCDOT will provide auxiliary aids and services for disabled persons who wish to participate in these meetings. To receive special services, please contact the study team by phone 1-800-554-7849 or email complete540@ncdot.gov. Please provide adequate notice prior to the date of the meeting so that arrangements can be made.

Si desea recibir una copia de este boletín en Español, por favor llame al número de teléfono 1-800-481-6494, o envíe un correo electrónico a complete540@ncdot.gov. Servicios de intérprete estarán disponibles en la junta para las personas que hablan Español y no hablan Inglés o si tienen una capacidad limitada para leer, hablar o entender el Inglés. Para obtener más información sobre estos servicios, por favor llame al número de teléfono 1-800-481-6494.

ROUTE ALTERNATIVES CURRENTLY UNDER CONSIDERATION

At public meetings held in September and December of 2010, several color-coded route location alternatives were presented for review and comment. Following those meetings, some of those alternatives were dropped from further consideration. Since that time, four new alternatives have been developed, and a portion of two that were dropped in 2010 have been reintroduced.

The map on the facing page shows the route alternatives that are currently recommended by NCDOT for further study. The paragraphs below explain the new routes that have been added since 2010. They also explain why the two previous routes needed to be reintroduced.

Lilac Corridor — NCDOT worked with the Capital Area Metropolitan Planning Organization and other local and agency stakeholders to see if they could identify any other route locations that could minimize wetland impacts similar to the Red Corridor. A new corridor—designated as the Lilac Corridor—showed the potential to accomplish this.

Mint Green Corridor — Compared to the Green Corridor, this option reduces impacts to a proposed development known as Randleigh Farm and would displace fewer homes and businesses than the nearby Tan Corridor.

Brown Corridor — This option completely avoids the Randleigh Farm property, but would impact a public wastewater treatment facility and a police training center.

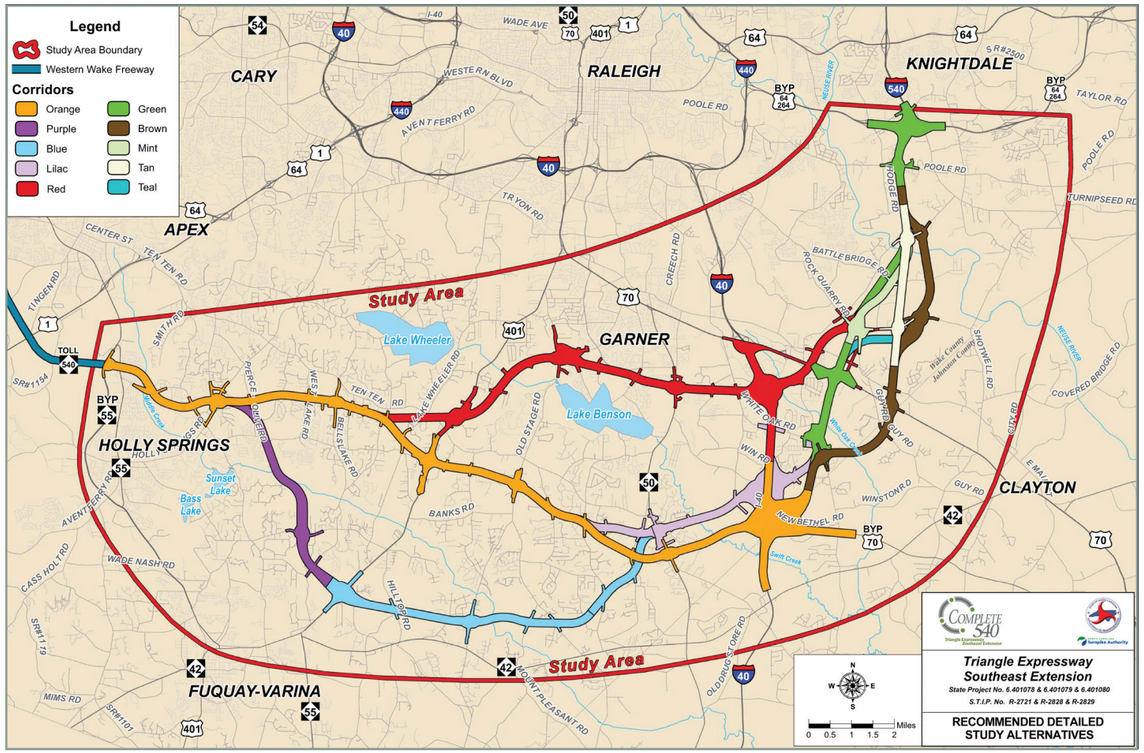
Teal Corridor — This is a short connector between the Green corridor and the Brown corridor, creating another route for 540 between I-40 and US 64/US 264 Bypass.

Purple-Blue-Lilac Corridor — The Blue and Purple Corridors were removed from consideration in November 2010 because the original connection did not provide enough benefit over other options under consideration at that time. With the development of the Lilac Corridor, however, it was found that connecting the Purple Corridor to the Blue Corridor, and then to the new Lilac Corridor, created an option that minimizes wetland impacts similar to the Red Corridor. For this reason, the combination known as the Purple-Blue-Lilac Corridor is under consideration.

Red Corridor — After NCSL 2011-7 was enacted, preventing full evaluation of the Red Corridor, NCDOT worked extensively with environmental agencies and local stakeholders to find a way to move the study forward without the Red Corridor. Despite that effort, the US Army Corps of Engineers determined that the federal laws they administer require the Red Corridor be studied at the same level of detail as the other route locations, and that the State law enacted in 2011 does not supersede federal law.

Route Alternatives Recommended for Detailed Study

September 2013



NOTE: If the project is approved for construction, only one of the potential routes would be built.

WHAT HAPPENS NEXT?

After consideration of all public and agency comments received on these recommended alternatives, NCDOT and the Federal Highway Administration will decide on the final set of "Detailed Study Alternatives." Once this decision is made, the study team will proceed with the required in-depth evaluations and comparisons. The results of these studies will be documented in the project's Draft Environmental Impact Statement, along with a possible recommendation of which alternative best meets the project purpose. The current schedule calls for this document to be published in the spring of 2015.

Once this document is published, public hearings will be scheduled at several locations in the project study area. Following the public hearings, NCDOT will again review all public and agency comments and then make a final decision about the best route, or "Preferred Alternative" for the project.

Anticipated Project Time Frame

Hold Public Meetings on Alternatives ..... Fall 2013
Finalize Detailed Study Alternatives ..... Winter 2013
Complete Required Technical Studies ..... Fall 2014
Receive Approval of the Draft EIS* ..... Spring 2015
Draft EIS Review Period and Public Hearings .. Summer 2015
Selection of the Preferred Alternative ..... Fall 2015
Approval of the Final EIS* ..... Spring 2016
Publication of the Record of Decision ..... Summer 2016
Complete Environmental Study Process ..... Fall 2016

Environmental Impact Statement

If the Study results in project approval, the following is expected, subject to availability of funding:

Complete Financial Feasibility ..... Spring 2017
Begin Right-of-Way Acquisition ..... Summer 2017
Begin Construction ..... Spring 2018
Open to Traffic ..... Spring 2022

COMPLETE 540
Triangle Expressway Southeast Extension

NORTH CAROLINA Turnpike Authority

PLANNING STUDY *and* ENVIRONMENTAL IMPACT STATEMENT

ISSUE 4 ■ FEBRUARY 2014

Detailed Study Alternatives Selected

We want to update you on the progress of the North Carolina Department of Transportation's (NCDOT) Complete 540 study for the Southeast Extension of the Triangle Expressway. The study aims to find the best possible route for completing 540 while minimizing impacts to people, businesses, and natural features within the area.

We understand how important it is to complete the process of identifying the final route for the project as quickly as possible for those who live and work in the project area. Rest assured that we share that same goal.

NCDOT is studying several possible routes to complete 540 from Holly Springs to Knightdale. These routes are shown on the map on the other side of this newsletter. Over the next few months, NCDOT will be conducting studies to determine the route that best meets the purpose of the project while also considering impacts to the human and natural environment. NCDOT expects to complete these studies and recommend the preferred alternative by the fall of 2015.

Studying these routes in detail now will greatly reduce the possibility of having to reconsider any of these routes in the future. Having to go back and consider additional routes after the study is complete would significantly delay selection of the final alternative. In other words, studying all of the potential Detailed Study Alternatives (DSAs) currently under consideration with the same level of detail now is the most effective approach for reaching a final decision as quickly as possible.

In October 2013, NCDOT held three public meetings to present the DSAs recommended by the Federal Highway Administration and NCDOT. We also presented the recommended DSAs to the various state and federal agencies with a stake in the project, and collected feedback from the Capital Area Metropolitan Planning Organization (CAMPO), which includes representatives from local governments within the study area.

Approximately 1,700 individuals attended the public meetings and NCDOT received more than 1,100 comments. The majority of the comments from citizens supported the Orange Corridor and opposed the Purple, Blue, Lilac, or Red Corridors, although there was some level of support and opposition expressed relative to each of the color-coded corridor segments. The most common concerns expressed were about potential impacts to homes and neighborhoods, natural resources, and increased noise and visual impacts. The information that was received from the public did not provide sufficient new information to change the basis for the recommended DSAs. NCDOT will document the public comments in the project's Draft Environmental Impact Statement (EIS), where it will be used in conjunction with information about the potential effects of each option under consideration to identify one preferred route for the project.

CAMPO expressed support for the Orange Corridor. Neither CAMPO nor the environmental resource and regulatory agencies requested dropping any of the corridors prior to a detailed study. NCDOT used this feedback, along with information about the benefits and potential effects of each option under consideration, to determine that more detailed information should be collected for each option before eliminating any of the recommended DSAs from further consideration.

Based on the feedback from citizens, local governments, and state and federal agencies, NCDOT is moving forward to complete the detailed study as quickly as possible, and will include all of the comments in any final decision making process.

NCDOT appreciates your patience and all of the community involvement in this process. We will continue working closely with the communities in the project area to select the best option for the project as quickly as possible.

Next Steps and Comment Process

With the Detailed Study Alternatives (DSAs) now selected, there is much work to be done to complete the next step in the process, which is the preparation and distribution of the project's Draft Environmental Impact Statement (EIS). This work will include an analysis of impacts based on more detailed engineering drawings and impact data collected through fieldwork.

NCDOT has established an aggressive schedule for all the study's remaining steps so that the final route location decision can be made as quickly as possible. In order to meet each step in the schedule, the study team will now be devoting its full attention to the technical studies and Draft EIS preparation.

While your comments and questions are always welcome, the best opportunity to provide your views on the DSAs will be after the detailed studies have been completed and documented in the Draft EIS.

The Draft EIS will be widely available to the public for review and will contain important new information on the DSAs. Official comments on this information can be made during the Draft EIS review period, which will include formal public hearings. Once the review period is over, the preferred route location will be selected.

FOR MORE INFORMATION

Email
complete540@ncdot.gov

Hotline
1-800-554-7849

Mailing Address
Mr. Eric Midkiff, P.E.
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Si desea recibir una copia de este boletín en Español, por favor llame al número de teléfono 1-800-481-6494, o envíe un correo electrónico a complete540@ncdot.gov.

NORTH CAROLINA
Turnpike Authority

Complete 540
Triangle Expressway Southeast Extension
PO Box 30923
Raleigh, NC 27622

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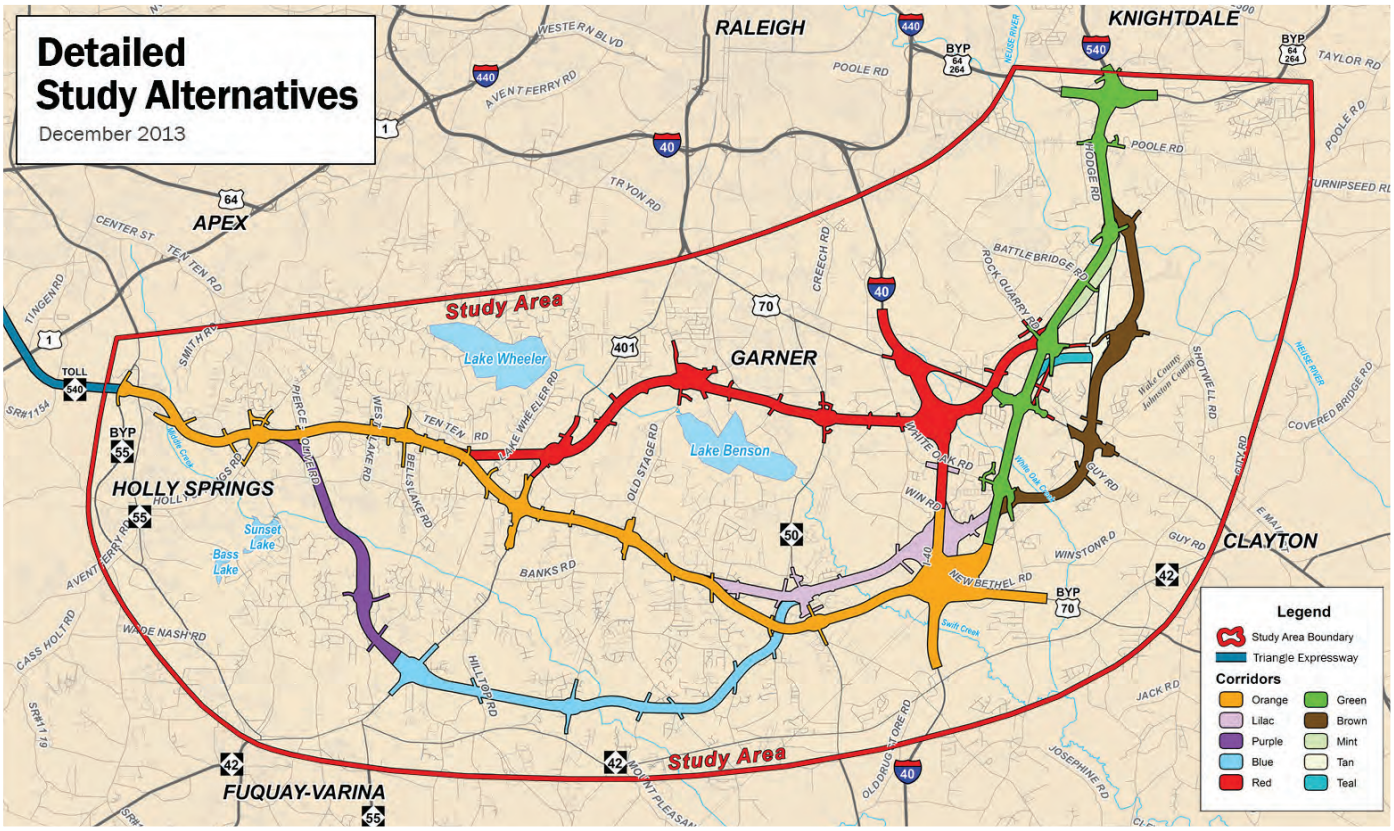


Note: A larger version of the DSA map is available on the project's website, at www.ncdot.gov/complete540.

Complete 540
Triangle Expressway Southeast Extension
PO Box 30923
Raleigh, NC 27622

CONTACT INFORMATION

Your thoughts and questions are important to us. We encourage you to attend one of the public hearings or open houses describ ed in the newsletter. Questions about these events, or the study in general, can be made as follows:

E-mail | Send us a comment via e-mail to **complete540@ncdot.gov**

Telephone | Call our toll-free hotline at **1-800-554-7849**

US Mail | Send your letter to: **Mr. Eric Midkiff, P.E.**
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

COMPLETE 540
Triangle Expressway Southeast Extension

PLANNING STUDY & ENVIRONMENTAL IMPACT STATEMENT NEWSLETTER 5 ■ SEPT. 2015

Draft Environmental Impact Statement Now Available for Review

The Complete 540 Draft Environmental Impact Statement (EIS) has been published by the North Carolina Department of Transportation and the Federal Highway Administration. The Draft EIS, associated technical reports, and prelimiinary designs of the alternative routes being considered, are available for review at the planning departments of the following communities: Holly Springs, Fuquay-Varina, Garner, Clayton, and Knightdale. They are also available at the Capital Area Metropolitan Planning Organization offices in downtown Raleigh, at the NCDOT District Offices at 4009 District Drive, in Raleigh, and on the project website at www.ncdot.gov/complete540.

Copies of the Draft EIS and its associated technical reports only, without the preliminary design drawings, are available for review at the following area libraries:

- Holly Springs Community Library, 300 W. Ballentine Street, in Holly Springs
- Fuquay-Varina Community Library, 133 S. Fuquay Avenue, in Fuquay-Varina
- Southeast Regonal Library, 908 7th Avenue, in Garner
- Hocutt-Ellington Memorial Library, 100 S. Church Street, in Clayton

Please note that the staff members at these locations are not able to answer questions about the materials. Questions should be sent to NCDOT, as shown on the back page of this newsletter.

Si desea recibir una copia de este boletín en Español, por favor llame al número de teléfono 1-800-481-6494, o envíe un correo electrónico a complete540@ncdot.gov. Servicios de intérprete estarán disponibles en la junta para las personas que hablan Español y no hablan Inglés o si tienen una capacidad limitada para leer, hablar o entender el Inglés. Para obtener más información sobre estos servicios, por favor llame al número de teléfono 1-800-481-6494.

Public Hearings Scheduled

NCDOT has scheduled two formal public hearings and three informal open house events to accept public comments on the findings of the Draft Environmental Impact Statement. The open house events provide an opportunity to ask questions and discuss the project with NCDOT representatives. The hearings allow individuals to make formal oral or written comments regarding the proposed project.

The formal comment period for the Draft EIS will begin on Monday, October 5, 2015 and will end on Monday, November 23, 2015. All comments received during the formal comment period will become part of the offical record of the project.

Open House & Hearing Locations

The open houses will be held from 3:30 pm to 6:30 pm. The hearings will start at 7:00 pm.

Tuesday, October XX, 2015
Barwell Road Community Center
3935 Barwell Road, Raleigh

Wednesday, October XX, 2015
Wake Tech Community College
9101 Fayetteville Road, Raleigh
Note: Open House only, no hearing on this date

Thursday, October XX, 2015
Holly Springs High School
5329 Cass Holt Road
Holly Springs, NC 27540

In compliance with the Americans with Disabilities Act (ADA), NCDOT will provide auxiliary aids and services for disabled persons who wish to participate in these events. To receive special services, please contact the study team by phone at 1-800-554-7849 or email complete540@ncdot.gov. Please provide adequate notice prior to the date of the meeting so that arrangements can be made.

Steps in the Environmental Review Process

The Complete 540 study is being developed in accordance with the National Environmental Policy Act (NEPA), and includes the preparation of an environmental impact statement (EIS).

The study includes the following steps:

Step 1
- **Collect data and identify local needs**
- **Define purpose and need of project**
- **Hold public input events**

Step 2
- **Identify possible routes**
- **Gather community concerns**
- **Conduct field studies**
- **Hold public input events**
- **Select potential routes for detailed study**

Step 3
- **Study potential routes in detail**
- **Conduct engineering studies**
- **Conduct field surveys**
- **Conduct environmental analysis**

Step 4
- **Prepare and distribute Draft EIS**

Step 5
- **Hold formal public hearings**

Step 6 — Fall/Winter, 2015*
- **Review all ccomments made on the Draft EIS**
- **Select preferred route**

Step 7 — Fall/Winter, 2016*
- **Develop preliminary engineering designs**
- **Conduct additional field studies**
- **Prepare and distribute Final EIS**
- **Receive final federal approval of project route (Record of Decision)**

Step 8 — 2017/2018*
- **Begin right-of-way acquisition and construction activities****

WE ARE HERE

*** Estimated time frame.**

**** Assuming project approval and availability of funding.**

What is a Draft EIS and why is it important?

An Environmental Impact Statement, or EIS, is a document that summarizes the many specific analyses and technical reports prepared as part of the overall study. Preparation of an EIS is a requirement of the National Environmental Policy Act (NEPA). One of the main purposes of NEPA is to provide decision-makers with the facts needed to ensure that the effects of a proposed project are understood before irreversible actions are taken.

Another requirement of NEPA is public disclosure of the study's findings. In order to accomplish this requirement, the EIS needs to be made available for review by government agencies and the public. There also needs to be a way to update, modify, or, if needed, to correct the information contained in the document. To do this, a distinction is made between a Draft EIS and a Final EIS.

A Draft EIS is a formal document, meaning it has been reviewed and approved for public distribution by the Federal Highway Administration. A Draft EIS contains a summary of the benefits and impacts of the proposed project. Once this document has been approved for public distribution, a formal announcement is made and copies of the document are distributed to regulatory agencies, local governmental officials, and others who need to make an official review. Printed copies of the Draft EIS and any other documents included by reference are made available for public review at public libraries, other public locations, and through Internet access.

Once the Draft EIS has been published, the document's formal review period begins. This period lasts several weeks and is intended to allow all who have an interest in the proposed project to thoroughly review the document and formulate questions and comments.

A key aspect of the review period is for the sponsoring agencies—in this case the FHWA and the NCDOT—to conduct one or more formal public hearings. Public hearings are intended to provide an opportunity to review and discuss the proposed project and the Draft EIS findings with the project sponsors and to submit formal comments about those findings. All comments submitted during the designated comment period, whether submitted before, during, or after the public hearing, become part of the official record of the project.

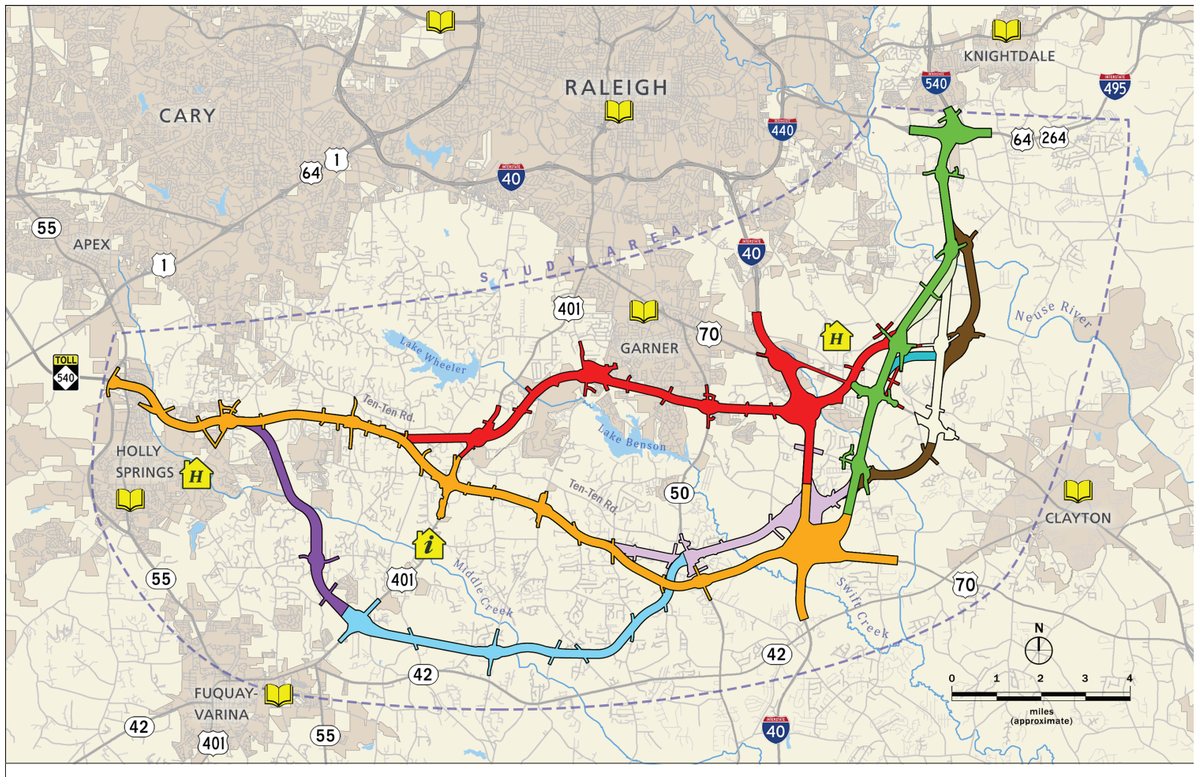
Once the formal comment period has ended, work begins on preparing the Final EIS, which includes a summary of all the comments received and their responses. The Final EIS also contains a detailed explanation of the alternative designated as the preferred "build" option and the reasons it was selected. Once the Final EIS is approved by the FHWA, its conclusions become official and a formal "Record of Decision" is published.

Statement On "*De Minimis*" Impact To Parklands

Several of the potential routes under consideration for the Complete 540 project would affect public park resources in the project's study area. Section 4(f) of the Department of Transportation Act of 1966 affords special protections to public parks and recreational resources. Under Section 4(f), these resources cannot, in most cases, be disrupted by highway projects unless it can be shown that there are no feasible and prudent alternatives to doing so. However, an exemption known as a "*de minimis* impact finding" is provided in cases where the official with jurisdiction over the park or recreational resource agrees with a determination that the effects of the highway would not adversely affect the protected resources.

In this newsletter, the Federal Highway Administration (FHWA) and NCDOT provide public notice of intended *de minimis* impact findings under Section 4(f) for the Complete 540 project's potential effects on three recreational resources in the project area. These three resources are the Town of Cary's Middle Creek School Park, the Watershed Extension Loop Trail in the Clemmons Educational State Forest (managed by the North Carolina Forest Service), and the Neuse River Trail (managed by the City of Raleigh.) As documented in the project's Draft Environmental Impact Statement, NCDOT's evaluation showed that the potential effects on each of these resources would not adversely affect their recreational characteristics. The proposed *de minimis* finding is based on coordination with the officials with jurisdiction over each resource.

Comments on the proposed *de minimis* finding may be submitted to: Federal Highway Administration, Attn. Mr. Donnie Brew, 310 New Bern Avenue Suite 410, Raleigh, NC 27601. Comments can also be sent to the NCDOT (see back page). The comment period extends from October 5, 2015 to November 23, 2015.



CORRIDOR SEGMENTS STUDIED IN DETAIL

Ten individual corridor segments have been studied in detail. These segments have each been given a different color. These segments can be combined to form seventeen different end-to-end route alternatiives, connecting US 55 in Apex to US 64/264 Bypass in Knightdale. Detailed maps showing each of these alternatives will be on display at the upcoming open house events, as described on page 1.

- Open House/Hearing Location
- Open House Location
- Draft EIS Review Location

Complete 540
Triangle Expressway Southeast Extension
PO Box 30923
Raleigh, NC 27622

Get Involved, Stay Informed

Your thoughts and questions are important to us. We encourage your input, and there are many ways you can reach us:

Web | Visit our website at www.ncdot.gov/projects/complete540

E-mail | Send us a comment via e-mail to complete540@ncdot.gov

T**elephone** | Call our toll-free hotline at 1-800-554-7849

Letter | Send your letter to: Ms. Nora McCann
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

mySidewalk

NCDOT is using an online public engagement tool called **mySidewalk** to provide the public and our stakeholders another way to learn more about the process and provide feedback. This forum can be accessed at:

engageNCDOT.mysidewalk.com

Complete 540
Triangle Expressway Southeast Extension

Planning Study & Environmental Impact Statement — Newsletter 6 ■ April 2016

Preferred Route Location Selected

The North Carolina Department of Transportation (NCDOT) in cooperation with the Federal Highway Administration (FHWA), has selected Detailed Study Alternative 2 as the Preferred Alternative for the proposed Complete 540 project. Alternative 2 consists of the Orange Corridor segment, a portion of the Green segment, all of the Mint segment, and another portion of the Green segment. This route is shown on the map on the inside of this newsletter.

The NCDOT and FHWA reached this decision after a thorough review of the results of the impact assessment conducted for the 17 Detailed Study Alternatives (DSAs), as documented in the study's Draft Environmental Impact Statement (EIS). The decision was also based on an assessment of the comments made on the Draft EIS by local governments, governmental agencies, non-governmental organizations and the public.

Some of the key reasons Alternative 2 was selected as the Preferred Alternative are as follows:

- It is formally supported by all local governments;
- It minimizes the number of relocations of homes and businesses, compared to other alternatives;
- It avoids impacts to the Swift Creek watershed critical area (a source for Raleigh's drinking water);
- It avoids the Clemmons Educational State Forest;
- It avoids impacts to historic resources; and
- It minimally affects only one local park.

The selection of the Preferred Alternative was based on data from the Draft Environmental Impact Statement (including topics such as impacts on the environment, homes and businesses, parks, community facilities and historic sites, and cost), past public comments on the proposed alternatives, as well as public comments made during the public comment period that ran from Nov. 9, 2015 through Jan. 8, 2016.

Details about the selection of the Preferred Alternative and the decision-making process can be found in the study's "Preferred Alternative Report," which is available on the study's website at www.ncdot.gov/projects/complete540/.

Public Outreach Summary

The NCDOT, in cooperation with the FHWA, held three public meetings and a formal public hearing in December 2015 to present information about the 17 DSAs and the findings of the Draft EIS and to receive comments on those findings. In total, these events were attended by more than a thousand individuals.

During the comment period for the Draft EIS (from early November 2015 to January 8, 2016), written comments addressing the DSAs, the Draft EIS, or other substantive project issues were received from about 1,500 people. During the comment portion of the formal public hearing, 34 people made oral statements. At the public meetings, 5 individuals

(continued on page 2)

More than 1,000 individuals attended the three public meetings and one public hearing held this past December.

Si desea recibir una copia de este boletín en Español, por favor llame al número de teléfono 1-800-481-6494, o envíe un correo electrónico a complete540@ncdot.gov.

Steps in the Environmental Review Process

The Complete 540 study is being developed in accordance with the National Environmental Policy Act, and includes the preparation of an EIS.

The study includes the following steps:

STEP 1
- Collect data; identify local needs
- Define purpose and need of project
- Hold public input events

STEP 2
- Identify possible routes
- Gather community concerns
- Conduct field studies
- Hold public input events
- Select potential routes for detailed study

STEP 3
- Study potential routes in detail; prepare roadway designs of alternative routes
- Conduct engineering studies
- Conduct field surveys
- Conduct environmental analysis

STEP 4
- Prepare and distribute Draft EIS

STEP 5
- Hold formal public hearing

STEP 6
- Review all comments made on the Draft EIS
- Select preferred route

WE ARE HERE

STEP 7
- Develop preliminary engineering designs
- Conduct additional field studies
- Prepare and distribute Final EIS
- Receive final Federal Highway Administration (FHWA) approval of project route (Record of Decision)

STEP 8
- Begin final design; conduct Design Public Hearing*
- Begin permit acquisition, financing, right-of-way acquisition, and construction activities*

*** Assuming project approval and availability of funding.**

("Public Outreach Summary," continued from page 1)

recorded oral comments electronically. There were also 23 people who submitted comments via NCDOT's mySidewalk site. Key conclusions that emerged once all the comments were reviewed include the following:

- Strong support for the Orange Corridor west of I-40. About 93 percent of submitted comments (those stating support for a color corridor west of I-40) expressed a clear preference for the Orange Corridor.
- Support for the Red, Purple/Blue, and Lilac Corridors was at 2 percent, 4 percent, and 2 percent, respectively.
- Widespread opposition to the Red (58 percent of those stating opposition to a color corridor west of I-40) and Purple/Blue Corridors (34 percent of those stating opposition to a color corridor west of I-40).
- Notable opposition to the Lilac Corridor, with 7 percent of those stating opposition to a color corridor west of I-40.
- Only one percent of those stating opposition to a color corridor west of I-40 are opposed to the Orange Corridor.

As can be seen from this summary, the most consistent pattern of comments concerned segments west of I-40. There was not such a discernible pattern of support and opposition for the corridors east of I-40. Comments that did specifically address those corridors most often expressed support for the Green Corridor. The Brown Corridor and the Tan Corridor were those with the greatest level of opposition.

More detail about the content of the public comments can be found in the study's "Preferred Alternative Report," which is available on the study's website at www.ncdot.gov/projects/complete540/.

What are the next steps in the study?

Various additional studies need to be undertaken or completed for the preferred alternative before the Final EIS can be prepared. These include:

- an updated traffic forecast and related analysis for the preferred alternative;
- detailed archaeological field surveys;
- additional viability studies and related research for the endangered dwarf wedgemussel;
- design refinements and associated changes in right-of-way and impacts in response to comments on the Draft EIS; and,
- a quantitative study of the indirect and cumulative effects of the preferred alternative on land use and water quality.

In addition to summarizing these findings in the Final EIS, they must be presented to local governments and agencies before the Final EIS can be approved. Currently, approval of the Final EIS is expected in mid-2017, depending on the outcome of these remaining tasks.

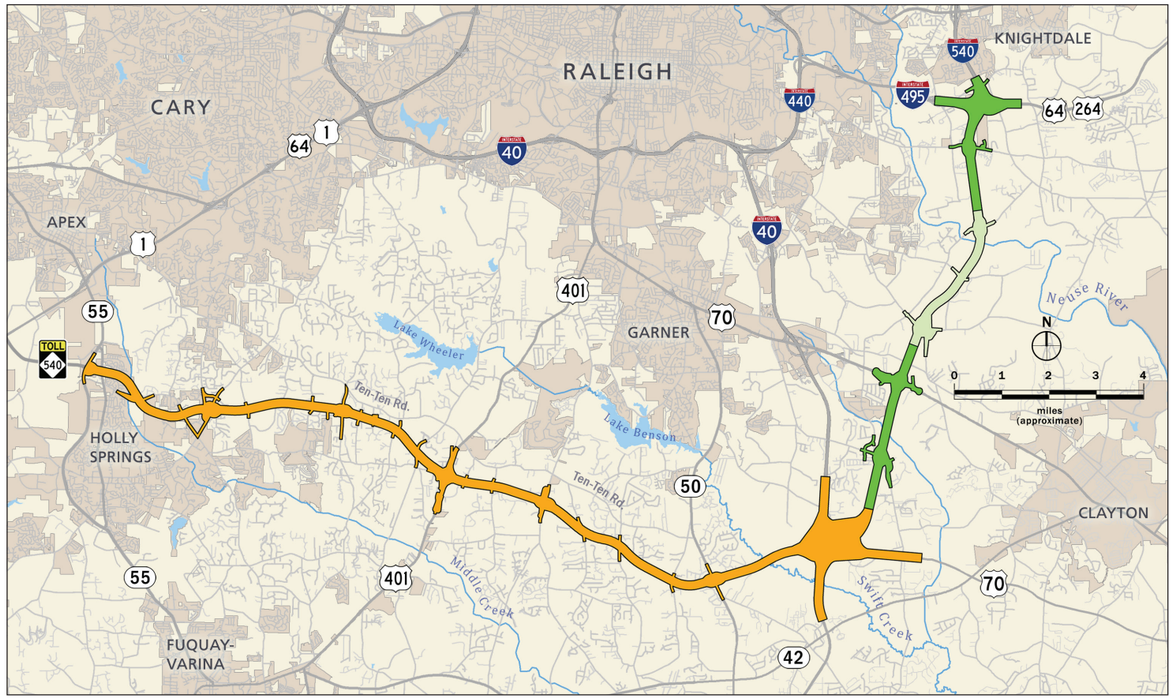
SUMMARY EVALUATION MATRIX (Key Evaluation Factors)

Color Coded Segments	Detailed Study Alternative	Length Overall length of each alternative, from NC 55 Bypass to US 64/US 264 Bypass	Total Estimated Costs Includes land purchase, relocations, utility adjustments, environmental mitigation, and construction (estimated dollars at time of expenditure)	Land Acquisition Total acres required to be purchased for right-of-way	Parcels Total number of individual parcels needed in whole or in part for the project's right-of-way	Relocations Total number of residential, commercial, industrial, or institutional entities to be displaced	Streams Total length of streams that would be affected	Wetlands Total acres of wetland that would be affected	Swift Creek Critical Watershed Area Amount of land designated as critical watershed that would be affected	Historic Sites Total acres of sites listed on or eligible for the *National Register of Historic Places* that would be adversely affected
		miles	$ million	acres	number	number	linear feet	acres	acres	acres
O G	Alternative 1	28.3	$2,195	1,830	741	278	67,967	75.6	0	0
Preferred O G M G	Alternative 2	28.4	$2,178	1,823	744	281	65,810	74.3	0	0
O B T G	Alternative 3	29.1	$2,188	1,802	754	265	68,130	73.5	0	5.9
O B G	Alternative 4	29.4	$2,189	1,818	719	243	61,322	71.6	0	0
O G TL B G	Alternative 5	29.3	$2,191	1,843	737	272	65,180	74.2	0	0
O R G	Alternative 6	25.2	$2,317	1,753	993	449	53,014	52.0	6.7	32.7
O R M G	Alternative 7	25.3	$2,315	1,752	995	451	51,582	51.4	6.7	32.7
O Pu BL L G	Alternative 8	30.9	$2,566	2,135	1,213	566	77,724	57.5	0	0
O Pu BL L G M G	Alternative 9	31.0	$2,547	2,128	1,216	569	75,566	56.2	0	0
O Pu BL L B T G	Alternative 10	31.6	$2,550	2,092	1,230	556	78,087	63.0	0	5.9
O Pu BL L B G	Alternative 11	32.0	$2,549	2,108	1,195	534	71,278	61.1	0	0
O Pu BL L G TL B G	Alternative 12	31.9	$2,559	2,148	1,209	560	74,936	56.1	0	0
O L G	Alternative 13	27.6	$2,362	1,960	984	481	68,604	66.7	0	0
O L G M G	Alternative 14	27.7	$2,344	1,953	987	484	66,447	65.5	0	0
O L B T G	Alternative 15	28.3	$2,346	1,917	1,001	471	68,967	72.3	0	5.9
O L B G	Alternative 16	28.7	$2,346	1,933	966	449	62,159	70.4	0	0
O L G TL B G	Alternative 17	28.6	$2,356	1,973	980	475	65,817	65.3	0	0

Key to Color Coded Segments: O Orange · R Red · Pu Purple · BL Blue · L Lilac · G Green · M Mint · T Tan · B Brown · TL Teal

* *The categories shown here are some of the more important ones for differentiating the DSAs. The complete matrix, with each category shown, can be found in the Draft Environmental Impact Statement*

PREFERRED ALTERNATIVE (Orange, Green, Mint Segments)



APPENDIX G
Summaries of CAMPO Working Group Meetings

APPENDIX H
Local Resolutions and State Legislation

RESOLUTION TO SUPPORT A STUDY OF TOLL FUNDING TO ACCELERATE THE CONSTRUCTION OF I-540 IN SOUTHWESTERN WAKE COUNTY

WHEREAS the growth in western and southern Wake County and surrounding areas has already overwhelmed the existing highway system in the southern Triangle; and

WHEREAS the proposed western and southern sections of the I-540 Wake freeway loop will provide a high speed, signal-free travel option that will save time, money, and lives throughout the region and preserve economic competitiveness in western and southern Wake County; and

WHEREAS increasing demands on scarce transportation funds is an unfortunate reality that has delayed the western section of I-540 by years and the southern section of I-540 indefinitely; and

WHEREAS the North Carolina General Assembly created the NC Turnpike Authority in October 2002 in order to speed the implementation of needed transportation improvements and to help meet more transportation needs than NCDOT could otherwise afford; and

WHEREAS the potential may exist to accelerate the opening of the entire western Wake freeway – to the US 1 freeway and the Holly Springs bypass – by several years, even with the additional $8 million devoted to the project in the recent federal highway legislation; and

WHEREAS the potential may also exist to accelerate the opening of the southern Wake freeway – to I-40 and the Clayton freeway bypass – by 15 or more years, perhaps a generation faster; and

WHEREAS there needs to be consideration and study of the potential for toll user fees to leverage our existing Highway Trust Fund loop funding authorizations to gain more control over our mobility future by reducing uncertainties in funding timetables for I-540;

BE IT THEREFORE RESOLVED that the undersigned members of the elected and business community request that the NC Turnpike Authority conduct a detailed feasibility study to determine the true viability of, and expected timesavings associated with, accelerating the construction of both the western and southern portions of the I-540 Wake freeway loop as two phases of a single potential Turnpike project in southwestern Wake County.

BE IT FURTHER RESOLVED that the undersigned members of the elected and business community will require assurances that this feasibility study include the following considerations: that the provisions of General Statute § 136-89.196 – which require the removal of tolls upon fulfillment of the Turnpike's revenue bonds – are adhered to, and that toll revenue generated by this toll road be used exclusively for pay down of the Turnpike's revenue bonds associated with this Turnpike project.

Signed,

Mayor Ernie McAlister
Town of Cary

Mayor Keith Weatherly
Town of Apex

Mayor Dick Sears
Town of Holly Springs

Mayor John Byrne
Town of Fuquay-Varina

Mayor Ronnie Williams
Town of Garner

Joe Freddoso, 2005-06 Chair
Regional Transportation Alliance

TOWN OF

Holly Springs

Resolution No.: 10-27
Date Adopted: Sept. 21, 2010

RESOLUTION STATING THE TOWN OF HOLLY SPRINGS TOWN COUNCIL'S POSITION REGARDING THE ALIGNMENT OF THE SOUTHERN PHASE OF I-540

WHEREAS, on May 6, 2008, the Holly Springs Town Council adopted Resolution 08-26 expressing its fervent support for the construction of the I-540 Western Wake Expressway; and

WHEREAS, the proposed I-540 Western Wake Expressway has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Holly Springs and other local governments of southwestern Wake County; and

WHERAS, the Town of Holly Springs historically has utilized the protected I-540 corridor proposed in earlier designs to plan for both existing and future development in Town; and

WHEREAS, the change to relocate the corridor south to connect to Bass Lake Road would have an adverse impact on our community, due to access issues and the cost of relocating both residential and commercial properties from said corridor; and

WHEREAS, additional traffic generated on Holly Springs Road would negatively impact the area around a proposed interchange and Holly Springs Road would not be adequate to handle the increased traffic volume; and

WHEREAS, the delay of the construction of the I-540 Western Wake Expressway is particularly injurious to the Town of Holly Springs when weighed against the much-needed NC 55 improvements that have not been constructed in anticipation of a 2008 start of I-540 Western Wake Expressway construction;

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Holly Springs hereby expresses its adamant opposition to any option for the construction of the I-540 Southern Wake Expressway that utilizes Bass Lake Road as a potential alternative for the southern phase of I-540; and

BE IT FURTHER RESOLVED that the Town Council supports use of the original protected corridor design as illustrated in orange on N.C. Transit Authority maps as the preferred choice for the development and construction of the I-540 Southern Wake Expressway.

Adopted this, the 21st day of September, 2010.

ATTEST:

Dick Sears, Mayor

[X] Joni Powell, CMC, Town Clerk
[ ] Linda R. Harper, CMC Deputy Town Clerk

Office *o*f the Mayor

128 S. Main Street • P.O. Box 8 • Holly Springs, NC 27540 • (919) 557-3901 • (919) 552-0654 *fax*
dick.sears@hollyspringsnc.us • www.hollyspringsnc.us

RESOLUTION NO. (2010) 2072

A RESOLUTION STATING THE TOWN OF GARNER TOWN COUNCIL'S POSITION REGARDING THE ALIGNMENT OF THE SOUTHERN PHASE OF I-540

WHEREAS, the proposed I-540 Expressway has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Garner and other local governments of Wake County;

WHEREAS, the Town of Garner historically has utilized the protected I-540 corridor proposed in earlier designs to make key planning decisions for both existing and future development in Garner; and

WHEREAS, the proposed change in plans to relocate the corridor away from its previously designated route will have an adverse impact on the Garner communities; and

WHEREAS, the "red" route shown on Turnpike Authority maps with a course north of Lake Benson is a very poor land use decision that will cause tremendous disruption to existing homes and businesses; and

WHEREAS, numerous Garner homeowners and landowners have relied upon the protected corridor route (orange) for many years as they have made investment decisions. A change to the planned route will be burdensome, chaotic, and unfair; and

NOW THEREFORE, BE IT RESOLVED, the Town of Garner would like to see the Southeast Extension of Triangle Expressway constructed, however, the Town cannot support a route north of Lake Benson; and

BE IT FURTHER RESOLVED that the Town Council supports use of the original protected corridor design as illustrated in orange on the N.C. Transit Authority maps as the preferred choice for the development and construction of the I-540 Triangle Expressway Southeast Extension.

Adopted this 4th day of October 2010.

Mayor

ATTEST:

Town Clerk

A RESOLUTION BY THE COUNTY OF WAKE REGARDING THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

WHEREAS, the proposed Triangle Expressway Southeast Extension has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for Wake County and other local governments of Wake County;

WHEREAS, Wake County historically has utilized the protected corridor proposed in earlier designs to make key planning decisions for both existing and future development in Wake County; and

WHEREAS, the proposed alternative alignments to relocate the corridor away from its previously designated and protected route will have an adverse impact on communities in Wake County; and

WHEREAS, the proposed alternative alignments illustrated as "blue", "purple", and "red" on N.C. Turnpike Authority maps will have a greater impact on Wake County's designated priority stream corridors and proposed Southeast Wake County Park than the previously designated and protected route; and

WHEREAS, numerous Wake County homeowners and landowners have relied upon the protected corridor route (orange) for many years as they have made investment decisions.

NOW THEREFORE, BE IT RESOLVED that Wake County supports use of the original protected corridor design as illustrated in "orange" on the N.C. Turnpike Authority maps as the preferred choice for the development and construction of the Triangle Expressway Southeast Extension.

Adopted this 18th day of October 2010.

Tony Gurley

Tony Gurley, Chairman
Wake County Board of Commissioners

ATTEST: Susan J Banks

Susan Banks
Clerk to the Board

Resolution No. 10-1160

TOWN OF FUQUAY-VARINA
401 Old Honeycutt Road
Fuquay-Varina, North Carolina 27526

A RESOLUTION BY THE TOWN OF FUQUAY-VARINA REGARDING THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION (I-540)

WHEREAS, the proposed Triangle Expressway Southeast Extension has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for Town of Fuquay-Varina, Wake County and other local governments of Wake County; and,

WHEREAS, the alternates routes have been only recently proposed and would have a much more significant negative impact on residents of Fuquay-Varina who purchased homes and businesses based on the original proposed route; and,

WHEREAS, the Town of Fuquay-Varina historically has utilized the protected corridor proposed in earlier designs to make key planning decisions for both existing and future development in the Town of Fuquay-Varina; and,

WHEREAS, the proposed alternative alignments to relocate the corridor away from its previously designated and protected route will have an adverse impact on the Town of Fuquay-Varina; and

NOW THEREFORE, BE IT RESOLVED that the Town of Fuquay-Varina supports use of the original protected corridor design as illustrated in "orange" on the North Carolina Turnpike Authority maps as the preferred choice for the development and construction of the Triangle Expressway Southeast Extension (I-540).

Adopted this 19th day of October 2010.

TOWN OF FUQUAY-VARINA, N.C. INCORPORATED 1909

ATTEST:

Town Clerk

Mayor John W. Byrne
Town of Fuquay-Varina

STAFF REPORT
Town of Knightdale

To:	Mayor and Town Council	Budget Amendment - #BA
From:	Chris Hills, Planning Director	Planning Director Signature - SL
Subject:	NC Turnpike Authority Resolution of Support for Preferred I-540 Alignment RES# 10-10-20-001	Town Manager Signature –
Date:	October 20, 2010	

REPORT

The North Carolina Turnpike Authority is currently proceeding through its Environmental Impact Statement (EIS) process which includes an Alternatives Analysis to determine the best possible route for the I-540/Triangle Expressway Southeast Extension. Part of this process is to solicit input from citizens and public officials on the preferred route. The project is envisioned in two phases, with phase I being between Apex and I-40 in Clayton and phase II being between I-40 in Clayton and US 64/264 Bypass in Knightdale.

The three potential options under consideration are briefly described below:

1. Build a new roadway between NC 55 near Apex and the US 64/264 Bypass in Knightdale.
2. Improve existing roadways by widening I-40 from west of Raleigh to the Clayton area, I-440 from I-40 to the US 64/264 Bypass, and US 64/264 Bypass from I-440 to the eastern study area boundary.
3. Hybrid new roadway construction/improve existing roadway option. This option consists of a new roadway option for Phase I and improving I-40, I-440 and US 64/264 in the Phase II area.

The Planning and Engineering Committee discussed this item at its October 11 meeting. At that meeting, the Committee unanimously recommended that the Town Council support Option 1 above for a new build roadway for both phases of the Southeast Extension project.

Attached to this staff report and proposed resolution is the most recent newsletter from the Turnpike Authority detailing the EIS process, the study area, and potential routes under consideration. A brief video will be shown at the Council meeting to elaborate on the proposed alternatives, after which the Council will be asked to pass a Resolution of Support for its preferred option.

REPORT RECOMMENDED ACTION

Motion to adopt RES # 10-10-20-001

TOWN OF KNIGHTDALE
PLANNING DEPARTMENT
www.ci.knightdale.nc.us
950 Steeple Square Court
Knightdale, NC 27545
(v) 919.217.2245
(f) 919.217.2249

RESOLUTION # 10-10-20-001

RESOLUTION OF THE KNIGHTDALE TOWN COUNCIL SUPPORTING THE NEW ROADWAY OPTION FOR BOTH PHASES OF THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

WHEREAS, the study area defined by the Environmental Impact Statement (EIS) study includes parcels within the Knightdale City Limits and ETJ boundaries; and

WHEREAS, the Town of Knightdale has demonstrated a commitment to comprehensive planning through its participation in with the Capital Area Metropolitan Planning Organization (CAMPO); and

WHEREAS, current and future development within this area will be at urban and suburban densities and is anticipated to generate significant transportation impacts that will require the completion of the outer loop referred to as the Triangle Expressway Southeast Extension; and

WHEREAS, the Town of Knightdale staff and Town Council has studied the proposed options presented by the North Carolina Turnpike Authority and determined that a new build roadway will be critical in mitigating the impacts of the future growth of eastern and southern Wake County and western Johnston County;

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Knightdale, North Carolina:

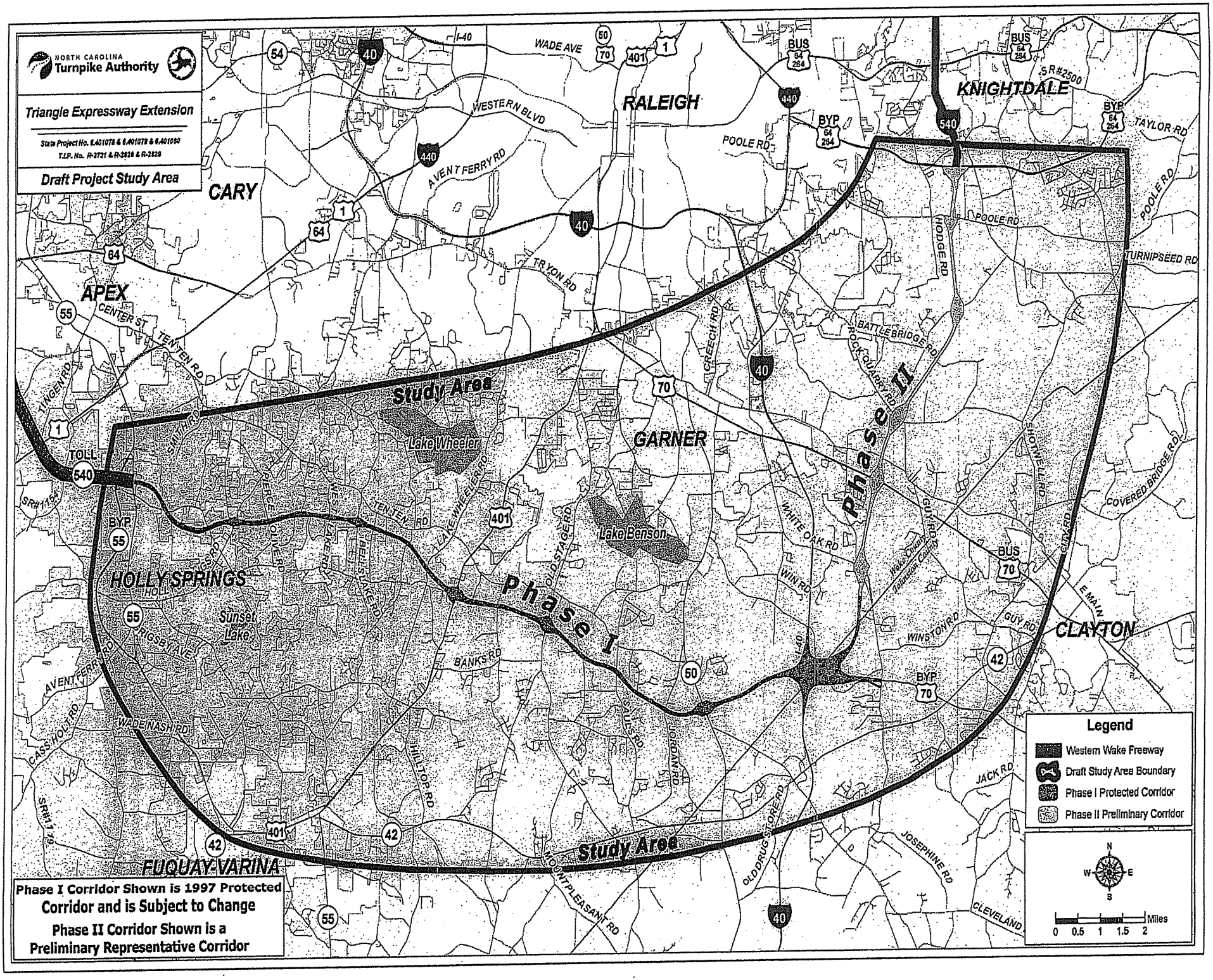
Section 1. That the Knightdale Town Council hereby requests that the North Carolina Turnpike Authority choose Option 1, being a new-build roadway for both phases, as the preferred alternative for the construction of the Triangle Expressway Southeast Extension.

Adopted this, the 20th day of October, 2010.

James M. Chalk, Mayor Pro-Tem

ATTEST & SEAL:

Suzanne M. Yeatts, Town Clerk


NORTH CAROLINA
Turnpike Authority
Triangle Expressway Extension
State Project No. 8.401078 & 8.401079 & 8.401080
T.I.P. No. R-2721 & R-2828 & R-2829
Draft Project Study Area
RALEIGH
CARY
APEX
KNIGHTDALE
GARNER
HOLLY SPRINGS
FUQUAY-VARINA
CLAYTON
Study Area
Phase II
Phase I
Study Area
Lake Wheeler
Lake Benson
Sunset Lake
I-40
WADE AVE
WESTERN BLVD
AVENT FERRY RD
POOLE RD
TAYLOR RD
TURNIPSEED RD
TRYON RD
CENTER ST
TEN TEN RD
LINGEN RD
SMITH RD
TOLL 540
SR#1134
LAKE WHEELER RD
OLD STAGE RD
CREECH RD
BATTLE BRIDGE RD
ROCK QUARRY RD
HODGE RD
SHOTWELL RD
COVERED BRIDGE RD
WHITE OAK RD
WIN RD
GUY RD
WINSTON RD
BANKS RD
JORDAN RD
HILLTOP RD
WADE NASH RD
CASS HOLT RD
RIGBY AVE
OLIVE RD
LAKE RD
BELL STAKE RD
JACK RD
JOSEPHINE RD
OLD DRUG STORE RD
MONT PLEASANT RD
CLEVELAND
Legend
Western Wake Freeway
Draft Study Area Boundary
Phase I Protected Corridor
Phase II Preliminary Corridor
N
W
E
S
Miles
0 0.5 1 1.5 2
Phase I Corridor Shown is 1997 Protected Corridor and is Subject to Change
Phase II Corridor Shown is a Preliminary Representative Corridor

RESOLUTION EXPRESSING THE NC CAPITAL AREA MPO'S POSITION REGARDING THE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE

On motion made by **Mayor Sears** and seconded by **Mayor Byrne** , and having been put to a vote, was duly adopted, the following resolution;

WHEREAS, the proposed southern and southeastern segments of the NC 540 Turnpike are an adopted element of the Capital Area Metropolitan Planning Organization's (CAMPO) 2035 Long Range Transportation Plan; and

WHEREAS, official corridor maps show a specific alignment, adopted by the North Carolina Board of Transportation, to block new development in the preferred path of the southern segment from N.C. 55 in Holly Springs to US 401 south of Garner on August 2, 1996 and the southern segment from US 401 south of Garner to Interstate 40 south of Garner on March 7, 1997; and

WHEREAS, the proposed freeway alignment has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for the towns of Fuquay-Varina, Garner, and Holly Springs; and

WHEREAS, Wake County is the first and only County in North Carolina to have its urban loop constructed as a toll road; and

WHEREAS, the southeastern segment is likely to be much more expensive on a per mile basis than the southern segment and as such will need the revenue coming from the southern segment to help pay for it; and

WHEREAS, the southeastern segment is the Capital Area MPO's urgently needed top regional priority and therefore should not be delayed until the northern segment of the loop is converted to a turnpike to help pay for it's construction

WHEREAS, the North Carolina Turnpike Authority is looking at new alternatives (defined as "red", "blue", and "purple")that would possibly have an adverse impact upon these towns, causing disruptions to existing homes and businesses; and

WHEREAS, the alternatives may be shorter and possibly cut construction cost; at the possible expense of environmentally sensitive areas as well as mar residential and commercial activities vital to the economic well being of the towns being impacted;

NOW, THEREFORE BE IT RESOLVED, the Capital Area MPO Transportation Advisory Committee supports the use of the original protected corridor alignment illustrated on North Carolina Turnpike Authority maps adopted in 1996 and 1997 as the preferred choice for the development and construction of the proposed NC 540 Turnpike in southern and southeastern Wake County; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee requests that the North Carolina Turnpike Authority include the Capital Area MPO as an active stakeholder in the alternatives analysis process; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee strongly urges the North Carolina Department of Transportation to construct the entire remaining portion of the outer loop as a turnpike in one phase rather than as two separate phases.

Adopted on this the 20th day of October, 2010

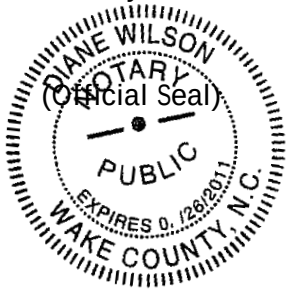
Joe Bryan, Chair
Director
Transportation Advisory Committee

Ed Johnson, Capital Area MPO
Transportation Advisory Committee Clerk

County of Wake
State of North Carolina

I, Diane Wilson, a Notary Public for said County and State, do hereby certify that on this, the 20th day of October, 2010, personally appeared before me, Joe Bryan, known to me by his presence, and acknowledged the due execution of the foregoing RESOLUTION STATING THE CAPITAL AREEA MPO'S POSITION REGARDING THE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE.

Witness my hand and official seal, this the 20th day of October, 2010.



(Official Seal)

Diane Wilson, Notary Public

My commission expires January 26, 2011

RESOLUTION
REGARDING THE TAN AND RED CORRIDORS AS ALTERNATIVE ALIGNMENTS FOR THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

On motion made by **Commssioner Bryan and** seconded by Mayor Sears and having being duly put to a vote of the N.C. Capital Area Metropolitan Planning Organization's Transportation Advisory Committee was adopted the following resolution;

WHEREAS, the proposed Southeast Extension of the Triangle Expressway will extend the eastern leg of the Triangle Expressway toll road from Interstate 40 near Garner north to the eastern tip of the 540 Outer Loop on U.S. 64 / 264 in Knightdale; and

WHEREAS, the North Carolina Turnpike Authority has been examining various alternate routes for the Southeast Extension of the Triangle Expressway in accordance with federal highway and environmental laws and as of March 2010 announced the introduction of new alternate corridors (aka the Red andTan Corridors) on the eastern side of the Triangle Expressway Southeast Extension as "equivalent" alternates to the 20 year old prospected "Green" and "Orange" corridors and,

WHEREAS, Wake County has indicated a lack of support for the recent addition of the "Tan" corridor and has requested that the North Carolina Turnpike Authority remove the corridor from consideration, as well as request that the selection of the final corridor be expedited as soon as possible; and,

WHEREAS, while the Raleigh City Council voted unanimously to oppose the Tan Corridor as it is currently proposed, has requested that staff continue to work with the North Carolina Turnpike Authority project team to develop viable alternatives for consideration in the Environmental Impact Statement (EIS), and states that while the EIS process is technical in nature, the North Carolina Turnpike Authority is urged to continue to take the concerns of area residents into account as they proceed with the study.

NOW THEREFORE, be it resolved that the N.C. Capital Area Metropolitan Planning Organization opposes the Red and Tan Corridors in their currently proposed alignment and supports the original alignment shown on the adopted 2035 Long-Range Transportation Plan, and will continue to be receptive to new and better information regarding alternative alignments as they become available during the EIS process. The organization also encourages the North Carolina Turnpike Authority to work with local government staff from Garner, Raleigh, Johnston County, and Wake County on the technical data for the EIS process.

Adopted this the 16th day of March, 2011

Vivian Jones, Chair
Transportation Advisory Committee

Ed Johnson, Capital Area MPO Director
Transportation Advisory Committee Clerk

County of Wake
State of North Carolina

I, Diane Wilson, a Notary Public for said County and State, do hereby certify that Vivian Jones personally known to me by her presence appeared before me this day and acknowledged the due execution of the foregoing RESOLUTION REGARDING THE TAN CORRIDOR AS AN ALTERNATIVE ALIGNMENT FOR THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

Witness my hand and official seal, the 16th day of March 2011.

(Official Seal)

DIANE WILSON NOTARY PUBLIC WAKE COUNTY, N.C.

Diane Wilson Notary Public

My commission expires January 26, 2016.

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011

SESSION LAW 2011-7
SENATE BILL 165

AN ACT TO RESTRICT THE NORTH CAROLINA TURNPIKE AUTHORITY'S SELECTION OF TRANSPORTATION CORRIDORS TO EXISTING PROTECTED CORRIDORS OR CORRIDORS SOUTH OF AN EXISTING PROTECTED CORRIDOR EXCEPT IN THE AREA OF INTERSTATE 40 EAST.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 136-89.183(a)(2) reads as rewritten:

"(2) To study, plan, develop, and undertake preliminary design work on up to nine Turnpike Projects. At the conclusion of these activities, the Turnpike Authority is authorized to design, establish, purchase, construct, operate, and maintain the following projects:

a. Triangle Expressway, including segments also known as N.C. 540, Triangle Parkway, and Western Wake Freeway in Wake and Durham ~~Counties.~~ Counties, except that segment known as the Triangle Expressway Southeast Extension which shall not be located north of an existing protected corridor established by the Department of Transportation circa 1995, except in the area of Interstate 40 East.

b. Gaston East-West Connector, also known as the Garden Parkway.

c. Monroe Connector/Bypass.

d. Cape Fear Skyway.

e. A bridge of more than two miles in length going from the mainland to a peninsula bordering the State of Virginia, pursuant to G.S. 136-89.183A.

f. Repealed by Session Laws 2008-225, s. 4, effective August 17, 2008.

Any other project proposed by the Authority in addition to the projects listed in this subdivision must be approved by the General Assembly prior to construction.

A Turnpike Project selected for construction by the Turnpike Authority shall be included in any applicable locally adopted comprehensive transportation plans and shall be shown in the current State Transportation Improvement Plan prior to the letting of a contract for the Turnpike Project."

SECTION 2. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 17th day of March, 2011.

s/ Philip E. Berger
President Pro Tempore of the Senate

s/ Thom Tillis
Speaker of the House of Representatives

s/ Beverly E. Perdue
Governor

Approved 3:09 p.m. this 18th day of March, 2011

RESOLUTION
EXPRESSING THE NC CAPITAL AREA MPO'S UNWAVERING SUPPORT FOR THE CONSTRUCTION OF THE WAKE OUTER LOOP

On motion made by **Mayor Sears** and seconded by **Mayor Williams**, and having been put to a vote, was duly adopted, the following resolution;

WHEREAS, the Wake Outer Loop has been an adopted element of the Capital Area Metropolitan Planning Organization's (MPO) Comprehensive and Long Range Transportation Plans of 2025, 2030, and 2035; and

WHEREAS, the Wake Outer Loop will continue to be an essential highway corridor for the MPO's 2040 Long Range Transportation Plan; and

WHEREAS, the Wake Outer Loop has historically been one of the highest priority projects in both the MPO's Transportation Improvement Plan and the State Transportation Improvement Program, and has received numerous resolutions and letters of support over many years; and

WHEREAS, completion of the Wake Outer Loop is vital to continued high-quality mobility, and thus the economic health and well-being of the Triangle region and the state of North Carolina;

NOW THEREFORE BE IT RESOLVED, that the Capital Area MPO expresses its unwavering support for construction of the Wake Outer Loop, as quickly as possible, in a location that meets the needs of area citizens and requirements of federal law; and

BE IT FURTHER RESOLVED, that the Capital Area MPO requests that the North Carolina Turnpike Authority, in cooperation with state and federal agencies work to fulfill all essential requirements to satisfy legal review and obtain financial support for the Wake Outer Loop; and to ensure that the construction and completion of the Wake Outer Loop remain a high priority.

Adopted on this the 16th day of May, 2012

Vivian Jones, Chair
Transportation Advisory Committee

Edison H. Johnson, Jr.
Director, Capital Area MPO

County of Wake
State of North Carolina

I, Diane Wilson, a Notary Public for said County and State, do hereby certify that on this, the 16th day of May, 2012, personally appeared before me, Vivian Jones, known to me by her presence, and acknowledged the due execution of the foregoing **RESOLUTION EXPRESSING THE NC CAPITAL AREA MPO'S UNWAVERING SUPPORT FOR THE CONSTRUCTION OF THE WAKE OUTER LOOP.**

Witness my hand and official seal, this the 16th day of May, 2012.

(Official Seal)

DIANE WILSON NOTARY PUBLIC WAKE COUNTY, N.C.

Diane Wilson, Notary Public

My commission expires January 26, 2016

NC CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION
REQUEST TO REPEAL NORTH CAROLINA SESSION LAW 2011-7

On a motion made by **Mayor Dick Sears** and seconded by **Mayor John Byrne**, and having been put to a vote, was duly adopted, the following resolution;

WHEREAS, the Wake County Outer Loop (also known as the Triangle Expressway) has been an adopted element of the Capital Area Metropolitan Planning Organization's (MPO) Long Range Transportation Plans (LRTPs) adopted for 2025, 2030, and 2035; and

WHEREAS, the Wake Outer Loop will continue to be an essential highway corridor for the MPO's 2040 Comprehensive Metropolitan Transportation Plan(CMTP); and

WHEREAS, the Wake Outer Loop has historically been one of the highest priority projects in both the MPO's Transportation Improvement Plan and the State Transportation Improvement Program, and has received numerous resolutions and letters of support over many years; and

WHEREAS, completion of the Wake Outer Loop is vital to continued high-quality mobility, and thus the economic health and well-being of the Triangle region and the state of North Carolina; and

WHEREAS, NC Session Law 2011-7 prohibits the construction of the Southeast Extension of the Wake Outer Loop on any location north of the existing protected corridor established by the North Carolina Department of Transportation in 1995 (now referred to as the Orange route in the currently ongoing environmental study; and

WHEREAS, the National Environmental Policy Act (NEPA) and other Federal laws require study of alternative corridors some of which have been proposed for study north of the protected corridor; and

WHEREAS, the Army Corps of Engineers and the Federal Highway Administration have expressed concern that the ability to analyze and objectively compare alternatives for this project as required by the Clean Water Act will be hampered; and

WHEREAS, the Army Corps of Engineers and the Federal Highway Administration, by letter (Appendix A attached hereto) indicate it is their belief that this project can no longer move forward with the Project Advancement Plan and satisfy all Federal environmental requirements;

NOW THEREFORE BE IT RESOLVED, that the Capital Area Metropolitan Planning Organization respectfully requests that North Carolina Session Law 2011-7 be repealed to allow study of alternative routes for the Southeast Extension of the Wake Outer Loop in accordance with the National Environmental Policy Act and other Federal laws and allow construction of the Wake Outer Loop, as quickly as possible, in a location that meets the needs of area citizens and requirements of federal law.

Adopted on this the 12th day of December 2012

Vivian Jones, Chair
Transportation Advisory Committee

Edison H. Johnson, Jr.
Director, Capital Area MPO

County of Wake
State of North Carolina

I, Valorie D. Lockehart, a Notary Public for said County and State, do hereby certify that on this, the 12th day of December, personally appeared before me, Vivian Jones and Edison Johnson, known to me by their presence, and acknowledged the due execution of the foregoing **NC CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION, REQUEST TO REPEAL NORTH CAROLINA SESSION LAW 2011-7**

Witness my hand and official seal, this the 12th day of December 2012.

(Official Seal)

Valorie D. Lockehart, Notary Public

My commission expires January 31 2016

VALORIE D. LOCKEHART NOTARY PUBLIC WAKE COUNTY, NC

North Carolina
Capital Area Metropolitan Planning Organization

December 20, 2012

Members of the North Carolina General Assembly

Subject: NC Session Law 2011-7

Dear Sirs/Madams:

Transmitted with this letter is a Resolution from the North Carolina Capital Area Metropolitan Planning Organization's Executive Policy Board, approved at its meeting on December 12, 2012, requesting the repeal of NC Session Law 2011-7 pertaining to the construction of the Southeast Extension of the Wake County Outer Loop (also known as the Triangle Expressway).

The Wake Outer Loop has been an adopted element of the Capital Area Metropolitan Planning Organization's (MPO) Long-Range Transportation Plans for 2025, 2030, and 2035 and is an essential highway corridor included in the MPO's 2040 Comprehensive Metropolitan Transportation Plan (CMTP). This project has historically been one of the highest priority projects in both the MPO's Transportation Improvement Plan and the State Transportation Improvement Program.

NC Session Law 2011-7 prohibits construction of the Southeast Extension of the Loop on location north of an existing protected corridor established by the North Carolina Department of Transportation in 1995 (known as the Orange route in the currently ongoing environmental study). Although well intentioned, this prohibition is contrary to the National Environmental Policy Act (NEPA) and other Federal laws that require study of alternative corridors, which would include those north of the protected corridor. The Army Corps of Engineers and the Federal Highway Administration have expressed concern that the ability to analyze and objectively compare alternatives for this project as required by the Clean Water Act will be hampered. They further indicate that it is their belief that this project can no longer move forward with the Project Advancement Plan and satisfy all Federal environmental requirements.

The Capital Area Metropolitan Planning Organization is therefore requesting that North Carolina Session Law 2011-7 be repealed as soon as practicable to allow study of a full range of alternative routes for the Southeast Extension of the Wake Outer Loop in accordance with the National Environmental Policy Act and other Federal laws to allow the preferred route to be approved and constructed for the completion of the Wake Outer Loop.

Sincerely,

Vivian Jones, Chair
Transportation Advisory Committee
Capital Area MPO

cc: Representative Thom Tillis, North Carolina House Speaker
Senator Phil Berger, North Carolina Senate President Pro Tem
Wake County Legislative Delegation
TAC Members

Town of Garner
900 7th Avenue · Garner, North Carolina 27529
Phone (919) 772-4688 · Fax (919) 662-8874 · www.GarnerNC.gov

January 23, 2013

North Carolina General Assembly
Wake County Representation
16 West Jones Street
Raleigh, NC 27601

Dear Honorable Member:

North Carolina Session Law 2011-7 (NCSL 2011-7) was approved by the North Carolina General Assembly in and signed into law by Governor Bev Perdue in March 2011. This law restricts the NC Turnpike Authority's selection of future Triangle Expressway Southeast (540) corridors to existing protected corridors, except in the area of I-40 East.

The Town of Garner and the Metropolitan Raleigh Region agree that 540 is vital to our region's future and we all support the construction of 540 to connect the outer loop. Over the past two years, the Town of Garner has utilized herculean efforts to find solutions and alternatives to this horribly bothersome problem, including hiring nationally recognized consultants, engaging in cooperative conversations with Southern Wake County Mayors, NC Department of Transportation (NCDOT) Capital Area Metropolitan Planning Organization (CAMPO) and the Regional Transportation Alliance.

In spite of these efforts, the Federal Highway Administration (FHWA) and US Army Corps of Engineers (Corps) have indicated via letter to NCDOT officials that NCSL 2011-7 is contrary to the National Environmental Policy Act (NEPA) and the Clean Water Act, thereby hampering their ability to analyze and objectively compare alternatives as required by these and other federal laws. These agencies have indicated that they believe the 540 project can no longer move forward in a manner satisfactory to all federal environmental requirements unless NCSL 2011-7 is repealed.

Subsequently, CAMPO adopted a Resolution on December 12, 2012 requesting that the NC General Assembly repeal Session Law 2011-7 to allow study of alternative routes for the Triangle Expressway Southeast as quickly as possible. That action is leading us to where we are today.

Positive economic impacts can be documented in the Town of Garner since Session Law 2011-7 was adopted on March 18, 2011. The most notable was the construction of the $12.5 million Strategic Behavioral Center in Greenfield South Business Park and dozens of new houses in the Village of Aversboro. As a reminder, the red route tramples 13 neighborhoods, 4 town parks, and our primary industrial park. The Town is completely opposed to the red route and insists that it not be studied or advanced in any way.

The Town of Garner is opposed to the repeal of Session Law 2011-7.

If NCSL 2011-7 is repealed or amended, then the Town requests that the General Assembly also mandate the following:

A. Ensure that NCDOT, CAMPO, and all involved federal agencies, especially FHWA and Corps, expedite all steps of the refinement and development of the necessary Environmental Impact Statement process for the Triangle Expressway Southeast, and to include the Town of Garner and the Garner Chamber of Commerce as key stakeholders in the EIS development process.

B. Ensure that NCDOT fully considers all reasonable alternatives, other than red, as suggested via adopted motion by the CAMPO Board of Directors at their December 12, 2012 meeting. This includes orange, blue, purple, lilac, and plum.

C. Assign a General Assembly Oversight Committee to monitor this issue on behalf of the citizens of Garner and Southern Wake County to ensure that all involved agencies move this process along as fast as possible.

This is a very important issue to the Garner community and has tremendous economic development implications. Thank you for your consideration of our request.

Sincerely,

Ronnie S. Williams
Mayor

Jackie Johns
Mayor Pro Tem

Kathy Behringer
Council Member

Buck Kennedy
Council Member

Ken Marshburn
Council Member

Gra Singleton
Council Member

c: Thom Tillis, Speaker, North Carolina House of Representatives
Phil Berger, President Pro Tempore, North Carolina Senate
Rep. William Brawler, Chairman, House Transportation Committee
Rep. Frank Iler, Chairman, House Transportation Committee
Sen. Warren Daniel, Co-Chairman, Senate Transportation Committee
Sen. Kathy Harrington, Co-Chairman, Senate Transportation Committee

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013

SESSION LAW 2013-94
HOUSE BILL 10

AN ACT TO REMOVE THE RESTRICTION ON THE TURNPIKE AUTHORITY'S SELECTION OF A CORRIDOR LOCATION FOR THE SOUTHEAST EXTENSION PROJECT OF N.C. 540.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 136-89.183(a)(2)a. reads as rewritten:

"(2) To study, plan, develop, and undertake preliminary design work on up to eight Turnpike Projects. At the conclusion of these activities, the Turnpike Authority is authorized to design, establish, purchase, construct, operate, and maintain the following projects:

a. Triangle Expressway, including segments also known as N.C. 540, Triangle Parkway, and the Western Wake Freeway in Wake and Durham ~~Counties, and Southeast Extension in Wake and Johnston Counties, except that no portion of the Southeast Extension shall be located north of an existing protected corridor established by the Department of Transportation circa 1995, except in the area of Interstate 40 East.~~ Counties. The described segments constitute three projects."

SECTION 2. The Department of Transportation shall strive to expedite the federal environmental impact statement process to define the route for the Southeast Extension of the Triangle Expressway Turnpike Project by promptly garnering input from local officials and other stakeholders, accelerating any required State studies, promptly submitting permit applications to the federal government, working closely with the federal government during the permitting process, and taking any other appropriate actions to accelerate the environmental permitting process.

SECTION 3. As part of its oversight of the Department of Transportation, the Joint Legislative Transportation Oversight Committee shall closely monitor the progress of the Southeast Extension of the Triangle Expressway Turnpike Project.

SECTION 3.1. This act is effective only if House Bill 817, 2013 Regular Session, becomes law.

SECTION 4. This act is effective when it becomes law.
In the General Assembly read three times and ratified this the 4th day of June, 2013.

s/ Daniel J. Forest
President of the Senate

s/ Thom Tillis
Speaker of the House of Representatives

s/ Pat McCrory
Governor

Approved 4:29 p.m. this 12th day of June, 2013

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013

SESSION LAW 2013-183
HOUSE BILL 817

AN ACT TO STRENGTHEN THE ECONOMY THROUGH STRATEGIC TRANSPORTATION INVESTMENTS.

The General Assembly of North Carolina enacts:

STRATEGIC TRANSPORTATION INVESTMENTS

SECTION 1.1.(a) Chapter 136 of the General Statutes is amended by adding a new Article to read:

"Article 14B.

"Strategic Prioritization Funding Plan for Transportation Investments.

"**§ 136-189.10. Definitions.**

The following definitions apply in this Article:

(1) Statewide strategic mobility projects. – Includes only the following:
- a. Interstate highways and future interstate highways approved by the federal government.
- b. Routes on the National Highway System as of July 1, 2012, excluding intermodal connectors.
- c. Highway routes on the United States Department of Defense Strategic Highway Network (STRAHNET).
- d. Highway toll routes designated by State law or by the Department of Transportation, pursuant to its authority under State law.
- e. Highway projects listed in G.S. 136-179, as it existed on July 1, 2012, that are not authorized for construction as of July 1, 2015.
- f. Appalachian Development Highway System.
- g. Commercial service airports included in the Federal Aviation Administration's National Plan of Integrated Airport Systems (NPIAS) that provide international passenger service or 375,000 or more enplanements annually, provided that the State's annual financial participation in any single airport project included in this subdivision may not exceed five hundred thousand dollars ($500,000).
- h. Freight capacity and safety improvements to Class I freight rail corridors.

(2) Regional impact projects. – Includes only the following:
- a. Projects listed in subdivision (1) of this section, subject to the limitations noted in that subdivision.
- b. U.S. highway routes not included in subdivision (1) of this section.
- c. N.C. highway routes not included in subdivision (1) of this section.
- d. Commercial service airports included in the NPIAS that are not included in subdivision (1) of this section, provided that the State's annual financial participation in any single airport project included in this subdivision may not exceed three hundred thousand dollars ($300,000).
- e. The State-maintained ferry system, excluding passenger vessel replacement.
- f. Rail lines that span two or more counties not included in subdivision (1) of this section.

g. Public transportation service that spans two or more counties and that serves more than one municipality. Expenditures pursuant to this sub-subdivision shall not exceed ten percent (10%) of any distribution region allocation.

(3) Division needs projects. – Includes only the following:

a. Projects listed in subdivision (1) or (2) of this section, subject to the limitations noted in those subsections.

b. State highway routes not included in subdivision (1) or (2) of this section.

c. Airports included in the NPIAS that are not included in subdivision (1) or (2) of this section, provided that the State's total annual financial participation under this sub-subdivision shall not exceed eighteen million five hundred thousand dollars ($18,500,000).

d. Rail lines not included in subdivision (1) or (2) of this section.

e. Public transportation service not included in subdivision (1) or (2) of this section.

f. Multimodal terminals and stations serving passenger transit systems.

g. Federally funded independent bicycle and pedestrian improvements.

h. Replacement of State-maintained ferry vessels.

i. Federally funded municipal road projects.

(4) Distribution Regions. – The following Distribution Regions apply to this Article:

a. Distribution Region A consists of the following counties: Bertie, Camden, Chowan, Currituck, Dare, Edgecombe, Gates, Halifax, Hertford, Hyde, Johnston, Martin, Nash, Northampton, Pasquotank, Perquimans, Tyrrell, Washington, Wayne, and Wilson.

b. Distribution Region B consists of the following counties: Beaufort, Brunswick, Carteret, Craven, Duplin, Greene, Jones, Lenoir, New Hanover, Onslow, Pamlico, Pender, Pitt, and Sampson.

c. Distribution Region C consists of the following counties: Bladen, Columbus, Cumberland, Durham, Franklin, Granville, Harnett, Person, Robeson, Vance, Wake, and Warren.

d. Distribution Region D consists of the following counties: Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Orange, Rockingham, Rowan, and Stokes.

e. Distribution Region E consists of the following counties: Anson, Cabarrus, Chatham, Hoke, Lee, Mecklenburg, Montgomery, Moore, Randolph, Richmond, Scotland, Stanly, and Union.

f. Distribution Region F consists of the following counties: Alexander, Alleghany, Ashe, Avery, Caldwell, Catawba, Cleveland, Gaston, Iredell, Lincoln, Surry, Watauga, Wilkes, and Yadkin.

g. Distribution Region G consists of the following counties: Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, and Yancey.

"**§ 136-189.11. Transportation Investment Strategy Formula.**

(a) Funds Subject to Formula. – The following sources of funds are subject to this section:

(1) Highway Trust Fund funds, in accordance with G.S. 136-176.

(2) Federal aid funds.

(b) Funds Excluded From Formula. – The following funds are not subject to this section:

(1) Federal congestion mitigation and air quality improvement program funds appropriated to the State by the United States pursuant to 23 U.S.C. § 104(b)(2) and 23 U.S.C. § 149.

(2) Funds received through competitive awards or discretionary grants through federal appropriations either for local governments, transportation authorities, transit authorities, or the Department.

(3) Funds received from the federal government that under federal law may only be used for Appalachian Development Highway System projects.

(4) Funds used in repayment of "GARVEE" bonds related to Phase I of the Yadkin River Veterans Memorial Bridge project.

(5) Funds committed to gap funding for toll roads funded with bonds issued pursuant to G.S. 136-176.

(6) Funds obligated for projects in the State Transportation Improvement Program that are scheduled for construction as of April 1, 2013, in State fiscal year 2012-2013, 2013-2014, or 2014-2015.

(7) Toll collections from a turnpike project under Article 6H of this Chapter and other revenue from the sale of the Authority's bonds or notes or project loans, in accordance with G.S. 136-89.192.

(8) Toll collections from the State-maintained ferry system collected under the authority of G.S. 136-82.

(9) Federal State Planning and Research Program funds.

(b1) Funds Excluded From Regional Impact Project Category. – Federal Surface Transportation Program-Direct Attributable funds expended on eligible projects in the Regional Impact Project category are excluded from that category.

(c) Funds With Alternate Criteria. – The following federal program activities shall be included in the applicable category of the Transportation Investment Strategy Formula set forth in subsection (d) of this section but shall not be subject to the prioritization criteria set forth in that subsection:

(1) Bridge replacement.

(2) Interstate maintenance.

(3) Highway safety improvement.

(d) Transportation Investment Strategy Formula. – Funds subject to the Formula shall be distributed as follows:

(1) Statewide Strategic Mobility Projects. – Forty percent (40%) of the funds subject to this section shall be used for Statewide Strategic Mobility Projects.

a. Criteria. – Transportation-related quantitative criteria shall be used by the Department to rank highway projects that address cost-effective Statewide Strategic Mobility needs and promote economic and employment growth. The criteria for selection of Statewide Strategic Mobility Projects shall utilize a numeric scale of 100 points, based on consideration of the following quantitative criteria:

1. Benefit cost.
2. Congestion.
3. Safety.
4. Economic competitiveness.
5. Freight.
6. Multimodal.
7. Pavement condition.
8. Lane width.
9. Shoulder width.

b. Project cap. – No more than ten percent (10%) of the funds projected to be allocated to the Statewide Strategic Mobility category over any five-year period may be assigned to any contiguous project or group of projects in the same corridor within a Highway Division or within adjoining Highway Divisions.

(2) Regional Impact Projects. – Thirty percent (30%) of the funds subject to this section shall be used for Regional Impact Projects and allocated by population of Distribution Regions based on the most recent estimates certified by the Office of State Budget and Management.

a. Criteria. – A combination of transportation-related quantitative criteria, qualitative criteria, and local input shall be used to rank Regional Impact Projects involving highways that address cost-effective needs from a region-wide perspective and promote

economic growth. Local input is defined as the rankings identified by the Department's Transportation Division Engineers, Metropolitan Planning Organizations, and Rural Transportation Planning Organizations. The criteria utilized for selection of Regional Impact Projects shall be based thirty percent (30%) on local input and seventy percent (70%) on consideration of a numeric scale of 100 points based on the following quantitative criteria:

1. Benefit cost.
2. Congestion.
3. Safety.
4. Freight.
5. Multimodal.
6. Pavement condition.
7. Lane width.
8. Shoulder width.
9. Accessibility and connectivity to employment centers, tourist destinations, or military installations.

(3) Division Need Projects. – Thirty percent (30%) of the funds subject to this section shall be allocated in equal share to each of the Department divisions, as defined in G.S. 136-14.1, and used for Division Need Projects.

a. Criteria. – A combination of transportation-related quantitative criteria, qualitative criteria, and local input shall be used to rank Division Need Projects involving highways that address cost-effective needs from a Division-wide perspective, provide access, and address safety-related needs of local communities. Local input is defined as the rankings identified by the Department's Transportation Division Engineers, Metropolitan Planning Organizations, and Rural Transportation Planning Organizations. The criteria utilized for selection of Division Need Projects shall be based fifty percent (50%) on local input and fifty percent (50%) on consideration of a numeric scale of 100 points based on the following quantitative criteria, except as provided in sub-subdivision b. of this subdivision:

1. Benefit cost.
2. Congestion.
3. Safety.
4. Freight.
5. Multimodal.
6. Pavement condition.
7. Lane width.
8. Shoulder width.
9. Accessibility and connectivity to employment centers, tourist destinations, or military installations.

b. Alternate criteria. – Funding from the following programs shall be included in the computation of each of the Department division equal shares but shall be subject to alternate quantitative criteria:

1. Federal Surface Transportation Program-Direct Attributable funds expended on eligible projects in the Division Need Projects category.
2. Federal Transportation Alternatives funds appropriated to the State.
3. Federal Railway-Highway Crossings Program funds appropriated to the State.
4. Projects requested from the Department in support of a time-critical job creation opportunity, when the opportunity would be classified as transformational under the Job Development Investment Grant program established pursuant to G.S. 143B-437.52, provided that the total State investment in each fiscal year for all projects funded under this

sub-subdivision shall not exceed ten million dollars ($10,000,000) in the aggregate or two million dollars ($2,000,000) per project.

5. Federal funds for municipal road projects.

c. Bicycle and pedestrian limitation. – The Department shall not provide financial support for independent bicycle and pedestrian improvement projects, except for federal funds administered by the Department for that purpose. This sub-subdivision shall not apply to funds allocated to a municipality pursuant to G.S. 136-41.1 that are committed by the municipality as matching funds for federal funds administered by the Department and used for bicycle and pedestrian improvement projects. This limitation shall not apply to funds authorized for projects in the State Transportation Improvement Program that are scheduled for construction as of October 1, 2013, in State fiscal year 2012-2013, 2013-2014, or 2014-2015.

(4) Criteria for nonhighway projects. – Nonhighway projects subject to this subsection shall be evaluated through a separate prioritization process established by the Department that complies with all of the following:

a. The criteria used for selection of projects for a particular transportation mode shall be based on a minimum of four quantitative criteria.

b. Local input shall include rankings of projects identified by the Department's Transportation Division Engineers, Metropolitan Planning Organizations, and Rural Transportation Planning Organizations.

c. The criteria shall be based on a scale not to exceed 100 points that includes no bonus points or other alterations favoring any particular mode of transportation.

(e) Authorized Formula Variance. – The Department may vary from the Formula set forth in this section if it complies with the following:

(1) Limitation on variance. – The Department, in obligating funds in accordance with this section, shall ensure that the percentage amount obligated to Statewide Strategic Mobility Projects, Regional Impact Projects, and Division Need Projects does not vary by more than five percent (5%) over any five-year period from the percentage required to be allocated to each of those categories by this section. Funds obligated among distribution regions or divisions pursuant to this section may vary up to ten percent (10%) over any five-year period.

(2) Calculation of variance. – Each year the Secretary shall calculate the amount of Regional Impact and Division Need funds allocated in that year to each division and region, the amount of funds obligated, and the amount the obligations exceeded or were below the allocation. In the first variance calculation under this subdivision following the end of fiscal year 2015-2016, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous year. In the first variance calculation under this subdivision following the end of fiscal year 2016-2017, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous two fiscal years. In the first variance calculation under this subdivision following the end of fiscal year 2017-2018, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous three fiscal years. In the first variance calculation under this subdivision following the end of fiscal year 2018-2019, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous four fiscal years. The new target amounts shall be used to fulfill the requirements of subdivision

(1) of this subsection for the next update of the Transportation Improvement Program. The adjustment to the target amount shall be allocated by Distribution Region or Division, as applicable.

(f) Incentives for Local Funding and Highway Tolling. – The Department may revise highway project selection ratings based on local government funding initiatives and capital construction funding directly attributable to highway toll revenue. Projects authorized for construction after November 1, 2013, and contained in the 10-year Department of Transportation work program are eligible for a bonus allocation under this subsection.

(1) Definitions. – The following definitions apply in this subsection:

a. Bonus allocation. – The allocation obtained as a result of local government funding participation or highway tolling.

b. Local funding participation. – Non-State or nonfederal funds committed by local officials to leverage the commitment of State or federal transportation funds towards construction.

(2) Funds obtained from local government funding participation. – Upon authorization to construct a project with funds obtained by local government funding participation, the Department shall make available for allocation as set forth in subdivision (4) of this section an amount equal to one-half of the local funding commitment for other eligible highway projects that serve the local entity or entities that provided the local funding.

(3) Funds obtained through highway tolling. – Upon authorization to construct a project with funding from toll revenue, the Department shall make available for allocation an amount equal to one-half of the project construction cost derived from toll revenue bonds. The amount made available for allocation to other eligible highway projects shall not exceed two hundred million dollars ($200,000,000) of the capital construction funding directly attributable to the highway toll revenues committed in the Investment Grade Traffic and Revenue Study, for a project for which funds have been committed on or before July 1, 2015. The amount made available for allocation to other eligible highway projects shall not exceed one hundred million dollars ($100,000,000) of the capital construction funding directly attributable to the highway toll revenues committed in the Investment Grade Traffic and Revenue Study, for a project for which funds are committed after July 1, 2015. If the toll project is located in one or more Metropolitan Planning Organization or Rural Transportation Planning Organization boundaries, based on the boundaries in existence at the time of letting of the project construction contract, the bonus allocation shall be distributed proportionately to lane miles of new capacity within the Organization's boundaries. The Organization shall apply the bonus allocation only within those counties in which the toll project is located.

(4) Use of bonus allocation. – The Metropolitan Planning Organization, Rural Transportation Planning Organization, or the local government may choose to apply its bonus allocation in one of the three categories or in a combination of the three categories as provided in this subdivision.

a. Statewide Strategic Mobility Projects category. – The bonus allocation shall apply over the five-year period in the State Transportation Improvement Program in the cycle following the contractual obligation.

b. Regional Impact Projects category. – The bonus allocation is capped at ten percent (10%) of the regional allocation, or allocation to multiple regions, made over a five-year period and shall be applied over the five-year period in the State Transportation Improvement Program in the cycle following the contractual obligation.

c. Division Needs Projects category. – The bonus allocation is capped at ten percent (10%) of the division allocation, or allocation to multiple divisions, made over a five-year period and shall be applied over the five-year period in the State Transportation Improvement Program in the cycle following the contractual obligation.

(g) Reporting. – The Department shall publish on its Web site, in a link to the "Strategic Transportation Investments" Web site linked directly from the Department's home page, the following information in an accessible format as promptly as possible:

(1) The quantitative criteria used in each highway and nonhighway project scoring, including the methodology used to define each criteria, the criteria presented to the Board of Transportation for approval, and any adjustments made to finalize the criteria.

(2) The quantitative and qualitative criteria in each highway or nonhighway project scoring that is used in each region or division to finalize the local input score and shall include distinctions between Metropolitan Planning Organization and Rural Transportation Planning Organization scoring and methodologies.

(3) Notification of changes to the methodologies used to calculate quantitative criteria.

(4) The final quantitative formulas, including the number of points assigned to each criteria, used in each highway and nonhighway project scoring used to obtain project rankings in the Statewide, Regional, and Division categories. If the Department approves different formulas or point assignments regionally or by division, the final scoring for each area shall be noted.

(5) The project scorings associated with the release of the draft and final State Transportation Improvement Program."

SECTION 1.1.(b) Effective July 1, 2019, G.S. 136-189.11(e)(2), as enacted by subsection (a) of this section, reads as rewritten:

"(e) Authorized Formula Variance. – The Department may vary from the Formula set forth in this section if it complies with the following:

…

(2) Calculation of Variance. – Each year, the Secretary shall calculate the amount of Regional Impact and Division Need funds allocated in that year to each ~~division,~~division and region, the amount of funds obligated, and the amount the obligations exceeded or were below the allocation. ~~In the first variance calculation under this subdivision following the end of fiscal year 2015-16, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous year. In the first variance calculation under this subdivision following the end of fiscal year 2016-17, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous two fiscal years. In the first variance calculation under this subdivision following the end of fiscal year 2017-18, the target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous three fiscal years. In the first variance calculation under this subdivision following the end of fiscal year 2018-19, the~~ The target amounts obtained according to the Formula set forth in this section shall be adjusted to account for any differences between allocations and obligations reported for the previous ~~four~~ five fiscal years. The new target amounts shall be used to fulfill the requirements of subdivision (1) of this subsection for the next update of the Transportation Improvement Program. The adjustment to the target amount shall be allocated by Distribution Region or Division, as applicable."

SECTION 1.2. Strategic Prioritization Process Reporting. – The Department shall issue a draft revision to the State Transportation Improvement Program required by G.S. 143B-350(f)(4) no later than January 1, 2015. The Board of Transportation shall approve the revised State Transportation Improvement Program no later than July 1, 2015.

SECONDARY ROADS CHANGES

SECTION 2.1. G.S. 20-85 reads as rewritten:

"**§ 20-85. Schedule of fees.**

…

(a1) One dollar ($1.00) of the fee imposed for any transaction assessed a fee under subdivision (a)(1), (a)(2), (a)(3), (a)(7), (a)(8), or (a)(9) of this section shall be credited to the North Carolina Highway Fund. The Division shall use the fees derived from transactions with the Division for technology improvements. The Division shall use the fees derived from transactions with commission contract agents for the payment of compensation to commission contract agents. An additional fifty cents (50¢) of the fee imposed for any transaction assessed a fee under subdivision (a)(1) of this section shall be credited to the Mercury Switch Removal Account in the Department of Environment and Natural Resources. ~~An additional fifty cents (50¢) of the fee imposed for any transaction assessed a fee under subdivision (a)(1) of this section shall be credited as follows:~~

~~(1) The first four hundred thousand dollars ($400,000) collected shall be credited to the Reserve for Visitor Centers in the Highway Fund.~~

~~(2) Any additional funds collected shall be credited to the Highway Trust Fund and, notwithstanding G.S. 136-176(b), shall be allocated and used for urban loop projects.~~

(a2) From the fees collected under subdivisions (a)(1) through (a)(9) of this section, the Department shall annually credit the sum of four hundred thousand dollars ($400,000) to the Reserve for Visitor Centers in the Highway Fund.

(b) Except as otherwise provided in ~~subsection (a1)~~subsections (a1) and (a2) of this section, the fees collected under subdivisions (a)(1) through (a)(9) of this section shall be credited to the North Carolina Highway Trust Fund. The fees collected under subdivision (a)(10) of this section shall be credited to the Highway Fund. ~~Fifteen dollars ($15.00) of each title fee credited to the Trust Fund under subdivision (a)(1) shall be added to the amount allocated for secondary roads under G.S. 136-176 and used in accordance with G.S. 136-44.5.~~

…."

SECTION 2.2.(a) G.S. 136-44.2 reads as rewritten:

"**§ 136-44.2. Budget and appropriations.**

(a) The Director of the Budget shall include in the "Current Operations Appropriations Act" an enumeration of the purposes or objects of the proposed expenditures for each of the ~~construction and maintenance~~construction, maintenance, and improvement programs for that budget period for the State primary, secondary, State parks road systems, and other transportation systems. The State primary system shall include all portions of the State highway system located both inside and outside municipal corporate limits that are designated by N.C., U.S. or Interstate numbers. The State secondary system shall include all of the State highway system located both inside and outside municipal corporate limits that is not a part of the State primary system. The State parks system shall include all State parks roads and parking lots that are not also part of the State highway system. The transportation systems shall also include State-maintained, nonhighway modes of ~~transportation as well.~~transportation.

(b) All ~~construction and maintenance~~ construction, maintenance, and improvement programs for which appropriations are requested shall be enumerated separately in the budget. Programs that are entirely State funded shall be listed separately from those programs involving the use of federal-aid funds. Proposed appropriations of State matching funds for each of the federal-aid construction programs shall be enumerated separately as well as the federal-aid funds anticipated for each program in order that the total construction requirements for each program may be provided for in the budget. Also, proposed State matching funds for the highway planning and research program shall be included separately along with the anticipated federal-aid funds for that purpose.

(c) Other program categories for which appropriations are requested, such as, but not limited to, maintenance, channelization and traffic control, bridge maintenance, public service and access road construction, transportation projects and systems, and ferry operations shall be enumerated in the budget.

(d) The Department of Transportation shall have all powers necessary to comply fully with provisions of present and future federal-aid acts. For purposes of this section, "federally eligible construction project" means any construction project except secondary road projects developed pursuant to G.S. 136-44.7 and 136-44.8 eligible for federal funds under any federal-aid act, whether or not federal funds are actually available.

(e) The "Current Operations Appropriations Act" shall also contain the proposed appropriations of State funds for use in each county for ~~maintenance and construction~~construction, maintenance, and improvement of secondary roads, to be allocated in

accordance with G.S. 136-44.5 and 136-44.6. State funds appropriated for secondary roads shall not be transferred nor used except for the ~~construction and maintenance~~construction, maintenance, and improvement of secondary roads in the county for which they are allocated pursuant to G.S. 136-44.5 and 136-44.6.

…."

SECTION 2.2.(b) Effective July 1, 2014, G.S. 136-44.2, as rewritten by subsection (a) of this section, reads as rewritten:

"**§ 136-44.2. Budget and appropriations.**

(a) The Director of the Budget shall include in the "Current Operations Appropriations Act" an enumeration of the purposes or objects of the proposed expenditures for each of the ~~construction, maintenance,~~ maintenance and improvement programs for that budget period for the State primary, secondary, State parks road systems, and other transportation systems. The State primary system shall include all portions of the State highway system located both inside and outside municipal corporate limits that are designated by N.C., U.S. or Interstate numbers. The State secondary system shall include all of the State highway system located both inside and outside municipal corporate limits that is not a part of the State primary system. The State parks system shall include all State parks roads and parking lots that are not also part of the State highway system. The transportation systems shall also include State-maintained, nonhighway modes of transportation.

(b) All ~~construction, maintenance,~~maintenance and improvement programs for which appropriations are requested shall be enumerated separately in the budget. Programs that are entirely State funded shall be listed separately from those programs involving the use of federal-aid funds. ~~Proposed appropriations of State matching funds for each of the federal-aid construction programs shall be enumerated separately as well as the federal-aid funds anticipated for each program in order that the total construction requirements for each program may be provided for in the budget. Also, proposed~~ Proposed State matching funds for the highway planning and research program shall be included separately along with the anticipated federal-aid funds for that purpose.

(c) Other program categories for which appropriations are requested, such as, but not limited to, maintenance, channelization and traffic control, bridge maintenance, public service and access road construction, transportation projects and systems, and ferry operations shall be enumerated in the budget.

(d) The Department of Transportation shall have all powers necessary to comply fully with provisions of present and future federal-aid acts. For purposes of this section, "federally eligible construction project" means any construction project except secondary road projects developed pursuant to ~~G.S. 136-44.7 and 136-44.8~~G.S. 136-44.8 eligible for federal funds under any federal-aid act, whether or not federal funds are actually available.

(e) The "Current Operations Appropriations Act" shall also contain the proposed appropriations of State funds for use in each county for ~~construction, maintenance,~~ maintenance and improvement of secondary roads, to be allocated in accordance with ~~G.S. 136-44.5 and 136-44.6.~~G.S. 136-44.6. State funds appropriated for secondary roads shall not be transferred nor used except for the ~~construction, maintenance,~~ maintenance and improvement of secondary roads in the county for which they are allocated pursuant to ~~G.S. 136-44.5 and 136-44.6.~~G.S. 136-44.6.

…

(g) The Department of Transportation may provide for costs incurred or accrued for traffic control measures to be taken by the Department at major events which involve a high degree of traffic concentration on State highways, and which cannot be funded from regular budgeted items. This authorization applies only to events which are expected to generate 30,000 vehicles or more per day. The Department of Transportation shall provide for this funding by allocating and reserving up to one hundred thousand dollars ($100,000) before any other allocations from the appropriations for State maintenance for ~~primary, secondary, and urban~~primary and secondary road systems are made, based upon the same proportion as is appropriated to each system."

SECTION 2.3.(a) G.S. 136-44.2A reads as rewritten:

"**§ 136-44.2A. Secondary road ~~improvement~~ construction program.**

There shall be annually allocated from the Highway Fund to the Department of Transportation for secondary road ~~improvement~~ construction programs developed pursuant to G.S. ~~136-44.7 and~~ 136-44.8, a sum provided by law. ~~equal to that allocation made from the~~

~~Highway Fund under G.S. 136-41.1(a). In addition, as provided in G.S. 136-176(b)(4) and G.S. 20-85(b), revenue is annually allocated from the Highway Trust Fund for secondary road construction. Of the funds allocated from the Highway Fund, the sum of sixty-eight million six hundred seventy thousand dollars ($68,670,000) shall be allocated among the counties in accordance with G.S. 136-44.5(b). All funds allocated from the Highway Fund for secondary road improvements in excess of that amount shall be allocated among the counties in accordance with G.S. 136-44.5(c). All funds allocated from the Highway Trust Fund for secondary road improvement programs shall be allocated in accordance with G.S. 136-182.~~"

SECTION 2.3.(b) Effective July 1, 2014, G.S. 136-44.2A is repealed.

SECTION 2.4. G.S. 136-44.2C is repealed.

SECTION 2.5. Article 2A of Chapter 136 is amended by adding a new section to read:

"**§ 136-44.2D. Secondary unpaved road paving program.**

(a) The Department of Transportation shall expend funds allocated to the paving of unpaved secondary roads for the paving of unpaved secondary roads based on a statewide prioritization. The Department shall pave the eligible unpaved secondary roads that receive the highest priority ranking within this statewide prioritization. Nothing in this subsection shall be interpreted to require the Department to pave any unpaved secondary roads that do not meet secondary road system addition standards as set forth in G.S. 136-44.10 and G.S. 136-102.6. The Highway Trust Fund shall not be used to fund the paving of unpaved secondary roads."

SECTION 2.6.(a) G.S. 136-44.5 reads as rewritten:

"**§ 136-44.5. Secondary roads; mileage study; allocation of funds.**

(a) Before July 1, in each calendar year, the Department of Transportation shall make a study of all State-maintained unpaved and paved secondary roads in the State. The study shall determine:

(1) The number of miles of unpaved State-maintained roads in each county eligible for paving and the total number of miles that are ineligible;

(2) The total number of miles of unpaved State-maintained roads in the State eligible for paving and the total number of miles that are ineligible; and

(3) The total number of paved State-maintained roads in each county, and the total number of miles of paved State-maintained roads in the State.

In this subsection, (i) ineligible unpaved mileage is defined as the number of miles of unpaved roads that have unavailable rights-of-way or for which environmental permits cannot be approved to allow for paving, and (ii) eligible unpaved mileage is defined as the number of miles of unpaved roads that have not been previously approved for paving by any funding source or has the potential to be programmed for paving when rights-of-way or environmental permits are secured. Except for federal-aid programs, the Department shall allocate all secondary road improvement funds on the basis of a formula using the study figures.

(b) ~~The first sixty-eight million six hundred seventy thousand dollars ($68,670,000) shall be allocated as follows: Each county shall receive a percentage of these funds, the percentage to be determined as a factor of the number of miles of paved and unpaved State-maintained secondary roads in the county divided by the total number of miles of paved and unpaved State-maintained secondary roads in the State, excluding those unpaved secondary roads that have been determined to be eligible for paving as defined in subsection (a) of this section. Beginning in fiscal year 2010-2011, allocations pursuant to this subsection shall be~~ The amounts appropriated by law for secondary road construction, excluding unpaved secondary road funds, shall be allocated among counties based on the total number of secondary miles in a county in proportion to the total State-maintained secondary road mileage.

~~(c) Funds allocated for secondary road construction in excess of sixty-eight million six hundred seventy thousand dollars ($68,670,000) shall be allocated to each county based on the percentage proportion that the number of miles in the county of State-maintained unpaved secondary roads bears to the total number of miles in the State of State-maintained unpaved secondary roads. In a county that has roads with eligible miles, these funds shall only be used for paving unpaved secondary road miles in that county. In a county where there are no roads eligible to be paved as defined in subsection (a) of this section, the funds may be used for improvements on the paved and unpaved secondary roads in that county. Beginning in fiscal year 2010-2011, allocations pursuant to this subsection shall be based on the total number of secondary miles in a county in proportion to the total State-maintained secondary road mileage.~~

~~(d) Copies of the Department study of unpaved and paved State-maintained secondary roads and copies of the individual county allocations shall be made available to newspapers having general circulation in each county.~~"

SECTION 2.6.(b) Effective July 1, 2014, G.S. 136-44.5 is repealed.

SECTION 2.6.(c) G.S. 136-44.6 reads as rewritten:

"**§ 136-44.6. Uniformly applicable formula for the allocation of secondary roads maintenance and improvement funds.**

The Department of Transportation shall develop a uniformly applicable formula for the allocation of secondary roads maintenance and improvement funds for use in each county. The formula shall take into consideration the number of paved and unpaved miles of state-maintained secondary roads in each county and such other factors as experience may dictate. This section shall not apply to projects to pave unpaved roads under G.S. 136-44.2D."

SECTION 2.6.(d) Secondary Road Funding. – The sum of fifteen million dollars ($15,000,000) in nonrecurring funds for the 2013-2014 fiscal year is allocated from the Highway Fund for the secondary road construction program under G.S. 136-44.2A, as enacted by Section 2.3 of this act, and the sum of twelve million dollars ($12,000,000) in recurring funds for the 2013-2014 fiscal year is allocated from the Highway Fund for the paving of unpaved roads pursuant to G.S. 136-44.2D, as enacted by Section 2.5 of this act.

SECTION 2.7. G.S. 136-44.7 reads as rewritten:

"**§ 136-44.7. Secondary roads; ~~annual work program.~~right-of-way acquisition.**

~~(a) The Department of Transportation shall be responsible for developing criteria for improvements and maintenance of secondary roads. The criteria shall be adopted by the Board of Transportation before it shall become effective. The Department of Transportation shall be responsible for developing annual work programs for both construction and maintenance of secondary roads in each county in accordance with criteria developed. It shall reflect the long-range and immediate goals of the Department of Transportation. Projects on the annual construction program for each county shall be rated according to their priority based upon the secondary road criteria and standards which shall be uniform throughout the State. Tentative construction projects and estimated funding shall also be listed in accordance to priority. The annual construction program shall be adopted by the Board of Transportation before it shall become effective.~~

~~(b) When a secondary road in a county is listed in the first 10 secondary roads to be paved during a year on a priority list issued by the Department of Transportation under this section, the secondary road cannot be removed from the top 10 of that list or any subsequent list until it is paved. All secondary roads in a county shall be paved, insofar as possible, in the priority order of the list. When a secondary road in the top 10 of that list is removed from the list because it has been paved, the next secondary road on the priority list shall be moved up to the top 10 of that list and shall remain there until it is paved.~~

(c) When it is necessary for the Department of Transportation to acquire a right-of-way ~~in accordance with (a) and (b) of this section~~ in order to pave a secondary road or undertake a maintenance project, the Department shall negotiate the acquisition of the right-of-way for a period of up to six months. At the end of that period, if one or more property owners have not dedicated the necessary right-of-way and at least seventy-five percent (75%) of the property owners adjacent to the project and the owners of the majority of the road frontage adjacent to the project have dedicated the necessary property for the right-of-way and have provided funds required by Department rule to the Department to cover the costs of condemning the remaining property, the Department shall initiate condemnation proceedings pursuant to Article 9 of this Chapter to acquire the remaining property necessary for the project.

(d) The Division Engineer is authorized to reduce the width of a right-of-way to less than 60 feet to pave an unpaved secondary road with the allocated funds, provided that in all circumstances the safety of the public is not compromised and the minimum accepted design practice is satisfied."

SECTION 2.8.(a) G.S. 136-44.8 reads as rewritten:

"**§ 136-44.8. Submission of secondary roads construction and unpaved roads paving programs to the Boards of County Commissioners.**

~~(a) The Department of Transportation shall post in the county courthouse a county map showing tentative secondary road paving projects rated according to the priority of each project in accordance with the criteria and standards adopted by the Board of Transportation. The map shall be posted at least two weeks prior to the public meeting of the county commissioners at~~

~~which the Department of Transportation representatives are to meet and discuss the proposed secondary road construction program for the county as provided in subsection (c).~~

(a1) Representatives of the Department of Transportation shall provide to the board of county commissioners in each county the proposed secondary road construction program and, if applicable to that county, a list of roads proposed for the annual paving program approved by the Board of Transportation. If a paving priority list is presented, it shall include the priority rating of each secondary road paving project included in the proposed paving program according to the criteria and standards adopted by the Board of Transportation.

~~(b) The Department of Transportation shall provide a notice to the public of the public meeting of the board of county commissioners at which the annual secondary road construction program for the county proposed by the Department is to be presented to the board and other citizens of the county as provided in subsection (c). The notice shall be published in a newspaper published in the county or having a general circulation in the county once a week for two succeeding weeks prior to the meeting. The notice shall also advise that a county map is posted in the courthouse showing tentative secondary road paving projects rated according to the priority of each project.~~

~~(c) Representatives of the Department of Transportation shall meet with the board of county commissioners at a regular or special public meeting of the board of county commissioners for each county and present to and discuss with the board of county commissioners and other citizens present, the proposed secondary road construction program for the county. The presentation and discussion shall specifically include the priority rating of each tentative secondary road paving project included in the proposed construction program, according to the criteria and standards adopted by the Board of Transportation.~~

~~At the same meeting after the presentation and discussion of the annual secondary road construction program for the county or at a later meeting, the board of county commissioners may (i) concur in the construction program as proposed, or (ii) take no action, or (iii) make recommendations for deviations in the proposed construction program, except as to paving projects and the priority of paving projects for which the board in order to make recommendations for deviations, must vote to consider the matter at a later public meeting as provided in subsection (d).~~

~~(d) The board of county commissioners may recommend deviations in the paving projects and the priority of paving projects included in the proposed secondary road construction program only at a public meeting after notice to the public that the board will consider making recommendations for deviations in paving projects and the priority of paving projects included in the proposed annual secondary road construction program. Notice of the public meeting shall be published by the board of county commissioners in a newspaper published in the county or having a general circulation in the county. After discussion by the members of the board of county commissioners and comments and information presented by other citizens of the county, the board of county commissioners may recommend deviations in the paving projects and in the paving priority of secondary road projects included in the proposed secondary road construction program. Any recommendation made by the board of county commissioners for a deviation in the paving projects or in the priority for paving projects in the proposed secondary road construction program shall state the specific reason for each such deviation recommended.~~

(e) The Board of Transportation shall adopt the annual secondary construction program for each county after having given the board of county commissioners of each county an opportunity to review the proposed construction program and to make recommendations as provided in this section. The Board of Transportation shall consider such recommendations insofar as they are compatible with its general plans, standards, criteria and available funds, but having due regard to development plans of the county and to the maintenance and improvement needs of all existing roads in the county. ~~However, no consideration shall be given to any recommendation by the board of county commissioners for a deviation in the paving projects or in the priority for paving secondary road projects in the proposed construction program that is not made in accordance with subsection (d).~~

(f) The secondary road construction ~~program~~ and unpaved roads paving programs adopted by the Board of Transportation shall be followed by the Department of Transportation unless changes are approved by the Board of Transportation and notice of any changes is given to the board of county commissioners. ~~The Department of Transportation shall post a copy of the adopted program, including a map showing the secondary road paving projects rated~~

~~according to the approved priority of each project, at the courthouse, within 10 days of its adoption by the Board of Transportation. The board of county commissioners may petition the Board of Transportation for review of any changes to which it does not consent and the determination of the Board of Transportation shall be final.~~ Upon request, the most recent secondary road construction and unpaved roads paving programs adopted shall be submitted to any member of the General Assembly. The Department of Transportation shall make the annual construction program for each county available to the newspapers having a general circulation in the county."

SECTION 2.8.(b) Effective July 1, 2014, G.S. 136-44.8, as rewritten by subsection (a) of this section, reads as rewritten:

"**§ 136-44.8. Submission of unpaved secondary roads ~~construction and unpaved roads~~ paving programs to the Boards of County Commissioners.**

(a1) ~~Representatives~~ In each county having unpaved roads programmed for paving, representatives of the Department of Transportation shall annually provide to the board of county commissioners in ~~each county~~those counties ~~the proposed secondary road construction program and, if applicable to that county,~~ a list of roads proposed for the annual paving program approved by the Board of Transportation. ~~If a~~The paving priority list ~~is presented, it~~ shall include the priority rating of each secondary road paving project included in the proposed paving program according to the criteria and standards adopted by the Board of Transportation.

…

~~(e) The Board of Transportation shall adopt the annual secondary construction program for each county after having given the board of county commissioners of each county an opportunity to review the proposed construction program and to make recommendations as provided in this section. The Board of Transportation shall consider such recommendations insofar as they are compatible with its general plans, standards, criteria and available funds, but having due regard to development plans of the county and to the maintenance and improvement needs of all existing roads in the county.~~

(f) The ~~secondary road construction and~~ unpaved secondary roads paving programs adopted by the Board of Transportation shall be followed by the Department of Transportation unless changes are approved by the Board of Transportation and notice of any changes is given to the board of county commissioners. Upon request, the most recent unpaved secondary ~~road construction and unpaved~~ roads paving programs adopted shall be submitted to any member of the General Assembly. The Department of Transportation shall make the annual construction program for each affected county available to the newspapers having a general circulation in the county."

SECTION 2.9. G.S. 136-182 is repealed.

STATE AID TO MUNICIPALITIES/POWELL BILL CHANGES

SECTION 3.1. G.S. 136-41.1 reads as rewritten:

"**§ 136-41.1. Appropriation to municipalities; allocation of funds generally; allocation to Butner.**

(a) There is annually appropriated out of the State Highway Fund a sum equal to ten and four-tenths percent (10.4%) of the net amount after refunds that was produced during the fiscal year by ~~a one and three-fourths cents (1 3/4¢) tax on each gallon of motor fuel taxed~~ the tax imposed under Article 36C of Chapter 105 of the General Statutes and on the equivalent amount of alternative fuel taxed under Article 36D of that Chapter. One-half of the amount appropriated shall be allocated in cash on or before October 1 of each year to the cities and towns of the State in accordance with this section. The second one-half of the amount appropriated shall be allocated in cash on or before January 1 of each year to the cities and towns of the State in accordance with this section. ~~In addition, as provided in G.S. 136-176(b)(3), revenue is allocated and appropriated from the Highway Trust Fund to the cities and towns of this State to be used for the same purposes and distributed in the same manner as the revenue appropriated to them under this section from the Highway Fund. Like the appropriation from the Highway Fund, the appropriation from the Highway Trust Fund shall be based on revenue collected during the fiscal year preceding the date the distribution is made.~~

Seventy-five percent (75%) of the funds appropriated for cities and towns shall be distributed among the several eligible municipalities of the State in the percentage proportion that the population of each eligible municipality bears to the total population of all eligible

municipalities according to the most recent annual estimates of population as certified to the Secretary of Revenue by the State Budget Officer. This annual estimation of population shall include increases in the population within the municipalities caused by annexations accomplished through July 1 of the calendar year in which these funds are distributed. Twenty-five percent (25%) of said fund shall be distributed among the several eligible municipalities of the State in the percentage proportion that the mileage of public streets in each eligible municipality which does not form a part of the State highway system bears to the total mileage of the public streets in all eligible municipalities which do not constitute a part of the State highway system.

It shall be the duty of the mayor of each municipality to report to the Department of Transportation such information as it may request for its guidance in determining the eligibility of each municipality to receive funds under this section and in determining the amount of allocation to which each is entitled. Upon failure of any municipality to make such report within the time prescribed by the Department of Transportation, the Department of Transportation may disregard such defaulting unit in making said allotment.

The funds to be allocated under this section shall be paid in cash to the various eligible municipalities on or before October 1 and January 1 of each ~~year.~~year as provided in this section. Provided that eligible municipalities are authorized within the discretion of their governing bodies to enter into contracts for the purpose of maintenance, repair, construction, reconstruction, widening, or improving streets of such municipalities at any time after January 1 of any calendar year in total amounts not to exceed ninety percent (90%) of the amount received by such municipality during the preceding fiscal year, in anticipation of the receipt of funds under this section during the next fiscal year, to be paid for out of such funds when received.

The Department of Transportation may withhold each year an amount not to exceed one percent (1%) of the total amount appropriated for distribution under this section for the purpose of correcting errors in allocations: Provided, that the amount so withheld and not used for correcting errors will be carried over and added to the amount to be allocated for the following year.

The word "street" as used in this section is hereby defined as any public road maintained by a municipality and open to use by the general public, and having an average width of not less than 16 feet. In order to obtain the necessary information to distribute the funds herein allocated, the Department of Transportation may require that each municipality eligible to receive funds under this section submit to it a statement, certified by a registered engineer or surveyor of the total number of miles of streets in such municipality. The Department of Transportation may in its discretion require the certification of mileage on a biennial basis.

…."

SECTION 3.2. G.S. 136-181 is repealed.

SECTION 3.3. G.S. 136-41.3 reads as rewritten:

"**§ 136-41.3. Use of funds; records and annual statement; excess accumulation of funds; contracts for maintenance, etc., of streets.**

(a) Uses of Funds. – The funds allocated to cities and towns under the provisions of G.S. 136-41.2 shall be expended by said cities and towns only for the purpose of maintaining, repairing, constructing, reconstructing or widening of any street or public thoroughfare including bridges, drainage, curb and gutter, and other necessary appurtenances within the corporate limits of the municipality or for meeting the municipality's proportionate share of assessments levied for such purposes, or for the planning, construction and maintenance of ~~bikeways located within the rights-of-way of public streets and highways,~~bikeways, greenways, or ~~for the planning, construction, and maintenance of sidewalks along public streets and highways.~~sidewalks.

(b) Records and Annual Statement. – Each municipality receiving funds by virtue of G.S. 136-41.1 and 136-41.2 shall maintain a separate record of accounts indicating in detail all receipts and expenditures of such funds. It shall be unlawful for any municipal employee or member of any governing body to authorize, direct, or permit the expenditure of any funds accruing to any municipality by virtue of G.S. 136-41.1 and 136-41.2 for any purpose not herein authorized. Any member of any governing body or municipal employee shall be personally liable for any unauthorized expenditures. On or before the first day of August each year, the treasurer, auditor, or other responsible official of each municipality receiving funds by virtue of G.S. 136-41.1 and 136-41.2 shall file a statement under oath with the Secretary of

Transportation showing in detail the expenditure of funds received by virtue of G.S. 136-41.1 and 136-41.2 during the preceding year and the balance on hand.

(c) Excess Accumulation of Funds Prohibited. – No funds allocated to municipalities pursuant to G.S. 136-41.1 and 136-41.2 shall be permitted to accumulate for a period greater than permitted by this section. Interest on accumulated funds shall be used only for the purposes permitted by the provisions of G.S. 136-41.3. Except as otherwise provided in this section, any municipality having accumulated an amount greater than the sum of the past 10 allocations made, shall have an amount equal to such excess deducted from the next allocation after receipt of the report required by this section. Such deductions shall be carried over and added to the amount to be allocated to municipalities for the following year. Notwithstanding the other provisions of this section, the Department shall adopt a policy to allow small municipalities to apply to the Department to be allowed to accumulate up to the sum of the past 20 allocations if a municipality's allocations are so small that the sum of the past 10 allocations would not be sufficient to accomplish the purposes of this section.

(d) Contracts for Maintenance and Construction. – In the discretion of the local governing body of each municipality receiving funds by virtue of G.S. 136-41.1 and 136-41.2 it may contract with the Department of Transportation to do the work of maintenance, repair, construction, reconstruction, widening or improving the streets in such municipality; or it may let contracts in the usual manner as prescribed by the General Statutes to private contractors for the performance of said street work; or may undertake the work by force account. The Department of Transportation within its discretion is hereby authorized to enter into contracts with municipalities for the purpose of maintenance, repair, construction, reconstruction, widening or improving streets of municipalities. And the Department of Transportation in its discretion may contract with any city or town which it deems qualified and equipped so to do that the city or town shall do the work of maintaining, repairing, improving, constructing, reconstructing, or widening such of its streets as form a part of the State highway system.

In the case of each eligible municipality, as defined in G.S. 136-41.2, having a population of less than 5,000, the Department of Transportation shall upon the request of such municipality made by official action of its governing body, on or prior to June 1, 1953, or June 1 in any year thereafter, for the fiscal year beginning July 1, 1953, and for the years thereafter do such street construction, maintenance, or improvement on nonsystem streets as the municipality may request within the limits of the current or accrued payments made to the municipality under the provisions of G.S. 136-41.1.

In computing the costs, the Department of Transportation may use the same rates for equipment, rental, labor, materials, supervision, engineering and other items, which the Department of Transportation uses in making charges to one of its own department or against its own department, or the Department of Transportation may employ a contractor to do the work, in which case the charges will be the contract cost plus engineering and inspection. The municipality is to specify the location, extent, and type of the work to be done, and shall provide the necessary rights-of-way, authorization for the removal of such items as poles, trees, water and sewer lines as may be necessary, holding the Department of Transportation free from any claim by virtue of such items of cost and from such damage or claims as may arise therefrom except from negligence on the part of the Department of Transportation, its agents, or employees.

If a municipality elects to bring itself under the provisions of the two preceding paragraphs, it shall enter into a two-year contract with the Department of Transportation and if it desires to dissolve the contract at the end of any two-year period it shall notify the Department of Transportation of its desire to terminate said contract on or before April 1 of the year in which such contract shall expire; otherwise, said contract shall continue for an additional two-year period, and if the municipality elects to bring itself under the provisions of the two preceding paragraphs and thereafter fails to pay its account to the Department of Transportation for the fiscal year ending June 30, by August 1 following the fiscal year, then the Department of Transportation shall apply the said municipality's allocation under G.S. 136-41.1 to this account until said account is paid and the Department of Transportation shall not be obligated to do any further work provided for in the two preceding paragraphs until such account is paid.

Section 143-129 of the General Statutes relating to the procedure for letting of public contracts shall not be applicable to contracts undertaken by any municipality with the Department of Transportation in accordance with the provisions of the three preceding paragraphs.

(e) Permitted Offsets to Funding. – The Department of Transportation is authorized to apply a municipality's share of funds allocated to a municipality under the provisions of G.S. 136-41.1 to any of the following accounts of the municipality with the said Department of Transportation, which the municipality fails to pay:

(1) Cost sharing agreements for right-of-way entered into pursuant to G.S. 136-66.3, but not to exceed ten percent (10%) of any one year's allocation until the debt is repaid,

(2) The cost of relocating municipally owned waterlines and other municipally owned utilities on a State highway project which is the responsibility of the municipality,

(3) For any other work performed for the municipality by the Department of Transportation or its contractor by agreement between the Department of Transportation and the municipality, and

(4) For any other work performed that was made necessary by the construction, reconstruction or paving of a highway on the State highway system for which the municipality is legally responsible."

SECTION 3.4. G.S. 136-41.4 reads as rewritten:

"**§ 136-41.4. Municipal use of allocated funds; election.**

(a) A municipality that qualifies for an allocation of funds pursuant to G.S. 136-41.1 shall have the ~~option~~ following options:

(1) ~~to accept~~Accept all or a portion of funds allocated to the ~~municipality, under that section, for the repair, maintenance, construction, reconstruction, widening, or improving of the municipality's streets.~~municipality for use as authorized by G.S. 136-41.3(a).

(2) Use some or all of its allocation to match federal funds administered by the Department for independent bicycle and pedestrian improvement projects within the municipality's limits, or within the area of any metropolitan planning organization or rural transportation planning organization.

(3) ~~or the municipality may elect~~Elect to have some or all of the allocation reprogrammed for any Transportation Improvement Project currently on the approved project list within the municipality's limits or within the area of any metropolitan planning organization or rural transportation planning organization.

(b) If a municipality chooses to have its allocation reprogrammed, the ~~minimum~~ amount that may be reprogrammed is an amount equal to that amount necessary to complete one full phase of the project selected by the municipality or an amount that, when added to the amount already programmed for the Transportation Improvement Project selected, would permit the completion of at least one full phase of the project. The restriction set forth in this subsection shall not apply to any bicycle or pedestrian projects."

SECTION 3.5. DOT Municipal Lane Mile Study. – The Department of Transportation shall collect lane mile data from each municipality eligible to receive funds under this section no later than December 1, 2013. The Department shall report to the Joint Legislative Transportation Oversight Committee no later than March 1, 2014, on at least three options to shift the distribution formula to include lane mile data. The report shall include advantages and disadvantages, fiscal impacts to each municipality, and any other technical considerations in making such a change. The Joint Legislative Transportation Oversight Committee and the Fiscal Research Division shall include in its recommendations to the 2014 Session of the 2013 General Assembly a new distribution formula, if the Committee finds that a new formula is beneficial and practical.

CONFORMING CHANGES

SECTION 4.1. G.S. 105-187.9 reads as rewritten:

"**§ 105-187.9. Disposition of tax proceeds.**

…

~~(b) **(Repealed effective July 1, 2013)** General Fund Transfer. – In each fiscal year, the State Treasurer shall transfer the amounts provided below from the taxes deposited in the Trust Fund to the General Fund. The transfer of funds authorized by this section may be made by transferring one-fourth of the amount at the end of each quarter in the fiscal year or by~~

~~transferring the full amount annually on July 1 of each fiscal year, subject to the availability of revenue.~~

~~(1) The sum of twenty-six million dollars ($26,000,000).~~

~~(2) In addition to the amount transferred under subdivision (1) of this subsection, the sum of one million seven hundred thousand dollars ($1,700,000) shall be transferred in the 2001-2002 fiscal year. The amount distributed under this subdivision shall increase in the 2002-2003 fiscal year to the sum of two million four hundred thousand dollars ($2,400,000). In each fiscal year thereafter, the sum transferred under this subdivision shall be the amount distributed in the previous fiscal year plus or minus a percentage of this sum equal to the percentage by which tax collections under this Article increased or decreased for the most recent 12-month period for which data are available.~~

~~(c) **(Effective July 1, 2013)** Mobility Fund Transfer. In each fiscal year, the State Treasurer shall transfer fifty-eight million dollars ($58,000,000) from the taxes deposited in the Trust Fund to the Mobility Fund. The transfer of funds authorized by this section may be made by transferring one-fourth of the amount at the end of each quarter in the fiscal year or by transferring the full amount annually on July 1 of each fiscal year, subject to the availability of revenue.~~"

SECTION 4.2. G.S. 136-18 reads as rewritten:

"**§ 136-18. Powers of Department of Transportation.**

The said Department of Transportation is vested with the following powers:

…

(12a) The Department of Transportation shall have such powers as are necessary to establish, administer, and receive federal funds for a transportation infrastructure banking program as authorized by the Intermodal Surface Transportation Efficiency Act of 1991, Pub. L. 102-240, as amended, and the National Highway System Designation Act of 1995, Pub. L. 104-59, as amended. The Department of Transportation is authorized to apply for, receive, administer, and comply with all conditions and requirements related to federal financial assistance necessary to fund the infrastructure banking program. The infrastructure banking program established by the Department of Transportation may utilize federal and available State funds for the purpose of providing loans or other financial assistance to governmental units, including toll authorities, to finance the costs of transportation projects authorized by the above federal aid acts. Such loans or other financial assistance shall be subject to repayment and conditioned upon the establishment of such security and the payment of such fees and interest rates as the Department of Transportation may deem necessary. The Department of Transportation is authorized to apply a municipality's share of funds allocated under G.S. 136-41.1 or G.S. 136-44.20 as necessary to ensure repayment of funds advanced under the infrastructure banking program. The Department of Transportation shall establish jointly, with the State Treasurer, a separate infrastructure banking account with necessary fiscal controls and accounting procedures. Funds credited to this account shall not revert, and interest and other investment income shall accrue to the account and may be used to provide loans and other financial assistance as provided under this subdivision. The Department of Transportation may establish such rules and policies as are necessary to establish and administer the infrastructure banking program. The infrastructure banking program authorized under this subdivision shall not modify the ~~regional distribution~~ formula for the distribution of funds established by ~~G.S. 136-17.2A.~~G.S. 136-189.11. Governmental units may apply for loans and execute debt instruments payable to the State in order to obtain loans or other financial assistance provided for in this subdivision. The Department of Transportation shall require that applicants shall pledge as security for such obligations revenues derived from operation of the benefited facilities or systems, other sources of revenue, or their faith and credit, or any combination thereof. The faith and credit of such governmental units shall

not be pledged or be deemed to have been pledged unless the requirements of Article 4, Chapter 159 of the General Statutes have been met. The State Treasurer, with the assistance of the Local Government Commission, shall develop and adopt appropriate debt instruments for use under this subdivision. The Local Government Commission shall develop and adopt appropriate procedures for the delivery of debt instruments to the State without any public bidding therefor. The Local Government Commission shall review and approve proposed loans to applicants pursuant to this subdivision under the provisions of Articles 4 and 5, Chapter 159 of the General Statutes, as if the issuance of bonds was proposed, so far as those provisions are applicable. Loans authorized by this subdivision shall be outstanding debt for the purpose of Article 10, Chapter 159 of the General Statutes.

…."

SECTION 4.3. G.S. 136-17.2A is repealed.

SECTION 4.4. G.S. 136-44.50(a) reads as rewritten:

"(a) A transportation corridor official map may be adopted or amended by any of the following:

(1) The governing board of any local government for any thoroughfare included as part of a comprehensive plan for streets and highways adopted pursuant to G.S. 136-66.2 or for any proposed public transportation corridor included in the adopted long-range transportation plan.

(2) The Board of Transportation, or the governing board of any county, for any portion of the existing or proposed State highway system or for any public transportation corridor, to include rail, that is in the Transportation Improvement Program.

(3) Regional public transportation authorities created pursuant to Article 26 of Chapter 160A of the General Statutes or regional transportation authorities created pursuant to Article 27 of Chapter 160A of the General Statutes for any portion of the existing or proposed State highway system, or for any proposed public transportation corridor, or adjacent station or parking lot, included in the adopted long-range transportation plan.

(4) The North Carolina Turnpike Authority for any project being studied pursuant to G.S. 136-89.183.

(5) The Wilmington Urban Area Metropolitan Planning Organization for ~~any project that is within its urbanized boundary and identified in G.S. 136-179.~~Department projects R-3300 and U-4751.

Before a city adopts a transportation corridor official map that extends beyond the extraterritorial jurisdiction of its building permit issuance and subdivision control ordinances, or adopts an amendment to a transportation corridor official map outside the extraterritorial jurisdiction of its building permit issuance and subdivision control ordinances, the city shall obtain approval from the Board of County Commissioners."

SECTION 4.5. G.S. 136-66.3 reads as rewritten:

"**§ 136-66.3. Local government participation in improvements to the State transportation system.**

…

~~(c1) No TIP Disadvantage for Participation. – If a county or municipality participates in a State transportation system improvement project, as authorized by this section, or by G.S. 136-51 and G.S. 136-98, the Department shall ensure that the local government's participation does not cause any disadvantage to any other project in the Transportation Improvement Program under G.S. 143B-350(f)(4).~~

(c2) Distribution of State Funds Made Available by County or Municipal Participation. – Any State or federal funds allocated to a project that are made available by county or municipal participation in a project contained in the Transportation Improvement Program under G.S. 143B-350(f)(4) shall ~~remain in the same funding region that the funding was allocated to under the distribution formula contained in G.S. 136-17.2A.~~be subject to G.S. 136-189.11.

~~(c3) Limitation on Agreements. – The Department shall not enter into any agreement with a county or municipality to provide additional total funding for highway construction in~~

~~the county or municipality in exchange for county or municipal participation in any project contained in the Transportation Improvement Program under G.S. 143B-350(f)(4).~~

…

(e1) Reimbursement Procedure. – Upon request of the county or municipality, the Department of Transportation shall allow the local government a period of not less than three years from the date construction of ~~the project~~a project undertaken under subsection (e) of this section is initiated to reimburse the Department their agreed upon share of the costs necessary for the project. The Department of Transportation shall not charge a local government any interest during the initial three years.

…."

SECTION 4.6. G.S. 136-89.192 reads as rewritten:

"**§ 136-89.192. ~~Equity distribution~~ Applicability of formula.**

Only those funds applied to a Turnpike Project from the State Highway Fund, State Highway Trust Fund, or federal-aid funds that might otherwise be used for other roadway projects within the State, and are otherwise already subject to the ~~distribution~~ formula under ~~G.S. 136-17.2A,~~ G.S. 136-189.11 shall be included in the ~~distribution~~ formula.

Other revenue from the sale of the Authority's bonds or notes, project loans, or toll collections shall not be included in the ~~distribution~~ formula."

SECTION 4.7. G.S. 136-175 reads as rewritten:

"**§ 136-175. Definitions.**

The following definitions apply in this Article:

~~(1) Intrastate System. The network of major, multilane arterial highways composed of those routes, segments, or corridors listed in G.S. 136-178, and any other route added by the Department of Transportation under G.S. 136-178.~~

(2) Transportation Improvement Program. The schedule of major transportation improvement projects required by G.S. 143B-350(f)(4).

(3) Trust Fund. The North Carolina Highway Trust Fund."

SECTION 4.8. G.S. 136-176 reads as rewritten:

"**§ 136-176. Creation, revenue sources, and purpose of North Carolina Highway Trust Fund.**

(a) A special account, designated the North Carolina Highway Trust Fund, is created within the State treasury. The Trust Fund consists of the following revenue:

(1) Motor fuel, alternative fuel, and road tax revenue deposited in the Fund under G.S. 105-449.125, 105-449.134, and 105-449.43, respectively.

(2) Motor vehicle use tax deposited in the Fund under G.S. 105-187.9.

(3) Revenue from the certificate of title fee and other fees payable under G.S. 20-85.

(4) Repealed by Session Laws 2001-424, s. 27.1.

(5) Interest and income earned by the Fund.

~~(a1) The Department shall use two hundred twenty million dollars ($220,000,000) in fiscal year 2001-2002, two hundred twelve million dollars ($212,000,000) in fiscal year 2002-2003, and two hundred fifty-five million dollars ($255,000,000) in fiscal year 2003-2004 of the cash balance of the Highway Trust Fund for the following purposes:~~

~~(1) For primary route pavement preservation. One hundred seventy million dollars ($170,000,000) in fiscal year 2001-2002, and one hundred fifty million dollars ($150,000,000) in each of the fiscal years 2002-2003 and 2003-2004. Up to ten percent (10%) of the amount for each of the fiscal years 2001-2002, 2002-2003, and 2003-2004 is available in that fiscal year, at the discretion of the Secretary of Transportation, for:~~

~~a. Highway improvement projects that further economic growth and development in small urban and rural areas, that are in the Transportation Improvement Program, and that are individually approved by the Board of Transportation; or~~

~~b. Highway improvements that further economic development in the State and that are individually approved by the Board of Transportation.~~

~~(2) For preliminary engineering costs not included in the current year Transportation Improvement Program. Fifteen million dollars~~

($15,000,000) in each of the fiscal years 2001-2002, 2002-2003, and 2003-2004. If any funds allocated by this subdivision, in the cash balance of the Highway Trust Fund, remain unspent on June 30, 2008, the Department may transfer within the Department up to twenty-nine million dollars ($29,000,000) of available funds to contract for freight transportation system improvements for the Global TransPark.

(3) For computerized traffic signal systems and signal optimization projects. Fifteen million dollars ($15,000,000) in each of the fiscal years 2001-2002, 2002-2003, and 2003-2004.

(4) For public transportation twenty million dollars ($20,000,000) in fiscal year 2001-2002, twenty-five million dollars ($25,000,000) in fiscal year 2002-2003, and seventy-five million dollars ($75,000,000) in fiscal year 2003-2004.

(5) For small urban construction projects. Seven million dollars ($7,000,000) in fiscal year 2002-2003.

Funds authorized for use by the Department pursuant to this subsection shall remain available to the Department until expended.

(a2) Repealed by Session Laws 2002-126, s. 26.4(b), effective July 1, 2002.

(a3) The Department may obligate three hundred million dollars ($300,000,000) in fiscal year 2003-2004 and four hundred million dollars ($400,000,000) in fiscal year 2004-2005 of the cash balance of the Highway Trust Fund for the following purposes:

(1) Six hundred thirty million dollars ($630,000,000) for highway system preservation, modernization, and maintenance, including projects to enhance safety, reduce congestion, improve traffic flow, reduce accidents, upgrade pavement widths and shoulders, extend pavement life, improve pavement smoothness, and rehabilitate or replace deficient bridges; and for economic development transportation projects recommended by local officials and approved by the Board of Transportation.

(2) Seventy million dollars ($70,000,000) for regional public transit systems, rural and urban public transportation system facilities, regional transportation and air quality initiatives, rail system track improvements and equipment, and other ferry, bicycle, and pedestrian improvements. For any project or program listed in this subdivision for which the Department receives federal funds, use of funds pursuant to this subdivision shall be limited to matching those funds.

Funds authorized for obligation and use by the Department pursuant to this subsection shall remain available to the Department until expended.

(a4) Project selection pursuant to subsection (a3) of this section shall be based on identified and documented need. Funds expended pursuant to subdivision (1) of subsection (a3) of this section shall be distributed in accordance with the distribution formula in G.S. 136-17.2A. No funds shall be expended pursuant to subsection (a3)(1) of this section on any project that does not meet Department of Transportation standards for road design, materials, construction, and traffic flow.

(a5) The Department shall report to the Joint Legislative Transportation Oversight Committee, on or before September 1, 2003, on its intended use of funds pursuant to subsection (a3) of this section. The Department shall report to the Joint Transportation Appropriations Subcommittee, on or before May 1, 2004, on its actual current and intended future use of funds pursuant to subsection (a3) of this section. The Department shall certify to the Joint Legislative Transportation Oversight Committee each year, on or before November 1, that use of the Highway Trust Fund cash balances for the purposes listed in subsection (a3) of this section will not adversely affect the delivery schedule of any Highway Trust Fund projects. If the Department cannot certify that the full amounts authorized in subsection (a3) of this section are available, then the Department may determine the amount that can be used without adversely affecting the delivery schedule and may proportionately apply that amount to the purposes set forth in subsection (a3) of this section.

(b) Funds in the Trust Fund are annually appropriated to the Department of Transportation to be allocated and used as provided in this subsection. A sum, not to exceed four and eight-tenths percent (4.8%) of the amount of revenue deposited in the Trust Fund under subdivisions (a)(1), (2), and (3) of this section sum, in the amount appropriated by law,

may be used each fiscal year by the Department for expenses to administer the Trust Fund. Operation and project development costs of the North Carolina Turnpike Authority are eligible administrative expenses under this subsection. Any funds allocated to the Authority pursuant to this subsection shall be repaid by the Authority from its toll revenue as soon as possible, subject to any restrictions included in the agreements entered into by the Authority in connection with the issuance of the Authority's revenue bonds. Beginning one year after the Authority begins collecting tolls on a completed Turnpike Project, interest shall accrue on any unpaid balance owed to the Highway Trust Fund at a rate equal to the State Treasurer's average annual yield on its investment of Highway Trust Fund funds pursuant to G.S. 147-6.1. Interest earned on the unpaid balance shall be deposited in the Highway Trust Fund upon repayment. The sum up to the amount anticipated to be necessary to meet the State matching funds requirements to receive federal-aid highway trust funds for the next fiscal year may be set aside for that purpose. The rest of the funds in the Trust Fund shall be allocated and used as ~~follows:~~specified in G.S. 136-189.11.

~~(1) Sixty-one and ninety-five hundredths percent (61.95%) to plan, design, and construct projects on segments or corridors of the Intrastate System as described in G.S. 136-178 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to these projects.~~

~~(2) Twenty-five and five hundredths percent (25.05%) to plan, design, and construct the urban loops described in G.S. 136-180 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to these urban loops.~~

~~(3) Six and one-half percent (6.5%) to supplement the appropriation to cities for city streets under G.S. 136-181.~~

~~(4) Six and one-half percent (6.5%) for secondary road construction as provided in G.S. 136-182 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to secondary road construction.~~

The Department must administer funds allocated under ~~subdivisions (1), (2), and (4) of this subsection~~ this section in a manner that ensures that sufficient funds are available to make the debt service payments on bonds issued under the State Highway Bond Act of 1996 as they become due.

~~(b1) The Secretary may authorize the transfer of funds allocated under subdivisions (1) through (4) of subsection (b) of this section to other projects that are ready to be let and were to be funded from allocations to those subdivisions. The Secretary shall ensure that any funds transferred pursuant to this subsection are repaid promptly and in any event in no more than four years. The Secretary shall certify, prior to making any transfer pursuant to this subsection, that the transfer will not affect the delivery schedule of Highway Trust Fund projects in the current Transportation Improvement Program. No transfers shall be allowed that do not conform to the applicable provisions of the equity formula for distribution of funds, G.S. 136-17.2A. If the Secretary authorizes a transfer pursuant to this subsection, the Secretary shall report that decision to the next regularly scheduled meetings of the Joint Legislative Commission on Governmental Operations, the Joint Legislative Transportation Oversight Committee, and to the Fiscal Research Division.~~

(b2) **(Effective July 1, 2013)** There is annually appropriated to the North Carolina Turnpike Authority from the Highway Trust Fund the sum of ~~one hundred twelve million dollars ($112,000,000).~~forty-nine million dollars ($49,000,000). Of the amount allocated by this subsection, twenty-five million dollars ($25,000,000) shall be used to pay debt service or related financing costs and expenses on revenue bonds or notes issued for the construction of the Triangle Expressway, and twenty-four million dollars ($24,000,000) shall be used to pay debt service or related financing expenses on revenue bonds or notes issued for the construction of the ~~Monroe Connector/Bypass, twenty-eight million dollars ($28,000,000) shall be used to pay debt service or related financing expenses on revenue bonds or notes issued for the construction of the Mid-Currituck Bridge, and thirty-five million dollars ($35,000,000) shall be used to pay debt service or related financing expenses on revenue bonds or notes issued for the construction of the Garden Parkway.~~Monroe Connector/Bypass. The amounts appropriated to the Authority pursuant to this subsection shall be used by the Authority to pay debt service or related financing costs and expenses on revenue bonds or notes issued by the Authority to

finance the costs of one or more Turnpike Projects, to refund such bonds or notes, or to fund debt service reserves, operating reserves, and similar reserves in connection therewith. The appropriations established by this subsection constitute an agreement by the State to pay the funds appropriated hereby to the Authority within the meaning of G.S. 159-81(4). Notwithstanding the foregoing, it is the intention of the General Assembly that the enactment of this provision and the issuance of bonds or notes by the Authority in reliance thereon shall not in any manner constitute a pledge of the faith and credit and taxing power of the State, and nothing contained herein shall prohibit the General Assembly from amending the appropriations made in this subsection at any time to decrease or eliminate the amount annually appropriated to the Authority. Funds transferred from the Highway Trust Fund to the Authority pursuant to this subsection are not subject to the ~~equity~~ formula in ~~G.S. 136-17.2A.~~G.S. 136-189.11.

~~(c) If funds are received under 23 U.S.C. Chapter 1, Federal-Aid Highways, for a project for which funds in the Trust Fund may be used, the amount of federal funds received plus the amount of any funds from the Highway Fund that were used to match the federal funds may be transferred by the Secretary of Transportation from the Trust Fund to the Highway Fund and used for projects in the Transportation Improvement Program.~~

(d) A contract may be let for projects funded from the Trust Fund in anticipation of revenues pursuant to the cash-flow provisions of G.S. 143C-6-11 only for the two bienniums following the year in which the contract is let.

(e) **(Effective July 1, 2013)** Subject to ~~G.S. 136-17.2A and other funding distribution formulas, funds allocated under subdivisions (1), (3), and (4) of subsection (b) of this section may also~~ G.S. 136-189.11, funds may be used for fixed guideway projects, including providing matching funds for federal grants for fixed guideway projects."

SECTION 4.9. The following statutes are repealed:

(1) G.S. 136-177.
(2) G.S. 136-177.1.
(3) G.S. 136-178.
(4) G.S. 136-179.
(5) G.S. 136-180.
(6) G.S. 136-184.
(7) G.S. 136-185.
(8) G.S. 136-187.
(9) G.S. 136-188.
(10) G.S. 136-189.

TURNPIKE AUTHORITY CHANGES

SECTION 5.1. G.S. 136-89.183(a)(2) reads as rewritten:

"**§ 136-89.183. Powers of the Authority.**

(a) The Authority shall have all of the powers necessary to execute the provisions of this Article, including the following:

…

(2) To study, plan, develop, and undertake preliminary design work on up to ~~eight~~ nine Turnpike Projects. At the conclusion of these activities, the Turnpike Authority is authorized to design, establish, purchase, construct, operate, and maintain the following projects:

a. Triangle Expressway, including segments also known as N.C. 540, Triangle Parkway, and the Western Wake Freeway in Wake and Durham ~~Counties, and Southeast Extension in Wake and Johnston Counties, except that no portion of the Southeast Extension shall be located north of an existing protected corridor established by the Department of Transportation circa 1995, except in the area of Interstate 40 East.~~Counties. The described segments constitute three projects.

~~b. Gaston East-West Connector, also known as the Garden Parkway.~~

c. Monroe Connector/Bypass.

~~d. Cape Fear Skyway.~~

e. ~~A bridge of more than two miles in length going from the mainland to a peninsula bordering the State of Virginia, pursuant to G.S. 136-89.183A.~~

Any other project proposed by the Authority in addition to the projects listed in this ~~subdivision must be approved by the General Assembly prior to construction.~~subdivision requires prior consultation with the Joint Legislative Commission on Governmental Operations pursuant to G.S. 120-76.1 no less than 180 days prior to initiating the process required by Article 7 of Chapter 159 of the General Statutes.

~~A~~ With the exception of the four projects set forth in sub-subdivisions a. and c. of this subdivision, the Turnpike ~~Project~~ projects selected for construction by the Turnpike ~~Authority~~ Authority, prior to the letting of a contract for the project, shall meet the following conditions: (i) two of the projects must be ranked in the top 35 based on total score on the Department-produced list entitled "Mobility Fund Project Scores" dated June 6, 2012, and, in addition, may be subject to G.S. 136-18(39a); (ii) of the projects not ranked as provided in (i), one may be subject to G.S. 136-18(39a); (iii) the projects shall be included in any applicable locally adopted comprehensive transportation ~~plans and~~plans; (iv) the projects shall be shown in the current State Transportation Improvement ~~Plan prior to the letting of a contract for the Turnpike Project.~~Program; and (v) toll projects must be approved by all affected Metropolitan Planning Organizations and Rural Transportation Planning Organizations for tolling."

SECTION 5.2. G.S. 136-18 reads as rewritten:

"**§ 136-18. Powers of Department of Transportation.**

The said Department of Transportation is vested with the following powers:

…

(39a) a. The Department of Transportation or Turnpike Authority, as applicable, may enter into ~~a partnership agreement~~ up to three agreements with a private entity as provided under subdivision (39) of this section for which the provisions of this section apply. ~~The pilot project allowed under this subdivision must be one that is a candidate for funding under the Mobility Fund, that is planned for construction through a public-private partnership, and for which a Request for Qualifications has been issued by the Department no later than June 30, 2012.~~

b. A private entity or its contractors must provide performance and payment security in the form and in the amount determined by the Department of Transportation. The form of the performance and payment security may consist of bonds, letters of credit, parent guaranties, or other instruments acceptable to the Department of Transportation.

c. Notwithstanding the provisions of G.S. 143B-426.40A, an agreement entered into under this subdivision may allow the private entity to assign, transfer, sell, hypothecate, and otherwise convey some or all of its right, title, and interest in and to such agreement, and any rights and remedies thereunder, to a lender, bondholder, or any other party. However, in no event shall any such assignment create additional debt or debt-like obligations of the State of North Carolina, the Department, or any other agency, authority, commission, or similar subdivision of the State to any lender, bondholder, entity purchasing a participation in the right to receive the payment, trustee, trust, or any other party providing financing or funding of projects described in this section. The foregoing shall not preclude the Department from making any payments due and owing pursuant to an agreement entered into under this section.

d. ~~The Department of Transportation may fix, revise, charge, and collect tolls and fees to the same extent allowed under~~ Article 6H of Chapter 136 of the General ~~Statutes.~~Statutes shall apply to the

Department of Transportation and to projects undertaken by the Department of Transportation under subdivision (39) of this section. The Department may assign its authority under that Article to fix, revise, charge, retain, enforce, and collect tolls and fees to the private entity.

e. Any contract under this subdivision or under Article 6H of this Chapter for the development, construction, maintenance, or operation of a project shall provide for revenue sharing, if applicable, between the private party and the Department, and revenues derived from such project may be used as set forth in G.S. 136-89.188(a), notwithstanding the provisions of G.S. 136-89.188(d). Excess toll revenues from a Turnpike project shall be used for the funding or financing of transportation projects within the corridor where the Turnpike Project is located. For purposes of this subdivision, the term "excess toll revenues" means those toll revenues derived from a Turnpike Project that are not otherwise used or allocated to the Authority or a private entity pursuant to this subdivision, notwithstanding the provisions of G.S. 136-89.188(d). For purposes of this subdivision, the term "corridor" means (i) the right-of-way limits of the Turnpike Project and any facilities related to the Turnpike Project or any facility or improvement necessary for the use, design, construction, operation, maintenance, repair, rehabilitation, reconstruction, or financing of a Turnpike Project; (ii) the right-of-way limits of any subsequent improvements, additions, or extension to the Turnpike Project and facilities related to the Turnpike projects, including any improvements necessary for the use, design, construction, operation, maintenance, repair, rehabilitation, reconstruction, or financing of those subsequent improvements, additions, or extensions to the Turnpike Project; and (iii) roads used for ingress or egress to the toll facility or roads that intersect with the toll facility, whether by ramps or separated grade facility, and located within one mile in any direction.

f. Agreements entered into under this subdivision shall comply with the following additional provisions:

1. The Department shall solicit proposals for agreements.
2. Agreement shall be limited to no more than 50 years from the date of the beginning of operations on the toll facility.
3. Notwithstanding the provisions of G.S. 136-89.183(a)(5), all initial tolls or fees to be charged by a private entity shall be reviewed by the Turnpike Authority Board. Prior to setting toll rates, either a set rate or a minimum and maximum rate set by the private entity, the private entity shall hold a public hearing on the toll rates, including an explanation of the toll setting methodology, in accordance with guidelines for the hearing developed by the Department. After tolls go into effect, the private entity shall report to the Turnpike Authority Board 30 days prior to any increase in toll rates or change in the toll setting methodology by the private entity from the previous toll rates or toll setting methodology last reported to the Turnpike Authority Board.
4. Financial advisors and attorneys retained by the Department on contract to work on projects pursuant to this subsection shall be subject to State law governing conflicts of interest.
5. 60 days prior to the signing of a concession agreement subject to this subdivision, the Department shall report to the Joint Legislative Transportation Oversight Committee on the following for the presumptive concessionaire:
   I. Project description.
   II. Number of years that tolls will be in place.

III. Name and location of firms and parent companies, if applicable, including firm responsibility and stake, and assessment of audited financial statements.

IV. Analysis of firm selection criteria.

V. Name of any firm or individual under contract to provide counsel or financial analysis to the Department or Authority. The Department shall disclose payments to these contractors related to completing the agreement under this subdivision.

VI. Demonstrated ability of the project team to deliver the project, by evidence of the project team's prior experience in delivering a project on schedule and budget, and disclosure of any unfavorable outcomes on prior projects.

VII. Detailed description of method of finance, including sources of funds, State contribution amounts, including schedule of availability payments and terms of debt payments.

VIII. Information on assignment of risk shared or assigned to State and private partner.

IX. Information on the feasibility of finance as obtained in traffic and revenue studies.

6. The Turnpike Authority annual report under G.S. 136-89.193 shall include reporting on all revenue collections associated with projects subject to this subdivision under the Turnpike Authority.

7. The Department shall develop standards for entering into comprehensive agreements with private entities under the authority of this subdivision and report those standards to the Joint Legislative Transportation Oversight Committee on or before October 1, 2013.

…

(43) For the purposes of financing an agreement under subdivision (39a) of this section, the Department of Transportation may act as a conduit issuer for private activity bonds to the extent the bonds do not constitute a debt obligation of the State. The issuance of private activity bonds under this subdivision and any related actions shall be governed by The State and Local Government Revenue Bond Act, Article 5 of Chapter 159 of the General Statutes, with G.S. 159-88 satisfied by adherence to the requirements of ~~subdivisions (39) and~~ subdivision (39a) of this section."

SECTION 5.3. G.S. 136-89.183(a)(5) reads as rewritten:

"**§ 136-89.183. Powers of the Authority.**

(a) The Authority shall have all of the powers necessary to execute the provisions of this Article, including the following:

…

(5) To fix, revise, charge, retain, enforce, and collect tolls and fees for the use of the Turnpike Projects. Prior to the effective date of any toll or fee for use of a Turnpike Facility, the Authority shall submit a description of the proposed toll or fee to the Board of Transportation, the Joint Legislative Transportation Oversight Committee and the Joint Legislative Commission on Governmental Operations for review.

…."

SECTION 5.4. G.S. 136-89.188 reads as rewritten:

"**§ 136-89.188. Use of revenues.**

(a) Revenues derived from Turnpike Projects authorized under this Article shall be used only for the following:

(1) Authority administration ~~costs;~~costs.

(2) Turnpike Project development, right-of-way acquisition, design, construction, operation, ~~and maintenance;~~maintenance, reconstruction, rehabilitation, and replacement.~~and~~

(3) ~~debt~~ Debt service on the Authority's revenue bonds or related purposes such as the establishment of debt service reserve ~~funds.~~funds.

(4) Debt service, debt service reserve funds, and other financing costs related to any of the following:

a. A financing undertaken by a private entity under a partnership agreement with the entity for a Turnpike Project.

b. Private activity bonds issued under law related to a Turnpike Project.

c. Any federal or State loan, line of credit, or loan guarantee relating to a Turnpike Project.

(5) A return on investment of any private entity under a partnership agreement with the entity for a Turnpike Project.

(6) Any other uses granted to a private entity under a partnership agreement with the entity for a Turnpike Project.

(b) The Authority may use up to one hundred percent (100%) of the revenue derived from a Turnpike Project for debt service on the Authority's revenue bonds or for a combination of debt service and operation and maintenance expenses of the Turnpike Projects.

(c) The Authority shall use not more than five percent (5%) of total revenue derived from all Turnpike Projects for Authority administration costs.

(d) Notwithstanding the provisions of subsections (a) and (b) of this section, toll revenues generated from a converted segment of the State highway system previously planned for operation as a nontoll facility shall only be used for the funding or financing of the right of way acquisition, construction, expansion, operations, maintenance, and Authority administration costs associated with the converted segment or a contiguous toll facility."

SECTION 5.5. Part 1 of Article 6H of Chapter 136 of the General Statutes is amended by adding a new section to read:

"**§ 136-89.199. Designation of high-occupancy toll and managed lanes.**

Notwithstanding any other provision of this Article, the Authority may designate one or more lanes of any highway, or portion thereof, within the State, including lanes that may previously have been designated as HOV lanes under G.S. 20-146.2, as high-occupancy toll (HOT) or other type of managed lanes; provided, however, that such designation shall not reduce the number of existing general purpose lanes. In making such designations, the Authority shall specify the high-occupancy requirement or other conditions for use of such lanes, which may include restricting vehicle types, access controls, or the payment of tolls for vehicles that do not meet the high-occupancy requirements or conditions for use."

SECTION 5.6. Part 2 of Article 6H of Chapter 136 of the General Statutes reads as rewritten:

"Part 2. Collection of Tolls on Turnpike Projects.

…

"**§ 136-89.212. Payment of toll required for use of Turnpike project.**

(a) A motor vehicle that is driven on a Turnpike project is subject to a toll imposed by the Authority for the use of the project. If the toll is an open road toll, the person who is the registered owner of the motor vehicle is liable for payment of the toll unless the registered owner establishes that the motor vehicle was in the care, custody, and control of another person when it was driven on the Turnpike project.

(b) A person establishes that a motor vehicle was in the care, custody, and control of another person when it was driven on a Turnpike project by submitting to the Authority a sworn affidavit stating one of the following:

(1) The name and address of the person who had the care, custody, and control of the motor vehicle when it was driven. If the motor vehicle was leased or rented under a long-term lease or rental, as defined in G.S. 105-187.1, the affidavit must be supported by a copy of the lease or rental agreement or other written evidence of the agreement.

(2) The motor vehicle was stolen. The affidavit must be supported by an insurance or police report concerning the theft or other written evidence of the theft.

(3) The person transferred the motor vehicle to another person by sale or otherwise before it was driven on the Turnpike project. The affidavit must be supported by insurance information, a copy of the certificate of title, or other evidence of the transfer.

(c) If a person establishes that a motor vehicle was in the care, custody, and control of another person under subsection (b) of this section, the other person shall be liable for the payment of the toll, and the Authority may send a bill to collect and enforce the toll in accordance with this Article; provided, however, that such other person may contest such toll in accordance with this Article.

"**§ 136-89.213. Administration of tolls and requirements for open road tolls.**

(a) Administration. – The Authority is responsible for collecting tolls on Turnpike projects. In exercising its authority under G.S. 136-89.183 to perform or procure services required by the Authority, the Authority may contract with one or more providers to perform part or all of the collection functions and may enter into agreements to exchange information, including confidential information under subsection (a1) of this section, that identifies motor vehicles and their owners with one or more of the following entities: the Division of Motor Vehicles of the Department of Transportation, another state, another toll operator, ~~or~~ a toll collection-related ~~organization.~~organization, or a private entity that has entered into a partnership agreement with the Authority pursuant to G.S. 136-89.183(a)(17). Further, the Authority may assign its authority to fix, revise, charge, retain, enforce, and collect tolls and fees under this Article to a private entity that has entered into a partnership agreement with the Authority pursuant to G.S. 136-89.183(a)(17).

…

(b) Open Road Tolls. – If a Turnpike project uses an open road tolling system, the Authority must operate a facility that is in the immediate vicinity of the Turnpike project ~~and that accepts~~or provide an alternate means to accept cash payment of the toll and must place signs on the Turnpike project that give drivers the following information:

(1) Notice that the driver is approaching a highway for which a toll is required. Signs providing this information must be placed before the toll is incurred.
(2) The methods by which the toll may be paid.
(3) ~~Directions~~ If applicable, directions to the nearby facility that accepts cash payment of the toll.

"**§ 136-89.214. Bill for unpaid open road toll.**

(a) Bill. – If a motor vehicle travels on a Turnpike project that uses an open road tolling system and a toll for traveling on the project is not paid prior to travel or at the time of travel, the Authority must send a bill by first-class mail to the registered owner of the motor vehicle or the person who had care, custody, and control of the vehicle as established under G.S. 136-89.212(b) for the amount of the unpaid toll. The Authority must send the bill within 90 days after the travel ~~occurs.~~occurs, or within 90 days of receipt of a sworn affidavit submitted under G.S. 136-89.212(b) identifying the person who had care, custody, and control of the motor vehicle. If a bill is not sent within the required time, the Authority waives collection of the toll. The Authority must establish a billing period for unpaid open road tolls that is no shorter than 15 days. A bill for a billing period must include all unpaid tolls incurred by the same person during the billing period.

(b) Information on Bill. – A bill sent under this section must include all of the following information:

(1) The name and address of the registered owner of the motor vehicle that traveled on the Turnpike ~~project.~~project or of the person identified under G.S. 136-89.212(b).
(2) The date the travel occurred, the approximate time the travel occurred, and each segment of the Turnpike project on which the travel occurred.
(3) An image of the registration plate of the motor vehicle, if the Authority captured an electronic image of the motor vehicle when it traveled on the Turnpike project.
(4) The amount of the toll due and an explanation of how payment may be made.
(5) The date by which the toll must be paid to avoid the imposition of a processing fee under G.S. 136-89.215 and the amount of the processing fee.

(6) A statement that a vehicle owner who has unpaid tolls is subject to a civil penalty and may not renew the vehicle's registration until the tolls and civil penalties are paid.
(7) A clear and concise explanation of how to contest liability for the toll.
(8) If applicable, a copy of the affidavit submitted under G.S. 136-89.212(b) identifying the person with care, custody, and control of the motor vehicle.

"**§ 136-89.215. Required action upon receiving bill for open road toll and processing fee for unpaid toll.**

(a) Action Required. – A person who receives a bill from the Authority for an unpaid open road toll must take one of the following actions within 30 days of the date of the bill:
(1) Pay the bill.
(2) Send a written request to the Authority for a review of the toll.

(b) Fee. – If a person does not take one of the actions required under subsection (a) of this section within the required time, the Authority may add a processing fee to the amount the person owes. The processing fee may not exceed six dollars ($6.00). A person may not be charged more than forty-eight dollars ($48.00) in processing fees in a 12-month period.

The Authority must set the processing fee at an amount that does not exceed the costs of collecting the unpaid toll.~~identifying the owner of a motor vehicle that is subject to an unpaid toll and billing the owner for the unpaid toll. The fee is a receipt of the Authority and must be applied to these costs.~~

…."

SECTION 5.7. DOT/Southeast Extension-Triangle Expressway. – The Department of Transportation shall strive to expedite the federal environmental impact statement process to define the route for the Southeast Extension of the Triangle Expressway Turnpike Project by promptly garnering input from local officials and other stakeholders, accelerating any required State studies, promptly submitting permit applications to the federal government, working closely with the federal government during the permitting process, and taking any other appropriate actions to accelerate the environmental permitting process.

SECTION 5.8. Monitoring. – As part of its oversight of the Department of Transportation, the Joint Legislative Transportation Oversight Committee shall closely monitor the progress of the Southeast Extension of the Triangle Expressway Turnpike Project.

TRANSITION STUDY AND REPORTING REQUIREMENTS

SECTION 6.1. Formula Implementation Report. – The Department of Transportation shall report to the Joint Legislative Transportation Oversight Committee and the Fiscal Research Division no later than August 15, 2013, on the Department's recommended formulas that will be used in the prioritization process to rank highway and nonhighway projects. The Department of Transportation's Prioritization Office shall develop the prioritization processes and formulas for all modes of transportation. The report will include a statement on the process used by the Department to develop the formulas, include a listing of external partners consulted during this process, and include feedback from its 3.0 workgroup partners on the Department's proposed recommendations. The Department shall not finalize the formula without consulting with the Joint Legislative Transportation Oversight Committee. The Joint Legislative Transportation Oversight Committee has 30 days after the report is received to meet and consult on the Department's recommendations. If no meeting occurs within 30 days after the report is received, the consultation requirement will be met. If consultation occurs and a majority of members serving on the Committee request changes to the Department's recommended formulas for highway and nonhighway modes, the Department shall review the requests and provide to the Committee its response to the requested changes no later than October 1, 2013. A final report on the highway and intermodal formulas shall be submitted to the Joint Legislative Transportation Oversight Committee by January 1, 2014.

SECTION 6.2. State Transportation Improvement Program Transition Report. – The Department of Transportation shall submit transition reports to members of the Joint Legislative Transportation Oversight Committee, House of Representatives Appropriations Subcommittee on Transportation and the Senate Appropriations Committee on Department of Transportation, and the Fiscal Research Division on March 1, 2014, and November 1, 2014. The reports shall include information on the Department's transition to Strategic Prioritization, overview changes to the State Transportation Improvement Program (STIP) and other internal and external processes that feed into the STIP, and offer statutory and policy recommendations

or items for consideration to the General Assembly that will enhance the prioritization process. The March 1, 2014, report shall also include an analysis of the distribution of tax and fee revenues between the Highway Fund and Highway Trust Fund and an analysis to determine if maintenance, construction, operations, administration, and capital expenditures are properly budgeted within the two funds and existing revenues are most effectively distributed between the two funds.

EFFECTIVE DATE

SECTION 7.1.(a) Except as provided herein, this act becomes effective July 1, 2013.

SECTION 7.1.(b) This act is effective only if the General Assembly appropriates funds in the Current Operations and Capital Improvements Appropriations Act of 2013 to implement this act.

In the General Assembly read three times and ratified this the 19th day of June, 2013.

s/ Philip E. Berger
President Pro Tempore of the Senate

s/ Thom Tillis
Speaker of the House of Representatives

s/ Pat McCrory
Governor

Approved 11:20 a.m. this 26th day of June, 2013

TOWN OF
Holly Springs

Resolution No.: 13-42
Date Adopted: Oct. 1, 2013

RESOLUTION STATING THE TOWN OF HOLLY SPRINGS TOWN COUNCIL'S SUPPORT REGARDING THE ALIGNMENT OF THE SOUTH EAST EXTENSION OF I-540

WHEREAS, the Holly Springs Town Council is expressing its fervent support for the construction of the I-540 Triangle Expressway Southeast Extension; and

WHEREAS, the proposed I-540 Triangle Expressway Southeast Extension has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Holly Springs and other local governments of southwestern Wake County; and

WHERAS, the Town of Holly Springs historically has utilized the protected I-540 corridor proposed in earlier designs to plan for both existing and future development in Town; and

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Holly Springs hereby expresses its support of the original protected corridor design as illustrated in orange on N.C. Transit Authority maps for the construction of the I-540 Triangle Expressway Southeast Extension; and

Adopted this, the 1st day of October, 2013.

ATTEST:

Dick Sears, Mayor

[X] Joni Powell, MMC, NCCMC Town Clerk
[ ] Linda R. Harper, MMC, NCCMC Deputy Town Clerk

Office of the Mayor
128 S. Main Street • P.O. Box 8 • Holly Springs, NC 27540 • (919) 557-3901 • (919) 552-0654 *fax*
dick.sears@hollyspringsnc.us • www.hollyspringsnc.us

Resolution No. 10-1160

TOWN OF FUQUAY-VARINA
401 Old Honeycutt Road
Fuquay-Varina, North Carolina 27526

A RESOLUTION BY THE TOWN OF FUQUAY-VARINA REGARDING THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION (I-540)

WHEREAS, the proposed Triangle Expressway Southeast Extension has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for Town of Fuquay-Varina, Wake County and other local governments of Wake County; and,

WHEREAS, the alternates routes have been only recently proposed and would have a much more significant negative impact on residents of Fuquay-Varina who purchased homes and businesses based on the original proposed route; and,

WHEREAS, the Town of Fuquay-Varina historically has utilized the protected corridor proposed in earlier designs to make key planning decisions for both existing and future development in the Town of Fuquay-Varina, and,

WHEREAS, the proposed alternative alignments to relocate the corridor away from its previously designated and protected route will have an adverse impact on the Town of Fuquay-Varina; and

NOW THEREFORE, BE IT RESOLVED that the Town of Fuquay-Varina supports use of the original protected corridor design as illustrated in "orange" on the North Carolina Turnpike Authority maps as the preferred choice for the development and construction of the Triangle Expressway Southeast Extension (I-540).

Adopted this 19th day of October 2010.

ATTEST:

Town Clerk

Mayor John W. Byrne
Town of Fuquay-Varina

A RESOLUTION BY THE COUNTY OF WAKE REGARDING THE TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

WHEREAS, the proposed Triangle Expressway Southeast Extension from NC 55 in Apex to US 64 in Knightdale has been a fundamental transportation facility underpinning, for more than 20 years, local land use and transportation decisions for Wake County and other local governments of Wake County;

WHEREAS, Wake County historically has utilized the protected corridor west of Interstate 40 developed in earlier efforts (orange) to make key planning decisions for both existing and future development in Wake County; and

WHEREAS, Wake County historically has utilized the planned corridor east of Interstate 40 developed in earlier efforts (green) to make key planning decisions for both existing and future development in Wake County; and

WHEREAS, numerous Wake County homeowners and landowners have relied upon the protected corridor route (orange) and the planned corridor route (green) for many years as they have made investment decisions; and

WHEREAS, the proposed alternative alignments that would relocate the roadway away from the protected route and planned route will have an adverse impact on communities in Wake County; and

WHEREAS, the proposed alternative alignments illustrated as "blue", "purple", and "red" on North Carolina Department of Transportation maps will have a greater impact on Wake County's designated priority stream corridors and proposed Southeast Wake County Park than the previously protected route.

NOW THEREFORE, BE IT RESOLVED that Wake County supports use of the protected corridor as illustrated in "orange" on the North Carolina Department of Transportation maps and supports use of the planned corridor as illustrated in "green" on the North Carolina Department of Transportation maps as the preferred choice for the development and construction of the Triangle Expressway Southeast Extension.

Adopted this 21st day of October 2013.

Joe Bryan, Chairman
Board of Commissioners

ATTEST:
Susan Banks
Clerk to the Board

RESOLUTION (2013) 2171

RESOLUTION STATING THE TOWN OF GARNER'S TOWN COUNCIL'S SUPPORT REGARDING ALIGNMENT OF THE SOUTHEAST EXTENSION OF I-540

WHEREAS, the Garner Town Council is expressing its avid support for the construction of the I-540 Triangle Expressway Southeast Extension; and

WHEREAS, the proposed I-540 Triangle Expressway Southeast Extension has been a fundamental transportation facility foundation for more than 20 years of local land use and transportation decisions of the Town of Garner and other local governments of southeastern Wake County; and

WHEREAS, the Town of Garner has historically utilized the protected I-540 corridor proposed in earlier designs to plan for both existing and future development in the Town; and

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Garner hereby expresses its support of the original protected corridor design as illustrated in orange on the N.C. Transit Authority maps for the construction of the I-540 Triangle Expressway Southeast Extension.

Adopted this, the 22nd day of October, 2013.

Ronnie S. Williams

Ronnie S. Williams, Mayor

ATTEST:

Kimberly A. Mallett

Town Clerk

RESOLUTION expressing THE NC CAPITAL AREA MPO'S POSITION REGARDING THE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE

On motion made by Mayor Sears and seconded by Mayor Eagles, and having been put to a vote, was duly adopted by unanimous vote, the following resolution;

WHEREAS, the proposed southern and southeastern segments of the NC 540 Turnpike are an adopted element of the Capital Area Metropolitan Planning Organization's (CAMPO) 2040 Metropolitan Transportation Plan; and

WHEREAS, official corridor maps show a specific alignment, adopted by the North Carolina Board of Transportation, to block new development in the preferred path of the southern segment from N.C. 55 in Holly Springs to US 401 south of Garner on August 2, 1996 and the southern segment from US 401 south of Garner to Interstate 40 south of Garner on March 7, 1997; and

WHEREAS, the proposed freeway alignment has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions for the towns of Fuquay-Varina, Garner, and Holly Springs; and

WHEREAS, Wake County is the first and only County in North Carolina to have its urban loop constructed as a toll road; and

WHEREAS, the southeastern segment is likely to be much more expensive on a per mile basis than the southern segment and as such will need the revenue coming from the southern segment to help pay for it; and

WHEREAS, the southeastern segment is the Capital Area MPO's urgently needed top regional priority and therefore should not be delayed until the northern segment of the loop is converted to a turnpike to help pay for it's construction

WHEREAS, the North Carolina Turnpike Authority is looking at other alternatives that would possibly have an adverse impact upon these towns, causing disruptions to existing homes and businesses; and

WHEREAS, other alternatives may be shorter and possibly cut construction costs; at the possible expense of environmentally sensitive areas, residential and commercial activities vital to the economic well being of the towns being impacted;

NOW, THEREFORE BE IT RESOLVED, based on the currently available information, the Capital Area MPO Transportation Advisory Committee supports the use of the original protected corridor alignment illustrated on North Carolina Turnpike Authority maps adopted in 1996 and 1997 as the locally preferred choice for the development and construction of the proposed NC 540 Turnpike in southern and southeastern Wake County; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee requests that the North Carolina Turnpike Authority continue to include the Capital Area MPO as an active stakeholder in the alternatives analysis process; and

BE IT FURTHER RESOLVED, that the Capital Area MPO Transportation Advisory Committee strongly urges the North Carolina Department of Transportation to construct the entire remaining portion of the outer loop as a turnpike in one phase rather than as two separate phases.

Adopted on this the 20th day of November, 2013

Ronnie Williams, Chair
Transportation Advisory Committee

Ed Johnson, Capital Area MPO
Transportation Advisory Committee Clerk

County of Wake
State of North Carolina

I, Valorie D. Lockehart, a Notary Public for said County and State, do hereby certify that on this, the 20th day of November, 2013, personally appeared before me, Ronnie Williams, known to me by his presence, and acknowledged the due execution of the foregoing RESOLUTION STATING THE CAPITAL AREEA MPO'S POSITION REGARDING THE LOCALLY PREFERRED ALTERNATIVE ALIGNMENT OF THE FUTURE NC 540 TURNPIKE.

Witness my hand and official seal, this the 20th day of November, 2013.

Valorie D. Lockehart, Notary Public

My commission expires: January 31, 2016

APPENDIX I
Local Government and Interest Group Letters

WAKE COUNTY
NORTH CAROLINA

Parks, Recreation & Open Space

TEL 919 664 7967
FAX 919 856 6181

Wake County Office Building 10th Floor
337 S. Salisbury Street
PO Box 550, Suite 1000
Raleigh, NC 27602
http://www.wakegov.com/county/parks/default.htm

October 6, 2010

Christy Shumate
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

Dear Mrs. Shumate:

I am writing on behalf of the Wake County Open Space and Parks Advisory Committee to provide input on the proposed routes for the Triangle Expressway's Southeast Extension, specifically to support the original protected corridor (Orange route) and oppose the Purple, Blue and Red alternative routes.

On September 27, 2010 our Committee met to review the proposed routes under consideration for the Southeast Extension of the Triangle Expressway. We understand and appreciate the fact that all of these routes have an impact on the communities that they pass through. However our focus is on the environmental and programmatic impact that the alternatives would have on our long term need to protect our environment.

In 2003, the Wake County Board of Commissioners formally identified priority stream corridors to protect valuable water resources. In 2008, the Board of Commissioners revisited this issue and at that time reaffirmed the County's intent to protect 11 priority stream corridors. Two of these corridors would be negatively impacted by the Purple, Blue and Red alternatives.

- Middle Creek would be impacted twice if a route is selected using a combination of the Purple and Blue alternatives.
- Middle Creek would be impacted once if a route is selected using only the Blue alternative.
- The priority stream corridor section of Swift Creek (between Lake Wheeler and Lake Benson) would be impacted by the Red alternative.
- The currently protected corridor (Orange route) does not cross Swift Creek in an area identified by Wake County as priority stream corridor, nor does the Orange route impact Middle Creek.

Wake County Government and the citizens of Wake County have consistently demonstrated their concern for the protection of these priority stream corridors through the preservation of land through the passage of three bond referendums since 2000 totaling $91,000,000. Each of these referendums has received more than 70% voter approval.

An additional significant concern that the Open Space and Parks Advisory Committee would like to express is the impact the Blue alternative will have on the County's Southeast Wake County Park. The County has been working to develop this park for the past decade and it is one of the three planned parks (in combination with the six existing parks) that the County is creating to meet the long term needs of the community.

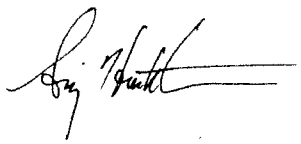
Within the Southeast County Park lie the Middle Creek Aquatic Habitat and the scenic bluffs along Middle Creek that rise 90 feet above the creek, a Natural Heritage site of local significance. The County has already acquired 258 acres for this park and has spent over $2,000,000 in land acquisition costs. In addition the County has also placed Clean Water Management Trust Fund easements over portions of this land. The proposed Blue alternative would impact the proposed park site and possibly result in the County abandoning its plans to develop this park.

It is our sincere desire that the Triangle Expressway Southeast Extension remain in the protected corridor (Orange route.) It is what the community has planned for over the past 15 years and unlike the Purple, Blue and Red alternatives it does not impact priority stream corridors or the Southeast Wake County Park.

If you would like to have additional information or if you have any questions about our position, please feel free to contact Chris Snow, Director Wake County Parks, Recreation and Open Space at 856-6677.

Thank you.

Sincerely,



Sig Hutchison
Chairman, Wake County Open Space and Parks Advisory Committee

cc: Eugene A. Conti Jr., Chairman, North Carolina Turnpike Authority
Perry R. Safran, Vice-Chairman, North Carolina Turnpike Authority
Robert D. Teer Jr., North Carolina Turnpike Authority
Robert C. Clay, North Carolina Turnpike Authority
John Collett, North Carolina Turnpike Authority
James H. Ferebee, Jr., North Carolina Turnpike Authority
Anthony Fox, North Carolina Turnpike Authority
E. David Redwine, North Carolina Turnpike Authority
Alan F. Swanstrom, North Carolina Turnpike Authority
Tony Gurley, Chairman, Wake County Board of Commissioners
David Cooke, County Manager, Wake County

THE TOWN OF
Holly
Springs

October 21, 2010

Jennifer Harris, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Re: Triangle Expressway Southeast Extension (I540)
Town of Holly Springs Comments

Dear Jennifer,

Thank you for meeting with us on October 4th about this project. We have attached a spreadsheet of Holly Springs' comments for the alternative alignments that are presently out for public comment. These comments support the position that we expressed in our meeting with you – that Holly Springs supports the orange (originally protected) corridor.

At our meeting you also indicated that we could meet with you in a separate forum – along with our transportation consultants and yours – to discuss the orange alignments' proposed intersection with both Kildaire Farm Road and Holly Springs Road (one intersection). We would like to go ahead and set that meeting up at your earliest convenience. Thank you.

Sincerely,

Stephanie L. Sudano, PE
Director of Engineering

SLS/dra

cc: Mayor Sears
Carl G. Dean, Town Manager
Chuck Simmons, Assistant Town Manager
Gina Clapp, AICP, Director of Planning & Zoning
Correspondence 13394

P.O. Box 8
128 S. Main Street
Holly Springs, N.C. 27540
www.hollyspringsnc.us

(919) 552-6221

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Mayor's Office Fax:
(919) 552-0654

TOWN OF

Holly Springs

Resolution No.: 10-27
Date Adopted: Sept. 21, 2010

RESOLUTION STATING THE TOWN OF HOLLY SPRINGS TOWN COUNCIL'S POSITION REGARDING THE ALIGNMENT OF THE SOUTHERN PHASE OF I-540

WHEREAS, on May 6, 2008, the Holly Springs Town Council adopted Resolution 08-26 expressing its fervent support for the construction of the I-540 Western Wake Expressway; and

WHEREAS, the proposed I-540 Western Wake Expressway has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Holly Springs and other local governments of southwestern Wake County; and

WHERAS, the Town of Holly Springs historically has utilized the protected I-540 corridor proposed in earlier designs to plan for both existing and future development in Town; and

WHEREAS, the change to relocate the corridor south to connect to Bass Lake Road would have an adverse impact on our community, due to access issues and the cost of relocating both residential and commercial properties from said corridor; and

WHEREAS, additional traffic generated on Holly Springs Road would negatively impact the area around a proposed interchange and Holly Springs Road would not be adequate to handle the increased traffic volume; and

WHEREAS, the delay of the construction of the I-540 Western Wake Expressway is particularly injurious to the Town of Holly Springs when weighed against the much-needed NC 55 improvements that have not been constructed in anticipation of a 2008 start of I-540 Western Wake Expressway construction;

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Holly Springs hereby expresses its adamant opposition to any option for the construction of the I-540 Southern Wake Expressway that utilizes Bass Lake Road as a potential alternative for the southern phase of I-540; and

BE IT FURTHER RESOLVED that the Town Council supports use of the original protected corridor design as illustrated in orange on N.C. Transit Authority maps as the preferred choice for the development and construction of the I-540 Southern Wake Expressway.

Adopted this, the 21st day of September, 2010.

ATTEST:

Dick Sears, Mayor

[X] Joni Powell, CMC, Town Clerk
[ ] Linda R. Harper, CMC Deputy Town Clerk

Office *of* the Mayor
128 S. Main Street • P.O. Box 8 • Holly Springs, NC 27540 • (919) 557-3901 • (919) 552-0654 *fax*
dick.sears@hollyspringsnc.us • www.hollyspringsnc.us

I540 Comments

	Comment
	BLUE CORRIDOR
1.	Conflicts with all of the Town's long range plans developed over the past 15 years (since corridor protection began), including: Comprehensive Plan Vision 2010, Long Range Water Master Plan, Long Range Sewer Master Plan, Long Range Reclaimed Master Plan, Holly Springs Pedestrian Transportation Plan, Long Range Greenway Plan, Long Range Bicycle Plan
2.	The Town has significant existing (and proposed too) investment in this corridor in major water, sewer, and reclaimed utility lines that will have to be relocated and replaced with great expense - both initial capital expense and perpetual operating expenses (as relocation and replacement would require new pumping stations)
3.	Town's Fire Department and Wake County EMS Headquarters would have to be relocated
4.	This alignment would severely impact both vehicular (including bus) and pedestrian transportation to 3 of the town's 6 public schools (Holly Ridge Elementary, Holly Ridge Middle, Holly Springs Elementary); this doesn't even include preschools and/or daycares. There are at least two of these directly in the alignment that would have to be relocated. (Note: the maps prepared by NCTA only indicate 2 of these public schools: there are 2 schools located to the east of the proposed interchange (Holly Ridge Elementary and Holly Ridge Middle) and 1 school to the west (Holly Springs Elementary). Holly Springs Road is a vital auto and pedestrian access route for all of these schools. Locating the interchange at this location would be very dangerous to students, parents, and caregivers accessing the schools daily.
5.	There are 2 minority churches significantly impacted (to extent of relocation probably) - one at Earp and Bass Lake Road intersection and one further south off of Bass Lake Road; there is also another future church site (Moravian Church) that would be impacted/eliminated near the Fire Department and EMS headquarters.
6.	Corridor passes through one of the very few remaining minority areas in the town and would completely divide and likely eliminate the population/area; The proposed corridor would bisect this long established neighborhood. In addition, the Town of Holly Springs has provided CDBG Scattered Site Single-Family Rehab assistance to many homes located along Bass Lake Road within the proposed corridor. This is an expenditure of federal and state funds to assist residents with housing. There has also been the expenditure of federal Farmers Home funding for utilities to serve the homes.
7.	Town's only funeral home would be eliminated
8.	Wipes out a 50 acre tract of land at the headwaters of Bass Lake; this land was set aside for preservation 2009 by Triangle Land and Conservation easements located within this area (Jeff Suggs)
9.	Passes over the headwaters of Bass Lake, a historical landmark and a valued park. The dam for this lake was rebuilt within the past 10 years by the Town with a Cleanwater Management Trust Fund grant; portions are subject to a Nature Conservancy easement; the Town has put into place special 100' buffers for all land tributary to this lake; this is a very valuable environmental resource for the region.
10	Town has worked hard to created connectivity between neighborhoods - vehicular, bicycle, and pedestrian - through planning and infrastructure construction; this corridor creates a division through this area negates those efforts
11	Parallels Middle Creek which is a very important protected stream/water feature with a large watershed; paralleling streams has very negative environmental consequences and may be impossible to permit.

I540 Comments

	Comment
	BLUE CORRIDOR
12	This corridor would require relocation/elimination of many homes and the division of many neighborhoods; some are Sunset Oaks North, Sunset Oaks South, Brackenridge various phases; Sunset Ridge North, Sunset Forest, Holly Park, Remington, Westview, Brook Manor, Sunset Ridge South, Spring Meadow, Dogwood, and Old Mills Lake. All but two of these have developed over the past 18 years, so are relatively new. In addition, many of the older "non-subdivision" homes that comprised the original Holly Springs minority population will be relocated/eliminated as well.
14	There is a Montessori school on HS Road near its intersection with Bass Lake Road that is not shown, but will be impacted and possibly eliminated.
15	In addition to the above referenced impact to Bass Lake, the greenway system around Bass Lake would also be impacted. Town recently received federal funding to complete one section of the greenway loop.
16	The long range transportation plans - developed carefully and collaboratively by the Town, the county, the MPO, NCDOT, and other municipalities over the past 15 years - have guided development and row dedication of roads to support the orange corridor - not at all this corridor
17	This corridor is not under corridor protection and development approvals and building permits continue to be processed, increasing the undesirability of this corridor as well as the resulting impact of construction in this corridor
19	This corridor, while on the books, delays development of properties (this is problematic especially in this economic climate) AND the ability of individuals who happen to own homes in the corridor and need to sell their homes; we would like to encourage quick and expeditious elimination of alternatives in order to alleviate these two scenarios.
20	Corridor would introduce a second major physical barrier/division in our small Town. The 55 Bypass currently divides the western part of town from center and east portions. It is a hurdle that is difficult and expensive to cross with utilities. It has proven impossible because of expense to cross for pedestrians and bicycles, which is of extreme detriment to the Town's efforts at encouraging a healthy, multi-modal community.
21	There are 2 private daycare centers that are located within the actual corridor/interchange boundaries at Holly Springs Road that would have been relocated.
22	The Town has planned pedestrian, bicycle and auto connectivity between neighborhoods since development began in the early 90s. The proposed corridor impacts an existing greenway along Middle Creek that connects Windcrest and Bridgewater and provided connection to the northeast side of Middle Creek for future development. The corridor would impact the construction of a major roadway connection between Sunset Ridge North and Woodcreek over Middle Creek. The corridor also impacts land that has been dedicated to the Town on the north side of Middle Creek for a park and community center.
23	The maps prepared by the NCTA do not show the new Wake County Public School- Herbert Akins Elementary School located at the corner of Herbert Akins Road and James Slaughter Road. The proposed corridor impacts the school campus.
24	Maple Ridge Apartments (federally subsidized housing project) and also Timber Springs Apartments (same) would be impacted/eliminated by this corridor.
25	The corridor alignment impacts/eliminates a large portion of the Westview Neighborhood. This neighborhood was developed in partnership with the Town of Holly Springs who received a $250,000 CDBG Infrastructure Grant to construct roads and utilities for the neighborhood. Many homeowners in Westview have received a portion of a $150,000 down payment assistance grant from the NCHFA.

I540 Comments

	Comment
	BLUE CORRIDOR
26	Concern that the proposed blue corridor and interchange at Holly Springs Road would have a tremendous impact to the quality of life of residents by bisecting the Town and directing a tremendous volume of traffic onto Holly Springs Road at a location that has not been planned for this level of volume. This location is very near to the center Village Town District, which the Town has been working for years to develop as the heart of our town.
27	This corridor, while on the books, delays development of properties (this is problematic especially in this economic climate) AND the ability of individuals who happen to own homes in the corridor and need to sell their homes; we would like to encourage quick and expeditious elimination of alternatives in order to alleviate these two scenarios.

	Comment
	ORANGE CORRIDOR
1.	Minority church at Lockley Road does not look like it is impacted; this is a good thing.
2.	Corridor has been preserved by the Town since 1997 NCDOT request for Corridor Protection....the corridor protection guidelines have been carefully and stringently followed by the Town to make expense and impact of acquisition and construction less expensive.
3.	Some of the ROW has already been acquired, and we believe this is of great benefit.
4.	This corridor is consistent with all of the Town's long range plans developed over the past 15 years (since corridor protection began), including: Comprehensive Plan Vision 2010, Long Range Water Master Plan, Long Range Sewer Master Plan, Long Range Reclaimed Master Plan, Holly Springs Pedestrian Transportation Plan, Long Range Greenway Plan, Long Range Bicycle Plan
5.	Town wants to insure that Kildaire Farm Road, which is a major access road, ties into interchange or nearby to preserve full access northward
6	Town has carefully planned and minimized the needed greenway/pedestrian/bike and vehicular connections through this corridor by carefully guiding development of adjacent lands. All of the infrastructure (transportation and other) that has been planned and installed to support these minimal number of crossings would no longer function as designed and infill of the preserved corridor would likely be awkward to develop. This careful planning will reduce construction costs and environmental impacts along this corridor.
7	This corridor and the proposed interchange at Kildaire Farm Road is consistent with the Town's long range planning efforts and locations for activity nodes, development densities, roadway design, and infrastructure to meet the demands of a highway interchange and location. Because Holly Springs is a relatively small town with limited growth potential due to the limiting feature of Progress Energy Lands to the west, the impact of the other corridors on the Town as a whole is proportionally very great. The impact of the orange corridor has been well planned to complement the Town as a whole.
8	Development of the roadway in this corridor complements the past planning and investment (and proposed too) by the Town in this area of water , sewer, and transportation infrastructures
9	The Town believes this corridor alignment has the least environmental impact, based upon our knowledge of the Town; the crossing of Middle Creek is essentially perpendicular which is desired as this is a major stream with a very large drainage basin.
10	This corridor would not impact or require the removal and/or displacement of many homes (maybe none) in Holly Springs
11	Town plans have long centered around this corridor, and the Town has directed development in a manner to make the construction of this through Town minimally invasive to our community. This has been achieved by planning transportation connections to complement I540 at this location and to link property on both sides with connections.
12	This corridor essential runs between Apex and Holly Springs - almost along the municipal boundaries - we see this as a plus as it does not divide a community like at least one of the other proposed corridors.
13	The long range transportation plans - developed carefully and collaboratively by the Town, the county, the MPO, NCDOT, and other municipalities over the past 15 years - have guided development and row dedication of roads to support the orange corridor.
14	This corridor is under corridor protection and development approvals and building permit requests continue to be handled under the corridor protection act, increasing the desirability of this corridor as it is protected

	Comment
	PURPLE CORRIDOR
1	Will impact/eliminate Town parkland south of Sunset Oaks south and planned walking trails and other passive recreation along Middle Creek - a major water feature and environmental treasure in south Wake County.
2	The long range transportation plans for the municipality and the county have guided development and row dedication of roads to support the current orange alignment - not needed intersection improvements for this route.
3	Conflicts with all of the Town's long range plans developed over the past 15 years (since corridor protection began), including: Comprehensive Plan Vision 2010, Long Range Water Master Plan, Long Range Sewer Master Plan, Long Range Reclaimed Master Plan, Holly Springs Pedestrian Transportation Plan, Long Range Greenway Plan, Long Range Bicycle Plan
4	This corridor would require relocation/elimination of many homes and the possible division of many neighborhoods; some in Holly Springs' jurisdiction only are Sunset Oaks North, Sunset Oaks South, Brackenridge various phases; In addition, there are many other homes not in subdivisions that would be impacted
5	The long range transportation plans - developed carefully and collaboratively by the Town, the county, the MPO, NCDOT, and other municipalities over the past 15 years - have guided development and row dedication of roads to support the orange corridor - not at all this corridor
6	This corridor, while on the books, delays development of properties (this is problematic especially in this economic climate) AND the ability of individuals who happen to own homes in the corridor and need to sell their homes; we would like to encourage quick and expeditious elimination of alternatives in order to alleviate these two scenarios.
7	This alignment would severely impact both vehicular (including bus) and pedestrian transportation to 3 public schools that some Holly Springs children attend in south Cary. The main transportation route to these schools is down Optimist Farm Road which is being bisected by this route.
6	Town has worked hard to created connectivity between neighborhoods - vehicular, bicycle, and pedestrian - through planning and infrastructure construction; this corridor negatively impacts one of the significant neighborhoods (only 8 years old) that has been planned and developed carefully to create the neighborhood atmosphere that is the Town's goal.
9	Parallels Middle Creek which is a very important protected stream/water feature with a large watershed; paralleling streams has very negative environmental consequences and may be impossible to permit.
10	This corridor would require relocation/elimination of many homes and the division of several neighborhoods such as Sunset Oaks North, Sunset Oaks South, Brackenridge, Talicud Trail within Holly Springs' jurisdiction only. This is a very negative consequence of this alignment especially when both corridors (and buffers on adjacent developments) have been protected for the orange alignment. This alignment is brand new and there has been no preservation or buffer protection for the neighborhoods that have been developed in the area of the corridor.
11	This corridor is not under corridor protection and development approvals and building permits continue to be processed, increasing the undesirability of this corridor as well as the resulting impact of construction in this corridor

	Comment
	PURPLE CORRIDOR
12	Plan as shown does not provide transportation connectivity along Optimist Farm Road which is a major transportation route in an area of SW Wake county that is limited in its primary route connectivity.

	Comment
	OTHER GENERAL COMMENTS
1	All communities impacted by this project have carefully and diligently planned for the orange protected corridor, and protected the corridor. There would be tremendous negative impact to each of them in many areas such as utility infrastructure, socio-economic, community, transportation, development, quality of life, and environment. We believe that the detrimental effect of switching from this corridor is great.
2	We support the orange corridor as a more direct east/west route that complements the east/west transportation system of those individuals travelling across the state.
3	Towns likes (from west to east) want to find the most direct route; like the least circuitous\ route from Asheville to Wilmington
4	Thank you for meeting with us and opportunity to submit comments on the corridors.

Garner
Chamber of Commerce

October 19, 2010

Ms. Jennifer Harris, PE
North Carolina Turpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Ms. Harris:

I am writing on behalf of the Board of Directors of the Garner Chamber of Commerce to express our concerns about the proposed plan to change the location of the southern phase of I-540. We encourage you to remove the alternate route that runs north of Lake Benson.

The "red" route shown on Turnpike Authority maps with the corridor north of Lake Benson will disrupt our business community as well as our residents. The newly proposed route will displace residents of several subdivisions and totally destroy one subdivision. It will run through and displace a portion of a prime commercial property.

For more than twenty years our landowners and developers have made investment decisions based on the protected corridor route. To change that plan now will be unfair.

The Board of Directors of the Garner Chamber of Commerce request that you remove the proposed "red" route as an option for the southern phase of I-540 and continue with the original plan.

Sincerely,

Jay Strickland
Board Chair, Garner Chamber of Commerce

401 Circle Drive • Garner, NC 27529 • phone: 919.772.6440 • fax: 919.772.6443 • www.garnerchamber.com

Town of Garner
Post Office Box 446 • Garner, North Carolina 27529
Phone 919-772-4688 • FAX 919-662-8874

October 20, 2010

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
1578 Mail Center
Raleigh, NC 27699-1578

Re: Triangle Expressway Southeast Extension Study
Town of Garner Comments

Ms. Harris:

This letter presents an official list of the Town of Garner concerns regarding the above referenced matter. The following points are major reasons why the Town of Garner believes NCTA should remove the red and pink corridors that go through Garner from further study. For your convenience, I have attached a map to illustrate the various impacts associated with each of the corridors discussed in this letter.

1. **The red corridor is extremely detrimental to current and future parks and recreation facilities in the Town of Garner.**

   The red corridor impedes on the northern edge of the recently opened **White Deer Nature Park**, the Town's first LEED Gold certified facility. This is a passive park facility with an environmental education center, trails, picnic shelters, and playgrounds.

   The red route obliterates and eliminates **George W. Bryan Nature Park**. Bryan Nature Park is a 20-acre nature park facility located east of Highway 50 near the South Creek neighborhood.

   The red corridor will also obstruct and wipe out a portion of the **South Garner Greenway** leading from Timber Drive to **White Deer Park**. This fully designed and funded greenway (slated for construction in 2011) will connect 4.2 miles of a neighborhood loop sidewalk in central Garner with a 2.8 mile greenway trail through **White Deer and Lake Benson Parks**.

The red corridor will also impede and negatively impact the Town's 35-acre **Timber Drive Park property**, designated as a future site of an aquatics facility and/or community center.

The **Triangle Area YMCA** also owns a tract of property on Aversboro Road that has been seriously considered as the location of a future Garner YMCA facility. The red corridor will prevent this property's availability for use as a community recreation facility such as a YMCA.

2. **The red corridor will disrupt long-range and orderly growth in areas designated for future development by the Town's *Comprehensive Growth Plan*.**

The Town's major future growth area is generally referred to as the White Oak area. It lies south of US 70, west of I-40, east of Highway 50, and north of Clifford Road. Significant infrastructure investment and planning decisions have been made to promote future growth and development in this area. Capital investments of over 3 million dollars have been made in roads, major water lines, and sewer trunk lines in this portion of the community to support future development. Tremendous uncertainty exists if the red corridor effectively bisects this future growth district.

The Town's ***Comprehensive Growth Plan*** and the recently adopted 2010 ***Garner Transportation Plan*** both recommend a new interchange at I-40 and White Oak Road to serve an emerging Regional White Oak Mixed Use Center. The red corridor would likely prevent this future interchange from ever occurring while creating some challenges for future growth in this important section of Town that will require additional study if the red corridor is selected.

3. **The red corridor severely damages Town's primary industrial recruitment area.**

The red corridor obliterates **Greenfield South Business Park**, one of Garner's premiere locations for jobs and industry. As a result, the red corridor will create a loss of significant tax base and the community will witness the demise of an area that has been programmed for non-residential growth that is vital to the Town.

There are 26 commercial/industrial lots (developed & vacant) impacted by the red corridor with a total Wake County tax value of over 30 million dollars.

4. **The red corridor splits and disconnects the Town of Garner again.**

   US Highway 70 split the Town of Garner and literally divided the town into two sections in the 1950's. The community has been striving to recover from this poor planning decision since that time. Garner cannot afford to be divided again by a road as large as the Triangle Expressway. If the orange protected corridor is selected as the preferred route, the Town can naturally grow towards the new expressway in a managed fashion over the next 25-35 years. Deference should be given to wise long-range planning as exemplified in the protected orange corridor route.

5. **The red corridor will have negative water quality impacts to Lake Benson.**

   The red corridor crosses into portions of the critical areas of **Lake Benson** and **Swift Creek**. The corridor is located immediately upstream of Lake Benson and crosses the majority of the tributaries feeding the lake. This location and proximity would increase the likelihood of potential drinking water contamination. Any spill from a roadway disaster would drain directly into Lake Benson. With the recent completion of the $90 million **Dempsey Benton Water Treatment Plant**, this lake serves as a substantial potable water supply for the Metro Raleigh area.

   Correspondingly, the road construction impact on **Lake Benson** is an area of concern with the red corridor. The aforementioned proximity and drainage flow direction could lead to lake contamination and/or potential reduction in the safe yield of the lake due to potential sedimentation as a result of the construction process.

   In addition to the lake itself the red corridor will negatively impact the existing water transmission and distribution infrastructure associated with the new water treatment plant. This is also a concern for the existing wastewater collection infrastructure located in the red corridor.

6. **The red corridor fails to provide adequate access to the Clayton Bypass facility.**

   The red corridor fails to provide efficient and effective transportation by not directly servicing traffic generation from the Clayton, Smithfield, Selma nd the eastern Johnston County region.

   Pushing traffic via a more northern route as depicted by the red corridor does not accomplish needed goals of accommodating travelers from areas south of Garner that need to travel westward towards Holly Springs, Morrisville and Research Triangle Park.

The red corridor also puts an interchange that would be just over one mile from the existing I-40/US 70 interchange. This would appear to create difficulty for proper traffic circulation and flow for the traveling public.

7. **The red corridor will have significant and direct impacts on thirteen (13) Garner neighborhoods.**

   The following neighborhoods are directly impacted by the red corridor: Lakewood; Heather Hills; Breezeway; Vandora Pines; Camelot; Breezeway West; Breezeway East; Summer's Walk; Van Story Hills; Heather Ridge; Heather Woods, Forest Landing; and the Village at Aversboro.

   We estimate approximately 510 residential lots in Garner could be impacted by the red corridor representing a tax value of over $106,500,000. This represents a significant cost to the Garner community in terms displacement and relocation of numerous families but also a significant impact to our tax base.

8. **The following points summarize the Town's concerns regarding the pink corridor, especially the portions nearest the Garner Town Limits:**

   - It would remove significant portions of the Town's industrial tax base;
   - It traverses directly through a City of Raleigh Wastewater Biosolids facility located just south of the Garner Town Limits;
   - It eliminates a future high school site (H-8) that was purchased by Wake County Public Schools after much community outcry and discussion about other unacceptable locations. This location has been agreed upon by residents and community leaders;
   - It changes land use for a large segment of our Town's future growth area and;
   - It fails to connect directly with the Clayton Bypass.

The Town of Garner is fundamentally opposed to both the red and pink corridors illustrated on N.C. Turnpike Authority's maps. Therefore, we request that both corridors be removed from further study at this time. The Town of Garner strongly supports the original protected corridor as illustrated by the Orange Corridor on the N.C. Turnpike

Authority's maps as the preferred choice for the development and construction of the I-540 Triangle Expressway Southeast Extension. The community expected growth along this protected corridor and has planned for it appropriately.

Many land use decisions have been made based upon citizens and community leaders assumptions about the protected corridor and its future use. We respectfully request the NC Turnpike Authority's formal and serious consideration of our concerns regarding this matter.

Sincerely,

Hardin Watkins

Hardin Watkins,
Town Manager

c: Mayor and Town Council
Steve DeWitt, P.E., Chief Engineer, NCTA
Brad Bass, AICP, Garner Planning Director
Frank Powell, P.E., Garner Town Engineer

0 2,000 4,000 Feet

TOWN OF GARNER
CHARTERED 1905

- 540_Preliminary Alignments
- 1000' Crossover (Pink Line)
- 1000' Corridor (Red Line)
- Major Future Growth Area
- Impacted Subdivisions (Garner ETJ Only)
- Town Parks
- Trails
- Lakes
- Swift Creek Watershed Critical Area

LAKE WHEELER ROAD
LAKE WHEELER RD
MECHANICAL BLVD
CREECH RD
I 40
70
401
CLOVERDALE PARKLAND
GREENBRIER
CREECH ROAD
GARNER RECREATION PARK
JONES SAUSAGE RD
GARNER RD
AVERSBORO RD
VANDORA SPRINGS RD
WOODLANDS, SECTION 5
NEW RAND RD
JAYCEE PARK
RAND MILL ROAD PARK
U. S. 401
GEORGETOWN, PHASE II PARKLAND
SOUTH GARNER PARK
GEORGETOWN OPEN SPACE
HEATHER HILLS OPEN SPACE
Proposed South Garner Greenway (Construction 2011)
STAUNTON MEADOWS OPEN SPACE
TIMBER DR
TIMBER DRIVE PARK
MALIBU VALLEY PARKLAND
THOMPSON ROAD PARK
YMCA TRACT
TAN STORY HILLS OPEN SPACE
WHITE DEER PARK
BRYAN ROAD NATURE PARK
HEATHER WOODS OPEN SPACE
SCARBOROUGH RIDGE MINI PARK
LAKE BENSON PARK
BUFFALOE RD
LAKE BENSON
CENTENNIAL PARK
Dempsy Benton Water Treatment Plant
RAND RD
TEN TEN RD
OLD STAGE RD
Regional White Oak Center
Greenfield Business Park
U. S. 70
WHITE OAK RD
RAYNOR RD
White Oak Business Park
I-40 / White Oak Road Interchange
Proposed H8 Wake County High School Site
City of Raleigh Land Application Facility
US 70 Clayton Bypass Interchange

Todd Delk

OFFICE OF THE MAYOR

October 20, 2010

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699

Subject: Comments on the Study of the NC 540 Triangle Expressway Southeast Extension, Purpose & Need Statement and Preliminary Alternatives

Dear Ms. Harris:

On behalf of the Cary Town Council, I respectfully submit the following comments in response to your September 2010 request for comments on the environmental impact study (EIS) process for the NC 540 Triangle Expressway Southeast Extension from NC 55 in Apex to the US 64/264 Bypass in Knightdale. The comments are listed below in respect to the Purpose & Need Statement and Preliminary Alternatives presented at your second round of public workshops held September 21-23, 2010.

- The NCTA should develop a more concise and specific Purpose & Need Statement outlining the specific elements that the alternatives will be designed to meet.
- The alternatives and new location corridors presented at the workshops seem reasonable and feasible for additional study and refinement.

The Town of Cary also reiterates our previous comment, submitted as part of the US 64 Study that we support NC 540 being designated as a bypass for the US 64 Corridor from Apex to Knightdale.

The Town would appreciate a response from the Turnpike Authority to both these comments and those submitted in my previous letter addressed March 17, 2010 as verification of your receipt and consideration of the presented issues.

The Town appreciates your consideration of our comments on this important matter. We would appreciate advance notification of any opportunities for additional public input on the EIS, including public workshops and hearings so that we may alert our citizens.

Please feel free to contact Todd B. Delk in our Engineering Department at (919) 462-3834 or via email at todd.delk@townofcary.org should you have any further questions relating to this issue. The Town of Cary looks forward to working with the Turnpike Authority on this important study process.

Best regards,

Harold Weinbrecht, Jr.
Mayor

TOWN *of* CARY
316 N. Academy Street • Cary, NC 27513 • PO Box 8005 • Cary, NC 27512-8005
tel 919-469-4011 • fax 919-460-4910 • www.townofcary.org

YMCA OF GARNER

1701 Aversboro Road • Garner, NC 27529 • 919-773-3621

October 22, 2010

Dear North Carolina Turnpike Authority,

Please consider this letter a formal request on behalf of the YMCA of Garner and the YMCA of the Triangle for the state to follow the originally planned route for the final stretch of Interstate 540.

For years the Garner community has supported plans for the YMCA of the Triangle to build a full facility YMCA on property on Aversboro Road in Garner. Historically, YMCAs are community hubs for adults, families and children. For more than 150 years, the YMCA of the Triangle has strengthened the foundations of community through youth development, healthy living and social responsibility.

In addition, YMCAs make a positive economic impact the communities they serve. Changes to the original route would result in a negative impact on the future plans of the YMCA in Garner and the community at large.

The new proposed route would divide family properties and ultimately damage our business community. We hope that you take our concerns into consideration as you make your decision.

Sincerely,

Brent Gore
Advisory Board Chair
YMCA of Garner

NORTH CAROLINA GENERAL ASSEMBLY
STATE LEGISLATIVE BUILDING
RALEIGH, NORTH CAROLINA 27603

November 30, 2010

Mr. Steve DeWitt, PE
Chief Engineer, NC Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Mr. DeWitt:

As members of the North Carolina General Assembly who represent the Town of Garner, we write to express our concern over the proposals known as the "Red and Pink Routes" as possible extensions to N. C. 540 Southeast to connect and complete the Triangle Expressway.

The "Orange Route" had been the preferred and most logical route in the 1990s. Relying on the Orange Route's location, the Town of Garner has invested over $3 million in infrastructure to support future growth based on its Comprehensive Growth Plan, last updated and adopted in 2006. Businesses, investors, and homeowners have also spent millions of dollars based on that growth plan. The Red corridor will disrupt that long-range and orderly growth.

In Greenfield South Business Park alone, the Town's primary industrial recruitment area, 26 commercial/industrial lots would be obliterated by the Red Route. Those lots have a total Wake County tax value of over $30 million, and the demise of the park would have serious consequences for non-residential growth that is vital to the Town of Garner.

We have been told that the Orange Route path could threaten the habitat of a few endangered mussels; however, the Red Route would be extremely detrimental to current and future parks and recreation facilities and designated open space in the Town of

Garner. It would completely obliterate and eliminate the 20-acre George W. Bryan Nature Park, and it would impede on the northern edge of the recently opened White Deer Nature Park, Garner's first LEED Gold certified facility. In addition, the Red Corridor would obstruct and wipe out a portion of the South Garner Greenway leading from Timber Drive to White Deer Park.

The Red Route would have negative water quality impacts to Lake Benson with the likelihood of contaminating its drinking water supply. With the recent completion of the $90 million Dempsey Benton Water treatment Plant, this lake serves as a substantial potable water supply for the Metro Raleigh area.

The "Red Corridor" fails to provide adequate access to the Clayton Bypass facility and would, therefore, not accomplish needed goals of accommodating travelers from areas south of Garner that need to travel westward toward Holly Springs, Morrisville, and the Research Triangle Park.

The Red Route would have significant and direct impacts on 13 Garner neighborhoods affecting approximately 510 residential lots with a value over $106.5 million. This represents a significant cost to the Garner community in terms of displacement and relocation of families as well as a significant impact to Garner's tax base.

In the 1950's the Town of Garner was split by the construction of Highway 70. They are still striving to recover from that unfortunate planning decision, and they cannot afford to be divided again by a road as large as the Triangle Expressway. If the protected Orange Corridor is selected as the preferred route, Garner can naturally grow towards the new expressway in a managed fashion over the next 25-35 years.

The Town of Garner has concerns about the Pink Corridor as well. The Pink Route would remove significant portions of the Town's industrial tax base, and it would traverse directly through a City of Raleigh Wastewater Biosolids facility located just south of the Garner town limits. It would eliminate a future high school site that was purchased by Wake County Public Schools after much outcry and discussion about other unacceptable locations. The Pink Route would change land use for a large segment of the Town's future growth area, and it would also fail to connect directly with the Clayton Bypass.

Over one thousand concerned Garner residents turned out for a meeting on November 17, 2010, in protest of the Red Route. We respectfully join with our constituents in asking that you eliminate both the Red and Pink Routes from your alternatives and select the Orange Route for the Triangle Expressway.

Very truly yours,

Representative Deborah Ross
House District #38

Representative Darren Jackson
House District #39

Senator Dan Blue
Senate District #14

Senator Richard Stevens
Senate District #17

cc: Mr. John Sullivan, PE
Federal Highway Administration

Mr. Gary Jordan
US Fish and Wildlife Service

Mr. Pete Benjamin
US Fish and Wildlife Service

Mr. Eric Alsmeyer
US Army Corps of Engineers

Mr. Scott McLendon
US Army Corps of Engineers

Mr. Chris Militscher
US Environmental Protection Agency

Mr. Brian Wrenn
NC Department of Environment and Natural Resources Div. of Water Quality

Mr. Travis Wilson
NC Wildlife Resources Commission

November 30, 2010

North Carolina Turnpike Authority
Christy Shumate, AICP
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear NC Turnpike Authority,

I am writing you in regards to the new proposed Tan Corridor for the Southeast Extension of I-540. I am opposed to this new corridor as it would affect my neighborhood. My family bought a new home during the summer, June. Before we purchased this home, we researched the area to make sure that it would not be directly affected by the I-540 project. At the time it would be further along White Oak Rd, and would not directly affect our home.

The new Tan Corridor, from the maps available on-line, will either take out my home entirely or I will be able to throw a rock onto the highway. The originally proposed corridor has been planned for years, with limits on development to minimize future impact on housing. I find it ironic that Wake County and the City of Raleigh want to now change the original plan, to minimize the impact on the planned Randleigh Farm Property. It is like they wrote the rules, and now want to change them to suit their own needs. What about the people that followed the rules from the beginning?

Sincerely,

Daniel Penny
110 Galloway Dr
Garner, NC 27529
dbpenny@sbcglobal.net
919-585-2687

As a concerned and distressed citizen of Garner, N.C., about the proposed route of the Triangle Expressway, I feel that I must take a stand. The Red route will directly impact the lives of so many people, many of them elderly, like myself. I am not an ecological nut, but I do care about any wildlife on the endangered species list. However, I must ask this question, Are we, as citizens of Garner, and Wake County, so demoralized by the ecological battle that we place the lives of mud mussels (alasmidanta heterodon) before the comforts of our elderly citizens? Many, lives will not withstand another disruption such as a move, just when we have found the place of our dreams in Aversboro Retirement Village. There are several other communities that will be adversely affected if the road proceeds as planned. Landmarks listed in our local paper include Vandora Pines, Breezeway, Timber Drive Park, White Deer Park, Heather Ridge, Van Story Hills, Forest Landing, Bryan Nature Park, and Greenfield Business Park.
I have not yet mentioned the deer that will be left homeless without the protection of our woods. Much of which will be destroyed by an expressway passing through it. We have deer that feed in our back yard.
My next question for the planning boards consideration: Why not place a bridge over the Little River and Swift Creek, and any other tributaries in question? It seems to me that this is a more humane gesture than destroying the homes and perhaps lives of so many people. I am just one voice in many that oppose this, and I, as a citizen will be heard. I thank you for listening to an elderly lady....wisdom comes with years. I remain,

Respectively Yours,

Jean C. Rhodes

Jean C, Rhodes
275 Shady Hollow Lane
Garner, N.C. 27529

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011

SESSION LAW 2011-7
SENATE BILL 165

AN ACT TO RESTRICT THE NORTH CAROLINA TURNPIKE AUTHORITY'S SELECTION OF TRANSPORTATION CORRIDORS TO EXISTING PROTECTED CORRIDORS OR CORRIDORS SOUTH OF AN EXISTING PROTECTED CORRIDOR EXCEPT IN THE AREA OF INTERSTATE 40 EAST.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 136-89.183(a)(2) reads as rewritten:

"(2) To study, plan, develop, and undertake preliminary design work on up to nine Turnpike Projects. At the conclusion of these activities, the Turnpike Authority is authorized to design, establish, purchase, construct, operate, and maintain the following projects:

a. Triangle Expressway, including segments also known as N.C. 540, Triangle Parkway, and Western Wake Freeway in Wake and Durham ~~Counties.~~ Counties, except that segment known as the Triangle Expressway Southeast Extension which shall not be located north of an existing protected corridor established by the Department of Transportation circa 1995, except in the area of Interstate 40 East.

b. Gaston East-West Connector, also known as the Garden Parkway.

c. Monroe Connector/Bypass.

d. Cape Fear Skyway.

e. A bridge of more than two miles in length going from the mainland to a peninsula bordering the State of Virginia, pursuant to G.S. 136-89.183A.

f. Repealed by Session Laws 2008-225, s. 4, effective August 17, 2008.

Any other project proposed by the Authority in addition to the projects listed in this subdivision must be approved by the General Assembly prior to construction.

A Turnpike Project selected for construction by the Turnpike Authority shall be included in any applicable locally adopted comprehensive transportation plans and shall be shown in the current State Transportation Improvement Plan prior to the letting of a contract for the Turnpike Project."

SECTION 2. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 17th day of March, 2011.

s/ Philip E. Berger
President Pro Tempore of the Senate

s/ Thom Tillis
Speaker of the House of Representatives

s/ Beverly E. Perdue
Governor

Approved 3:09 p.m. this 18th day of March, 2011

WAKE COUNTY
NORTH CAROLINA

Board of Commissioners
P.O. Box 550 • Raleigh, NC 27602

TEL 919 856 6160
FAX 919 856 5699

PAUL COBLE, CHAIRMAN
PHIL MATTHEWS, VICE-CHAIR
JOE BRYAN
TONY GURLEY
STAN NORWALK
BETTY LOU WARD
JAMES WEST

December 8, 2010

David W. Joyner, Executive Director
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

RE: Triangle Expressway Southeast Extension – Tan Corridor

Dear Mr. Joyner,

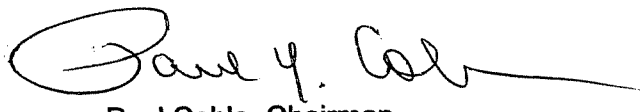
On November 4, 2010, the North Carolina Turnpike Authority (NCTA) announced the introduction of a new alternate corridor (Tan) on the eastern side of the Triangle Expressway Southeast Extension. Our understanding is that the Tan corridor was added as an alternative to the corridor shown at previous meetings (Green) in order to minimize impact on the planned development at Randleigh Farm. Wake County and the City of Raleigh jointly purchased the Randleigh Farm property for the development of various public facilities. However, the property has not been developed and the general alignment of the Triangle Expressway Southeast Extension corridor (Green) was known when the property was purchased. Wake County, therefore, does not support the recent addition of the new alternate corridor (Tan) and requests that it be removed from consideration.

Wake County supports the position that the Tan corridor's potential impact on established neighborhoods and residents is clearly more important than ensuring that the preliminary development plan of the Randleigh Farm property remain viable. Residents in the area have relied upon the general alignment corridor (Green) for many years when making investment decisions regarding their homes. As a result, residents have expressed their concern about the Tan corridor.

In addition to removing the Tan corridor from consideration, the County requests that the selection of the final corridor be expedited as much as possible. As long as alternatives remain under consideration, residents, business, and property owners must deal with the uncertainty that can create a financial burden and psychological stress.

If you need additional information or have any questions about the County's position, please feel free to contact me.

Sincerely,



Paul Coble, Chairman
Wake County Board of Commissioners

cc: Eugene A. Conti Jr., Chairman, North Carolina Turnpike Authority
Perry R. Safran, Vice-Chairman, North Carolina Turnpike Authority
Robert D. Teer Jr., North Carolina Turnpike Authority
Robert C. Clay, North Carolina Turnpike Authority
John Collett, North Carolina Turnpike Authority
James H. Ferebee, Jr., North Carolina Turnpike Authority
Anthony Fox, North Carolina Turnpike Authority
E. David Redwine, North Carolina Turnpike Authority
Alan F. Swanstrom, North Carolina Turnpike Authority
David Cooke, County Manager, Wake County

City Of Raleigh
North Carolina

Charles Meeker
Mayor

January 11, 2011

David W. Joyner, Executive Director
NC Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

SUBJECT: Comments on TIP Project R-2829, Eastern Wake Expressway

Dear Mr. Joyner:

At our January 4, 2011 meeting, the Raleigh City Council received comments from the general public regarding alternatives under consideration for the Southeast Extension of the Triangle Expressway. The portion of your project within the City's jurisdiction falls under TIP Project R-2829 (Eastern Wake Expressway). These residents spoke out specifically in opposition to the Tan Corridor that has been developed by the NC Turnpike Authority for this segment of the project.

I understand that your project team has met with City staff from multiple departments on several occasions to discuss alignment issues along the Eastern Wake Expressway. Working out the details on a final alignment for this corridor has been a priority for the City for many years, especially with regards to getting out ahead of growth in this area and providing County residents with improved predictability.

The City Council voted unanimously to oppose the Tan Corridor as it is currently proposed, and we have requested that City staff continue to work with your project team to develop viable alternatives for consideration in your Environmental Impact Statement (EIS). We understand that the EIS process is technical in nature, but we urge you continue to take the concerns of area residents into account as you proceed with your study. The completion of the Eastern Wake Expressway as part of the larger Raleigh Outer Loop is important to the continued growth of the City and its neighboring communities. We appreciate the efforts of the Turnpike Authority to move this project forward.

Telephone: 919.996.3050
Office • 222 West Hargett Street • Post Office Box 590 • Raleigh, North Carolina 27602-0590
Recycled Paper

If you have additional questions about our comments, please contact Eric Lamb at (919) 516-2161 or by email at eric.lamb@raleighnc.gov.

Sincerely,

Charles C. Meeker
Mayor

CCM/ejl

Cc: City Councilors
J. Russell Allen – Raleigh City Manager
David Cooke – Wake County Manager
Mitchell Silver, AICP – Raleigh Planning Director
Carl R. Dawson, Jr., PE – Raleigh Public Works Director
Brad Bass, AICP –Garner Planning Director

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

January 26, 2011

JAN 27 2011

Regulatory Division/1145b

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Steven D. DeWitt, P.E.
Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Mr. DeWitt:

Reference the proposed North Carolina Turnpike Authority project known as the Triangle Expressway Southeast Extension toll facility (STIP Nos. R-2721, R-2828, and R-2829), from NC 540 currently under construction at NC 55 in Holly Springs, to existing I-540 north of Poole Road and Clayton, in southern Wake and northeastern Johnston counties, North Carolina. Reference also the January 20, 2011 Turnpike Environmental Agency Coordination (TEAC) meeting for this project, at which Mr. Eric Alsmeyer of our staff informed you that the Corps of Engineers has identified an Issue of Concern regarding your proposal to eliminate the Red and Pink corridors as reasonable and feasible alternatives for further study. In accordance with Section 6002 of SAFETEA-LU Issues of Concern are those that "could result in denial of a permit or substantial delay in issuing a permit"

Our concern is based primarily on the Summary of Potential Impacts in Table 2 of Handout #8 for the January 20, 2011 TEAC meeting, which shows that the Orange Alternative, which, if the Red and Pink corridors were eliminated, would be the only remaining alternative for study in the eastern portion of the project study area, has substantially more wetland impacts (88.1 acres) than the Red and Pink Alternatives (43.7 acres and 57.4 acres, respectively), and has substantially more stream impacts (36,120 linear feet) than the Red Alternative (29,770 linear feet).

As you are aware, our permit program requires that we make a complete, thorough, and unbiased review of all factors associated with a proposed project within jurisdictional waters of the United States. A major component of the review is the consideration of reasonable and practicable alternatives, required by both the National Environmental Policy Act and the Clean Water Act 404 b (1) Guidelines (33 U.S.C. Section 1344 (b); 40 CFR Part 230). The Clean Water Act requires that individual permit decisions be made "after notice and opportunity for public hearings" (33 U.S.C. Section 1344(a)). Based on these requirements and the information we have available to us at this time, we believe it would be premature for the Wilmington District to agree to your proposal to eliminate from further consideration the "Red" and "Pink"

alternatives, as you have requested. It is our understanding that the impacts to both the natural and human environment that you have provided to us are based on 1,000 foot-wide corridors. It has been our experience that once a preliminary or functional design has been developed that these impacts may change substantially. Given the level of potential adverse impacts associated with all the corridors currently under consideration and our substantial requirements under the 404 (b) 1 Guidelines, we believe that a decision to eliminate one or more of these corridors should be based on impacts more closely associated with a typical 4-lane median divided facility that has been placed within each of the corridors in such a way as to avoid impacts to the maximum extent practicable.

If you elect to eliminate these alternatives from further consideration at this point, we may elect to prepare our own supplement to your EIS describing these alternatives, or prepare an entirely separate NEPA document that thoroughly describes alternatives to the proposed action. We note that this is specifically contrary to your draft "Section 6002 Coordination Plan for the Triangle Expressway Southeast Connector Project STIP Projects R-2721, R-2828, & R-2829" which states, in Section 1.2, Integration of NEPA and Section 404 Requirements, "(t)he process established in this plan is intended to ensure that … the US Army Corps of Engineers (USACE) can issue a Section 404 permit for the project promptly following the end of the NEPA process, without the need for supplemental NEPA studies…."

Should you have any questions, please call Mr. Alsmeyer at (919) 554-4884, extension 23.

Sincerely,

Henry Wicker

for S. Kenneth Jolly
Chief, Regulatory Division
Wilmington District

Copies Furnished:

Mr. Brian Wrenn
Division of Water Quality
North Carolina Department of
Environment and Natural Resources
1650 Mail Service Center
Raleigh, NC 27699-1650

Mr. Clarence Coleman
Federal Highway Administration
310 New Bern Ave., Rm 410
Raleigh, North Carolina 27601-1442

Mr. Chris Lukasina
Capital Area Metropolitan Planning Organization (CAMPO)
127 West Hargett Street, Ste. 800
Raleigh NC 27601

Mr. Heinz Mueller
Chief, NEPA Program Office
Office of Policy and Management
US Environmental Protection Agency
61 Forsythe St., SW
Atlanta, GA 30303

Mr. Gary Jordan
US Fish and Wildlife Service
PO Box 33726
Raleigh, NC 27636

Mr. Travis Wilson
NC Wildlife Resources Commission
1142 I-85 Service Road
Creedmoor, NC 27522

Mr. Peter Sandbeck
NC State Historic Preservation Office
4619 Mail Service Center
Raleigh, NC 27699-4619

Office of
County Commissioners
(919) 989-5100
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Paula G. Woodard, Clerk

Johnston County
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SMITHFIELD, N.C. 27577

Allen L. Mims, Jr., Chairman
Jeffrey P. Carver, Vice Chairman
Cookie Pope
W. Ray Woodall
DeVan Barbour
Tony Braswell
Wade M. Stewart

February 8, 2011

Mr. David W. Joyner
Executive Director
N.C. Turnpike Authority
1578 Mail Service Center
Raleigh, N.C. 27699-1578

Re: Triangle Expressway Southeast Extension – Tan Corridor

Dear Mr. Joyner:

The Johnston County Board of Commissioners opposes the Tan Corridor option for the Triangle Expressway Southeast Extension. It was our understanding that there has been a selected corridor reserved for this project for several years. As you can imagine, recent discussions regarding alternate options (such as the Tan Corridor) have been upsetting for Johnston County landowners in the vicinity.

Johnston County appreciates the opportunity to voice our concerns, and we hope that the Tan Corridor option will be eliminated from consideration. If you need further information, please feel free to contact me.

Sincerely,

Allen L. Mims, Jr., Chairman
Johnston County Board of Commissioners

Cc: Johnston County Board of Commissioners
Mr. David Rouzer, North Carolina Senate
Mr. James H. Langdon, Jr., North Carolina House of Representatives
Mr. N. Leo Daughtry, North Carolina House of Representatives

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

February 17, 2011

RECEIVED
FEB 21 2011

Steven D. Dewitt, P.E.
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

Dear Mr. Dewitt:

This letter is in regard to the Southern and Eastern Wake Expressway (TIP Nos. R-2721, R-2828, and R-2829). As you know, the U.S. Fish and Wildlife Service (Service) has been very involved in this project through the Turnpike Environmental Agency Coordination meetings. At these meetings, the Service has stated its concern regarding the likely adverse effects of the project on the federally endangered dwarf wedgemussel (*Alasmidonta heterodon*) within the Swift Creek watershed (Neuse River basin). Section 7(a)(2) of the Endangered Species Act (ESA) requires that all federal action agencies (or their designated non-federal representatives), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally threatened or endangered species. We anticipate that a formal Section 7 consultation will be required. The Federal Highway Administration (FHWA), as the lead federal action agency, must initiate formal Section 7 consultation by submitting to the Service an initiation package which includes a Biological Assessment (BA). In return, the Service will conduct an analysis to determine if the project will jeopardize the continued existence of the dwarf wedgemussel and issue a Biological Opinion (BO). Given the fact that the 1993 Dwarf Wedgemussel Recovery Plan requires a viable population in Swift Creek in order to recover the species, maintenance of a sustainable dwarf wedgemussel population in the post-project Swift Creek watershed is vitally important. We cannot understate the significance of this issue.

In addition to the normal information needs in developing the BA and BO (e.g. fully describing and analyzing the direct, indirect and cumulative effects to the species), the Service must determine the Environmental Baseline of the species. This section of the BO is an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species, its habitat, and ecosystem within the action area. The Service believes there is a significant lack of information for this critical component of the BO, which will likely hamper our analysis.

The ESA requires that the action agency provide the best scientific and commercial data available concerning the impact of the proposed project on the listed species. Although significant mussel survey data exists, the Service believes that more holistic data regarding historical trends and ongoing alterations of habitat, water quality, hydrograph, watershed, and

land use are either lacking or not readily available to the Service. We believe that if additional data and information were developed and/or acquired, the Section 7 consultation will be expedited, and the probability of arriving at sound and accurate conclusions increases. In lieu of filling these data gaps, the Service will develop the BO with available information, but giving the benefit of any doubts to the species.

In order to ensure that issues related to data gathering and information availability and analysis do not impede the consultation process, the Service is requesting that the North Carolina Turnpike Authority (NCTA) and/or the FHWA fund an additional study within the Swift Creek watershed. This additional information would greatly assist in the development of the environmental baseline, effects analysis, jeopardy analysis, incidental take statement (if a no jeopardy opinion) and reasonable and prudent measures (if a no jeopardy opinion). We envision a three part study which focuses on the Swift Creek watershed from the Lake Benson dam downstream to its confluence with the Neuse River, but may include relevant data from upstream of the Lake Benson dam if needed (e.g. to fully evaluate stressors).

The study components include:

1. Provide an accounting (compliance/success) of existing conservation measures in the lower Swift Creek watershed. This would primarily be a "desktop" evaluation which documents conservation/mitigation measures adopted for past projects and following up to see if the measures were implemented and enforced. It would also document all other environmental protections emplaced through legislation and local ordinances.
2. Evaluate the effectiveness of existing conservation measures and environmental protections, with regard to the dwarf wedgemussel and other rare aquatic species. This portion of the study could incorporate a modified version of an existing local watershed planning process developed by the North Carolina Ecosystem Enhancement Program. It includes the following phases:
    a. Watershed characterization
        i. Review existing watershed data
        ii. Identify data gaps
        iii. Identify preliminary stressors
    b. Detailed assessment and modeling
        i. Conduct water quality monitoring and field assessments based upon identified data gaps
        ii. GIS data development
        iii. Stakeholder outreach
    c. Watershed management plan and project atlas
        i. Develop watershed recommendations to address identified stressors (projects, planning and zoning recommendations, etc.)
        ii. Develop project atlas that prioritizes projects based upon degree of functional improvement and project feasibility
3. Determine mussel population **and** habitat viability. This would determine if the dwarf wedgemussel population contains a sufficient number of reproducing adults to maintain genetic variability and annual recruitment adequate to maintain a stable population. This would also determine if aquatic habitat [both physical (e.g. substrate, hydrograph) and

chemical] is currently sufficient to support dwarf wedgemussels. It would determine whether the conditions are stable, declining, or improving by assessing historic habitat trends and projecting into the future what the habitat quality is likely to be (given future development pressures in the watershed).

The proposed study will require both qualitative and quantitative data collection, be part field-based and part academic in nature, involve multiple professional disciplines, and should lead to logically defensible conclusions. Although best professional judgment may be a component, emphasis should be placed on acquiring and analyzing empirical data. The information derived from this study can be used to enhance the quality of the BA and will be a critical component of the BO.

If the Service issues a "No Jeopardy" opinion, the action agency will be required to implement Reasonable and Prudent Measures (RPM) in order to minimize the level of take of the species. The information developed from the proposed study will help develop the RPM and the Terms and Conditions for implementing them. Depending upon the information and conclusions obtained, one possible RPM may involve captive propagation and augmentation/reintroduction of the species within the Swift Creek watershed. We will further address this issue if the study conclusions support it.

In addition to the aforementioned proposed study, the Service recommends that the NCTA and FHWA begin planning for the development of the BA, with special emphasis on the indirect and cumulative effects of the project. Please note that indirect effects and cumulative effects are defined differently in the ESA than from the National Environmental Policy Act. Under the ESA, indirect effects are defined as "those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur." Though indirect effects can take many forms, of greatest concern are road-induced secondary development and infrastructure with the accompanying degradation of water quality and increased sedimentation. Under the ESA, cumulative effects are defined as "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." Cumulative effects may be difficult to distinguish from indirect effects.

One additional consideration is that the Service has recently been petitioned to list several other aquatic species which occur within the Swift Creek watershed as threatened or endangered. Although the Service has not yet completed the process to determine whether the species warrant federal protection, it is a real possibility that one or more of these species could be listed prior to the construction of this project. If so, Section 7 consultation would be required for any newly listed species. This should be monitored closely and considered during the planning of this project.

Again, the Service is requesting that the NCTA and/or FHWA fund the aforementioned study. We understand that it is the action agency's prerogative to either provide for the additional study or not; however, the Service believes it is in the best interest of all parties to conduct the study and to initiate it as soon as possible in order to ensure timely completion of the consultation process. We believe that developing the BO without the additional information would be very

difficult and require us to give the benefit of a doubt to the conservation of the species. We would likely have to make several assumptions, which may not be favorable to the NCTA and FHWA.

We look forward to the scheduled March 14 meeting to discuss these issues. If you have any questions regarding this letter, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,

Pete Benjamin
Field Supervisor

cc: George Hoops, FHWA, Raleigh, NC
Eric Alsmeyer, USACE, Wake Forest, NC
Brian Wrenn, NCDWQ, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
Rob Nichols, NCWRC, Garner, NC
Chris Militscher, USEPA, Raleigh, NC
Judy Ratcliffe, NCNHP, Raleigh, NC

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

March 23, 2011

RECEIVED
MAR 24 2011
N.C. TURNPIKE AUTHORITY

Regulatory Division/1145b

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Steven D. DeWitt, P.E.
Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Mr. DeWitt:

Reference the proposed North Carolina Turnpike Authority project known as the Triangle Expressway Southeast Extension toll facility (STIP Nos. R-2721, R-2828, and R-2829), from NC 540 currently under construction at NC 55 in Holly Springs, to existing I-540 north of Poole Road and Clayton, in southern Wake and northeastern Johnston counties, North Carolina. Reference also my January 26, 2011 letter identifying an Issue of Concern regarding your proposal to eliminate the Red and Pink corridors as reasonable and feasible alternatives for further study. The Red and Pink Alternatives appear at this time to have significantly less impacts to the aquatic environment and to endangered species than the Orange Alternative; therefore, we believe eliminating these alternatives at this point, well before a draft NEPA document has been prepared, is premature and not warranted by the information we presently have.

After further review of the available information related to these alternatives, we have the following questions:

1) What is the relative quality of the wetlands and streams that may be impacted by the Red, Pink and Orange Alternatives? We do not believe it is necessary to provide a detailed functional analysis of each potential impact site but believe it is important to determine, on a qualitative basis, the relative difference, if any, that exists between the referenced alternatives.

2) What is the comparison between the wetland occurrences on the 1,000-foot Orange Alternative corridor, as predicted by the National Wetland Inventory (used in the current impact tables), and the delineated wetland occurrences on the same corridor that have been field-verified by the Corps of Engineers, to date?

3) Provide additional detail regarding the level of design that is associated with the "conceptual alternative alignment".

4) How was the "conceptual alternative alignment" for the 300-foot wide preliminary new location alternative corridors placed within the 1,000-foot study corridors (Reference the August 10, 2010 Turnpike Environmental Agency Coordination Meeting Handout #3, "Alternative Screening, Quantitative Second Tier Screening of Alternative Concepts", page 4, Section 2., SCREENING CRITERIA)? It is not clear to us whether the conceptual alternative alignment was placed in the center of the 1,000-foot corridor or if it was placed in such a manner that it avoided and/or minimized impacts to the human and natural environment.

5) What methodology did the NC TA employ to quantify the "Structures Relocated", as shown in the Summary of Potential Impacts in Table 2 of Handout #8 for the January 20, 2011 TEAC meeting (e.g., dates of aerial photography used, tax maps, windshield surveys, and assumptions made)?

6) We were recently made aware that an Alternatives Screening Report has been prepared but has not been provided to us for our review. We would appreciate receiving a copy of this report as soon as it is finalized as this may contain information we are not currently aware of.

We continue to support the development of the draft EIS for this project to allow for a fair and unbiased comparison of alternatives leading to a determination of the Least Environmentally Damaging Practicable Alternative for this project.

Should you have any questions, please call Mr. Alsmeyer at (919) 554-4884, extension 23.

Sincerely,

S. Kenneth Jolly
Chief, Regulatory Division

Copies Furnished:

Mr. Brian Wrenn
Division of Water Quality
North Carolina Department of
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Mr. Chris Lukasina
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Mr. Peter Sandbeck
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Town of Garner

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Ronnie S. Williams
MAYOR

October 6, 2011

Mr. David Joyner
Executive Director
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear David,

Thank you for the opportunity to discuss the proposed new 540/Triangle Expressway Southeast Extension turnpike with you and officials from CAMPO and NCDOT here at Garner Town Hall on August 31, 2011. It was an informative meeting.

As discussed in the meeting, the Town of Garner is not interested in the "red route" alignment of the proposed 540 roadway being studied, considered, or built. This is a well-documented position and viewpoint of the Town and we enjoy the support of the NC General Assembly in this viewpoint.

The Town believes that no further action on the part of NCDOT, NCTA, or CAMPO should be undertaken on the continuation of 540 in southern Wake County until an official response is received from the federal and state resource agencies that have jurisdiction in this matter. The Town believes that the alternatives report (with a summary of the work, research, and documentation completed so far) should be forwarded to the resource agencies and urges NCTA/NCDOT to complete that task if it has not yet been completed. We spoke briefly about this report via telephone call to NCTA Chief Engineer Steve DeWitt during the August 31, 2011 meeting and he indicated that the alternatives summary report was nearing completion.

The Town would also urge NCTA to formally reply to the six questions asked by Kenneth Jolly, Chief, Regulatory Division, US Army Corps of Engineers – Wilmington District in his letter dated March 23, 2011, if that has not already occurred. If it has occurred, we would be pleased to receive a copy of that reply and any response received from the USACE.

As you know, the Town is a proponent of the completion of the entire 540/Triangle Expressway for the good of the region and looks forward to the highway being constructed within the alignment of the orange route (i.e., the "protected corridor") in the near future. Indeed, the Town has been planning for the completion of 540 in the location of the protected corridor for more than a decade, and the zoning and land uses outlined in our approved land use plan are predicated on that location which was established in the 1990s. We cannot support or endorse any activity that involves study or construction of the "red route." That will destroy our community.

The Town will continue to monitor activities related to the proposed 540/Triangle Expressway Southeast Extension and we look forward to its successful advancement and completion within the protected corridor. Please send us a summary of recently-completed and expected activities related to the progress of the proposed 540 in southern Wake County at your earliest convenience, and please forward copies of the alternatives summary report and transmittal letter when they are completed and sent to the resource agencies. The Town would also be pleased to receive copies of response letters including those from FHWA, Corps of Engineers, EPA, and US Fish & Wildlife.

Thank you for your continued leadership of the NC Turnpike Authority and your ongoing willingness to hear the Town of Garner's views and concerns. I look forward to talking with you soon, and I offer you continued best wishes on the successful opening of the first segments of the Triangle Expressway Turnpike later this year and in 2012 in western Wake County.

Sincerely,

Ronnie S. Williams

Ronnie S. Williams
Mayor

cc: Terry Gibson, NCDOT
Ed Johnson, CAMPO
Steve DeWitt, NCTA
Joe Milazzo, RTA
Hardin Watkins, Town Manager
Brad Bass, Planning Director

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

February 17, 2012

Regulatory Division/1145b

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Steven D. DeWitt, P.E.
Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Dear Mr. DeWitt:

Reference the proposed North Carolina Turnpike Authority (NCTA) project known as the Triangle Expressway Southeast Extension toll facility (TIP Nos. R-2721, R-2828, and R-2829), from NC 540 currently under construction at NC 55 in Holly Springs, to existing I-540 north of Poole Road and Clayton, in southern Wake and northeastern Johnston Counties, North Carolina. Reference also my March 23, 2011 letter asking for additional information regarding alternatives; my meeting on December 20, 2011, with representatives of the North Carolina Department of Transportation, including the NCTA and its consultants, and of the Federal Highway Administration; and NCTA's submittal on January 9, 2012, of the revised Draft Alternatives Development and Analysis Report (DADAR), for the subject project.

We understand that Governor Perdue signed legislation (Senate Bill 165) on March 18, 2011, that restricted the study, planning, and development of the Triangle Expressway Southeast Extension from the area north of the protected corridor and west of Interstate 40 (the area of the Red and Pink Corridors). We believe that state law which restricts the consideration of reasonable and practicable alternatives does not preclude our requirement under the 404 (b)(1) Guidelines (40 CFR Part 230) to analyze and objectively compare alternatives for this or any project that requires a Clean Water Act permit. While we are sensitive to the potential impacts to communities, public recreation facilities, and an industrial park in the Town of Garner, associated with the Red Corridor, we believe that its elimination from further consideration compromises our ability to satisfy our statutory requirements under the Guidelines.

The DADAR recommends that the Orange to Red to Green Corridor not be included as a reasonable and practicable alternative for detailed study in the Draft Environmental Impact Statement (DEIS) because it has significant and disproportionate impacts on the human environment, has limited ability to meet traffic needs, and is not a feasible and prudent Alternative under Section 4(f) of the Department of Transportation Act of 1966.

Our permit program requires that we make a complete, thorough, and unbiased review of all factors associated with a proposed project within jurisdictional waters of the United States.

CESAD-RG/McLendon

A major component of the review is the consideration of reasonable and practicable alternatives, required by both the National Environmental Policy Act (NEPA) and the Clean Water Act 404 (b)(1) Guidelines (40 CFR Part 230). The 404 (b)(1) Guidelines require that the Corps can permit a project only if the applicant demonstrates that other alternatives are not practicable, available or less environmentally damaging. Practicable relates to cost, logistics or technology. As is FHWA, we are required to satisfy the provisions of NEPA which include the requirement to develop an EIS to examine all reasonable alternatives to the proposal, with reasonable alternatives including those that are practical or feasible from the technical and economic standpoint, rather than simply desirable from the standpoint of the applicant. Table 5-2 in the DADAR, Preliminary Alternatives – Summary of Potential Impacts, describes impacts to 43.7 acres of wetlands, and 29,770 linear feet of stream, for a 300- foot right-of-way for the end-to-end Orange to Red to Green Alternative that includes the Red Corridor, based on map data including the National Wetlands Inventory. This compares to impacts to 88.1 acre of wetlands and 36,110 linear feet of stream for the end-to-end Orange to Green Alternative. Furthermore, the US Fish and Wildlife Service has indicated that construction within the Orange Corridor would result in an adverse impact to the federally endangered dwarf wedge mussel (*Alasmidonta heterodon*) and that formal consultation will be required. Based on this information, the Orange to Red to Green Alternative appears to be a less environmentally damaging alternative and should be included as an alternative to be studied the Draft Environmental Impact Statement (DEIS). Nothing in our administrative record for this project indicates that the Orange to Red to Green Alternative is not practicable under the 404 (b) (1) Guidelines.

We are being asked to eliminate every alternative segment for a major portion of the corridor, with the exception of one, including the elimination of the least environmentally damaging alternative, prior to the release of a DEIS and before we, the agencies and the public have had an opportunity to conduct a side-by-side comparison of the one remaining segment alternative with the Red Corridor, with the usual level of data that is available after the DEIS, including detailed wetland delineation information, functional design, an analysis of the indirect and cumulative impacts, and additional data related to our twenty-one public interest review factors. Where we have previously elected to eliminate alternatives from further consideration prior to release of a DEIS, 1) the eliminated alternative clearly had unacceptable impacts to either the natural or human environment as compared to other alternatives under consideration, *and* 2) there was a sufficient number of remaining alternatives that encompassed a range of impacts to both the natural and human environment that the alternatives could be reasonably compared. Therefore, we believe it is premature to eliminate what we believe to be the environmentally preferable alternative from further consideration

We understand that FHWA has determined that several 4(f) properties may be impacted by the Red Corridor. Furthermore, we are also aware of the restriction that Section 4(f) of the Department of Transportation Act of 1966 places upon FHWA including a stipulation that FHWA cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of land, or the action includes all possible planning to minimize harm to the property resulting from use. While this may be a consideration utilized by FHWA in determining a preferred alternative, we do not concur that the Department of Transportation Act should be used to define a reasonable range of alternatives under NEPA, and believe that it

cannot be used to eliminate alternatives that should otherwise be considered under the Clean Water Act 404(b)(1) Guidelines. We continue to believe that in order for the EIS to satisfy our respective agencies' responsibilities, it should rigorously explore and objectively evaluate the Red corridor. For the reasons discussed above, if the NCTA elects to complete its NEPA analysis and release a DEIS without including the Orange to Red to Green Alternative as an alternative for detailed study, and the NCTA intends to pursue Department of the Army authorization for this project, we may find it necessary to terminate our cooperating agency status with the FHWA and supplement the FHWA EIS with our own document.

Should you have any questions, please call Mr. Alsmeyer at (919) 554-4884, extension 23.

Sincerely,

S. Kenneth Jolly
Chief, Regulatory Division
Wilmington District

Copies Furnished:

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Town of Garner

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March 7, 2012

Mr. Steve DeWitt, P.E., Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Re: Triangle Expressway Southeast Extension Alternatives Development & Analysis Report

Dear Mr. DeWitt:

This letter is to advise you of the Town of Garner's position regarding the Triangle Expressway Southeast Extension Alternatives Development & Analysis Report dated January 13, 2012.

The Town of Garner would like to reiterate the statements and concerns noted in: a) our letter dated October 20, 2010 addressing our initial concerns with the devastating human impacts of the red route; b) our Resolution (2010) 2072 dated October 4, 2010 supporting use of the original protected corridor design illustrated as orange on NCTA maps; and c) our letter dated January 9, 2012 detailing the significant negative impacts on numerous public parks in the Town of Garner.

As you know, the Garner community cannot withstand the negative consequences of construction and/or study of the red route. It is destructive to our community and the prospect of study brought our growth and economic development progress to a standstill during 2010.

While a devastating transportation option such as the red route is being actively and publicly studied, no home buyer is interested in buying a house (new or resale) in the road's path and no industry, bank, or developer is willing to invest in any project in or near the route's study area.

Since the NC General Assembly passed legislation on March 18, 2011 disallowing the NCTA to study any route north of the orange corridor, the following positive economic impacts have occurred in the Town of Garner:

Residential

- Sales resumed at the Village of Aversboro, one of the hottest residential projects in Wake County.
- This community has seen 15 house closings since March 18, 2011. Value of these residential sales totals $4,424,000.
- 7 additional home sales are currently pending (waiting to close or under construction).
- An additional 17 lots have been sold to builders by the developer for the next round of construction. This totals $1,190,000 in value.

Commercial/Industrial

- Strategic Behavioral Health, LLC of Memphis, Tennessee announced they would build a brand new facility in Garner.
- Their investment will total approximately $8 million. This project is currently under construction with a late 2012 opening date. The venture capital fund backing this project refused to allow the project to continue until the red route was removed.
- This new facility will employ 200 employees with an average wage of $50,000.
- Penske Truck Leasing Service Center had broken ground just prior to announcement of the red route as a study alternative going through their brand new site. Their corporate management in Pennsylvania was devastated to learn of the possible destruction of their brand new investment in NC.
- Their facility investment totals $3 million and 12 jobs.

Totals

The discontinuation of the study of the red route has resulted in **$16,614,000** in **new investment** in Garner and adds tremendously to our tax base. **212 permanent jobs** and numerous short-term construction jobs are created for the Research Triangle region.

All persons that have engaged in conversation about the red route agree that the red route is horribly detrimental to the Town of Garner and is not worthwhile for construction. Therefore, it seems to be extremely foolish to continue studying it. It is a waste of public dollars and creates irreparable harm to the entire Garner community; current residents, active residential developers, and industrial tenants (current and future) are severely harmed.

It is notable that CAMPO, the Capital Area Metropolitan Planning Organization, representing 18 area municipalities and 5 counties, completely agrees with and supports the Town's position and beliefs on this matter.

The Town is pleased with the Triangle Expressway Southeast Extension Alternatives Development & Analysis Report and commends the NCTA for taking the Garner community concerns to heart in its recent work.

The notable remarks about the **red route that were pleasing to the Town include the following:**

> From page 5-22: "Despite these advantages (mentioned in preceding paragraph) of the red corridor alternative, it is the opinion of NCTA that the numerous disadvantages of the Red Corridor Alternative are so extensive and significant that they outweigh this advantage."
>
> 6.5 pages of text follow outlining why the red corridor alternative is a bad idea. The headings are as follows: a) does not serve traffic needs; b) disproportionate community impacts; c) impacts to Swift Creek watershed area; d) impacts to Section 4-F applicable resources (town parks); e) negative impacts to local economic base; and f) opposed by local governments and local community.
>
> The report also discusses the 6 alternate routes proposed by Town of Garner and the one route suggested by Joe Milazzo of Regional Transportation Alliance (RTA) that follows existing I-40 & US 64.

From the Town's perspective, the bottom line is on page 5-38. The NCTA report identifies five alternatives for additional detailed study in the next phase – Draft Environmental Impact Statement (EIS). These are the options that NCTA plans to move forward with:

1. Orange to Green
2. Orange to Green to Mint Green to Green
3. Orange to Brown to Tan to Green
4. Orange to Brown to Green
5. Orange to Green to Teal to Brown to Green

The Town is extremely pleased that none of these alternatives say red or pink.

We are hopeful that our colleagues at the various state and federal resource agencies will see this matter the same way the citizens of Garner do. The human impacts are too severe to continue with any further study of the red route.

The Town understands that the federal regulatory officials continue to be concerned about wetland impacts. Of course the red route has less wetland impacts – it traverses and obliterates 13 residential neighborhoods, 4 Town parks, and our primary industrial park – Greenfield South. By definition, residential communities, active parks, and industrial areas are located on high ground outside of low-lying, swampy areas. A route through Downtown Raleigh would produce lower wetland impacts, but that is also an unwise option. It is doubtful that the original intent of NEPA was for all new highway routes to go through densely developed suburban or urban areas. If the amount of wetlands is the driving force for route selection decisions, then very few new routes will be built in less populated areas.

For the good of the Research Triangle Region, a vital and important economic engine for the State of North Carolina and the Southeastern United States, Highway 540, Raleigh's Southern Loop, needs to be constructed. Our region does not need to replicate the gridlock, traffic congestion, and associated problems of our neighbors in Atlanta and Washington, DC. Continuing to delay progress on Highway 540's designated route (orange protected corridor) from 15+ years ago is unwise and detrimental.

Thank you for your time and effort involved in preparing the recent Triangle Expressway Southeast Extension Alternatives Development & Analysis Report. Please contact me at 919-773-4407 if you have any questions or need additional information.

Sincerely,

Hardin Watkins

Hardin Watkins
Town Manager

WAKE COUNTY NORTH CAROLINA

Board of Commissioners
P.O. Box 550 • Raleigh, NC 27602

TEL 919 856 6160
FAX 919 856 5699

PAUL Y. COBLE, CHAIRMAN
PHIL MATTHEWS, VICE-CHAIR
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TONY GURLEY
ERVIN PORTMAN
BETTY LOU WARD
JAMES WEST

August 29, 2012

David W. Joyner, Executive Director
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

RE: Triangle Expressway Southeast Extension

Dear Mr. Joyner,

The Wake County Board of Commissioners received an update on the planning activities for the proposed Triangle Expressway Southeast Extension at their Board meeting on Monday August 20, 2012. This letter is to reaffirm the County's position on this project.

1. The County supports the original "orange" corridor in the area south of Garner as stated in the Board's resolution adopted on October 18, 2010.

2. The County supports the "green" corridor on the eastern side of the Triangle Expressway Southeast Extension as indicated in a letter from the Board of Commissioners to the Turnpike Authority on December 8, 2010.

3. The County requests that the selection of the final corridor be expedited as much as possible. As long as alternatives remain under consideration, residents, businesses, and property owners must deal with the uncertainty that can create a financial burden and psychological stress.

4. The County requests that all public input from past planning activities on this project, including comments, letters, petitions, emails or other, be entered into the record as the Turnpike Authority embarks on additional public workshops later this year.

If you need additional information or have any questions about the County's position, please feel free to contact me.

Sincerely,

Paul Y. Coble, Chairman
Wake County Board of Commissioners

cc: Richard Burr, United States Senator, North Carolina
Kay Hagan, United States Senator, North Carolina
Eugene A. Conti Jr., Chairman, North Carolina Turnpike Authority
Perry R. Safran, Vice-Chairman, North Carolina Turnpike Authority
Robert D. Teer Jr., North Carolina Turnpike Authority
Robert C. Clay, North Carolina Turnpike Authority
John Collett, North Carolina Turnpike Authority
James H. Ferebee, Jr., North Carolina Turnpike Authority
Anthony Fox, North Carolina Turnpike Authority
Thomas A. Stith III, North Carolina Turnpike Authority
Alan F. Swanstrom, North Carolina Turnpike Authority
David Cooke, County Manager, Wake County

U.S. Department of Transportation
Federal Highway Administration

FEDERAL HIGHWAY ADMINISTRATION
North Carolina Division
310 New Bern Avenue, Suite 410
Raleigh, NC 27601
HDA-NC

DEPARTMENT OF THE ARMY
Wilmington District, Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403-1343
Regulatory Division/1145b

December 7, 2012

Mr. Terry R. Gibson, P.E.
Chief Engineer
North Carolina Department of Transportation (NCDOT)
1536 Mail Service Center
Raleigh, NC 27699-1536

SUBJECT: Action ID 2009-02240; STIP Nos. R-2721, R-2828, and R-2829

Dear Mr. Gibson:

This letter is in regards to the North Carolina Session Law 2011-7 (N.C.S.L. 2011-7) and its impact on the Triangle Expressway Southeast Extension project proposed by the North Carolina Turnpike Authority (NCTA). The law, which was passed on March 18, 2011, states that the Triangle Expressway Southeast Extension project shall not be located north of an existing protected corridor established by the North Carolina Department of Transportation (NCDOT) in 1995, except in the area of Interstate 40 East. Consequently, the law restricts the location of alternative corridors prior to the engineering and environmental analysis required by the National Environmental Policy Act (NEPA) and other Federal laws. Based on this restriction, Federal Highway Administration (FHWA) found it imperative that the process to advance the project be fully supported and concurred with by all Federal agencies. In an effort to do this, a series of meetings and discussions were held with multiple stakeholders to resolve issues and advance the project. Through these meetings, the following concerns have been identified by the Army Corps of Engineers (Corps) and FHWA regarding the approach and its ability to successfully advance the project under the requirements of NEPA and Section 404 (b)(1) Guidelines (40 CFR Part 230).

The NCDOT and NCTA, in consultation with Dawson and Associates, developed a Project Advancement Plan which included a proposal to evaluate refinements to the project purpose to reflect input from public involvement [possibly including local plan support and financial viability as elements of the NEPA project purpose] and an evaluation of additional potential alternatives. Both the Corps and FHWA have concerns that, for this project, including local plan support as a primary NEPA project purpose may inappropriately limit the study of a full range of Detailed Study Alternatives. The Corps believes that it would not support their requirement

under the 404 (b)(1) Guidelines (40 CFR Part 230) to analyze and objectively compare alternatives for this project that requires a Clean Water Act permit.

In the evaluation of alternatives, the Corps continues to believe that in regards to streams and wetlands, the Orange to Red to Green Alternative appears to be a less environmentally damaging alternative and should be included as an alternative to be analyzed in the Draft Environmental Impact Statement (DEIS). Please note that, at this time, the Corps is not able to make a decision on the practicability of any of the alternatives. That decision will not be made until after the Corps has issued a public notice (following publication of the DEIS) seeking comments from the public, Federal, State and local agencies, including any consolidated state viewpoint or written position of the Governor, on the Detailed Study Alternatives and the factors that the Corps considers in our public interest decision. The decision will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest, and will reflect the national concern for both protection and utilization of important resources. Factors, including the cumulative effects thereof, which may be relevant to the proposal that will be considered include, but are not necessarily limited to community cohesion, relocations, impacts to existing and proposed business centers, recreation, including parks, historic properties (Section 4(f) issues), water supply and conservation, ecological conservation, economics, aesthetics, general environmental concerns, wetlands, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. The Corps evaluation process for this project is consistent with the review for all other transportation projects in North Carolina, and with Section 404 of the Clean Water Act, including the 404 (b)(1) Guidelines (40 CFR Part 230).

Therefore, in consideration of the concerns above, the Corps and the FHWA believe the project can no longer move forward with the Project Advancement Plan and satisfy all Federal environmental requirements in a concurrent manner. As a result, the FHWA will withdraw the Notice of Intent (NOI), meaning we will no longer continue to develop the environmental impact statement and federally fund the project. Our withdrawal does not prevent the project from being reinitiated in the future. NCDOT or other applicant/sponsors may restart the project at any time by requesting a new NOI with sufficient support that all constraints have been relieved to allow compliance with NEPA.

Should you have any questions, please call George Hoops of the FHWA at (919) 747-7001 or Eric Alsmeyer of the Corps at (919) 554-4884, extension 23.

Sincerely,

For John F. Sullivan, III, P.E.
Federal Highway Administration
Division Administrator

Sincerely,

Steven A. Baker
Colonel, U. S. Army
District Commander

Copies Furnished:

Mr. David Joyner
Executive Director
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Mr. Eric Midkiff
North Carolina Department of Transportation
Project Development and Environmental Analysis
1548 Mail Service Center
Raleigh, NC 27699-1548

Mr. Mitch Vakerics
Office of Congresswoman Renee Ellmers
1533 Longworth HOB
Washington, DC 20515

Mr. Rob Ridings
Division of Water Quality
Transportation Permitting Unit
North Carolina Department of
Environment and Natural Resources
1650 Mail Service Center
Raleigh, NC 27699-1650

Mr. Chris Lukasina
Capital Area Metropolitan Planning
Organization (CAMPO)
127 West Hargett Street, Ste. 800
Raleigh, NC 27601

Mr. Heinz Mueller
Chief, NEPA Program Office
Office of Policy and Management
US Environmental Protection Agency
61 Forsythe St., SW
Atlanta, GA 30303

Mr. Gary Jordan
US Fish and Wildlife Service
PO Box 33726
Raleigh, NC 27636

Mr. Travis W. Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
NC Wildlife Resources Commission
1718 Hwy 56 West
Creedmoor, NC 27522

Mr. Peter Sandbeck
NC State Historic Preservation Office
4619 Mail Service Center
Raleigh, NC 27699-4619

North Carolina General Assembly
House of Representatives

PAUL STAM
SPEAKER PRO TEMPORE

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DISTRICT: SOUTHERN WAKE COUNTY (37)

COMMITTEES:
APPROPRIATIONS, SUB. EDUCATION
EDUCATION
ELECTION LAW
FINANCE
JUDICIARY, SUB. B
REGULATORY REFORM
RULES

October 23, 2013

Secretary Anthony Tata
NC Department of Transportation
1501 Mail Service Center
Raleigh, NC 27699-1501

Re: Southeast Extension/540/Orange Route/Purple Route

Dear Mr. Secretary:

This is to provide comments for the official record of the Southeast Extension project for the completion of the 540 Outer Loop. I understand there are seventeen alternative route alignments being considered to determine the appropriate corridor for the 540 segment between Holly Springs and Knightdale.

A number of these alternative routes continue to cause significant stress to residents and business owners who may be impacted. I realize that the study of some alternatives is required by federal law and that commitments to fund the completion of the Outer Loop will be withdrawn without a thorough environmental assessment of identified potential routes.

Based on my study of all of the potential routes it is my considered opinion that the only feasible corridor would be the "orange corridor". This route has been protected from development since the mid-1990s and would result in the fewest number of dislocations of residents and businesses with significantly lower cost.

In order for this process to have the least negative impact on the affected property owners, it is my strong request that the study of the purple route be completed immediately. Property owners are in limbo until a final corridor is selected and they are entitled to relief from this uncertainty as quickly as possible. I would appreciate your full attention to the need for this study to be completed rapidly.

Thank you for your attention to my concerns. Please include this in your public comments.

Sincerely,

Rep. Paul Stam

North Carolina General Assembly
House of Representatives
State Legislative Building
Raleigh 27601-1096

November 12, 2013

Mr. Eric Midkiff, P.E.
NC Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Re: Complete 540 Project

Mr. Midkiff,

Please accept this letter as my official response in regards to the comment form due November 15, 2013 in regards to the proposed routes for the complete 540 project. Currently serving my third term in a district that includes parts of Garner and eastern Wake County, it is not an exaggeration to say that this project has been the single biggest source of constituent contact I have had in five years. I have literally received hundreds, if not a thousand emails and phone contacts in regard to this proposal. To the best of my recollection, not one person has been in favor of the Red Route proposal.

I have also been able to attend public meetings, both back in 2009, and again in October of this year. I thought the staff of DOT did an excellent job with the presentations and answering questions. At those meetings, I attempted to speak with citizens to find out which proposals they supported or opposed. It is clear to me that the full orange route (dropping purple, blue, and red) is the way most of the people that have contacted me have felt. On the eastern portion, I have gotten little feedback on the green vs. brown vs. tan alternatives. I also live near this area and want to be sure not to base my comments based only on my opinion. It appears to me that DOT should weigh the impact of the routes on the Sherriff's training center and the wastewater treatment much higher than the route that would impact the development planned by the County and City. After all, this route was on the map before the City and County purchased the site.

Finally, it is my understanding that the Red Route was originally proposed due to the potential environmental impact of the Orange Route. As I am sure you are aware, a similar environmental issue was present during the design and construction of the Clayton bypass. Since completion, I believe the environmental mitigation of that project has been deemed successful. It is my sincere hope, that similar mitigations will allow construction of the original Orange Route, so not to greatly impact the residents of this district. I hope the department will expend whatever resources are necessary in an expedited manner, so that we can get this dreaded Red Route removed from consideration once and for all.

With kindest personal regards, I am

Very truly yours,

Representative Darren G. Jackson,
North Carolina House of Representatives, 39th District
Wake County Legislative Delegation

DGJ: asm

53091

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OFFICE OF THE SECRETARY

North Carolina General Assembly
House of Representatives

REPRESENTATIVE NELSON DOLLAR
36TH DISTRICT

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CARY, NORTH CAROLINA 27512

COMMITTEES:

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FINANCE, VICE-CHAIR
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INSURANCE
TRANSPORTATION
PUBLIC UTILITIES
REGULATORY REFORM
UNC BOARD OF GOVERNORS NOMINATING COMMITTEE

November 12, 2013

Secretary Anthony Tata
NC Department of Transportation
1501 Mail Service Center
Raleigh, NC 27699-1501

Dear Secretary Tata:

As you know, NC 540 is the largest transportation project ever attempted by the State of North Carolina, with a price tag in excess of $2 billion. Approximately half of the project has been completed as a toll road between the Research Triangle Park and Holly Springs; however, the other half of the project remains to be built linking I-40 east of Garner to the current terminus at NC 55. We support the "Orange route" as the only suitable corridor for completion of this project.

The corridor for the "southern expressway" has been protected for over twenty years with land owners and municipalities planning and building in coordination with the designated "Orange route." As a result, numerous subdivisions, schools, shopping areas, and parks have been built with the protected 540 corridor in mind. Our constituents in Southern Wake County are practically unanimous in their strong opposition to the construction of any route other than the Orange route.

Alternative routes including the Red, Blue, Purple and Lilac would each dramatically impact the lives of hundreds of families and homeowners. Many local businesses would be harmed or placed out of business, jobs would be lost, as well as, the loss of prime business development property. Some routes would also adversely affect parks and properties of historic significance. The tax bases of the Towns of Garner, Holly Spring and Fuquay Varina would be negatively impacted. In short, the human impacts would be considerable, long lasting, and for far too many of our residents, simply devastating.

We believe any potential environmental concerns along the orange route can be mitigated as they have on similar projects across the State.

We appreciate the many events NCDOT has hosted to take in public input; having attended several events, we know your staff has heard loud and clear the voice of the people on this issue. It is our hope that this process can be concluded as rapidly as possible, given the significant impacts being experienced by home and business owners in the study area.

We thank you in advance for including these comments in the public record.

Sincerely,

Rep. Nelson Dollar

Sen. Tamara Barringer

THE TOWN OF
Holly
Springs

November 12, 2013

Eric Midkiff, PE
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

Re: Complete I540 Southeast Extension
Town of Holly Springs Comments

Dear Eric,

Thank you for meeting with us several times and for providing information that we have requested on this project. We have attached a spreadsheet of the Town of Holly Springs' comments for the alternative alignments that are presently out for public comment. These comments support the position that we have previously expressed in our meetings and conversations with you, and in our Town Council's recent resolution as well – that Holly Springs supports the orange (originally protected) corridor.

Regards,

Stephanie L. Sudano, PE
Director of Engineering

SLS/dra

cc: Mayor Sears
Chuck Simmons, Town Manager
Gina Clapp, AICP, Director of Planning & Zoning
Correspondence 13660

P.O. Box 8
128 S. Main Street
Holly Springs, N.C. 27540
www.hollyspringsnc.us

(919) 552-6221

TOWN OF

Holly Springs

Resolution No.: 13-42
Date Adopted: Oct. 1, 2013

RESOLUTION STATING THE TOWN OF HOLLY SPRINGS TOWN COUNCIL'S SUPPORT REGARDING THE ALIGNMENT OF THE SOUTH EAST EXTENSION OF I-540

WHEREAS, the Holly Springs Town Council is expressing its fervent support for the construction of the I-540 Triangle Expressway Southeast Extension; and

WHEREAS, the proposed I-540 Triangle Expressway Southeast Extension has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Holly Springs and other local governments of southwestern Wake County; and

WHERAS, the Town of Holly Springs historically has utilized the protected I-540 corridor proposed in earlier designs to plan for both existing and future development in Town; and

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Holly Springs hereby expresses its support of the original protected corridor design as illustrated in orange on N.C. Transit Authority maps for the construction of the I-540 Triangle Expressway Southeast Extension; and

Adopted this, the 1st day of October, 2013.

ATTEST:

Dick Sears, Mayor

[X] Joni Powell, MMC, NCCMC Town Clerk
[ ] Linda R. Harper, MMC, NCCMC Deputy Town Clerk

Office *of* the Mayor
128 S. Main Street • P.O. Box 8 • Holly Springs, NC 27540 • (919) 557-3901 • (919) 552-0654 *fax*
dick.sears@hollyspringsnc.us • www.hollyspringsnc.us

	Comment
	ORANGE CORRIDOR
1	Orange corridor is a much more direct routh for commuters travelling across Wake County from west to east or visa versa.
2.	Corridor has been preserved by the Town since 1997 NCDOT request for Corridor Protection....the corridor protection guidelines have been carefully and stringently followed by the Town to make expense and impact of acquisition and construction less expensive.
3.	Some of the ROW for the facility has already been acquired, and we believe this is of great benefit.
4.	This corridor is consistent with all of the Town's long range plans developed over the past 15 years (since corridor protection began), including: Comprehensive Plan Vision 2010, Long Range Water Master Plan, Long Range Sewer Master Plan, Long Range Reclaimed Master Plan, Holly Springs Pedestrian Transportation Plan, Long Range Greenway Plan, Long Range Bicycle Plan
5.	Town wants to insure that Kildaire Farm Road, which is a major access road, ties into interchange or nearby to preserve full access northward
6	Town has carefully planned and minimized the needed greenway/pedestrian/bike and vehicular connections through this corridor by carefully guiding development of adjacent lands. All of the infrastructure (transportation and other) that has been planned and installed to support these minimal number of crossings would no longer function as designed and infill of the preserved corridor would likely be awkward to develop. This careful planning will reduce construction costs and environmental impacts along this corridor.
7	This corridor and the proposed interchange at Kildaire Farm Road is consistent with the Town's long range planning efforts and locations for activity nodes, development densities, roadway design, and infrastructure to meet the demands of a highway interchange and location. Because Holly Springs is a relatively small town with limited growth potential due to the limiting feature of Progress Energy Lands to the west, the impact of the other corridors on the Town as a whole is proportionally very great. The impact of the orange corridor has been well planned to complement the Town as a whole.
8	Development of the roadway in this corridor complements the past planning and investment (and proposed too) by the Town in this area of water , sewer, and transportation infrastructures
9	The Town believes this corridor alignment has the least environmental impact, based upon our knowledge of the Town; the crossing of Middle Creek is essentially perpendicular which is desired as this is a major stream with a very large drainage basin.
10	This corridor would not impact or require the removal and/or displacement of many homes (maybe none) in Holly Springs
11	Town plans have long centered around this corridor, and the Town has directed development in a manner to make the construction of this through Town minimally invasive to our community. This has been achieved by planning transportation connections to complement I540 at this location and to link property on both sides with connections.
12	This corridor essential runs between Apex and Holly Springs - almost along the municipal boundaries - we see this as a plus as it does not divide a community like at least one of the other proposed corridors.
13	The long range transportation plans - developed carefully and collaboratively by the Town, the county, the MPO, NCDOT, and other municipalities over the past 15 years - have guided development and row dedication of roads to support the orange corridor.
14	This corridor is under corridor protection and development approvals and building permit requests continue to be handled under the corridor protection act, increasing the desirability of this corridor as it is protected
15	This corridor has greater ridership projections

	Comment
	ORANGE CORRIDOR
16	This corridor does not bisect any parks
17	The orange corridor is more direct of a route for people traversing through Wake County from west to east.
18	The orange corridor provides for a much better and more direct interchange further east at I40.
18	Construction cost for this corridor is less than the purple corridor, as it is shorter.

	Comment
	PURPLE CORRIDOR
1	Will impact/eliminate Town parkland south of Sunset Oaks Subdivision, plus planned walking trails and other passive recreation along Middle Creek which is a major water feature and environmental treasure in south Wake County. The park will be eligible for partf funding/classification. The park and trails are covered in numerous Town master plans over the past 10 to 15 years.
2	The long range transportation plans for both the municipality and the county have guided development and row dedication of roads and at intersections to support the current orange alignment - NOT needed intersection road improvements for the orange route.
3	Conflicts with ALL of the Town's long range plans developed over the past 15 years (since corridor protection began), including: Comprehensive Plan Vision 2010, Long Range Water Master Plan, Long Range Sewer Master Plan, Long Range Reclaimed Master Plan, Holly Springs Pedestrian Transportation Plan, Long Range Greenway Plan, Long Range Bicycle Plan, Long Range Park Plans.
4	This corridor would require relocation/elimination of many homes and the possible division of many neighborhoods; in Holly Springs' jurisdiction only is Sunset Oaks ; In addition, there are many other homes not in subdivisions that would be impacted. This is a very negative consequence of this alignment especially when the orange corridor has been protected from development and impacts less homes.
5	The long range transportation plans and land use plans - developed carefully and collaboratively by the Town, the county, the MPO, NCDOT, and other municipalities over the past 15 years - have guided development that would be supported by orange corridor - not the purple corridor
6	This corridor, while on the books, both delays development of properties (this is problematic especially in the recent and continuing unsteady economic climate) AND delays the ability of individuals who happen to own homes in the corridor and need to sell their homes; we would like to encourage quick and expeditious elimination of alternatives in order to alleviate these two scenarios.
7	This alignment would severely impact both vehicular (including bus) and pedestrian transportation to 3 public schools that some Holly Springs children attend in south Cary. The main transportation route to these schools is down Optimist Farm Road which is being bisected by this route.
6	Town has worked hard to created connectivity between neighborhoods - vehicular, bicycle, and pedestrian - through planning and infrastructure construction; this corridor negatively impacts one of the significant neighborhoods that has been planned and developed carefully to create the neighborhood atmosphere that is the Town's goal.
9	Parallels Middle Creek closely, and crosses Middle Creek a total of 3 times. This is a very important protected stream/water feature with a large watershed; paralleling streams has very negative environmental consequences and may be impossible to get a permit.
10	This corridor is not under corridor protection and development approvals and building permits continue to be processed, increasing the undesirability of this corridor as well as the resulting impact of construction in this corridor
11	Plan as shown does not provide transportation connectivity along Optimist Farm Road which is a major transportation route in an area of SW Wake county that is limited in its primary route connectivity.
12	Divides the town and makes provision of trash, police, fire, medical, and other services more difficult and expensive.

	Comment
	PURPLE CORRIDOR
14	Purple Corridor has less ridership projected.
15	This alignment is brand new and there has been no preservation or buffer protection for the neighborhoods that have been developed in the area of the corridor. Neighborhoods nearby the orange corridor have been required to preserve buffers outside the corridor.

53094

WAKE COUNTY NORTH CAROLINA

Planning, Development & Inspections

TEL (PLANNING) 919 856 6310
TEL (INSPECTIONS) 919 856 6222

A Division of Community Services
P.O. Box 550 • Raleigh, NC 27602
www.wakegov.com

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OFFICE OF THE SECRETARY

November 12, 2013

Mr. Tony Tata, Secretary
NC Department of Transportation
1501 Mail Service Center
Raleigh, NC 27699-1501

RE: I-540 Triangle Expressway Southeast Extension

Dear Secretary Tata,

On behalf of the Wake County Planning, Development and Inspections Division, I want to take this opportunity to express our position on the corridors being considered for the I-540 Triangle Expressway Southeast Extension. Our position mirrors the action taken by the Wake County Board of Commissioners in their October 21, 2013 Resolution whereby support is expressed for the protected "orange" corridor west of I-40 and the "green" corridor east of I-40.

For many years now, Wake County Planning, in collaboration with our municipal partners, has established short and long range urban service areas around the protected 'orange' corridor. These urban service areas are captured in the Wake County Land Use Plan that guides growth as it relates to residential and non-residential development. To be specific, the protected "orange" corridor has played a key role in identifying areas for non-residential development in what are called Activity Centers. These Activity Centers have been designated in key locations along the protected 'orange' corridor and in some instances are already developing according to plan.

The "green" corridor east of I-40, although not protected but on planning maps for some time now, has also been used by the County to make key planning decisions for both existing and future development.

Please take this information into consideration when evaluating the corridors for the new expressway. Should you have any questions, please don't hesitate to contact me. I can be reached at 919-856-6678 or tmaloney@wakegov.com.

Sincerely,

Timothy W. Maloney, RLA, ASLA
Director

cc: Richard W. Hancock, NCDOT Project Development & Environmental Analysis

WAKE COUNTY NORTH CAROLINA

Parks, Recreation & Open Space

TEL 919 664 7967
FAX 919 856 6181

Wake County Office Building 10th Floor
337 S. Salisbury Street
PO Box 550, Suite 1000
Raleigh, NC 27602
http://www.wakegov.com/county/parks/default.htm

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OFFICE OF THE SECRETARY

November 12, 2013

Mr. Tony Tata
North Carolina Department of Transportation
1501 Mail Service Center
Raleigh, North Carolina 27699-1501

Dear Secretary Tata;

On behalf of the Wake County Division of Parks, Recreation and Open Space, I'd like to take this opportunity to provide input on the proposed routes for the Triangle Expressway's Southeast Extension, specifically to support the protected "orange" corridor west of I-40 and the "green" corridor east of I-40.

Since 2000, the citizens of Wake County have approved $91 million on bond referenda that has gone to purchase property that is devoted to the 1. preservation of natural resources and habitat; 2. managed production of resources (forest and farm land); 3. outdoor recreation; 4. preservation of historic and cultural property; 5. protection of scenic landscapes; and 6. protection of public health, safety and welfare, including the protection of water quality.

In 2003, the Wake County Board of Commissioners formally identified priority stream corridors to protect valuable water resources. In 2008, the Board of Commissioners revisited this issue and at the time reaffirmed the County's intent to protect 11 priority stream corridors. More recently, on October 21, 2013, the Board of Commissioners unanimously passed a resolution endorsing the protected corridor (Orange route) and the planned corridor (Green route) as the preferred choice for the development and construction of the Triangle Expressway Southeast Extension.

Of Wake County's 11 priority stream corridors, two corridors would be negatively impacted by the Purple, Blue and Red alternative routes.

- Middle Creek would be impacted twice if a route is selected using a combination of the Purple and Blue alternatives.
- Middle Creek would be impacted once if a route is selected using only the Blue alternative.

- The priority stream corridor section of Swift Creek (between Lake Wheeler and Lake Benson) would be impacted by the Red alternative.
- The currently protected corridor (Orange route) does not cross Swift Creek in an area identified by Wake County as a priority stream corridor, nor does the Orange route impact Middle Creek.

An additional significant concern that Wake County would like to address is the impact the Blue alternative will have on the County's Southeast Wake County Park. The County has been working to develop this park for the past decade and it is one of three planned parks (in combination with the eight existing parks) that the County is creating to meet the long term needs of the community.

Within the Southeast County Park lie the Middle Creek Aquatic Habitat and the scenic bluffs along Middle Creek that rise 90 feet above the creek, a Natural Heritage site of local significance. Wake County has already invested over $2 million to acquire 258 acres of land to support this park plan. Additionally, Wake County has also placed Clean Water Management Trust Fund easements over portions of this land. The proposed Blue alternative would impact the proposed park site and possibly result in Wake County abandoning its plans to develop this park.

It is our sincere desire that the Triangle Expressway Southeast Extension remain in the protected corridor (Orange route).

If you would like to receive additional information or if you have any questions, please feel free to contact me via telephone at (919) 856-6677 or via email at csnow@wakegov.com.

Many thanks for your consideration.

Sincerely,

Christopher Snow
Director,
Wake County Parks, Recreation, and Open Space

cc: Richard W. Hancock, NCDOT Project Development & Environmental Analysis

APPENDIX J
RESPONSE TO COMMENTS ON THE DRAFT EIS

ORGANIZATION OF APPENDIX J

J1. Agency Comment Letters

J2. Local Government Comment Letters

J3. Interest Group Letters

J4. Public Comments Made During the Draft EIS Review Period / Public Hearings

APPENDIX J1
AGENCY COMMENTS AND RESPONSES

Following publication of the Draft EIS, NCDOT received formal review comments from several federal and state agencies. Comments addressed a number of topics, including potential impacts to protected species, water quality impacts, and impacts to wetlands and streams. Copies of each of these comments are on the following pages of this Appendix. For tracking purposes, each comment letter was assigned a document number—this number has been placed in the upper right corner of each comment letter. The table below lists each agency that submitted comments, the document number assigned to that agency's comments, and the date of the comments. On each comment letter, the individual comment topics are noted with numbered brackets. A comment response table follows each comment letter. The comment response table lists each bracketed topic number, along with a summary of the comment, and the project team's response to the comment.

Document Number	Agency	Date
a001	US Department of the Interior Fish and Wildlife Service (USFWS)	11/25/15
a002	US Environmental Protection Agency Region 4 (EPA)	1/4/16
a003	US Department of Commerce NOAA - National Marine Fisheries Service (NMFS)	12/15/15
a004	US Department of Agriculture Natural Resources Conservation Service (NRCS)	12/17/15
a005	US Department of the Interior Office of Environmental Policy and Compliance	12/31/15
a006	NC Department of Environmental Quality (NCDEQ)	12/17/15
a007	NC Wildlife Resources Commission (NCWRC)	12/9/15
a008	NCDEQ – Division of Waste Management Solid Waste Section	12/10/15
a009	NCDEQ – Division of Waste Management Hazardous Waste Section	12/11/15
a010	NCDEQ – Division of Waste Management Superfund Section	12/7/15
a011	NCDEQ – Division of Water Resources (DWR)	12/7/15

United States Department of the Interior

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Raleigh Field Office
Post Office Box 33726
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November 25, 2015

Richard W. Hancock, PE
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

This letter is in response to your November 13, 2015 letter which requested comments from the U.S. Fish and Wildlife Service (Service) on the Federal Draft Environmental Impact Statement (DEIS) for the Complete 540 Triangle Expressway Southeast Extension in Wake and Johnston Counties, North Carolina (TIP Nos. R-2721, R-2828, R-2829). These comments are provided in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

The North Carolina Department of Transportation (NCDOT) and Federal Highway Administration (FHWA) propose to build a new, limited-access highway from NC 55 in Apex to US 64/US 264 Bypass (I-495) in Knightdale – a distance of approximately 27 miles. The Complete 540 project would complete the I-540 outer loop that currently exists on the north and west sides of Raleigh.

General Comments

1 Overall, the project will have very substantial impacts on fish and wildlife resources, including impacts to streams, wetlands, upland forest and other habitat types. These impacts will be in the form of direct loss of habitat and habitat fragmentation effects on remaining habitat. Although these habitats are already fragmented by suburban development and other land uses in the project area, additional cumulative habitat fragmentation effects will occur. In addition, indirect habitat loss is expected due to secondary development induced by the new road facility.

Comments on the Dwarf Wedgemussel

2 In previous correspondence and during the Service's participation in interagency meetings, the Service has frequently stated its concern regarding the likely adverse effects of the project on the federally endangered dwarf wedgemussel (DWM, *Alasmidonta heterodon*) within the Swift Creek watershed (Neuse River basin). It is anticipated that the FHWA, as the lead federal action agency, will initiate formal Section 7 consultation by submitting to the Service an initiation package which includes a Biological Assessment (BA). In return, the Service will conduct an analysis to determine if the project will jeopardize the continued existence of the DWM and

issue a Biological Opinion (BO). Since there was a significant lack of information needed to develop the Environmental Baseline portions of the BA and BO, the NCDOT and FHWA agreed to fund additional studies within the Swift Creek watershed to fill in the information gaps.

The Service has reviewed the "Dwarf Wedgemussel Viability Study: Phase 1" report and found the information to be very helpful and well presented. The information provided addresses some of the critical information needs we have. However, we understand this information to be an interim report of tasks completed thus far, with subsequent tasks and analysis to be provided at a later date in Phase 2. Conclusive answers to questions regarding the viability of the DWM and its habitat in the Swift Creek watershed are yet forthcoming.

In order to avoid a Jeopardy BO, the action agency must not "engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." In order for the Service to ultimately recover the DWM, the 1993 Dwarf Wedgemussel Recovery Plan requires, among other criteria, that a viable population (i.e. a population containing a sufficient number of reproducing adults to maintain genetic variability and annual recruitment adequate to maintain a stable population) occur in Swift Creek. Therefore, maintaining such a population in the post-project Swift Creek watershed is vitally important. We cannot understate the significance of this issue.

Since the DWM was first discovered in Swift Creek in 1991, rapid development within the watershed below the Lake Benson Dam has severely impacted the DWM. Mussel survey data from this timeframe shows a declining catch per unit effort (CPUE), implying a declining population. Although preliminary indicators of the long-term viability of the DWM in Swift Creek are mixed, one positive note is the evidence of recent reproduction. However, it is unclear whether this reproduction is sufficient to maintain population viability.

A North Carolina DWM work group has concluded that population augmentation through captive propagation is an essential component of management strategies to ensure DWM persistence in North Carolina (Smith et al. 2015). This is especially true with the population in Swift Creek where the Allee effect (high risk of demographic extirpation due to low population abundance and lack of dispersal) is one of the major limiting factors of population viability.

Though much of the technical and procedural knowledge for propagating DWM has previously been developed (Beck and Neves 2001), the Service and our partners lack a dedicated facility and staff to conduct DWM propagation on a large scale. As stated on page 95 of the DEIS, targeted efforts to propagate the DWM and augment the existing population in Swift Creek could improve the chances of maintaining the species' viability in the watershed. As a project conservation measure, the Service recommends that the NCDOT and FHWA provide assistance in developing a dedicated captive propagation facility in order to produce DWMs for augmenting the declining population within Swift Creek. The ability, or the lack thereof, to propagate DWMs and augment the population in Swift Creek will factor significantly in our analysis to determine whether the Complete 540 project will jeopardize the continued existence of the species.

3

Comments on Alternatives

4 Detailed study alternatives that include the Red Corridor segment clearly have the lowest impacts on wetlands and streams. The Red Corridor would have the least direct and indirect effects on the DWM and its habitat since it crosses Swift Creek upstream of Lake Benson – outside the known range of the species in the watershed. However, the Service acknowledges and understands the intense opposition to the Red Corridor segment due to its disproportionate impacts on the human environment.

Detailed study alternatives that include the Orange Corridor segment, being the protected corridor with right-of-way purchases made many years ago prior to any comprehensive environmental analysis, greatly minimize impacts to the human environment. However, the Orange Corridor segment has great potential to adversely affect the DWM since it crosses Swift Creek, tributaries to Swift Creek, and a significant portion of the watershed all downstream of Lake Benson – within the known occupied range of the species. The Orange Corridor segment connects to I-40 at a particularly unfavorable location for the DWM. This location puts the interchanges with I-40 and US 70 Bypass on top of several tributaries to Swift Creek and also is in close proximity to the Swift Creek main stem. The DWM is at risk from direct effects associated with construction of the project (e.g. erosion and siltation from construction) and from indirect effects associated with the degradation of water quality from secondary development induced by the new road. Increased impervious surface and storm water runoff from additional development would likely further degrade the water quality of Swift Creek and its tributaries. Also, other proposed projects within the study area such as the proposed widening of I-40 (TIP No. I-5111) and bridge replacements on Swift Creek could cumulatively contribute to a decline in habitat quality for the DWM. The Service finds the Orange Corridor very problematic.

Detailed study alternatives that include the Lilac Corridor segment would have very similar, albeit somewhat lesser adverse effects on the DWM. These somewhat lesser effects would be due to the fact that the interchange with I-40 would be farther removed from Swift Creek and its tributaries.

Other Species

5 The DEIS renders a biological conclusion of "no effect" for the federally endangered red-cockaded woodpecker (*Picoides borealis*) and Michaux's sumac (*Rhus michauxii*). Based on the survey results, the Service concurs with these "no effect" conclusions. The DEIS renders a "May Affect, Likely to Adversely Affect" conclusion for the northern long-eared bat (*Myotis septentrionalis*). As stated in the DEIS, formal Section 7 consultation has already been completed for this species through a Programmatic Biological Opinion adopted on May 4, 2015. As stated in the DEIS, Section 7 is yet unresolved for the DWM and Tar River spinymussel (*Elliptio steinstansana*). However, the Service believes that the project is unlikely to have adverse effects on the Tar River spinymussel.

6

7 There is a possibility that up to three additional mussel species may be listed as federally endangered or threatened prior to the completion of the Complete 540 project – the Atlantic pigtoe (*Fusconaia masoni*), yellow lance (*Elliptio lanceolata*), and green floater (*Lasmigona subviridis*). Conclusions and recommendations for the dwarf wedgemussel may be relevant to these additional species. In addition, the Carolina madtom (*Noturus furiosus,* a fish species) and

the Neuse River waterdog (*Necturus lewisi,* an amphibian) may also be federally listed as threatened or endangered prior to the completion of the project.

Other Miscellaneous Comments

8 Page 29 states "...the dwarf wedgemussel...could be directly affected by the proposed project." While true, the Service believes that indirect effects from road-induced development are the greater concern.

9 Page 97 incorrectly states "An incidental take is when a non-federal activity will result in the loss, or "take" of a threatened or endangered animal." As per 50 CFR 17.3, an incidental take is "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For the purposes of Section 7, this would only include federal activities. For Section 10 of the ESA, incidental take would only include non-federal activities.

10 The Clemmons Educational State Forest is referenced several times in the DEIS. The Service prefers that this forest not be impacted. At only 825 acres, this state forest is relatively small and already exists in a fragmented context. Even small impacts to this forest could substantially degrade the wildlife habitat value of this public land.

The Service believes that this DEIS and its accompanying technical reports adequately address the existing fish and wildlife resources, the waters and wetlands of the United States, and the potential impacts of this proposed project on these resources. The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,

Gary Jordan

for Pete Benjamin
Field Supervisor

Literature cited:

Beck, K.M. and R.J. Neves. 2001. Propagation studies of the endangered dwarf wedgemussel. Final Report to the North Carolina Department of Transportation, Raleigh, NC. 63 pp.

Smith, D.R., S.E. McRae, T. Augspurger, J.A. Ratcliffe, R.B. Nichols, C.B. Eads, T. Savidge, and A.E. Bogan. 2015. Developing a conservation strategy to maximize persistence of an endangered freshwater mussel species while considering management effectiveness and cost. Freshwater Science 34(4):000-000.

Electronic copy provided to:

Eric Alsmeyer, USACE, Wake Forest, NC
Cynthia Van Der Wiele, USEPA, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
George Hoops, FHWA, Raleigh, NC
Donnie Brew, FHWA, Raleigh, NC
Neil Medlin, NCDOT, Raleigh, NC
Eric Midkiff, NCDOT, Raleigh, NC
Rob Ridings, NCDWR, Raleigh, NC

USFWS Letter – 11/25/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Habitat Loss/ Fragmentation	Project will result in direct, indirect, and cumulative habitat loss and fragmentation.	Continued coordination has been and will be held during the remainder of the NEPA process with NCWRC and USFWS concerning wildlife corridors. During past coordination meetings with these agencies prior to the Draft EIS, areas of wildlife connectivity concerns were identified and bridge limits were established to permit this connectivity. This coordination has continued during the development of the preferred alternative and the Final EIS. Quantitative studies of the indirect and cumulative effects of the project have been completed and are summarized in Chapter 4 of the Final EIS.
2	Dwarf Wedgemussel	USFWS is concerned about the project's potential effects on long-term viability of the Dwarf Wedgemussel (DWM) and needs to see additional study results to make an assessment of species viability.	A DWM viability study was completed after publication of the Draft EIS. The results of the study are documented in the *Dwarf Wedgemussel Viability Study* report released in May 2016 and summarized in Chapter 4 of the Final EIS. The study report was provided to USFWS.
3	Dwarf Wedgemussel	Ability to propagate DWM will factor into USFWS analysis of the project's effects on DWM.	Comment noted. NCDOT and FHWA have continued coordination with USFWS to address this issue. The Biological Assessment, summarized in Chapter 4 of the Final EIS, details several conservation measures NCDOT will use to help offset the effects of the project on the DWM, including development of a mussel propagation laboratory at Yates Mill Pond.
4	Alternatives	Detailed Study Alternatives (DSAs) including Red Corridor would have the lowest impacts on wetlands and streams and the least effects on DWM. USFWS is concerned about the potential of DSAs crossing Swift Creek downstream of Lake Benson to affect DWM. However, the Service Acknowledges and understands the intense opposition to the Red Corridor due to its disproportionate impacts on the human environment.	USFWS's preferences have been noted in the *Preferred Alternative Report*.
5	Effects on Other Species	USFWS concurs with Draft EIS "no effect" conclusions for red-cockaded woodpecker and Michaux's sumac.	Comment noted; more information about Michaux's Sumac is in the Biological Assessment and is summarized in Chapter 4 of the Final EIS.
6	Tar River Spinymussel	USFWS believes that the project is unlikely to have adverse effects on the Tar River spinymussel.	As noted in the Biological Assessment and summarized in Chapter 4 of the Final EIS, the Biological Conclusion for the Tar River spinymussel is No Effect.
7	Other Aquatic Species	Conclusions and recommendations for the DWM may be relevant to Atlantic Pigtoe, Yellow Lance, and Green Floater mussel species, which may be listed prior to completion of the project. The Carolina Madtom and Neuse River Waterdog may also be listed prior to completion of the project.	The Yellow Lance has since been proposed for listing as threatened under the Endangered Species Act. This mussel species is addressed in the Biological Assessment and is summarized in Chapter 4 of the Final EIS. NCDOT and FHWA will continue to monitor the listing status of the other species and enter into consultation for them if and when it is appropriate.
8	Editorial	Page 29 of the Draft EIS states "…the Dwarf Wedgemussel…could be directly affected by the proposed project." USFWS believes that indirect effects from road-induced development are the greater concern.	This is noted in the Draft EIS errata as presented in the Final EIS.
9	Editorial	Page 97 incorrectly defines "incidental take."	This is noted in the Draft EIS errata as presented in the Final EIS.

Comment Number	Primary Topic	Paraphrased Comment	Response
10	Clemmons State Forest	USFWS would prefer that the project avoid the Clemmons Educational State Forest.	The preferred alternative for the project avoids the Clemmons Educational State Forest.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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JAN 04 2016

Mr. Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Re: Federal Draft Environmental Impact Statement (DEIS) and Draft §4(f) Evaluation for the Complete 540 [Triangle Expressway Southeast Extension] Project, Wake and Johnston Counties, North Carolina; ERP No.: FHW-E40852-NC; CEQ No.: 20150323; NC Department of Transportation (NCDOT) TIP Project Nos.: R-2721, R-2828, and R-2829

Dear Mr. Hancock:

The U.S. Environmental Protection Agency 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). The NEPA process provides decision-makers the type and quality of information needed to make informed decisions about where and how to implement the subject project, or whether to proceed with the project at all. The Complete 540 Federal Draft Environmental Impact Statement (DEIS) proposes an approximately 27-mile, 4-lane divided, limited-access toll highway originating at NC 55 in Apex, North Carolina and connecting to US 64/US 264 Bypass (I-495) in Knightdale, North Carolina.

Although this project is not included in the NCDOT's NEPA/§404 Merger process, the EPA staff has been an active participant in the MAP-21 §6002 coordination plan for the proposed project, including purpose and need, detailed study alternatives to be carried forward and alignment review.

The Complete 540 DEIS represents a novel approach to creating a streamlined, reader-friendly document. The EPA welcomes innovative approaches to describe and discuss the proposed actions in a concise and straightforward manner. The primary function of a DEIS is to explain how decisions about the project were made and to convey the information that was used to inform those decisions. Numerous technical reports were cited and linked within the DEIS. However, the information from these reports such as the findings, conclusions, and/or recommendations, which are essential in conveying the basis for decision making, were not included. Thus, the EPA rated the DEIS as 'Environmental Concerns' (EC-2), indicating that our review identified environmental impacts within the project study area that should be avoided in order to fully protect the environment. The '2' rating indicates that the DEIS document does not

1

1 contain adequate information in order to sufficiently assess all of the environmental impacts and allowing the EPA to be able to identify an environmentally-preferred alternative.

2 Climate change could have potential effects on transportation infrastructure. We recommend that the NCDOT, in concert with the Federal Highway Administration (FHWA), incorporate scenarios from the National Climate Assessment (NCA), released by the U.S. Global Change Resource Program[1] as a prediction of how climate change may impact this particular transportation facility. Based on future scenarios, it may be appropriate to incorporate resiliency features to withstand more frequent and/or more intense storm events as well as the impact of temperature extremes on pavement and infrastructure.

Specific technical review comments on the DEIS are enclosed to this letter (See enclosure).The EPA recommends that all of the technical comments in the enclosure be addressed in the Final EIS (FEIS). Additionally, we also recommend that all impacts to the human and natural environment that have not been disclosed in the DEIS or covered in the FEIS 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 NCDOT Interagency Team 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. We appreciate the opportunity to comment on the proposed Complete 540 project.

Sincerely,

G. Alan Farmer
Director
Resource Conservation and Restoration Division

Enclosure

cc: John F. Sullivan, III, P.E, FHWA- NC
Eric Alsmeyer, USACE Raleigh Field Office
Gary Jordan, USFWS Raleigh Field Office
Rob Ridings, NCDEQ, DWR
Travis Wilson, NCWRC

[1] http://nca2014.globalchange.gov/

ENCLOSURE

Draft Environmental Impact Statement
Complete 540 (Triangle Expressway Southeast Extension) Project
Wake and Johnston County
ERP No.: FHW- E40852-NC; CEQ No.: 20150323

Potential Impacts from the Proposed Project

The Complete 540 Project assesses 17 Detailed Study Alternatives (DSAs), consisting of 1000-foot corridors on new location—ranging from 25.2 to 32.0 miles in length. Residential relocations range from 234 (DSA 4) to 550 (DSA 9) and business relocations range from 8 (DSA 3 & 4) to 16 (DSAs 8 – 12). Agri-businesses impacted by the project range from none (DSAs 1, 5-7, 13, and 17) to 3 (DSAs 9 – 11), with losses in prime farmland soils ranging from 1,949 acres (DSA 7) to 2,332 acres (DSA 12). The Clean Water Act Section 404 impacts range from 51,582 (DSA 7) to 78,087 linear feet (DSA 10) of streams; 51.4 acres (DSA 7) to 75.6 acres (DSA 1) of wetlands; and 49.0 to 103.4 acres of 100-year floodplains. Cultural resource impacts include up to 2 National Register of Historic Places (NHRP)-listed sites with adverse effects (DSAs 6 and 7) and up to 27.2 acres of impacts to Department of Transportation Act of 1966 §4(f) public parks and recreation facilities. The impacts of this project on floodways, the 500-year floodplain, terrestrial forests, unique farmlands, soils/minerals, greenhouse gases and climate change, community cohesion, future local and regional land use plans, and on Environmental Justice (EJ) communities is unclear. See Comparative Evaluation Matrix on pages 107-109 of the Draft Environmental Impact Statement (DEIS).

3

Summary
The DEIS did not include an 'Executive Summary' section.

USEPA Recommendation: An Executive Summary section is used to succinctly and accurately summarize the EIS including the purpose and need, major conclusions—particularly the environmental impacts of all alternatives (e.g., a table of impacts), areas of controversy, issues raised by agencies and the public, issues to be resolved, and the choice among alternatives and identification of a preferred alternative (CEQ reference 40 CFR §1502.12). It is recommended that an executive summary and table of all key natural and human resource impacts be included in the Final Environmental Impact Statement (FEIS).

4

Study Overview
Chapter 1 provided an overview and history of the proposed project, including a useful graphic of the project location, and an overview of National Environmental Policy Act (NEPA).

USEPA Comment: The study overview chapter is useful for public outreach in explaining the project context.

Project Purpose and Need

Two primary purposes of the Complete 540 project were established: 1) *improve mobility* within or through the study area during peak travel periods, and 2) *reduce forecast[ed] congestion on the existing roadway network* within the project study area.

The needs for the proposed project include: 1) *more route choices* and 2) *congestion on the existing roadway network*.

The Capital Area Metropolitan Planning Organization (CAMPO) notes that the "*Triangle is one of the nation's most sprawling regions…a key challenge is to match our vision for how our communities should grow with the transportation investments to support this growth*" (p. 14 emphasized in red bold). The USEPA supports the principles of sustainable community development[2].

5 ***USEPA Comment:*** The transportation agencies might wish to consider the potential indirect and cumulative effects from the various alternatives in the identification of a preferred alternative and the potential negative environmental consequences of 'sprawl'.

The Study Area and Its Features

This chapter aims to describe the information collected by the study team.

USEPA Recommendations: The DEIS chapter on the affected environment should concisely describe the human and natural environment of the area to be affected by the DSAs under consideration. This chapter should concentrate future planning and documentation effort and attention on important environmental issues, particularly the presence or absence of significant human and natural resources.

6 The Land Use and Population Characteristics section of the DEIS provides a substantial narrative on suburban development and limited information on community characteristics. The findings, conclusions, and recommendations of the *Community Impact Assessment* (CIA, June 2015) technical report were not included in the DEIS. The CIA and the DEIS both do not provide sufficient information pertaining to the existing land use and demographics. Of primary concern to the USEPA regards not including the six (6) demographic indicators for identifying EJ communities[3] (i.e., minority, low-income populations, over 65 years old, under 5 years old, less than a high school education, and linguistically-isolated populations). A summary and/or graphic of EJ populations within the detailed study area should be included in order to be able to fully understand the demographic characteristics within the study area. Additionally, the DEIS also did not include a description, findings, or summary of the study area population's use and consumption of environmental resources, neighborhoods, or reference existing or future land use plans. The CIA report, however, substantiates the fact that while the project itself does not conflict with any local land use plans or with any of the jurisdictions' desired development patterns, each particular DSA would have potentially negative effects on local land use plans and planning objectives (CIA, page E-5).

[2] See Guiding Principles, http://www.epa.gov/smartgrowth/hud-dot-epa-partnership-sustainable-communities#Livability_Principles.

[3] See: http://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen

7 Tables listing park and recreation facilities, historic properties and districts, and other significant public or semi-public land uses/buildings located within the study area are a useful way of summarizing information in a succinct manner.

8 The Economic Characteristics section of the DEIS does not provide specificity with regards to median income levels within the study area (i.e., does not include percentages or figures but uses the terms "somewhat higher" or "smaller percentage" and does not identify specific block groups). Similarly, the Racial/Ethnic Percentages section does not provide sufficient information regarding census block groups or concentrations of communities of concern. It is unclear whether there are significant block groups of EJ communities of concern as there was no discussion of this in the chapter. As such, the USEPA is unable to make a determination at this time regarding which DSA would have the least impact to EJ communities. The USEPA suggests that the transportation agencies consider utilizing the 'EJ Screening and Mapping' tool at: http://www.epa.gov/ejscreen for the FEIS.

9 The project study area includes 445 jurisdictional streams and 543 jurisdictional wetlands. The DEIS Water Resources section did not include any tabular information summarizing stream or wetlands findings (e.g., NC Stream Assessment Method (NC SAM) and NC Wetland Assessment Method (NC WAM) ratings, water quality class, etc.), or other data regarding the quality and integrity of these systems. Some of this data, however, can be found in the *Waters Report* (September 2014). The USEPA recommends that detailed information on jurisdictional resources be included and presented in a comparative form based upon the DSAs in the FEIS.

10 The DEIS section on Protected Species describes several species that are located within central and/or eastern North Carolina. However, it was unclear as to whether or not there are species of concern present located within the project study area. The referenced *Natural Resources Technical Report* provides some additional detail. The USEPA requests that a summary of key protected species and the potential effects based upon the DSAs be included in the FEIS.

11 This chapter also lacked cross-cutting NEPA information regarding: floodplains (E.O. 11988; 10 CFR Part 1022); natural resources (e.g., timber, soils, minerals, fish, wildlife, etc.; Council on Environmental Quality regulations at 40 CFR §1508.8); prime/unique farmland (Farmland Protection Policy Act of 1981: 7 USC §4201); and migratory birds (Responsibilities of Federal Agencies to Protect Migratory Birds, E.O. 13186). The USEPA requests that the transportation agencies include this information in the FEIS and also make it available to resource and permitting agencies during the Interagency Coordination Team meetings.

12 **Detailed Study Alternatives**

The DEIS Selection of a Build Alternative was based on several key factors: logical termini/independent utility, roadway design criteria/typical sections, and study alternatives for each section. The range of build alternatives was reduced to seventeen (17) 1,000-foot wide DSA corridors which are comprised of various combinations of 10 discrete color-coded corridor segments. A substantial portion of the "Orange Corridor" segment was established through right-of-way acquisitions by the NCDOT as a protected corridor for the project in the mid-1990s, in order to protect it from large-scale development. This pre-NEPA action could be regarded as

being pre-decisional based upon the information provided in the DEIS. The Orange Corridor crosses a portion of the Swift Creek watershed that provides habitat for the federally-protected Dwarf wedgemussel (*Alasmidonta heterodon*) and has more wetland impacts than the other corridors under consideration.

13 ***USEPA Recommendations:*** Color maps of each of the 17 DSAs were included in the DEIS but did not provide the length (mileage) of each alternative. A table of each DSA and how each one compares to the project's purpose and need would facilitate comparison of the alternatives (CEQ reference §1502.14). Although the DEIS describes the color-coded segments, information on each DSA is not provided. Consequently, this makes it difficult for the USEPA to fully assess each alternative in a comparable fashion.

14 From the information provided, DSAs 6 and 7 appear to *most closely* meet the Complete 540's 'Purpose and Need' as these alternatives best facilitate the ability to provide other route choices due to their proximity to other major highways within the existing network (thus, alleviating congestion on existing roadways). DSAs 6 and 7 would be the most viable 'jumping on/off points' to the majority of commuters within the study area. The USEPA notes that these alternatives include the "Red Corridor" segment. NC General Assembly Session Laws 2013-94 and 2013-183 removed previous restrictions on considering this segment as reasonable and feasible alternatives that meet the Complete 540's 'Purpose and Need'.

Additionally, the USEPA also finds that DSAs 8 – 17 as being very problematic as these alternatives are the most distant from existing road networks and would be less able to meet the 'Purpose and Need' as stated (i.e., increase mobility and reduce congestion on the existing roadway network as a commuter would have to drive substantially further to access the Interstate 540 toll facility). Furthermore, DSAs 8 – 17 would have the most potential induce low-density development in an area that is currently rural/agricultural and have the highest impacts on habitat connectivity, §404 jurisdictional streams and wetlands, threatened/endangered species, farmlands, and residential relocations.

15 Because all of the 17 DSAs for the Complete 540 project are entirely on new location the USEPA advises that wildlife 'hotspot' areas be fully identified in the FEIS. Furthermore, the USEPA encourages additional collaboration with the NC Wildlife Resources Commission (NCWRC) and the U.S. Fish & Wildlife Service (USFWS) to design appropriate underpasses and/or overpasses to reduce large mammal mortality with vehicle collisions, and increase safety and reliability.

Expected Effects of Each Alternative

This chapter aims to describe the DSAs and the resulting direct and indirect impacts on the human and natural environment. The graphics provided facilitate understanding of relocation impacts and neighborhood effects.

16 ***USEPA Recommendations:*** The DEIS describes the process for determining the effects and discusses impacts in a general sense, but does not explicitly discuss direct or indirect impacts on:

- future land use and transportation planning

- commercial corridors and nodes
- police, fire, and emergency services (e.g. response times)
- relocations in terms of securing affordable housing; mobility, and access
- community effects (i.e., high benefit from project versus high burden)

With the exception of some EJ issues, most of the impacts of the Complete 540 project can be located within the technical reports provided on a compact disc (CD). The main findings, conclusions, and recommendations from these technical reports would be beneficial to include in the FEIS.

17 Cultural Resources and Public Facilities: The USEPA encourages the transportation agencies to continue coordination efforts to avoid and minimize impacts to parks and recreational facilities and historic properties.

18 Noise: The USEPA understands that a more detailed review of specific noise barrier locations will be performed during the final design process. The USEPA encourages the transportation agencies to consider the design and implementation of evergreen roadside vegetation in locations that do not meet the threshold for noise barriers. The use of vegetative roadside screening ameliorates noise impact issues, visual quality impacts, as well as provides some potential beneficial effects for downwind vehicle emissions from near-roadway air pollutants.

19 Jurisdictional Resources: Impacts to floodways or the 500-year floodplain were not included in the DEIS. Floodways and floodplains are vital to reducing the likelihood of localized flooding during storm events, particularly as the study area continues to urbanize. The USEPA environmentally prefers bridges to culverts at major hydraulic crossings. The USEPA encourages engineering designs that incorporates resiliency strategies into the Complete 540 project to mitigate the likelihood of flooding in low-lying, flood-prone areas in addition to the identified FEMA 100-year floodplain. Such a design will ensure that the project's 'Purpose and Need' is met with regard to a robust, reliable transportation system as well as potentially mitigate for extreme weather events that are anticipated to increase as a result of climate change.

20 The USEPA environmentally prefers DSAs 6 and 7 as the alternatives as having the least impacts to jurisdictional streams and wetlands based upon the information from the DEIS. DSAs 1 – 4 and 8 – 17 have the highest stream impacts while DSAs 1 – 5 and 15 - 17 have the highest wetland impacts. Further avoidance and minimization during final design should be considered in order to reduce impacts to aquatic resources. The USEPA has environmental concerns about the potential impacts from some of the DSAs with respect to the Swift Creek Watershed critical area and streams and wetlands that have higher quality ratings using the NC SAM and the NC WAM methods, respectively.

21 Protected Species: The USEPA encourages further collaboration with the USFWS and the NCWRC during final design to avoid and minimize impacts to threatened and endangered species. There is potential for adverse biological effects as a result of the proposed Complete 540 project. Several recent studies have examined the use of bridges and culverts as [day and night]

bat roosting habitat[4]. The structural design of bridges and culverts with regard to the Northern long-eared bat (*Myotis septentrionalis*) might be considered during final design as a way to benefit and/or promote recovery of the species within the project study area.

22 Climate Change Adaption: The DEIS did not address climate change/greenhouse gas emissions. We recommend considering climate adaption measures based on how future climate scenarios may impact the proposed project in the FEIS. The National Climate Assessment (NCA) contains scenarios for regions and sectors, including transportation. Using the NCA or other peer review-reviewed climate scenarios to inform alternatives analysis and possible changes to the proposal can improve resilience and preparedness for climate change. Changing climate conditions can affect a proposed project as well as the project's ability to meet the designated purpose and need. For additional information, the transportation agencies may wish to refer to: https://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf

[4] See: http://www.icoet.net/downloads/99paper21.pdf

US Environmental Protection Agency Region 4 – 1/4/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Draft EIS Format	Draft EIS does not have adequate information for EPA to sufficiently assess impacts.	As noted clearly in the Draft EIS, under the reader-friendly EIS format, the findings, conclusions, and recommendations from all of the supporting technical reports are summarized in the Draft EIS, not repeated in detail. The supporting technical reports should be consulted to review the detailed information. The findings, conclusions, and recommendations that EPA asserts are not included in the Draft EIS are documented in Chapter 5 of the Draft EIS. Coordination with the agencies under the Section 6002 Coordination Plan has continued following publication of the Draft EIS. No agency, including EPA raised any issues of concern relative to the selection of the preferred alternative.
2	Impacts Analysis	Draft EIS should assess how climate change could affect 540. Resiliency features to withstand more frequent or intense storm events and greater temperature extremes may be appropriate.	Comment noted. On April 5, 2017, the Council on Environmental Quality (CEQ) rescinded its guidance on greenhouse gas emissions and climate change. Consistent with FHWA policy, greenhouse gas emissions and climate change were not included in the Final EIS.
3	Impacts Analysis	Potential impacts of the project DSAs on several environmental resources (500-year floodplain, terrestrial forests, unique farmlands, soils/minerals, greenhouse gases and climate change, community cohesion, future land use plans, and Environmental Justice communities) is unclear.	As noted in the project's *Preferred Alternative Report*, issued after publication of the Draft EIS, potential impacts on these environmental resources are included and addressed in the Draft EIS. In addition, NCDOT technical staff have been available to provide clarification on these topics at subsequent interagency meetings. Neither "floodways" nor the "500-year floodplain" are included in any applicable Executive Order or regulation, and neither has been raised as an issue that will affect project decision making by any agency or the public. Other than farmland soils, no other soils/minerals are included in any applicable Executive Order or regulation, and these have not been raised as an issue that will affect project decision making by any agency or the public. For this reason, these are not included in the Draft EIS. Climate change is addressed in the response to comment #2 and environmental justice is addressed in the response to comments #6 and #8.
4	Draft EIS Format	Draft EIS should have included an Executive Summary.	Under the reader-friendly format, the Draft EIS itself is, in essence, an executive summary of the items EPA mentions in its comments. The Final EIS does include a summary at the beginning of the document and a table in Chapter 4 of the Final EIS summarizing the potential impacts of the preferred alternative.
5	Indirect and Cumulative Effects	Indirect and cumulative effects should be considered in selection of a preferred alternative.	As documented in the Draft EIS, a qualitative analysis of the potential indirect and cumulative effects of the DSAs was completed. The results of this analysis were considered in selection of the preferred alternative. Quantitative studies of the indirect and cumulative effects of the project have been completed and are summarized in Chapter 4 of the Final EIS. Results of the quantitative studies have been consistent with the results of the qualitative studies.
6	Human Environment	Insufficient information about existing land use, demographics, and environmental justice was presented in the Draft EIS.	Pages 74 and 75 in the Draft EIS report a summary of potential effects to communities meeting the criteria for environmental justice consideration. The *Community Impact Assessment* fully documents the community demographics within the project study area. FHWA and NCDOT consider the methods used to identify potential environmental justice communities to be sufficient for comparison between Detailed Study Alternatives.

Comment Number	Primary Topic	Paraphrased Comment	Response
7	Section 4(f)	Should include tables of impacts to parks, recreation sites, historic sites, etc.	Tables and narrative descriptions of this information are included in the Draft EIS on pages 75-80.
8	Human Environment	Insufficient information about income and race/ethnicity was presented in the Draft EIS.	Pages 74 and 75 in the Draft EIS include a summary of potential effects to communities meeting the criteria for environmental justice consideration. The *Community Impact Assessment* fully documents the community demographics within the project study area. FHWA and NCDOT consider the methods used to identify potential environmental justice communities to be sufficient for comparison between Detailed Study Alternatives.
9	Natural Environment	Insufficient information about jurisdictional resources was presented in the Draft EIS.	This information is included in sufficient detail for a reader-friendly Draft EIS. Details about all of the information mentioned in the comment are available in the *Natural Resources Technical Report* and/or *Waters* Report that were included on a DVD attached to the Draft EIS and available on the project website. The impact data included in the Final EIS is also included in sufficient detail for the reader-friendly format.
10	Protected Species	Insufficient information about presence of protected species was presented in the Draft EIS.	As described in the response to comment #9, this information is included in sufficient detail for a reader-friendly Draft EIS. The appropriate additional details are available in the *Natural Resources Technical Report*, incorporated by reference.
11	Natural Environment	Insufficient information about other natural and physical resources, including floodplains, timber, soils, minerals, fish, wildlife, prime/unique farmland, and migratory birds, was presented in the Draft EIS.	As described in the response to comment #9, this information is included in sufficient detail for a reader-friendly Draft EIS. Additional details about some of the topics mentioned in the comment are available in the associated technical reports, including the *Community Impact Assessment* and *Natural Resources Technical Report*.
12	Alternatives	Orange Corridor may appear to have been predetermined.	NCDOT followed the State's Transportation Corridor Official Map Act in establishing the protected corridor for the project. No Federal or State law was violated by establishment of the protected corridor. In developing, analyzing and evaluating the project alternatives, NCDOT considered a range of alternatives in addition to the Orange Corridor (protected corridor), subjecting the Orange Corridor to the same process as the other alternatives.
13	Alternatives	Insufficient information about DSAs was presented in the Draft EIS.	FHWA and NCDOT consider the information included about the DSAs in the Draft EIS to be sufficient for meaningful comparison of alternatives. The Comparative Evaluation Matrix beginning on page 107 lists the length of each alternative. Because all the DSAs are new location highway alternatives, they all meet the purpose of the project, as described in Chapter 2 of the Draft EIS.

Comment Number	Primary Topic	Paraphrased Comment	Response
14	Alternatives	EPA believes that DSAs 6 and 7 would best meet the project purpose and need and that DSAs 8-17 would least be able to meet the project purpose and need.	EPA's opinion has been noted on page 16 of the *Preferred Alternative Report*, produced after the Draft EIS. While DSAs 6 and 7, which use the Red Corridor, would generally avoid DWM habitat and have the smallest impact on streams, they are the only alternatives that would directly affect the Swift Creek Critical Watershed Area, (regulated to protect drinking water). DSAs 6 and 7 would also affect four sites subject to Section 4(f) and two sites eligible for the National Register of Historic Places. Based on the Draft EIS and the comments on the Draft EIS, NCDOT and FHWA in collaboration with their agency partners identified the preferred alternative (DSA 2) for the project in accordance with the Section 6002 coordination plan for this project. This plan affords each agency the opportunity to raise issues of concern that would inhibit or delay the issuance of permits for the project. No agency, including EPA raised any issues of concern relative to the selection of the preferred alternative.
15	Wildlife	EPA suggests wildlife hotspot areas be identified in the Final EIS and collaboration with USFWS/NCWRC to incorporate wildlife crossings into the project.	Continued coordination has been and will be held during the remainder of the NEPA process with NCWRC and USFWS concerning wildlife corridors. During past coordination meetings with these agencies prior to the Draft EIS, areas of wildlife connectivity concerns were identified and bridge limits were established to permit this connectivity. This coordination has continued during the development of the preferred alternative and the Final EIS. The wildlife hotspot analysis referenced in EPA's comment was completed for R-2544/2545. That level of analysis is not applicable to the Complete 540 project because, unlike R-2544/2545, surrounding lands are not gamelands/wildlife refuges. Also, the protected species that the agencies have indicated have notable potential to be affected by the Complete 540 project are aquatic species, which are not able to use wildlife crossings on roadways.
16	Human Environment	Insufficient information about direct or indirect impacts on various human environmental resources, including future land use and transportation planning, commercial areas, emergency services, relocations (in terms of securing affordable replacement housing, mobility and access), and other community effects, was presented in the Draft EIS.	As described in previous responses, this information is included in sufficient detail for a reader-friendly Draft EIS. Additional details about the information mentioned in the comment are available in the *Community Impact Assessment*.
17	Human Environment	EPA encourages continued efforts to avoid and minimize impacts to parks, recreational facilities, and historic properties.	NCDOT has sought and will continue to seek ways to minimize the project's effects on these resources. An Interagency Meeting was held on July 12, 2017, to summarize the minimization strategies that have been incorporated into the project.
18	Project Design	EPA encourages use of roadside vegetation in areas not warranting noise barriers.	Comment noted. Please note that vegetation is not an effective measure for reducing traffic noise and is not an allowable abatement measure by FHWA. Any installed vegetation would be for visual screening purposes only.

Comment Number	Primary Topic	Paraphrased Comment	Response
19	Natural Environment	Insufficient information regarding impacts to floodways and the 500-year floodplain were presented in the Draft EIS. EPA encourages incorporation of resiliency strategies to mitigate the likelihood of flooding.	See response to comment #3. Design-related comment to increase resiliency noted.
20	Alternatives	EPA environmentally prefers DSAs 6 and 7.	EPA's opinion has been noted in the *Preferred Alternative Report*. Otherwise see response to comment #14.
21	Natural Environment	EPA encourages further collaboration with USFWS and NCWRC to avoid/minimize impacts to threatened and endangered species.	NCDOT and FHWA have worked collaboratively with USFWS to minimize impacts to threatened and endangered species and satisfy the requirements of the Endangered Species Act. The Biological Assessment, summarized in Chapter 4 of the Final EIS, details several conservation measures NCDOT proposes to use to help offset the effects of the project on protected species.
22	Impacts Analysis	Draft EIS should assess how climate change could affect 540.	See response to comment #2.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

December 15, 2015 F/SER47: KH/pw

(Sent via Electronic Mail)

Col. Kevin P. Landers, Commander
U.S. Army Corps of Engineers, Wilmington District
69 Darlington Avenue
Wilmington, North Carolina 28403-1398

Attention: Eric Alsmeyer

Dear Colonel Landers:

NOAA's National Marine Fisheries Service (NMFS) reviewed the public notice for Action ID # SAW-2009-02240[1], dated November 16, 2015. The North Carolina Department of Transportation (NCDOT) is examining alternatives for the Triangle Expressway Southeast Extension – Complete 540 in Wake and Johnston Counties. The Wilmington District is soliciting comments on seventeen (17) alignment alternatives evaluated in a Draft Environmental Impact Statement (DEIS) prepared by the Federal Highway Administration (FHWA), dated November 2, 2015. The proposed expressway is not within areas designated essential fish habitat, and the NMFS offers no comments under the authorities of the Magnuson-Stevens Fishery Conservation and Management Act. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the NMFS provides the following comments and recommendations pursuant to authorities of the Fish and Wildlife Coordination Act.

The NCDOT proposes to complete the outer loop around the greater Raleigh area in Wake and Johnston Counties by connecting the existing NC 540 toll road at NC 55 in Apex to the existing I-540 at the US 64/US 264 Bypass (I-495) in Knightdale, a distance of approximately 27 miles. The proposed project, called the "Triangle Expressway Southeast Extension – Complete 540," would have six travel lanes divided by a 70-foot-wide median, which is consistent with the built portions of NC 540 and I-540. The Triangle Expressway Southeast Extension would be within the Neuse River Basin.

1 All of the expressway alternatives presented would cross the Neuse River and most would cross Swift Creek. The Neuse River and Swift Creek include spawning, foraging, or migration habitat for American shad (*Alosa sapidissima*), striped bass (*Morone saxatilis*), and American eel (*Anguilla rostrata*). Anthropogenic impacts, including noise disturbance, sediment and toxicant input into streams and rivers, and direct physical injury, are threats to these fish and their habitats. These impacts can directly affect individuals and spawning aggregations as well as permanently eliminate nursery, foraging, and spawning areas. At the ecosystem level, the loss of freshwater wetlands can adversely affect water quality as this habitat filters pollutants and facilitates transport of organic material and impacts to streams can permanently eliminate habitats used by aquatic organisms.

2 Within the 17 Detailed Study Alternative (DSA), the number of wetland impacts ranges from 111 to 161, the acreage of wetland impacts ranges from 51.4 to 75.6 acres, the number of stream crossings ranges from 106 to 142, and the length of the stream crossings ranges from 51,582 to 78,087 linear feet. All of

[1] The NCDOT 2016-2025 State Transportation Improvement Program (STIP) as project numbers for the work are R-2721, R-2828, and R-2829.

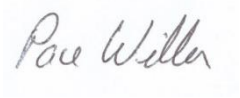
2 the alternatives presented would require seasonal, in-water work moratoria and other restrictions to avoid and minimize potential impacts to diadromous fish and their habitat.

3 The NMFS prefers DSA No. 6 or No. 7 because these alignments avoid impacts to shad and striped bass and their habitats in Swift Creek. DSAs No. 6 and No. 7 cross Swift Creek upstream of Lake Benson and the Lake Benson Dam, which represents the upstream limit of these fish in Swift Creek. The NMFS also prefers these alternatives because of the smaller impacts to the Neuse River compared to the other 15 DSAs. Additionally, DSAs No. 6 and No. 7 would impact the fewest wetlands (113 and 111, respectively), least wetland acres (52.0 and 51.4 acres, respectively), fewest streams (109 and 106 crossings, respectively), and fewest stream linear feet (53,014 and 51,582 linear feet, respectively).

In summary, all of the expressway alternatives presented would temporarily and permanently impact streams, wetlands, and open water ponds and would alter or eliminate the functions of these habitats. Selection of DSA No. 6 or No. 7 would avoid and minimize impacts diadromous fish habitat due to the comparatively small impacts to streams, wetlands, ponds, and the Neuse River and the potential avoidance of impacts to shad and striped bass and their habitat in Swift Creek. The NMFS recommends DSA No. 6 or No. 7 as the Least Environmentally Damaging Practicable Alternative (LEDPA).

The NMFS appreciates the opportunity to provide these comments. Please direct related questions or comments to the attention of Keith M. Hanson at our Charleston Area Office, 219 Fort Johnson Road, Charleston, South Carolina 29412-9110, Keith.Hanson@noaa.gov or by phone at (843)762-8622.

Sincerely,



/ for

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc: COE, Eric.C.Alsmeyer@usace.army.mil
EPA, Vanderwiele.Cynthia@epa.gov
FWS, Gary.Jordan@fws.gov
NCWRC, Travis.Wilson@ncwildlife.org
F/SER4, David.Dale@noaa.gov
F/SER47, Fritz.Rhode@noaa.gov, Keith.Hanson@noaa.gov

NMFS Letter – 12/15/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Aquatic Species	All DSAs have the potential to affect aquatic species.	Comment noted. FHWA and NCDOT have selected DSA 2 as the preferred alternative and have continued design work to either avoid or minimize impacts to water bodies and freshwater wetlands
2	Aquatic Species	All DSAs would require seasonal, in-water work moratoria and other restrictions to avoid and minimize potential impacts to diadromous fish and their habitat.	Comment noted.
3	Alternatives	NMFS prefers DSAs 6 and 7 because they have the potential to avoid/minimize impacts fish species and impact the fewest wetlands, least wetland acres, fewest streams and fewest linear feet of streams.	NMFS's preferences have been noted in the *Preferred Alternative Report*. In accordance with the Section 6002 coordination process developed for this project, FHWA and NCDOT have identified DSA 2 as the preferred alternative and continue efforts to avoid and minimize impacts. No issues of concern have been raised by the interagency team with regard to selection of DSA 2 as the preferred alternative.

USDA
United States Department of Agriculture

Natural Resources
Conservation Service

North Carolina
State Office

4407 Bland Road
Suite 117
Raleigh, NC 27609
Voice 919-873-2100
Fax 844-325-6833

DEC 17 2015

Mr. Eric Midiff, P.E.
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27601-1418

Dear Mr. Midkiff:

Thank you for providing the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), an opportunity to review and comment on the Draft Environmental Impact Statement *Complete 540 - Triangle Expressway Southeast Extension* (the DEIS).

We have reviewed our records and determined, as of this date, that NRCS:

1. Holds no conservation easements inside the DEIS Study Area; and
2. Is not in the process of acquiring conservation easements inside the DEIS Study Area.

1 We encourage the Department of Transportation to use NRCS developed soils data to identify, avoid, and minimize conversion of Prime Farmland soils to non-agricultural uses to the greatest extent possible, as those soils represent an irreplaceable resource. Technical interpretations of soil properties, including Farmland Classification interpretations are provided on the NRCS Web Soil Survey at: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm.

If you would like further assistance from NRCS please contact Matthew Flint, Assistant State Conservationist for Technology, at matt.flint@nc.usda.gov, or (919) 873-2124.

Sincerely,

Timothy A. Beard
State Conservationist

cc:
Matthew Flint, Assistant State Conservationist for Technology, NRCS, Raleigh, NC
Kent Clary, State Soil Scientist, NRCS, Raleigh, NC

The Natural Resources Conservation Service
is an agency of the Department of Agriculture's
Natural Resources mission.

An Equal Opportunity Provider, Employer and Lender.

NRCS Letter – 12/17/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Farmland Soils	NRCS has no conservation easements in study area; encourages avoidance and minimization of conversion of farmland soils.	Comment noted.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Richard B. Russell Federal Building
75 Ted Turner Drive, S.W., Suite 1144
Atlanta, Georgia 30303

ER 15/0641
9043.1

December 31, 2015

Mr. Eric Midkiff
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Re: Comments and Recommendations on the Draft Environmental Impact Statement and Section 4(f) Evaluation for the Complete 540 Triangle Expressway Southeast Extension, Wake and Johnston Counties, NC

Dear Mr. Midkiff:

The U. S. Department of the Interior (Department) has reviewed the Complete 540 Triangle Expressway Southeast Extension in Wake and Johnston Counties, North Carolina. We offer the following comments:

The North Carolina Department of Transportation (NCDOT) and Federal Highway Administration (FHWA) propose to build a new, limited-access highway from NC 55 in Apex, to US 64/US 264 Bypass (I-495) in Knightdale for a distance of approximately 27 miles. The proposed highway, known as Complete 540–Triangle Expressway Southeast Extension, is being proposed as a toll facility.

Section 4(f) Evaluation

There is an extensive record of coordination with land owners and managers of 4(f) properties as well as the State Historic Preservation Office (SHPO) for this project. The potential uses of these resources were discussed, avoidance alternatives and other measures to minimize harm to the resources are identified and coordination with the public official having jurisdiction over each resource is documented. Section 4(f) resources that have the potential to be impacted are listed below:

Complete 540 Triangle Expressway Southeast Extension - ER 15-0641

Dr. L.J. Faulhaber Farm
Bryan Farms Historic District
Baucom-Stallings House, Middle Creek School Park, Planned Sunset Oaks Park,
White Deer Park Expansion Area
Planned Bryan Road Nature Park
Watershed Extension Loop Trail (Clemmons)
Neuse River Trail

Since a preferred alternative has not been identified at this time, we cannot concur that the Section 4(f) Evaluation includes all planning to avoid, minimize and mitigate all harm to 4(f) resources and that there is no other prudent or feasible alternative at this time.

1 The Department has no objection to the demimimis determination provided that a MOA is developed identifying who is responsible for each avoidance, minimization and mitigation effort and the MOA is signed by the SHPO, land owners and managers.

Thank you for the opportunity to review and provide comments. If you have any questions concerning these comments please, contact Anita Barnett at (404) 507-5706. I can be reached on (404) 331-4524 or via email at joyce_stanley@ios.doi.gov.

Sincerely,

Joyce Stanley, MPA
Regional Environmental Protection Specialist

cc: Christine Willis – FWS
Gary LeGain - USGS
Anita Barnett – NPS
Chester McGhee – BIA
Robin Ferguson – OSMRE
OEPC – WASH

US Dept. of Interior - Office of Environmental Policy & Compliance Letter – 12/31/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Section 4(f)	Dept. of Interior has no objection to *de minimis* determinations provided that a MOA is developed to identify responsibilities for avoidance, minimization and mitigation and is signed by SHPO, land owners and managers.	Comment noted. The preferred alternative will not have any adverse effects on any National Register of Historic Places (NRHP) listed or eligible sites, so no Section 106 MOA is needed for historic properties.

Environmental Quality

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

MEMORANDUM

To: Crystal Best
State Clearinghouse Coordinator
Department of Administration

FROM: Lyn Hardison
Division of Environmental Assistance and Customer Service
Permit Assistance & Project Review Coordinator

RE: 16-0134
Draft Environmental Impact Statement
Proposed project is for the Complete 540 Triangle Expressway Southeast Extension, TIP Projects – R-2721, R-2828 and R-2829
Wake and Johnston Counties

Date: December 17, 2015

1 The Department of Environmental Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some guidance to minimize impacts to the natural resources within the project area. The comments are attached for the applicant's consideration.

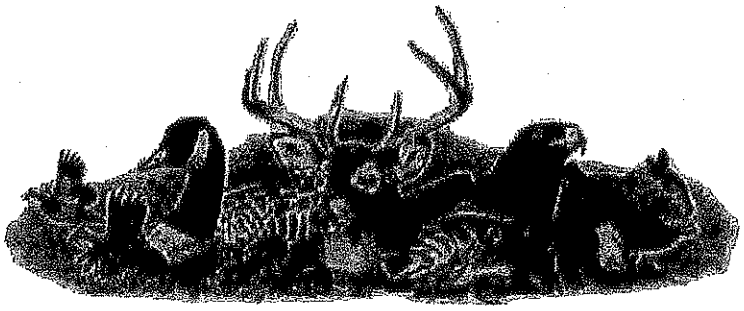
The Department encourages the applicant to continue to work with our agencies during the NEPA Merger Process and as this project moves forward.

Thank you for the opportunity to respond.

Attachment

NCDEQ Letter – 12/17/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Permitting/Impacts	Several agencies within NCDEQ provided information about required permits and offered guidance to minimize impacts to natural resources. NCDEQ encourages continued coordination with the agencies as the project moves forward.	Comment noted. See subsequent response tables for responses to each agency's individual comments.



North Carolina Wildlife Resources Commission

Gordon Myers, Executive Director

MEMORANDUM

TO: Lyn Hardison, Environmental Assistance Coordinator
Division of Environmental Assistance and Outreach, DENR

FROM: Travis Wilson, Highway Project Coordinator
Habitat Conservation Program

DATE: December 9, 2015

SUBJECT: North Carolina Department of Transportation (NCDOT) Draft Environmental Impact Statement (DEIS) for the proposed Complete 540 Triangle Expressway Southeast Extension in Wake and Johnston Counties, North Carolina. TIP Nos. R-2721/R-2828/R-2829. SCH Project No. 16-0134

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

NCDOT is proposing the construction of a limited access facility on new location from NC 55 in Apex to US 64/US264 Bypass (I-495) in Knightdale. Known as the Complete 540-Triangle Expressway Southeast Extension, it is proposed as a toll facility. The approximate 27 mile long facility will have extensive direct impacts to the natural environment as well as secondary and cumulative impacts within the project area.

1 The DEIS identifies 17 detailed study alternatives (DSAs) with approximated impacts ranging from 51,582 to 78,087 linear feet of stream, wetland impacts of 51.4 to 75.6 acres, as well as substantial upland habitat removal. The DEIS references the value of maintaining habitat connectivity in this already fragmented landscape. As with any multi-lane new location highway facility this project will result in further fragmenting the habitat throughout the proposed 27 mile corridor.

Mailing Address: Division of Inland Fisheries • 1721 Mail Service Center • Raleigh, NC 27699-1721
Telephone: (919) 707-0220 • **Fax:** (919) 707-0028

As stated under the Indirect Effects and Cumulative Impacts section of this document. (p. 105)

2 *"...the build scenarios could lead to more rapid growth and more intense development in some areas near proposed interchanges. In this way, each of the DSAs would likely lead induced land development and higher concentrations of high-density and more intense land uses in the vicinity of the DSA, especially near interchange areas".*

This will be a key aspect in selecting the Least Environmentally Damaging Practicable Alternative.

Likewise (p. 106)

3 *"Continued development in the lower Swift Creek watershed, below the Lake Benson dam, may pose challenges for the long-term viability of dwarf wedgemussel habitat in this area.... The addition of the Complete 540 project to this area has the potential to add to the cumulative effects of other past and planned future projects on the long-term viability of the species in the lower Swift Creek watershed. Continued growth under either the build or no-build scenarios will have the potential to contribute to forest fragmentation and wildlife habitat disturbance. Combined with the effects of past and planned future projects, the Complete 540 project could shift these effects farther to the south and east."*

These are concerns shared by the NCWRC not only for dwarf wedgemussel (Alasmidonta heterodon) but also other sensitive aquatic species found in the Swift Creek watershed. WRC will assess potential minimization and conservation measures to address these concerns.

WRC has participated in stakeholder meetings as well as interagency coordination that has occurred during the planning of this project. That involvement has allowed us to express concerns involving the potential direct and indirect impacts associated with all the alternatives under consideration. As we continue through the coordination process and the alternative selection we will work with NCDOT to avoid and minimize impacts to natural resources in the project area. Thank you for the opportunity to comment. If we can be of any further assistance please contact me at (919) 707-0370.

cc: Gary Jordan, USFWS
Rob Ridings, NCDWR
Eric Alsmeyer, USACE
Cynthia Van Der Wiele, USEPA

NCWRC Letter – 12/9/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Habitat Fragmentation	Project will result in further habitat fragmentation.	Continued coordination has been and will be held during the remainder of the NEPA process with NCWRC and USFWS concerning wildlife corridors. During past coordination meetings with these agencies prior to the Draft EIS, areas of wildlife connectivity concerns were identified and bridge limits were established to permit this connectivity. This coordination has continued during the development of the preferred alternative and the Final EIS.
2	Indirect and Cumulative Effects	Indirect and cumulative effects on land use will be important in selecting Least Environmentally Damaging Practicable Alternative (LEDPA).	The qualitative study of indirect and cumulative effects (ICE), summarized in the Draft EIS on pages 104-106, concluded that "each of the DSAs would likely lead to induced land development and higher concentrations of high-density and more intense land uses in the vicinity of the DSA." The qualitative study also concluded that DSAs using the Orange Corridor segment would be less likely to induce development that would be in conflict with local plans. As noted in Chapter 4 of the Final EIS, this was a consideration in selecting DSA 2 as the preferred alternative. Quantitative studies of the indirect and cumulative effects of the project have been completed and are summarized in the Final EIS in Chapter 4 also. Results of the quantitative studies have been consistent with the results of the qualitative studies.
3	Protected Species	Concerns about cumulative effects on long-term viability of Dwarf Wedgemussel and other sensitive aquatic species. Assess avoidance and conservation measures to address these concerns.	These concerns have been noted in the *Preferred Alternative Report*. Additional studies of long-term viability of the DWM have been completed and are summarized in Chapter 4 of the Final EIS. Avoidance and minimization are also discussed in Chapter 4 of the Final EIS, and conservation measures are summarized in this section of the Final EIS. Quantitative studies of the indirect and cumulative effects of the project on water quality, which influences DWM viability, have been completed and are summarized in Chapter 4 of the Final EIS. Please also see USFWS comments 2, 3, and 7.

MEMORANDUM

TO: Linda Culpepper, Division Director through Sharon Brinkley

FROM: Dennis Shackelford, Eastern District Supervisor
Solid Waste Section

Digitally signed by Dennis Shackelford
DN: cn=Dennis Shackelford, o=Division of Waste Management - Solid Waste Section, ou=DENR, email=dennis.shackelford@ncdenr.gov, c=US
Date: 2015.12.10 15:20:50 -05'00'

DATE: December 10, 2015

SUBJECT: NEPA Review: Project # 16-0134 Wake/Johnston County
540 Triangle Expressway Southeast Extension

The Division of Waste Management, Solid Waste Section (Division) has reviewed the Draft Environmental Impact Statement for the complete 540 Triangle Expressway Southeastern Extension, Transportation Improvement Projects R 2721, R 2828 and R 2829. The Division has seen no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project.

During construction the North Carolina Department of Transportation (NCDOT) should make every feasible effort to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this project where suitable. Any waste generated by this project that cannot be beneficially reused or recycled must be disposed of at a solid waste management facility permitted by the Division. The Division strongly recommends that the NCDOT require all Contractors to provide proof of proper disposal for all waste generated. Eight Permitted Facilities in Wake County are as follows: 9226-CDLF-2001, 9227-TRANSFER-2012, 9228-CDLF-2001, 9229T-TRANSFER-2009, 9230-CDLF-2000, 9231-CDLF-2012, 9234-TRANSFER-2012 and 9237T-TRANSFER-2010. Additional permitted facilities are listed on the Division of Waste Management, Solid Waste Section portal site at: http://portal.ncdenr.org/web/wm/sw/facilitylist.

Questions regarding solid waste management should be directed to Liz Patterson, Environmental Senior Specialist, Solid Waste Section, at (919-707-8286).

cc: Jason Watkins, Field Operations Branch Head
Liz Patterson, Environmental Senior Specialist
Jessica Montie, Compliance Officer

NCDEQ – Solid Waste Section Letter – 12/10/15

Comment Number	Primary Topic	Paraphrased Comment	Response
--	Solid Waste	The Division has seen no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project. Encourages NCDOT to minimize waste, recycle materials, and use recycled products to the extent possible in constructing the project.	Comments noted.

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

LINDA CULPEPPER
Director

December 11, 2015

To: Linda Culpepper, Director
Division of Waste Management

From: Jenny Patterson, Environmental Senior Specialist, Compliance Branch Jenny Patterson
Hazardous Waste Section

Subject: Hazardous Waste Section Comments on the Complete 540 - Triangle Expressway Southeast Extension (Wake and Johnston Counties)
Project Number: 16-0134

The Hazardous Waste Section (HWS) has reviewed the subject Environmental Assessment for the proposed project for the construction of the Complete 540 – Triangle Expressway Southeast Extension project which would extend the existing Triangle Expressway, from NC 55 Bypass in Apex to the US 64/US 264 Bypass in Knightdale, completing the 540 Outer Loop around the Raleigh metropolitan area.

Any hazardous waste generated from demolition, construction, operation, or maintenance and/or remediation (e.g. excavated soil) from the proposed project must be managed in accordance with the North Carolina Hazardous Waste Rules. The demolition, construction, operation, maintenance; and remediation activities conducted will most likely generate a solid waste, and a determination must be made whether it is a hazardous waste. If a project site generates more than 220 pounds of hazardous waste in a calendar month, the HWS must be notified, and the site must comply with the small quantity generator requirements. If a project site generates more than 2200 pounds of hazardous waste in a calendar month, the HWS must be notified, and the site must comply with the large quantity generator requirements.

Should any questions arise, please contact me at 336-767-0031.

NCDEQ – Hazardous Waste Section Letter – 12/15/15

Comment Number	Primary Topic	Paraphrased Comment	Response
--	Hazardous Waste	Hazardous waste generated from implementing the project must be managed in accordance with NC Hazardous Waste Rules.	Comment noted.

North Carolina Department of Environmental Quality

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

Date: December 7, 2015

To: Linda Culpepper, Director
Division of Waste Management

Through: Jim Bateson, Superfund Section Chief

From: Adam Ulishney, Inactive Hazardous Sites Branch

Subject: SEPA Project Number #16-0134: Complete 540 Triangle Expressway Southeast Extension-Wake and Johnston Counties, North Carolina

I have completed a database review of sites under the jurisdiction of the Superfund Section, and thirty (30) sites are located either within the study area or within a one mile search radius of the study area boundary. The identified sites are listed on the attached spreadsheet and shown on the attached map.

Files for the attached sites can be accessed by following the "Access Online Files" link on the Superfund Section website: http://portal.ncdenr.org/web/wm/sf-file-records. If you have any questions, please contact me at (919) 707-8210 or via email at adam.ulishney@ncdenr.gov.

Ec: Jim Bateson
Qu Qi
Pete Dorn

Site Name	Site ID	Program	Site Address	City	County
CARRIAGE HOUSE CLEANERS	DC920051	DSCA	537 Plaza CIR	Garner	Wake
JOY CLEANERS	DC920028	DSCA	4503 Fayetteville Rd	Raleigh	Wake
GREENBRIER CLEANERS	DC920032	DSCA	4207 Fayetteville Rd	Raleigh	Wake
Con-Agra	15036-11-92	BFA	4851 Jones Sausage Rd	Garner	Wake
Walmart – Garner	10066-06-92	BFA	4500 Fayetteville Rd	Garner	Wake
Purser Drive	10067-06-92	BFA	816 Purser Drive	Garner	Wake
Baker Property, Former	11018-07-92	BFA	Newspaper Way	Holly Springs	Wake
Clayton Ball Field	NCD980844732	PRLF	City Road	Clayton	Johnston
Elwood Pines Dump	NONCD0000729	PRLF	180 Newspaper Way	Holly Springs	Wake
Garner Trash Dump	NONCD0000604	PRLF	3175 Benson Rd	GARNER	Wake
Holly Springs Dump	NONCD0000605	PRLF	BASS LAKE RD	HOLLY SPRINGS	Wake
old holly springs dump/ Cary sanitary LF	NONCD0000665	PRLF	Holly Springs Rd	HOLLY SPRINGS	Wake
OLD RALEIGH LF #12	NONCD0000694	PRLF	SHIRLEY ST	RALEIGH	WAKE
WE Buffaloe, JR private dump	NONCD0000667	PRLF	US-70	GARNER	wake
CONAGRA FOODS, INC	NCD982116477	IHSB	4851 JONES SAUSAGE RD	GARNER	WAKE
CP&L NORTHERN DIVISION COMPLEX	NONCD0001061	IHSB	902 WITHERS RD; SR 1466	GARNER	WAKE
GUILFORD MILLS PLANT	NONCD0001064	IHSB	200 DICKENS ROAD	FUQUAY-VARINA	WAKE
BARWELL ROAD WELLS	NONCD0001322	IHSB	CHARLES ST & ANN AVE	RALEIGH	Wake
LAN-O-SHEEN, INC.	NONCD0001980	IHSB	201 DICKENS RD	FUQUAY-VARINA	Wake
MANGUM,MARY RESI./PRINCES GRO	NONCD0002029	IHSB	456 MAIN STREET	APEX	Wake
NAPA/LOCKAMY'S BODY SHOP (FORMER)	NONCD0002116	IHSB	1301 HIGHWAY 70 WEST	GARNER	Wake
NEWS & OBSERVER MECH BLV-SPILL	NONCD0002201	IHSB	1400 MECHANICAL BLVD.	GARNER	Wake
RALEIGH NEUSE RIVER WWTP METHANOL RELEAS	NONCD0002363	IHSB	NEUSE RIVER WWTP	RALEIGH	Wake
W.E. GARRISON COMPANY	NONCD0002683	IHSB	5820 FAYETTEVILLE ROAD	RALEIGH	Wake

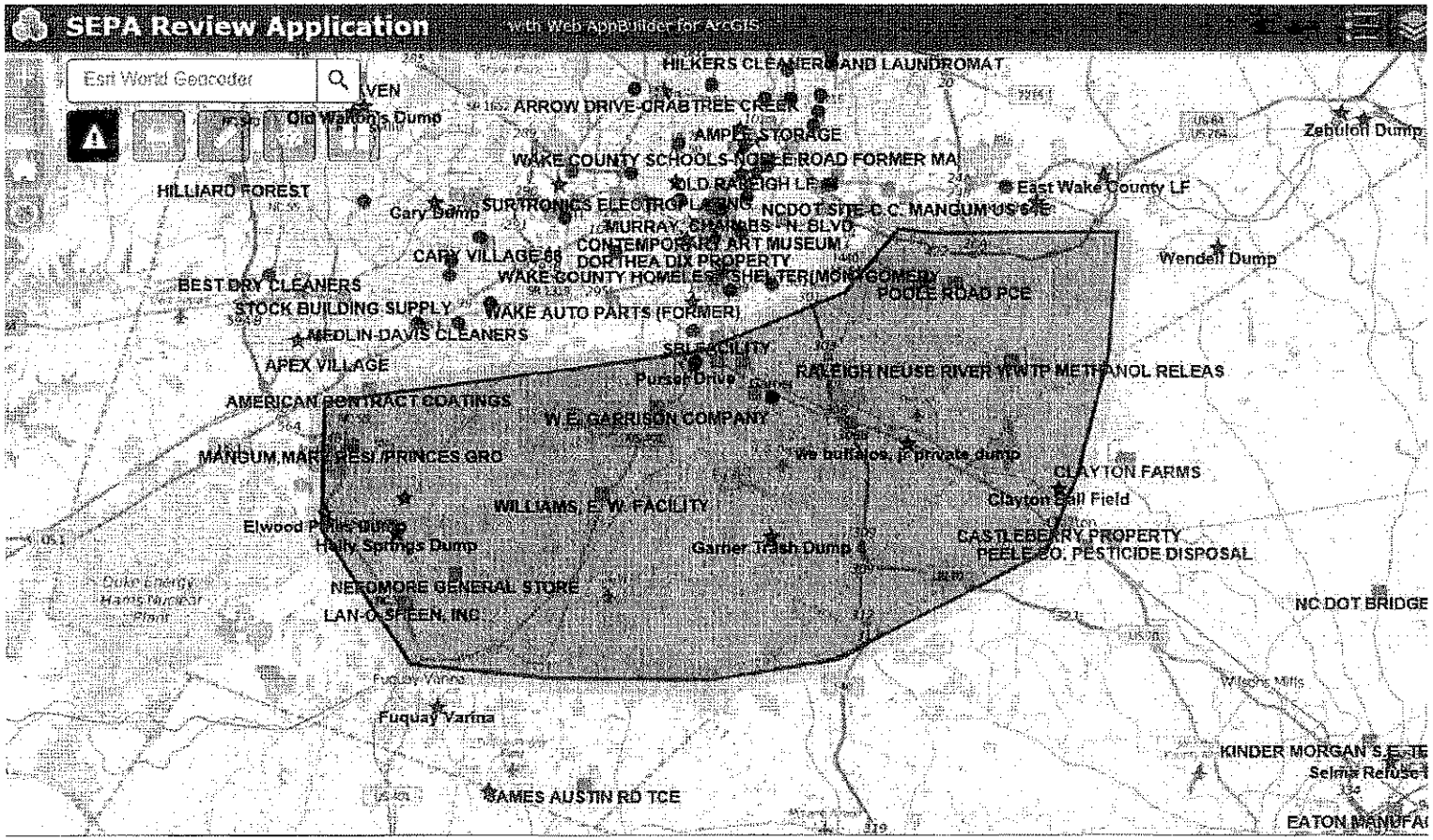
Site Name	Site ID	Program	Site Address	City	County
WILLIAMS, E. W. FACILITY	NONCD0002728	IHSB	8200 FAYETTEVILLE ROAD	RALEIGH	Wake
NEEDMORE GENERAL STORE	NONCD0002882	IHSB	1921 BASS LAKE RD	FUQUAY-VARINA	WAKE
POOLE ROAD PCE	NONCD0002943	IHSB	POOLE RD	RALEIGH	WAKE
AMERICAN CONTRACT COATINGS	NONCD0001033	IHSB	HWY 55	APEX	WAKE
SBI FACILITY	NONCD0002448	IHSB	121 EAST TRYON STREET	RALEIGH	Wake
CASTLEBERRY PROPERTY	NONCD0001463	IHSB	451 EAST MAIN STREET	CLAYTON	Johnston

*DSCA-Dry-Cleaning Program

*BFA-Brownfields Program

*PRLF-Pre-Regulatory Landfill Program

*IHSB-Inactive Hazardous Sites Program



- Brownfields Sites
- Federal Remediation Branch Sites
- Pre-Regulatory Landfill Sites
- Dry-Cleaning Solvent Cleanup Act Sites
- Inactive Hazardous Sites

NCDEQ – Superfund Section Letter – 12/7/15

Comment Number	Primary Topic	Paraphrased Comment	Response
--	Hazardous Materials	Enclosed list of 30 Superfund sites in the vicinity of the project study area.	Comment noted. None of the sites listed will be affected by the preferred alternative.

Water Resources
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

S. JAY ZIMMERMAN
Director

December 7, 2015

MEMORANDUM

To: Lyn Hardison, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

Through: Amy Chapman, Supervisor, Transportation Permitting Unit, Division of Water Resources

From: Rob Ridings, Division of Water Resources, Transportation Permitting Unit

Subject: Comments on the Draft Environmental Impact Statement, related to proposed NC 540 Triangle Expressway Southeast Extension from NC 55 to US 264, Wake County, Federal Aid Project No. STP-0540(19-21) State Project No. 6.401078, 6.401079 & 6.401080; TIPs R-2721/R-2828/R-2829., State Clearinghouse Project No. 16-0134.

This office has reviewed the referenced document received December 1, 2015. The NC Division of Water Resources (NCDWR) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. The NCDWR offers the following comments based on review of the aforementioned document:

Project Specific Comments:

1. This project is being planned as part of the 404/NEPA Merger and Section 6002 Coordination Process. As a participating team member, the NCDWR will continue to work with the team.

2. Streams in the project area include NSW waters of the State. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these streams and their tributaries. Additionally, to meet the requirements of NCDOT's NPDES permit NCS0000250, the NCDWR requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual.

1

3. Numerous streams and tributaries in the Project Area are impaired 303(d) waters of the State.. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) to reduce the risk of further impairment to these waters. Additionally, the NCDWR requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual.

1

4. Review of the project reveals the presence of surface waters classified as Water Supply Critical Area in the project study area. Given the potential for impacts to these resources during the project implementation, the NCDWR requests that the NCDOT strictly adhere to North Carolina regulations entitled *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) throughout design and construction of the project. This would apply for any area that drains to streams having WS CA(Water Supply Critical Area) classifications.

2

5. Should the project include bridges located within the Critical Area of a Water Supply, the NCDOT may be required to design, construct, and maintain hazardous spill catch basins in the project area. The number of catch basins installed should be determined by the design of the bridge, so that runoff would enter said basin(s) rather than flowing directly into the stream, and in consultation with the NCDWR.

3

6. This project is within the Neuse River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0233. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC .02B .0295. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, coordinated with the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, coordinated with the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification.

General Comments:

4

7. The environmental documents should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.

5

6. Environmental impact statement alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. To meet the requirements of NCDOT's NPDES permit NCS0000250, these alternatives should include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual, which includes BMPs such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.

6

8. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Division of Mitigation Services may be available to assist with wetland mitigation.

7

9. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Division of Mitigation Services may be available to assist with stream mitigation.

8

10. Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.

9 11. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.

10 12. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Resources Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.

11 13. The NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.

12 14. Where streams must be crossed, the NCDWR prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, the NCDOT should not install the bridge bents in the creek, to the maximum extent practicable.

13 15. Whenever possible, the NCDWR prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) should not be placed in the stream when possible.

14 15. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures.

15 16. Sediment and erosion control measures should not be placed in wetlands or streams.

16 17. Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.

17 18. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.

18 19. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an Individual Permit (IP) application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWR. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

19 20. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

20 21. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody

species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.

22. Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required.

23. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.

24. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3883/Nationwide Permit No. 6 for Survey Activities.

25. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.

26. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of the NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.

27. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (NC-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.

28. Heavy equipment should be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.

29. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

30. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

The NCDWR appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Rob Ridings at 919-707-8786.

Electronic copy only distribution:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
File Copy

NCDEQ – Division of Water Resources Letter – 12/7/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Water Resources	The project area includes nutrient sensitive waters, impaired 303(d) streams and Water Supply Critical Area; sediment and erosion control BMPs should be implemented to reduce the risk of nutrient runoff. To meet NCDOT's NPDES permit requirements, designs should include stormwater treatment.	NCDOT will implement sediment and erosion control Best Management Practices in accordance with *Design Standards in Sensitive Watersheds*, as appropriate. Additionally, NCDOT will adhere to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual. This is listed as a special project commitment in the Final EIS.
2	Water Resources	If project includes bridges within the Critical Area of a Water Supply, NCDOT may be required to include hazardous spill catch basins in the project area.	Comment noted. The preferred alternative does not cross the Water Supply Critical Area.
3	Water Resources	Riparian buffer mitigation may be required; NCDOT will need to provide a buffer mitigation plan prior to approval of the Water Quality Certification.	NCDOT will meet all riparian buffer mitigation requirements as necessary. See response to comment #1.
4	Water Resources	Documentation should include itemized impacts to wetlands and streams, with corresponding mapping. Mitigation plans required prior to issuance of 401 Water Quality Certification.	Comment noted. Itemized impacts to wetlands and streams are included in Chapter 4 of the Final EIS. For compensatory mitigation of R-2721, NCDOT currently proposes to use the NC DMS in-lieu fee program (on-site mitigation is being reviewed as an alternative approach). For R-2828, NCDOT currently proposes to use DMS for mitigation of impacts to wetland and riparian buffers along with private mitigation banks and DMS for impacts to streams (on-site mitigation is being reviewed as an alternative approach). For R-2829, no mitigation approach has been established since the anticipated construction date is more than five years in the future (2027).
5	Water Resources	Alternatives should consider design criteria that reduce stormwater impacts on streams and wetlands.	See response to comment #1.
6	Water Resources	Prior to issuance of 401 Water Quality Certification, NCDOT will need to demonstrate avoidance and minimization of impacts to wetlands and streams.	Avoidance and minimization measures for the preferred alternative were discussed with agencies throughout the NEPA process, including after publication of the Draft EIS. The coordination occurring after the Draft EIS is described in the *Stakeholder Involvement Report* and summarized in Chapter 3 of the Final EIS.
7	Water Resources	Mitigation will be required for impacts greater than 150 feet to any single perennial stream.	See response to comment #4.
8	Water Resources	Future documentation should include itemized impacts to wetlands and streams, with corresponding mapping.	Comment noted.
9	Water Resources	NCDOT should address potential impacts to aquatic environment and any mitigating factors.	NCDOT will meet all applicable requirements for obtaining 401 Water Quality Certification. See response to comment #1.
10	Water Resources	Analysis of cumulative and secondary impacts anticipated as a result of the project is required.	A quantitative water quality indirect and cumulative impacts analysis was completed after selection of the preferred alternative (after publication of the Draft EIS). This work is summarized in Chapter 4 of the Final EIS.

Comment Number	Primary Topic	Paraphrased Comment	Response
11	Water Resources	All impacts to jurisdictional wetlands, streams, and riparian buffers need to be included in final impact calculations, which need to be included in the 401 Water Quality Certification application.	NCDOT will submit all data required as part of the 401 Water Quality Certification.
12	Water Resources	Where streams must be crossed, the Division of Water Resources prefers bridges in lieu of culverts. When used, culverts should be countersunk.	Minimizing impacts through bridging has been discussed with the agencies during the NEPA process. Culverts will be buried in accordance with NCDOT Hydraulics Unit's 2004 "Pipe Burial Depths" reference.
13	Water Resources	Whenever possible, the Division of Water Resources prefers spanning structures.	Comment noted—this request will be considered during final design.
14	Water Resources	Bridge deck drains should not discharge directly into streams.	Comment noted. The design-build team(s) will be required to provide bridge drainage features that prevent direct discharge into surface waters.
15	Water Resources	Sediment and erosion control measures should not be placed in wetlands or streams.	See response to comment #1.
16	Water Resources	Borrow/waste areas should avoid wetlands as much as possible. Impacts to wetlands in borrow/waste area need to be disclosed in the 401 Water Quality Certification.	Comment noted. The design-build team(s) will be required to acquire applicable permits relative to borrow pits and comply with requirements for borrow pits, dewatering, and any temporary work in jurisdictional areas.
17	Water Resources	401 Water Quality Certification application will need to address proposed methods for stormwater management.	Comment noted. The application will propose methods for stormwater management.
18	Water Resources	Individual Permit application to USACE and corresponding 401 Water Quality Certification may be required due to magnitude of impacts to wetlands and streams. Approval will be contingent on appropriate avoidance, minimization, and mitigation.	NCDOT will obtain all applicable permits, including Section 404 Individual Permit and associated 401 Water Quality Certification. Avoidance, minimization and mitigation efforts to date are summarized in Chapter 4 of the Final EIS x. These efforts will continue as final design progresses.
19	Water Resources	If concrete is used during construction, dry work area should be maintained.	All currently approved NCDOT BMPs for the protection of surface waters will be implemented during project construction.
20	Water Resources	If temporary access roads or detours constructed, site should be graded to preconstruction contours and elevated. Disturbed areas should be seeded/mulched and planted with appropriate species.	Temporary access and haul roads other than public roads will be addressed in the Erosion and Sedimentation Control Plans. This commitment will be included in design-build team contracts.
21	Water Resources	Culverts and other structures in waters, streams, and wetlands should be placed below elevation of the streambed according to specified requirements.	Culverts will be buried in accordance with NCDOT Hydraulics Unit's 2004 "Pipe Burial Depths" reference.
22	Water Resources	If multiple pipes or barrels are required, they should mimic natural stream cross sections as closely as possible.	Final design for preferred alternative will be completed according to NCDOT's *Guidelines for Drainage Studies and Hydraulic Design*.
23	Water Resources	Any necessary foundation test borings should be noted in the document.	If additional geotechnical investigations are needed, subsurface investigations, including borings, will be conducted in accordance with current NCDOT Geotechnical Unit Guidelines and Procedures Manual. This commitment will be included in design-build team contracts.

Comment Number	Primary Topic	Paraphrased Comment	Response
24	Water Resources	Sediment and erosion control measures much be implemented and maintained in accordance with NC Sediment and Erosion Control Planning and Design Manual.	The final Design-Build Request for Proposals will require development of erosion control plan, to be implemented and maintained during construction. The plan will incorporate NPDES permit requirements. See response to comment #1.
25	Water Resources	All work in or adjacent to stream waters should be conducted in dry work area, incorporating approved BMP measures.	NCDOT will implement approved BMP measures from the most current version of NCDOT *Construction and Maintenance Activities Manual*.
26	Water Resources	Inherent inaccuracies in NWI wetland maps and soil survey maps require that qualified personnel perform onsite wetland delineations.	As discussed in the Natural Resources Technical Report, stream surveys and wetland delineations were performed by qualified personnel onsite for all project DSAs. Surveyed wetland and stream data were used to calculate impacts to jurisdictional resources as shown in the Draft and Final EIS.
27	Water Resources	Heavy equipment should be operated from the bank to minimize sedimentation.	See response to comment #25.
28	Water Resources	Riprap should not be placed in active channel or streambed.	All appropriate measures will be taken to protect streams and aquatic life based on NCDOT standard practices. Riprap is removed from streams where stream velocities are not erosive.
29	Water Resources	Riparian vegetation should be preserved to the maximum extent possible.	Appropriate measures will be taken to preserve and reestablish riparian vegetation to the maximum extent possible. NCDOT will require the NCDOT design-build team(s) to preserve trees along the project.

APPENDIX J2
LOCAL GOVERNMENT COMMENTS AND RESPONSES

Following publication of the Draft EIS, NCDOT received formal review comments from several local governments. Copies of each of these comments are on the following pages of this Appendix. For tracking purposes, each comment letter was assigned a document number—this number has been placed in the upper right corner of each comment letter. The table below lists each local government that submitted comments, the document number assigned to that local government's comments, and the date of the comments. On each comment letter, the individual comment topics are noted with numbered brackets. A comment response table follows each comment letter. The comment response table lists each bracketed topic number, along with a summary of the comment, and the project team's response to the comment.

Document Number	Agency	Date
b001	City of Raleigh – Mayor	1/5/16
b002	City of Raleigh – Office of Transportation Planning	1/8/16
b003	Town of Cary	1/7/16
b004	Town of Garner	12/16/15
b005	Town of Benson	1/7/16

City Of Raleigh
North Carolina

Nancy McFarlane
Mayor

January 5, 2016

Mr. Jamille Robbins
NC Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

SUBJECT: Comments on Draft EIS, Complete 540 Triangle Expressway Southeast Extension

Mr. Robbins,

Transportation options are of utmost importance to the continued success and growth of the Triangle region. The City's Strategic Plan not only focuses on "Transportation & Transit" as one of six key focus areas, but highlights the need for resilient and sustainable public infrastructure in objectives under the "Growth & Natural Resources" and "Economic Development & Innovation" areas. It is with this strategic emphasis on mobility that the City of Raleigh continues to strongly support and encourage the Complete 540 effort by NCDOT and the future construction of the southern and eastern segments of the NC 540 Triangle Expressway. Our City Council reaffirmed the Eastern Wake Expressway (TIP Project R-2829) as its top priority request to NCDOT in your Transportation Improvement Program at our March 17, 2015 meeting.

City staff has reviewed the draft Environmental Impact Statement and its supporting technical reports to better understand the potential impacts associated with each study alternative. The City of Raleigh has concerns over potential impacts highlighted in the document and would like to submit comments on the following color-coded segments evaluated for the freeway corridor:

- **Red Route:** The City is concerned that the Red Route directly impacts the Swift Creek Watershed Area, a critical water source for Raleigh and Wake County residents, as well as the treatment and distribution infrastructure operated by the City in the Garner area. Based on these impacts, the City opposes all alternatives that utilize the Red Route.
- **Lilac Route:** The Lilac Route directly impacts 88.7 acres at our Public Utilities facility located off Wrenn Road, including water treatment sprayfields & at least one of two 25-acre holding ponds. The City opposes all alternatives that use the Lilac route.
- **Green Route**: The Randleigh Farm property represents a significant investment in the future by the City and Wake County as a site for proposed schools and potential development. The Green Route impacts those school sites and twice as much land area on the property,

1

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therefore the City opposes alternatives that use this route across the property, unless compelling evidence to the contrary is presented for this alignment.

- **Brown Route**: The Brown Route represents significant impacts to the City's operations at the Neuse River Wastewater Treatment Plant (NRWWTP), including more than 80 acres of sprayfields and biosolids application fields and potentially the facility guardhouse. The route would also require the relocation of the City/County Law Enforcement Training Center shooting range where officers train to serve and protect the city's and county's residents. Based these impacts and potential impact to the City's solar array located near Brownfield Road, the City opposes alternatives that use the Brown Route north of Old Baucom Road.

1

The City would also like to express concern that the draft EIS and Utilities Impact technical report do not account for numerous water and sewer lines serving Garner, Wendell, and Raleigh that cross the corridor. These include a 30" force main along Raynor and Auburn-Knightdale Roads and two 72" mains along the Neuse River serving the NRWWTP, as well as a planned 96" line to the plant. The City will need to retain access in the project corridor to maintain and repair those lines in their current locations. The City requests NCDOT to update the Utility Impact Report and draft EIS to (a) identify impacts to water and sewer infrastructure on all routes and (b) revise or account for those impacts in future designs for the expressway.

2

The City also requests NCDOT consider alternative designs for the Auburn-Knightdale Road interchange. The existing designs do not account for the Hodge Road extension as shown in Raleigh and CAMPO transportation plans. The City requests NCDOT investigate interchange options that would facilitate the proposed Hodge Road extension to Auburn-Knightdale Road.

3

In light of these concerns, the City views the Orange Route as the least impactful to City interests and therefore recommends its endorsement as the preferred route for the portion of the Outer Loop west of I-40. East of I-40, the impacts to the City's wastewater treatment operations and the Law Enforcement Training Center (Brown Route) outweigh those impacts to the Randleigh Farm property (Green, Mint, and Tan segments). The Council has taken previous action in January 2011 opposing the Tan Route due to community impacts (see attached). The Mint Route minimizes the impacts to the Randleigh property and proposed school sites, and therefore is the City's preferred route for the Eastern Wake Expressway. Based on these preferred routes and segments, the City endorses Detail Study Alternative 2 as the preferred alternative for this project.

The City would like to thank NCDOT for the opportunity to submit our comments and endorsements based on review of the draft EIS. City staff will be providing additional technical comments on the document and the supporting reports. If you have questions about this letter or the City's comments, please contact Todd Delk at 919-996-2661 or todd.delk@raleighnc.gov.

Sincerely,

Nancy McFarlane

Nancy McFarlane
Mayor

Attachment
NM/td

Cc: Nick Tennyson, NC Secretary of Transportation
Beau Memory, NC Turnpike Authority Executive Director
Joey Hopkins, NCDOT Division 5 Engineer
Jim Hartmann, Wake County Manager
Chris Lukasina, CAMPO Executive Director

City Of Raleigh
North Carolina

Charles Meeker
Mayor

January 11, 2011

David W. Joyner, Executive Director
NC Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578

SUBJECT: Comments on TIP Project R-2829, Eastern Wake Expressway

Dear Mr. Joyner:

At our January 4, 2011 meeting, the Raleigh City Council received comments from the general public regarding alternatives under consideration for the Southeast Extension of the Triangle Expressway. The portion of your project within the City's jurisdiction falls under TIP Project R-2829 (Eastern Wake Expressway). These residents spoke out specifically in opposition to the Tan Corridor that has been developed by the NC Turnpike Authority for this segment of the project.

I understand that your project team has met with City staff from multiple departments on several occasions to discuss alignment issues along the Eastern Wake Expressway. Working out the details on a final alignment for this corridor has been a priority for the City for many years, especially with regards to getting out ahead of growth in this area and providing County residents with improved predictability.

The City Council voted unanimously to oppose the Tan Corridor as it is currently proposed, and we have requested that City staff continue to work with your project team to develop viable alternatives for consideration in your Environmental Impact Statement (EIS). We understand that the EIS process is technical in nature, but we urge you continue to take the concerns of area residents into account as you proceed with your study. The completion of the Eastern Wake Expressway as part of the larger Raleigh Outer Loop is important to the continued growth of the City and its neighboring communities. We appreciate the efforts of the Turnpike Authority to move this project forward.

Telephone: 919.996.3050
Office • 222 West Hargett Street • Post Office Box 590 • Raleigh, North Carolina 27602-0590
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If you have additional questions about our comments, please contact Eric Lamb at (919) 516-2161 or by email at eric.lamb@raleighnc.gov.

Sincerely,

Charles C. Meeker
Mayor

CCM/ejl

Cc: City Councilors
J. Russell Allen – Raleigh City Manager
David Cooke – Wake County Manager
Mitchell Silver, AICP – Raleigh Planning Director
Carl R. Dawson, Jr., PE – Raleigh Public Works Director
Brad Bass, AICP –Garner Planning Director

City of Raleigh – Mayor Letter – 1/5/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Alternatives	City of Raleigh has concerns about Red, Lilac, Green, and Brown Corridors.	Comment noted. Preferred alternative (DSA 2) does not include the Red, Lilac, or Brown Corridors. Portions of the Green Corridor are part of the preferred alternative both south and north of the Mint Corridor, but the portions of the Green Corridor that are part of the preferred alternative are not the portions in the vicinity of Randleigh Farm.
2	Utilities	City is concerned that Draft EIS and Utility Impact Report don't fully address all potential impacts to water and sewer infrastructure.	NCDOT has coordinated with and will continue to coordinate with the City of Raleigh relative to water and sewer infrastructure along and crossing the preferred alternative. Additional project related utility information is included in the Utilities Analysis and Routing Report (preliminary) and has been incorporated into the design plans and the Final EIS.
3	Design	City would like design of Auburn-Knightdale Road interchange to account for planned Hodge Road extension.	NCDOT has coordinated with the City of Raleigh concerning the potential extension of Hodge Road to Auburn-Knightdale Road. Hodge Road can be extended to connect to Auburn Knightdale Road between the existing Neuse River Bridge on Auburn Knightdale Road and the new ramps associated with the 540 interchange at Auburn Knightdale Road. It is not practicable or operationally desirable to incorporate the Hodge Road extension into the 540 interchange at Auburn Knightdale Road.
4	Alternatives	Raleigh prefers the Orange corridor and the Mint Corridor because they minimize impacts to City interests relative to the other corridors.	The City's preferences have been noted in the *Preferred Alternative Report*, which identifies DSA 2 (Orange to Green to Mint to Green Corridors) as the preferred alternative.

City of Raleigh
North Carolina

January 8, 2016

MEMORANDUM

TO: Mr. Jamille Robbins, PE, NCDOT

FROM: Todd Delk, PE, Senior Planning Engineer

RE: Comments on NC 540 Draft Environmental Impact Statement

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Complete 540 project. As stated in the Mayor's letter to NCDOT, staff from multiple City departments have coordinated to review the document and its supporting technical reports in order to better understand the findings and potential impacts associated each study alternative.

City staff has concerns over the potentially major impacts to City facilities, operations, and other interests within our planning jurisdiction as outlined below.

PUBLIC UTILITIES

Water Supply Infrastructure: The Red Route (Alternatives 6, 7) directly impacts numerous City of Raleigh water transmission/distribution mains, particularly where the City provides service in the Garner area & near Dempsey Benton Treatment Plant. While some of these impacts may be below the $250,000 relocation cost threshold to be reported in the Utility Impact report, discussion of the impacts are not acknowledged nor accounted for in DEIS or Utility Impact Report.

The Red Route also directly impacts 6.7 acres of critical watershed area for Swift Creek and Lake Benson, the primary water source for the City's Dempsey Benton Water Treatment Plant. As noted in the DEIS, the watershed is managed through a NCDEQ management plan adopted by General Assembly in 1998 to limit development and protect water quality. The City would request to be part of the "extensive coordination with NCDEQ & USEPA officials to reach agreement for protection" noted in the DEIS. 1

Sewer Infrastructure: The DEIS and Utility Impact Report fails to identify several major sewer pipelines that will be impacted by Triangle Expressway Southeast Extension:

- The Red Route crosses the NC Highway 50 sewer force main (30") adjacent to Raynor Road. Designs for the NC 540 overpass at this location will need to ensure future access to the line for operations and maintenance.
- The Green, Mint, Tan, and Brown Routes all cross two parallel 72" sewer interceptors located south of the Neuse River. The City is also planning for a future 96" interceptor

north of the Neuse River to serve the Neuse River Wastewater Treatment Plant (NRWWTP). The lines are not accounted for in DEIS or Utility Impact Report and the current roadway designs will require revisions to provide access for operation and maintenance of the lines. Due to the volume handled by the existing interceptors, relocations are not advised.

Water Treatment Sprayfields & Holding Ponds at Wrenn Road Facility: The DEIS and Utility Impact Report identify the Orange Route (Alts. 1-5) directly impacts 10.8 acres of water treatment sprayfields on the site, and the Lilac Route (Alts. 8-17) directly impacts 88.7 acres including water treatment sprayfields & at least one of two 25-acre holding ponds. Based on the designs shown in the public hearing maps, we request confirmation that the Lilac Route would avoid impacts to either holding pond. 1

Wastewater Sprayfields, Biosolids Fields, and facilities at NRWWTP: The DEIS and Utility Impact Report identify that the Teal and Brown routes (Alts. 4, 5, 11, 12, 16, 17) would directly impact 81.5 and 87.2 acres, respectively, of wastewater treatment sprayfields & permitted biosolids application fields, as well as agricultural activities on fields.

Not noted in the DEIS, the Brown Route may also impact the NRWWTP facility guardhouse located on Battle Bridge Road and a city-owned solar array southeast of the intersection of Brown Field and Battle Bridge Roads.

Based on the impacts above, the City of Raleigh Public Utilities Department requests a coordination meeting with NCDOT and its consultants to discuss utility impacts along the routes listed above. The City also requests that the Utility Impact Report, as well as the subsequent information and cost estimates reported in the DEIS, be updated to include the Public Utilities Department in the Utility Contact Lists and to include those water and sewer infrastructure impacts overlooked in the report's analysis.

COMMUNITY IMPACTS

Randleigh Farm property: The DEIS identifies that the Green Route (Alts. 1, 6, 8, 13) impacts 62.1 of 415-acre site owned by the City and Wake County for future development. The route effectively bisects the property, and impacts two proposed Wake County Public School System school sites. The Tan and Mint Routes (Alts. 2, 3, 9, 10, 14, 15) reduce the impacts to Randleigh Farm by nearly half with little or no impact to proposed school sites.

City/County Law Enforcement Training Facility: The Brown Route (Alts. 4, 5, 11, 12, 16, 17) directly impacts the 9.14 acres of public safety training campus, including a 42-lane outdoor firing range and a live-fire shoot house facility. While the DEIS states that the facility "could likely still function in its current use," the loss of the firing ranges would significantly impact training and certification activities that take place on the site, according to the Raleigh Police Department. 2

Neuse River Greenway Trail: The Mint, Tan, and Brown Routes (Alts. 2, 3, 7, 9, 10, 14, 15) all relocate the Neuse River Greenway Trail through a culvert under the proposed expressway. If one of these routes is chosen, the City requests that NCDOT investigate bridging options where the greenway and the sewer lines discussed earlier in the Public Utilities section could be co-located. With the Brown Route, staff from the Parks, Recreation, and Cultural Resources 3

3 (PRCR) Department has no objection to the proposed relocation of the greenway to the east side of NC 540 from its current location adjacent to Brown Field Road.

4 PRCR staff requests that the design plans account for all future greenway corridors in municipal plans crossing the NC 540 alignment and consider the provision of greenways or easements within the future rights-of-way to link these crossings.

5 **Cemetery:** Please note there is a cemetery located on the east side of 2898 Brown Field Road. This is a potential impact that should be accounted for in the DEIS.

Residential relocations associated with Tan Route: City Council took action in January 2011 opposing the Tan Route due to community impacts. The letter to NCDOT is attached to the Mayor's letter.

TRANSPORTATION

6 **Hodge Road Extension:** The DEIS fails to acknowledge the planned extension of Hodge Road, which is shown as a proposed major thoroughfare in the adopted CAMPO Comprehensive Transportation Plan and as a proposed four-lane avenue in the City of Raleigh's 2030 Comprehensive Plan. For all of the eastern routes except the Brown Route, the DEIS and designs should account for this proposed street extension. The interchange design plans at/near Auburn-Knightdale Road should be revised to better facilitate the proposed street connection, with consideration of moving the southbound ramps from the northwest quadrant to the southwest quadrant that could align opposite from the Hodge Road extension at Auburn-Knightdale Road.

INDIRECT AND CUMULATIVE IMPACTS

7 The City's Long Range Planning staff concurs with the findings that the Red and Purple/Blue routes would encourage development patterns different from those envisioned in the local plans of our neighboring communities. The City has concerns that the Red Route would encourage and induce more development in the Swift Creek Watershed, potentially impacting water quality and increasing water treatment costs for the City. The City has concerns that the Purple/Blue Route will encourage more suburban growth patterns counter to area land use plans, increasing regional VMT and congestion.

OTHER DEIS COMMENTS

8 One page 15, please note and describe what scenario the 2035 network figure represents (Existing Network, Existing Network + Committed Projects, MTP, or other scenario).

9 On page 40, the discussion that the capital, operating, and maintenance costs of transit improvements not being fully funded by the fares is not valid when discussing the proposed tollway improvements where the construction, operations, and maintenance of the facility will not be covered by toll revenues and require gap funding.

Again, thank you for the opportunity to provide comments on the DEIS. If you have questions or need clarification on our comments, please contact me at 919-996-2661 or at todd.delk@raleighnc.gov.

Cc: Tansy Hayward – Assistant City Manager
Ken Bowers – City Planning Director
Eric Lamb – Transportation Planning Manager
Robert Massengill – Public Utilities Director
Diane Sauer – Parks, Recreation & Community Resources Director
Joseph Perry – Deputy Chief, Raleigh Police Department
Mike Kennon – Traffic Operations Manager, Public Works

City of Raleigh – Office of Transportation Letter – 1/8/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Utilities	City is concerned that the Draft EIS and Utility Impact Report do not fully address all potential impacts to water and sewer infrastructure.	NCDOT has coordinated with and will continue to coordinate with the City of Raleigh relative to water and sewer infrastructure along and crossing the preferred alternative (DSA 2/Orange to Green to Mint to Green Corridors). Additional project related utility information is included in the Utilities Analysis and Routing Report (preliminary) and has been incorporated into the design plans and the Final EIS.
2	Human Environment	Brown Corridor impacts to the firing ranges at the Raleigh police training facility would significantly affect the site's activities.	Comment noted. The preferred alternative will not affect this facility.
3	Human Environment	If Mint, Tan, or Brown Corridor is selected, City requests that NCDOT investigate bridging options to co-locate the Neuse River Greenway Trail and sewer lines.	The preliminary design of the preferred alternative (Mint Corridor) has been coordinated with the City of Raleigh to provide for crossing provision for the Neuse River Greenway and for existing and planned utilities. The greenway will be accommodated under the bridge that will cross the Neuse River.
4	Human Environment	City requests design plans account for all planned greenway crossing 540 alignment and consider greenways/easements within ROW to link.	The preliminary design of the preferred alternative accounts for all planned greenways and has been coordinated with the City of Raleigh. Greenways will be accommodated within the highway right of way in the manner normally used by NCDOT through coordination with the locality responsible for the greenway.
5	Cemetery	Draft EIS should account for cemetery on east side of 2898 Brown Field Road.	The cemetery on the east side of 2898 Brown Field Road is in the Brown Corridor and this was not selected as part of the preferred alternative.
6	Design	City would like design of Auburn-Knightdale Road interchange to account for planned Hodge Road extension.	NCDOT has coordinated with the City of Raleigh concerning the potential extension of Hodge Road to Auburn-Knightdale Road. Hodge Road can be extended to connect to Auburn Knightdale Road between the existing Neuse River Bridge on Auburn Knightdale Road and the new ramps associated with the 540 interchange at Auburn Knightdale Road. It is not practicable or operationally desirable to incorporate the Hodge Road extension into the 540 interchange at Auburn Knightdale Road.
7	Indirect and Cumulative Effects	City agrees that Red and Purple/Blue corridors would encourage development patterns in conflict with local plans.	Comment noted.
8	Editorial	On page 15 of the Draft EIS, indicate what scenario the 2035 network figure represents (existing network, existing network + committed projects, MTP, etc.)	This is noted in the Draft EIS errata as presented in the Final EIS.
9	Editorial	On page 40 of the Draft EIS, discussion of costs of transit not being fully funded by fares should consider that construction, operations, and maintenance of toll road will require gap funding in addition to toll revenues.	This is noted in the Draft EIS errata as presented in the Final EIS.

From: Tyler Bray <Tyler.Bray@townofcary.org> on behalf of Tyler Bray
Sent: Thursday, January 7, 2016 2:13 PM
To: complete540@ncdot.gov
Subject: DRAFT EIS Comments: Town of Cary

Greetings,
The following comments are submitted on the Complete540 DRAFT EIS to NCDOT from the Town of Cary. If you have any questions or need additional information, please do not hesitate to contact me.
Thank you,
Tyler Bray

1 • Page 31: The heading at the bottom of the page should be moved to the top of the next page.
2 • Page 32: The heading on the bottom left should be moved to the top right.
3 • Page 73: There should be a dash '-' after the word Services instead of a period '.'.
4 • Page 81: The word 'are' in the last paragraph should read 'area'.
5 • Page 87: The heading is missing the word 'on'.
6 • There are two greenways in the Town of Cary that are affected by the proposed Orange Route. They are the Optimist Farm Greenway and the Camp Branch Greenway. Please ensure that connections are shown and constructed so that these greenways will be accommodated with a grade separation across/under NC540 if it is designed/constructed in this location. The Town of Cary specifications calls for culverts with this recommendation to be a 12'x12' box culvert poured in place.

Tyler Bray, PE
Transportation Planning Engineer
Transportation & Facilities Department
P.O. Box 8005, Cary, NC 27512-8005
Voice: (919)467-1533 **Fax**: (919)388-1124
Visit us on the Web @ www.townofcary.org

In keeping with the NC Public Records Act, e-mails, and all attachments, may be released to others upon request for inspection and copying without prior notification.

Town of Cary Email – 1/7/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Editorial	On page 31 of the Draft EIS, heading at bottom of page should be moved to top of next page.	All section headings in Final EIS have been placed on pages with their subsequent text.
2	Editorial	On page 32 of the Draft EIS, heading on bottom left should be moved to top right.	All section headings in Final EIS have been placed on pages with their subsequent text.
3	Editorial	On page 73 of the Draft EIS, use a dash instead of a period after the word “Services.”	This is noted in the Draft EIS errata as presented in the Final EIS.
4	Editorial	On page 81 of the Draft EIS, the word “are” in the last paragraph should be “area.”	This is noted in the Draft EIS errata as presented in the Final EIS.
5	Editorial	On page 87 of the Draft EIS, heading is missing the word “on.”	This is noted in the Draft EIS errata as presented in the Final EIS.
6	Design	Plans should show connections to accommodate Optimist Farm Greenway and Camp Branch Greenways with grade separations across/under 540. Town specifications call for 12’ x 12’ box culverts.	Both the Optimist Farm Greenway and Camp Branch Greenway are located in areas where there are drainage culverts planned. These locations will easily facilitate an additional 12’ x 12’ greenway culvert.

Town of Garner
900 7th Avenue · Garner, North Carolina 27529
Phone (919) 772-4688 · Fax (919) 662-8874 · www.GarnerNC.gov

Ronnie S. Williams
MAYOR

Garner All-America City 2013

December 16, 2015

Eric Midkiff, P.E.
Project Development - Western Region
North Carolina Department of Transportation
1548 Mail Center
Raleigh, NC 27699-1548

Re: Draft Environmental Impact Statement
Complete 540 Triangle Expressway Southeast Extension Study
Town of Garner Comments

Dear Mr. Midkiff:

This letter presents an official list of the Town of Garner concerns regarding the above referenced matter. The following points are major reasons why the Town of Garner believes why the North Carolina Department of Transportation should remove the red and lilac corridors from further study.

1. **The red corridor is extremely detrimental to current and future parks and recreation facilities in the Town of Garner.**

   The red corridor impacts the northern edge of the recently opened **White Deer Nature Park**, the Town's first LEED Gold certified facility. This is a passive park facility with an environmental education center, trails, picnic shelters, and playgrounds.

   The red corridor will also obstruct and wipe out a portion of the **South Garner Greenway** leading from Timber Drive to **White Deer Park**. This greenway facility connects 4.2 miles of a neighborhood loop sidewalk in central Garner with a 2.8 mile greenway trail through **White Deer and Lake Benson Parks**. The red corridor completely severs the pedestrian connection between these parks and the 4.2 mile sidewalk loop serving hundreds of homes in central Garner.

   The red route obliterates and eliminates **George W. Bryan Nature Park**. Bryan Nature Park is a 20-acre nature park facility located east of Highway 50 near the South Creek neighborhood.

   The red corridor will also impede and negatively impact the Town's 35-acre **Timber Drive Park property**, designated as a future site of an aquatics facility and/or community center.

The **Triangle Area YMCA** owns a tract of land on Aversboro Road that will be the location of a new Poole Family YMCA. The plans have been submitted to the Town for review. Construction is planned to begin in 2016. The red corridor will impact this property's availability for use as a community recreation facility.

2. **The red corridor will disrupt long-range and orderly growth in areas designated for future development by the Town's *Comprehensive Growth Plan*.**

   The Town's major future growth area is generally referred to as the White Oak area. It lies south of US 70, west of I-40, east of Highway 50, and north of Clifford Road. Significant infrastructure investment and planning decisions have been made to promote future growth and development in this area. Capital investments of over 3 million dollars have been made in roads, major water lines, and sewer trunk lines in this portion of the community to support future development. Tremendous uncertainty exists if the red corridor effectively bisects this future growth district.

   The Town's ***Comprehensive Growth Plan*** and the ***2010 Garner Transportation Plan*** both recommend a new interchange at I-40 and White Oak Road to serve an emerging Regional White Oak Mixed Use Center. The red corridor would likely prevent this future interchange from ever occurring while creating some challenges for future growth in this important section of Town that will require significant additional study if the red corridor is selected.

3. **The red corridor severely damages the Town's primary industrial recruitment area.**

   The red corridor obliterates **Greenfield South Business Park**, one of Garner's premiere locations for jobs and industry. As a result, the red corridor will create a loss of significant tax base and the community will witness the demise of an area that has been programmed for non-residential growth that is vital to the Town.

   In 2015, 151 acres of this park was inducted in to the Duke Site Readiness Program. This program helps communities, such as Garner, develop their economic development assets by providing professional assistance and counsel on how to make properties market ready for development. This site has potential to be one of Garner's largest employment centers and will play a key role to a brighter economic future for our community. The Red Route, if chosen, would have a tremendous negative impact on this site rendering the Town's and our partner's efforts in developing one of the largest contiguous sites in Wake County and make it unsuitable for large industrial and commercial development.

   There are 26 commercial/industrial lots (developed & vacant) impacted by the red corridor with a total Wake County tax value of over 30 million dollars.

4. **The red corridor splits and disconnects the Town of Garner again.**

   US Highway 70 split the Town of Garner and literally divided the town into two sections in the 1950's. The community has been striving to recover from this poor

planning decision since that time. Garner cannot afford to be divided again by a road as large as the Triangle Expressway. If the orange protected corridor is selected as the preferred route, the Town can naturally grow towards the new expressway in a managed fashion over the next 25-35 years. Deference should be given to wise long-range planning as exemplified in the protected orange corridor route.

5. **The red corridor will have negative water quality impacts to Lake Benson.**

   The red corridor crosses into portions of the critical areas of **Lake Benson** and **Swift Creek**. The corridor is located immediately upstream of Lake Benson and crosses the majority of the tributaries feeding the lake. This location and proximity would increase the likelihood of potential drinking water contamination. Any spill from a roadway disaster would drain directly into Lake Benson. With the completion of the $90 million **Dempsey Benton Water Treatment Plant**, this lake serves as a substantial potable water supply for the Metro Raleigh area.

   Correspondingly, the road construction impact on **Lake Benson** is an area of concern with the red corridor. The aforementioned proximity and drainage flow direction could lead to lake contamination and/or potential reduction in the safe yield of the lake due to potential sedimentation as a result of the construction process.

   In addition to the lake itself the red corridor will negatively impact the existing water transmission and distribution infrastructure associated with the new water treatment plant. This is also a concern for the existing wastewater collection infrastructure located in the red corridor.

6. **The red corridor fails to provide adequate access to the Clayton Bypass facility.**

   The red corridor fails to provide efficient and effective transportation by not directly servicing traffic generation from the Clayton, Smithfield, Selma and the eastern Johnston County region.

   Pushing traffic via a more northern route as depicted by the red corridor does not accomplish needed goals of accommodating travelers from areas south of Garner that need to travel westward towards Holly Springs, Morrisville and Research Triangle Park.

   The red corridor also puts an interchange that would be just over one mile from the existing I-40/US 70 interchange. This would appear to create difficulty for proper traffic circulation and flow for the traveling public.

7. **The red corridor will have significant and direct impacts on thirteen (13) Garner neighborhoods.**

   The following neighborhoods are directly impacted by the red corridor: Lakewood; Heather Hills; Breezeway; Vandora Pines; Camelot; Breezeway West; Breezeway East; Summer's Walk; Van Story Hills; Heather Ridge; Heather Woods, Forest Landing; and the Village at Aversboro.

We estimate approximately 510 residential lots in Garner could be impacted by the red corridor representing a tax value of over $106,500,000. This represents a significant cost to the Garner community in terms displacement and relocation of numerous families but also a significant impact to our tax base.

8. **The following points summarize the Town's concerns regarding the lilac corridor, especially the portions nearest the Garner Town Limits:**

   - It would remove significant portions of the Town's industrial tax base;
   - It causes a large number of residential relocations for persons in the Greater Garner area;
   - It traverses directly through a City of Raleigh Wastewater Biosolids facility located just south of the Garner Town Limits;
   - It changes land use for a large segment of our Town's future growth area and;
   - It fails to connect directly with the Clayton Bypass.

1 The Town of Garner is fundamentally opposed to both the red and lilac corridors illustrated on the 2015 Corridor Public Hearing Maps. Therefore, the Town strongly requests that both corridors be eliminated from further consideration at this time. The Town of Garner strongly supports the original protected corridor as illustrated by the Orange Corridor on the 2015 Corridor Public Hearing Maps as the preferred choice for the development and construction of the I-540 Triangle Expressway Southeast Extension. The community has long expected growth along this protected corridor and has planned for it appropriately.

Many land use decisions have been made based upon citizens and community leaders assumptions about the protected corridor and its future use. We respectfully request the North Carolina Department of Transportation's formal and serious consideration of our concerns regarding this matter.

Sincerely,

Ronnie S. Williams
Mayor

Hardin Watkins
Town Manager

cc: Town Council Members

RESOLUTION NO. (2015) 2277

A RESOLUTION STATING THE TOWN OF GARNER TOWN COUNCIL'S POSITION REGARDING ALIGNMNENT OF TRIANGLE EXPRESWAY SOUTHEAST EXTENSION

WHEREAS, the proposed 540 Triangle Expressway has been a fundamental transportation facility underpinning for more than 20 years of local land use and transportation decisions of the Town of Garner and other local governments of Wake County;

WHEREAS, the Town of Garner historically has utilized the protected 540 corridor proposed in earlier designs to make key planning decisions for both existing and future development in Garner; and

WHEREAS, any change in plans to relocate this roadway away from its previously designated location (orange route) will have an adverse impact on the Garner community; and

WHEREAS, the "red" route shown on **2015 Corridor Public Hearing Maps** with a course north of Lake Benson is a very poor land use decision that will cause tremendous disruption to existing homes and businesses in Garner; and

WHEREAS, numerous Garner homeowners and landowners have relied upon the protected corridor route (orange) for many years as they have made investment decisions. A change to the planned route will be burdensome, chaotic, and unfair; and

NOW THEREFORE, BE IT RESOLVED, the Town of Garner would like to see the Triangle Expressway Southeast Extension constructed, however, the Town is fundamentally opposed to the "red route" north of Lake Benson; and

BE IT FURTHER RESOLVED that the Town Council supports use of the original protected corridor design as illustrated in orange on the 2015 Corridor Public Hearing Maps as the preferred choice for the development and construction of the I-540 Triangle Expressway Southeast Extension.

Adopted this 15th day of December 2015.

TOWN OF GARNER CORPORATE SEAL 1905 N.C.

(TOWN SEAL)

Ronnie S. Williams

Ronnie S. Williams, Mayor

ATTEST:

Stella Gibson

Stella Gibson, Interim Town Clerk

Town of Garner Letter – 12/16/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Alternatives	Garner opposes the Red and Lilac Corridors due to their potential impacts on Garner interests. Garner supports the Orange Corridor.	The Town's preferences have been noted in the *Preferred Alternative Report*. FHWA and NCDOT have identified DSA 2 as the preferred alternative based on information gathered for the Draft EIS and on stakeholder comments received at hearings after release of the Draft EIS. FHWA will finalize its decision following the NEPA process.

MAYOR
WILLIAM W. MASSENGILL, JR.

MAYOR PRO-TEM
FREDERICK D. NELSON, JR.

COMMISSIONER
WILL T. CHANDLER
JOHN R. BONNER
CASANDRA P. STACK
JERRY MEDLIN
DR. R. MAX. RAYNOR

TOWN OF BENSON
P.O. BOX 69
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TOWN MANAGER
MATTHEW R. ZAPP

TOWN CLERK
CONNIE M. SORRELL

FINANCE OFFICER
KIMBERLY T. PICKETT

TOWN ATTORNEY
R. ISAAC PARKER

Mr. Jamille Robbins
Complete 540 Project
NC Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

January 7, 2016

Dear Mr. Robbins,

Thank you for your consideration of our support for the Complete 540 Project. The Town of Benson is committed to the vitality of its citizens and sustainable planning and development. The Complete 540 Project is an important component to the ease of access and quality of life for our citizens and businesses. While no one route is devoid of impacting the natural and human environments, construction of the route is necessary with increased growth and traffic congestion in the Triangle region.

1 Benson supports the proposed "orange" corridor. This corridor would assist our citizens that work in Wake County and RTP by decreasing their commute time. Furthermore, truck traffic heading west from Benson will find the "orange" corridor less encumbering than traveling through I-40 during peak commute times.

We will continue to follow information related to Complete 540 as it becomes available. This project plays a critical role in our strategic planning efforts and we look forward to its construction. If you have any questions or comments, please do not hesitate to contact us.

Best Regards,

Karissa Bergene

Karissa Bergene
Economic Development Director
Town of Benson
kbergene@townofbenson.com

Town of Benson Letter – 1/7/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Alternatives	Benson prefers the Orange Corridor because it would best serve traffic to and from Benson.	The Town's preferences have been noted in the *Preferred Alternative Report*. FHWA and NCDOT have identified DSA 2 as the preferred alternative based on information gathered for the Draft EIS and on stakeholder comments received at hearings after release of the Draft EIS. FHWA will finalize its decision following the NEPA process.

APPENDIX J3
INTEREST GROUP COMMENTS AND RESPONSES

Following publication of the Draft EIS, NCDOT received formal review comments from several area interest groups. Copies of each of these comments are on the following pages of this Appendix. For tracking purposes, each comment letter was assigned a document number—this number has been placed in the upper right corner of each comment letter. The table below lists each interest group that submitted comments, the document number assigned to that group's comments, and the date of the comments. On each comment letter, the individual comment topics are noted with numbered brackets. A comment response table follows each comment letter. The comment response table lists each bracketed topic number, along with a summary of the comment, and the project team's response to the comment.

Document Number	Agency	Date	Page Number
c001	Southern Environmental Law Center	1/8/16	
c002	Regional Transportation Alliance	12/10/15	
c003	Triangle Greenways Council	12/12/15	
c004	Morrisville Chamber of Commerce	1/8/16	

SOUTHERN ENVIRONMENTAL LAW CENTER

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January 8, 2016

VIA E-MAIL AND FEDEX

Mr. Eric Midkiff, P.E.
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548
complete540@ncdot.gov

RE: Complete 540: Draft Environmental Impact Statement

Dear Mr. Midkiff:

On behalf of Sound Rivers and Clean Air Carolina, the Southern Environmental Law Center ("SELC") submits the attached comments on the Draft Environmental Impact Statement ("DEIS") for the Complete 540 project. The DEIS makes clear that this project cannot move forward in its current form. The extremely high cost of the project—over $2 billion—coupled with the low expected travel time savings for most commuters renders the project an absurd waste of North Carolina's transportation resources. Moreover, the DEIS makes clear that each of the toll road alternatives would do severe damage to the natural environment, including devastating massive areas of wetlands, polluting impaired water bodies and imperiling the existence of federally endangered species.

Of the 17 alternatives proposed by NCDOT, it is clear that Detailed Study Alternatives ("DSA") 6 and 7 are the least environmentally damaging. While still tremendously destructive, they would impact significantly fewer acres of wetlands and fewer linear feet of streams than the other alternatives, and are the only alternatives that would avoid placing a federally endangered species in jeopardy. Further, while all 17 alternatives have no financial path forward, DSAs 6 and 7 are also among the most "practicable" of a range of impracticable alternatives; they rank among the lowest in terms of relocations and have one of the lowest price tags; indeed once all costs are accounted for (such as the cost of a mussel propagation facility) it is likely that DSAs 6 and 7 will be the least costly choice. Nonetheless, the community of Garner has made clear that DSAs 6 and 7 are not acceptable options, and it is imperative that NCDOT search for other alternative solutions to meet the transportation need in the study area.

The comments below call into question the advisability of proceeding further with the $2.5 billion toll highway. The key shortcomings of the proposed toll highway and NCDOT's review of the project include the following:

1 [
- The high price tag—$2.1 to 2.6 billion—represents $1.2 billion more than NCDOT has allocated to the project for the next decade, rendering the road impracticable.

- The toll highway proposal was scored in the NCDOT's data-driven STI process using cost data that is significantly lower than current cost estimates. The project should be rescored and is unlikely to score high enough to obtain funding. 2
- NCDOT's failure to project who is likely to use the toll highway and how much revenue it is likely to generate leaves serious questions about the extent to which the cost of this exclusive toll highway will be shouldered by taxpayers. 3
- NCDOT's data suggest the overwhelming majority of commuters in the study area would not experience any meaningful travel time savings. 4
- For the commuters who will experience time savings, those benefits are expected to average 10 minutes or less, meaning the project will cost over $200 million for every minute of time saved. 5
- NCDOT failed to look at a range of options that would be substantially less expensive and cause significantly less destruction to communities and the environment. 6
- Each toll highway alternative will force hundreds of families to relocate and physically divide existing communities. 7
- All toll highway alternatives would cause extensive damage to the natural environment, including direct impacts to dozens of acres of wetlands, several miles of streams, and hundreds of ponds. 8
- The toll highway would jeopardize the continued existence of the endangered dwarf wedgemussel, and may affect several more soon-to-be federally listed species as well as other species of concern. 9
- The toll highway would impact a variety of public parks and historic places—and every single highway alternative would cross the Neuse River Trail. 10
- The DEIS relies on methodologies that have recently been declared illegal by a Federal Court in North Carolina. 11

I. INTRODUCTION

The National Environmental Policy Act ("NEPA") is the nation's keystone environmental law designed to ensure careful decision making and a rational consideration of impacts and alternatives. It is the foundation of "a national policy of protecting and promoting environmental quality." *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 443 (4th Cir. 1996). NEPA is intended to be "action-forcing," and it should provide the public and decision-makers with the data they need to intelligently make a considered decision about the best path forward for their communities. *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 601 (4th Cir. 2012) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). Accordingly, an Environmental Impact Statement ("EIS") must "serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made." 40 C.F.R. § 1502.2(g).

The Complete 540 DEIS fails to fulfill the purposes of NEPA in a variety of ways. The asserted purpose and need for the project lacks support and contains built-in bias in favor of a

toll highway alternative. The DEIS further fails to fairly assess a reasonable range of alternatives in violation of NEPA requirements. In turn, this failure has led to only toll highway alternatives progressing to the detailed study stages, and each of these toll highway alternatives correspond to enormous environmental and human impacts at an unprecedented and impracticable project cost. Indeed, the entire Complete 540 NEPA process has largely been an exercise in predetermined decision-making. These many shortcomings of the DEIS are discussed in turn below.

II. BIASED AND UNSUPPORTED STATEMENT OF PURPOSE AND NEED

The Statement of Purpose and Need is essential to the NEPA process, as it guides the agencies' scope of review. 40 C.F.R. § 1502.13. As noted by the United States Court of Appeals for the Fourth Circuit, "[o]nly alternatives that accomplish the purposes of the proposed action are considered reasonable, and only reasonable alternatives require detailed study. So how the agency defines the purpose of the proposed action sets the contours for its exploration of available alternatives." *Webster v. U.S. Dep't of Agric.*, 685 F.3d 411, 422 (4th Cir. 2012). Because the Statement of Purpose and Need forms the basis upon which to compare alternatives, an agency is not permitted "to contrive a purpose so slender as to define competing 'reasonable alternatives' out of consideration." *Simmons v. U.S. Army Corps of Eng'rs*, 120 F.3d 664, 666 (7th Cir. 1997).

The stated primary purposes of the Complete 540 project are twofold: (1) "to improve mobility within or through the study area during peak travel periods," and (2) "to reduce forecast congestion on the existing roadway network within the project area."[1] These two primary purposes are largely the same purpose stated different ways: improving mobility during peak travel times is essentially the converse of reducing congestion, which naturally occurs at peak travel times. The primary purposes were developed based on identified transportation needs within the study corridor, including mobility, the need to provide for high speed travel along the 540 Outer Loop, and existing and projected poor levels of service on current roadways.[2] The DEIS also identifies completing the 540 Outer Loop as a secondary purpose, or desirable outcome, of the project.[3]

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As discussed below, the premises underlying the project's purposes and needs call into question how much a toll highway through the project study area is truly needed—and demonstrate the agencies' clear bias in favor of a toll highway despite the lack of such documented need.

A. The Statement of Purpose and Need Was Developed Using Old Data

While the project's purpose and need statement is not on its face too narrowly defined to pass legal scrutiny, the metrics used to ascertain whether or not project alternatives meet the

[1] DEIS, at 10.
[2] Purpose & Need Statement (2011), at 2-3. The DEIS appears to have simplified the needs identified in the Purpose & Need Statement into two needs of (1) more route choices and (2) reducing congestion on the existing roadway network. DEIS at 12-16.
[3] DEIS, at 10; Purpose & Need Statement, at 4.

stated purpose have that effect.[4] Much of the stated need for the Complete 540 project revolves around projections of future growth in the study area and forecasts of future traffic congestion. The 2011 Purpose and Need document states, for example, that "[w]ith increases in traffic volumes projected in the future, a substantial portion of the roadway network in and near the project study area will deteriorate to LOS E or F by 2035."[5] The Statement, however, bases such conclusions on 2008 traffic data that was put into a 2008 traffic model.[6] That traffic modeling tool has since been updated,[7] yet NCDOT failed to update its traffic data or the model used to generate its forecasts that purport to justify the need for this project. The Statement of Purpose and Need, and the DEIS by extension, thus relies on traffic data more than seven years out of date, and a traffic forecast model that is now obsolete.

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The U.S. Environmental Protection Agency ("EPA") noted the outdated nature of these traffic forecasts in 2012: "The details of the traffic models and forecasts are not specifically identified in the report but appear to be generally based upon past development and population growth. Since 2009, the project study area's growth rate has substantially decreased from the two previous decades. In the last 3 years, the growth in southern Wake County has been well below previous years and new development is reported to have stagnated."[8] The EPA again highlighted the lack of up-to-date information in critiquing the mobility purpose of the project, stating, "It is difficult to understand a purpose of reducing forecasted congestion when the traffic modeling, growth projections, and other assumptions are not identified in the report."[9]

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Developing a forecast from such outdated traffic data violates NCDOT's own technical guidance, which directs that "the traffic counts used for capacity analysis purposes should have been taken no more than one year prior to the submittal date of the document."[10] Up-to-date data is imperative in the NEPA process. A long line of federal courts have held that agency reliance on data that is stale or inaccurate invalidates environmental review. *See, e.g., N. Plains Res. Council, Inc.* v. *Surface Transp. Bd.*, 668 F.3d 1067, 1085-86 (9th Cir. 2011) (ten-year old survey data for wildlife was "too stale" and thus reliance on it in EIS was arbitrary and capricious); *Lands Council* v. *Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005) (six-year-old survey data for cutthroat trout was "too outdated to carry the weight assigned to it" and reliance on that data violated NEPA); *Seattle Audubon Soc.* v. *Espy*, 998 F.2d 699, 704-05 (9th Cir. 1993) (reliance on "stale scientific evidence" regarding owl population data without adequate

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[4] Stakeholder Report at 178 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report) ("The purposes of the project were narrowly defined in the previous section of the report. The highway 'threshold criteria' as further defined and as alluded to in the report to meet purpose and need were 'pre-disposed' to eliminate all but new location, multi-lane toll road alternatives.").

[5] Purpose & Need Statement at 4.

[6] *Id.* at 10.

[7] *See e.g.* INST. FOR TRANSP. RESEARCH & EDUC., *History of the Triangle Regional Model*, http://www.itre.ncsu.edu/TBM/trmsb/history.html (last visited Dec. 29, 2015) (listing milestones, including that "2011 TRM version 5 is released and adopted for use by stakeholders"), Attachment 1.

[8] Stakeholder Report at 177 (2012 EPA Technical Assistance Comments on Draft Alternatives Development And Analysis Report).

[9] *Id.*

[10] NCDOT, CONGESTION MANAGEMENT CAPACITY ANALYSIS GUIDELINES, at 3 (2015), *available at* https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/Congestion%20Management/Capacity%20Analysis%20Guidelines.pdf, Attachment 2.

discussion of scientific uncertainty violated NEPA). These courts have been clear that the quality of data must be proportional to the weight the agency assigns to it in its analysis.

Here, the inaccuracy of the traffic forecast data underlies both the purpose and need for the project and the entire analysis of alternatives. Population and economic growth are key factors in traffic forecasting. Accordingly, changes or slumps in projected growth can significantly impact projected traffic demand. Although the DEIS was published in November 2015, the traffic forecasts are derived from data more than seven years old, and on a similarly dated traffic model. As such, the traffic forecasts did not and could not have accounted for the multi-year recession and suppressed growth that began in 2008. Reliance on such stale and overly-optimistic data further inflates demand, and is a glaring oversight that violates NEPA. *Cf. 1000 Friends of Wisc., Inc., v. U.S. Dep't of Transp.*, No. 11-C-0545, 2015 WL 2454271, at *9 (E.D. Wisc. May 22, 2015).

15 The old traffic forecasts are further dated in consideration of Wake County's recently-released long-term transit plan, which includes quadrupled bus service within the county and adding a commuter rail line connecting Garner with Raleigh, NCSU, Morrisville, RTP, Cary, Durham, and Duke.[11] The increase in mass-transit options will have a direct effect on future traffic conditions, and the alleged needs for this giant toll highway should be reassessed in light of the increased future public transportation services.

B. The Statement of Purpose and Need Was Crafted Using an Illegal Methodology.

The traffic forecasts used to create the statement of purpose and need were created using a methodology that has been determined illegal by a long line of federal courts, including most recently the U.S. District Court for the Eastern District of North Carolina. *See Catawba Riverkeeper Found. v. N.C. Dep't of Transp.*, No. 5:15–CV–29–D, 2015 WL 1179646 (E.D.N.C. Mar. 13 2015), attached as Attachment 4. The DEIS purports to compare forecast traffic

16 congestion in 2035 for "build" and "no build" scenarios, but in forecasting traffic, the DEIS relies on socio-economic projections that assumed growth that would occur *with* the Complete 540 toll highway would also occur *without* the toll road.[12] This approach necessarily overstates the level of congestion in a "no build" scenario because, as even NDCOT and FHWA admit, significant future developments and the traffic associated with them will only move forward if the Complete 540 project is built.[13]

The illegal approach has the effect both of making construction of the proposed highway appear more necessary, as well as making other, less damaging and more practicable

[11] RECOMMENDED WAKE COUNTY TRANSIT PLAN, at 8-11(Dec. 2015), Attachment 3.
[12] DEIS at 15 & n.*.
[13] Indirect and Cumulative Effects Report (Dec. 2014), at 76 (noting that building the toll highway will encourage faster growth, and specifically highlighting that "the planned Randleigh Farm project is more likely to begin to be developed if the Complete 540 project is constructed nearby") [hereinafter "ICE Report"]; *see id.*at 79 ("As a major new location facility, the Complete 540 project would dramatically increase access both within the project area and between locations in the project area and employment and commercial centers outside the project area. Local planners fully anticipate that the project would play a major role in influencing the land uses and intensities that will develop across the project area.").

alternatives—such as upgrades to existing roads—seem less attractive. It is not surprising that this flaw was contained in the DEIS. In an attempted appeal of the district court ruling that declared this method illegal, FHWA explained that this flawed approach to traffic forecasting was often used in NEPA analyses of highway projects around the country. FHWA cited 108 instances of other highway projects that had been analyzed using the same approach—the Complete 540 project being one of them.[14] The appeal was denied by the U.S. District Court, and thus the court's initial ruling declaring this method illegal stands. *Catawba Riverkeeper Found.*, No. 5:15-CV-29-D (E.D.N.C. Sept. 10, 2015). The case is currently on appeal to the Fourth Circuit. *See* Federal Defendants' Notice of Appeal, *Catawba Riverkeeper Found.*, No. 5:15-CV-29-D, (E.D.N.C. Nov. 9, 2015); State Defendants' Notice of Appeal, *Catawba Riverkeeper Found.*, No. 5:15-CV-29-D, (E.D.N.C. Oct. 21, 2015). FHWA's apparent wide use of this flaw does not make the flaw any less illegal or misleading in the instant DEIS and supporting documents. *Izaak Walton League of America v. Butz*, 522 F.2d 945, 952 n.26 (4th Cir. 1975) (quoting *Wilderness Society v. Morton*, 156 U.S. App. D.C. 121, 479 F.2d 842, 865 (1973) ("[I]t is our firm belief that a line must be drawn between according administrative interpretations deference and the proposition that administrative agencies are entitled to violate the law if they do it often enough.").

The NEPA process for another highway on Defendants' list, the Illiana Expressway, was recently determined illegal by a federal court in Illinois. *Openlands v. U.S. Dep't Transp.*, No. 13 C 4950, 2015 WL 4999008, at *10 (N.D. Ill June 16, 2015), attached as Attachment 7. FHWA is not appealing the ruling.

C. The Purpose and Need Statement Is Impermissibly Narrow and Favors a Toll Highway over Any Other Alternative.

A secondary purpose of the project is to improve system linkage, or in other words, to complete the I-540 loop.[15] As identified by the Environmental Protection Agency ("EPA") early on in the alternatives development process, such a purpose is out of line with FHWA Guidelines and creates a clear preference for building a road and a bias against any alternatives that would not complete the I-540 loop.[16] The FHWA Guidelines succinctly disapprove of such a purpose: "We don't typically decide to link something just because we can."[17] Indeed, this guidance explains that a purpose of system linkage "does not necessarily translate to a completely new transportation facility," and instead, "modification of an existing facility may be a viable method of improving system linkage."[18]

17 The DEIS, however, specifically limits this purpose to construction of the specific pre-identified roadway: "[a] secondary purpose of the project is to improve system linkage in the regional roadway network *by completing the 540 outer loop around the greater Raleigh area*—a

[14] Gloria Shepherd Decl., Apr. 10, 2015, *Catawba Riverkeeper Found. v. N.C. Dep't of Transp.*, No. 515-CV-29-D, ECF No. 75-3, Attachment 5; Letter from Gloria Shepherd, FHWA, to Kate Asquith, SELC (July 10, 2015), Attachment 6.
[15] DEIS at 10.
[16] Stakeholder Report at 176 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report).
[17] FHWA Guidance, Version 2 (Feb. 2009) at 17, Attachment 8.
[18] *Id.*

goal that has been sought for area planners by more than 40 years."[19] The system linkage goal is ostensibly a "secondary" purpose, and yet every single one of the DSAs in the DEIS completes the outer loop. Indeed, the name given to the project—*Complete 540*—underscores the focus and significance ascribed to the "secondary" purpose of completing the 540 Outer Loop. Even before adopting the catchy Complete 540 name, the 2011 Purpose and Need Statement similarly preordained that the solution would be a toll highway connecting 540 by referring to the project as the "Triangle Expressway Southeast Extension."[20]

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The introduction to this document admits of such an impermissible focus in its first sentence, stating that the agencies proposed "transportation improvements *with a focus* on the consideration of *an extension of the Triangle Expressway (NC 540)* from NC 55 Bypass near Holly Springs to the US 64/US264 Bypass south of Knightdale."[21] The Statement is replete with examples illustrating that it was a foregone conclusion that the project would manifest only in the form of a highway completing the 540 Outer Loop.[22] Such a fixed focus on completing the 540 Outer Loop is precisely the kind of narrow, illegitimate purpose the FHWA Guidance cautions against and should not be considered in the NEPA process.[23] Indeed, the U.S. Army Corps of Engineers and other agencies expressed concern about integrating local land use plans into any statement of purpose for the project at a 2012 interagency meeting.[24] Despite this flaw being brought to the attention of NCDOT early in the NEPA process, the DEIS retains this heavily-critiqued purpose.

III. INADEQUATE ALTERNATIVES ANALYSIS

NEPA requires that agencies "[r]igorously explore and objectively evaluate all reasonable alternatives." *N.C. Wildlife Federation*, 677 F.3d at 602 (citing 40 C.F.R. § 1502.14(a)). In turn, "[a]ccurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b). Such accuracy ensures that agencies take a "hard look" at environmental effects of proposed projects and that relevant information is available to the public. *Glickman*, 81 F.3d at 445-46 (holding that the economic assumptions underlying an EIS are subject to "narrowly focused review" to determine whether they "impair[ed] fair consideration of a project's adverse environmental effects"). Moreover, agencies have a duty to "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." 40 C.F.R. § 1502.24. The alternatives analysis, supported by thorough scientific, expert, and public review, is intended to be the "heart" of the impact statement. 40 C.F.R. § 1502.14. Despite this mandate, the DEIS only offers one true alternative:

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[19] DEIS at 10.
[20] Purpose & Need Statement at cover page.
[21] *Id.* at 1.
[22] *E.g. id.* at 5 (project history section devoted to history of the 540 Outer Loop, not transportation needs in project area); *id* at 16 (identifying the State Transportation Improvement Program's identifiers for the "proposed action['s]" associated three "freeway facility on new location" projects, which complete the 540 Outer Loop); *id.* at 19 (highlighting local governments' resolution requesting a study of toll funding for constructing I-540 in southwestern Wake County).
[23] Stakeholder Report at 179 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report) (citing FHWA Administrator: 7/23/03 Memorandum on Guidance on "Purpose and Need," available at http://www.environment.fhwa.dot.gov/guidebook/Gjoint.asp, Attachment 9.).
[24] *See* Meeting Minutes, Interagency Project Meeting (Aug. 22, 2012), at 2, Attachment 10.

18 building an expensive, environmentally-destructive toll highway that completes the 540 Outer Loop.

As noted above, the project's Purpose and Need, which provides the foundation for the evaluation of reasonable alternatives, was crafted based on outdated and flawed data, and was designed to include an impermissible narrow purpose. The tainted Purpose and Need Statement, including its bias in favor of a toll highway completing the 540 Outer Loop, set the stage for the agencies' arbitrary and capricious alternatives analysis which prematurely rejected reasonable, non-toll highway, alternatives.

A. The Alternatives Analysis is Based on a Biased and Flawed Alternatives Screening Process.

The DEIS relies on a 2014 Alternatives Development and Analysis Report ("Alternatives Analysis") to eliminate all non-toll highway alternatives prior to detailed environmental review. The preliminary review of alternatives involved three tiers of screening, with 8 out of 10 potential alternative types eliminated at the first tier of screening (not including the required No-Build baseline alternative).[25] This first tier of screening was designed with a heavy bias toward construction of a new-location toll highway[26]. The process employed misleading metrics to ensure the toll road option progressed to later screening stages; used an arbitrary method to distinguish between alternatives that would supposedly meet the project purposes as opposed to alternatives that supposedly would not; and inconsistently applied different methodologies to evaluate highway-based options as opposed to other traffic improvements and mass-transit options.

1. Misleading Metrics Arbitrarily Removed Reasonable Alternatives

The first-tier screening process relied heavily on misleading, numeric "Measures of Effectiveness," or "MOEs" to review the potential for each alternative concept to achieve travel time savings and congestion relief.[27] With each of these MOEs, the change from the No-Build scenario was expressed as a percentage. [28] Then, the different concepts were ranked for each MOE from greatest to least percentage change.[29] As noted by EPA, "[a]ll of these measures and the undefined Triangle Regional Model (TRM) are biased towards eliminating TDM, TSM, and Mass Transit/Multi-modal Alternative Concepts."[30]

19 The different MOEs purported to help distinguish the alternatives according to the results of the MOEs. In reality, the MOEs illustrate how indistinguishable the considered alternatives

[25] Alternatives Development and Analysis Report (May 2014), at Table 2-9: Alternative Concepts to be Carried Forward to Second Screening [hereinafter "Alternatives Analysis Report"]

[26] Stakeholder Report at 178 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report) ("The purposes of the project were narrowly defined in the previous section of the report. The highway 'threshold criteria' as further defined and as alluded to in the report to meet purpose and need were 'pre-disposed' to eliminate all but new location, multi-lane toll road alternatives.").

[27] Alternatives Analysis Report at 2-6.

[28] *Id.* at 2-9.

[29] *Id.* at 2-9.

[30] Stakeholder Report at 179 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report).

are in terms of their ability to relieve congestion or enhance mobility. For example, the 2035 projected average daily travel speeds during the evening rush hour for the different alternatives ranged from 43.7 MPH to 47.3 MPH—a difference of less than 4 MPH between the "worst" performing alternative and the "best" performing alternative.[31]

Similarly, the best performing alternative under the travel time MOE was only marginally better than the worst performing alternative. When reviewing travel times, the Alternatives Analysis focused on a "subset of the origin and destination points . . . for closer evaluation of the MOE for project purpose."[32] The origin points chosen were Brier Creek and Research Triangle Park ("RTP").[33] As to the projected travel times for an RTP origin during peak PM travel times, the smallest average change over the No-Build alternative was 3.5% and the greatest change was 13.7%,[34] or stated in minutes saved, an average of 2.25 minutes saved and 5.75 minutes saved, respectively. A difference of an average of 3.5 minutes saved between the worst and best alternatives is hardly a significant difference,[35] and demonstrates that the toll road highway option did not significantly outperform the other reviewed alternatives. Advancing the toll highway alternative over other alternatives, based on such slight differences , is arbitrary and capricious.

2. The Ranking System Arbitrarily Distinguished Between Successful and Unsuccessful Alternatives.

Next, the first-tier screening process used the misleading MOEs to draw false distinctions between the alternatives by dividing them into two groups: alternatives that met the purpose and need and alternatives that did not. [36] After ranking the alternatives from greatest to least percentage changes for each MOE, the alternatives were given different "quartile" scores according to where they fell in the rankings.[37] The alternatives in the top quartile were given a score of "4," and those in the next quartile a "3" and so on.[38] This quartile ranking system thus had the effect of artificially inflating significance of the incremental differences among alternatives, creating the illusion that some were much more successful than others.

Traffic forecasts are inherently limited in their ability to accurately forecast future traffic. Given this level of uncertainty, the minute differences between the respective performance of the various alternatives were likely not even statistically significant.

Indeed, the Complete 540 Traffic Forecast Technical Memorandum recognized the inherent inaccuracy of traffic forecasts:

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[31] Alternatives Analysis Report at Table 2-1: Average Daily Travel Speeds in Traffic Study Area (2035)—PM Peak Period.
[32] *Id.* at 2-11.
[33] *Id.* at 2-12.
[34] *Id.* at Table 2-2: Average Travel Times from RTP to Listed Destinations (2035) – PM Peak Period.
[35] The range of difference in travel times with a Brier Creek origin are similar, with the lowest average percentage change being 3.4% and the highest being 12.1%, or a difference of 2 minutes saved and up to 7.5 minutes saved. With this example, unlike the RTP example, the "best" performing alternative was Hybrid 1 and not the New Location Highway.
[36] *Id.* at 2-9.
[37] *Id.* at 2-9.
[38] *Id.* at 2-9.

> The 2009 TRM V4 model run data was extrapolated to 2010 and shows daily assignment volumes varying (some higher and some lower) from existing count data along study area roadways. This can be attributed to a quickly changing and developing study area and very low base year volumes, which make it difficult for the regional model to completely account for all existing conditions and recent changes.[39]

Despite the insignificant differences between the best-performing and worst-performing alternatives, the Alternatives Analysis used the quartile ranking system to prematurely discard purportedly lower-performing alternatives. Alternatives that achieved a quartile ranking of 3 or 4, were regarded as meeting the project purpose, while alternatives that were (artificially) ranked lower were discarded as unable to meet the purpose and need. [40]

Under this ranking system, a project that scored well under one MOE, but marginally less well than the next project, would be described as not meeting the project purpose—even if it performed better than all other alternatives regarding another purpose. Additionally, an alternative that performed only slightly better than another alternative would be deemed to meet the project purpose, while the other alternative would be deemed to not meet the project purpose, despite an insignificant difference between the performances of the two.

For example, the Hybrid 1 Alternative received quartile rankings of 3 and 4 in every MOE except Average Speed, where it received a 2 for a projected averaged speed of 44.7 MPH.[41] However, the next-best-performing alternative under the Average Speed MOE, which earned a "passing" quartile ranking of 3, was projected to achieve an average speed of 45.6 MPH.[42] Thus, a difference of 0.9 MPH separated the Hybrid 1 Alternative from the alternatives that passed muster under this MOE. This small difference,—which cannot be statistically significant given the uncertainty of traffic forecasting—was thus used to eliminate from consideration an alternative that was otherwise competitive.

If the forecast speed for the Hybrid 1 Alternative had been a mere *one* MPH greater, it would have received a quartile ranking of "3" under this MOE and advanced beyond the first-tier screening process.

This arbitrary screening of alternatives failed to provide the objectively and holistic review of a reasonable range of solutions that NEPA requires.

3. The Screening Process Arbitrarily Used Different Methods to Assess Non-Road Building Alternatives.

21 The first-tier screening process applied the quantitative MOEs and corresponding methodology to road-building or road-upgrading alternatives, but failed to use the same

[39] Traffic Forecast Tech. Mem. (Apr. 2014), at 17; *see id.* at Table 9. Base Year No-Build Forecast Traffic Volumes.
[40] Alternatives Analysis Report at 2-7, 2-17, Table 2-7: Summary of Quartile Rankings of MOEs for Build Alternative Concepts.
[41] *See id.* Table 2-1: Average Daily Travel Speeds in Traffic Study Area (2035) – PM Peak Period; Table 2-7: Summary of Quartile Rankings of MOEs for Build Alternative Concepts.
[42] *Id.* Table 2-1: Average Daily Travel Speeds in Traffic Study Area (2035) – PM Peak Period.

21 methodology to assess the transportation demand management ("TDM"), transportation system management ("TSM"), and Mass Transit/Multi-Modal Alternatives. The methodology used for measuring the MOEs, the Triangle Regional Model ("TRM"), could not be used to evaluate the various MOEs as to the TDM, TSM, and Mass Transit/Multi-Modal Alternative Concepts.[43] Thus, these three alternative concepts were not evaluated using the same methodology as the other road-building or road-upgrading options and were thus not included in any of the tables summarizing the numeric differences between the alternatives. They did not receive relative scores nor a quartile ranking. As highlighted by the EPA in 2012, the MOEs were "biased towards personal vehicle use and alternative concepts that promote new location, high-speed highways."[44] This use of inconsistent methodologies to evaluate different alternatives failed to allow the public to review the relative merits of these less costly and less destructive alternative concepts.

4. The Arbitrary and Flawed Alternatives Analysis Process Violates NEPA

After this arbitrary and inconsistent first tier screening process had been applied, only highway based alternatives advanced to later screening stages. [45] Thus, a wide range of alternative solutions were eliminated before any study of their feasibility or potential environmental impacts,[46] including transportation demand management, transportation system management, mass transit/multi-modal, three different alternatives to improve existing roadways and two different hybrid alternatives.[47] The Alternatives Analysis thus "stacked the deck" in favor of the toll highway, which performs poorly in comparison to the other less expensive and less destructive options, when such factors are considered.

22 The agencies' methodology undercuts the very purpose of the NEPA process, which is to fully and fairly evaluate a reasonable range of alternatives and to do so in a manner that involves the public. The NEPA process, including the EIS, is designed to "serve[] as an environmental full disclosure law, providing information which Congress thought the public should have concerning the particular environmental costs involved in a project." *Silva v. Lynn*, 482 F.2d 1282, 1285 (1st Cir. 1973). Additionally, a detailed EIS "helps to insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug." *Id*.; *see Dubois v. U.S. Dept. of Agriculture*, 102 F.3d 1273, 1285–86 (1st Cir. 1996) ("Thus, the EIS helps satisfy NEPA's 'twin aims': to ensure that the agency takes a 'hard look' at the environmental consequences of its proposed action, and to make information on the environmental consequences available to the public, which may then offer its insight to assist the agency's decision-making through the comment process.").

The EIS must contain sufficient and necessary information to allow the public to scrutinize the agency's review and examine the "basis for a comparison of the problems involved

[43] *See* Alternatives Analysis Report at 2-10 (average daily travel speeds); *id*. at 2-11 (travel times); *id.* at 2-14 (average daily VHT); *id.* at 2-15 (congested VMT); *id.*at 2-16 (congested VHT).

[44] Stakeholder Report at 177 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report).

[45] Alternatives Analysis Report at Table 2-9: Alternative Concepts to be Carried Forward to Second Screening.

[46] *Id.* at 3-9.

[47] *Id.*

with the proposed project and the difficulties involved in the alternatives." *Silva*, 482 F.2d at 1285 (quoting *Monroe Cnty. Conservation Council v. Volpe*, 472 F.2d 693, 697 (2d Cir. 1972)). Because the Alternatives Analysis for the Complete 540 project eliminated the majority of alternatives from consideration prematurely, the transportation agencies deprived the public and local decision-makers of the opportunity to meaningfully participate in the alternatives selection process and contravened NEPA. *See N.C. Wildlife Fed'n*, 677 F.3d at 601-02 (quoting *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989)) (internal quotation marks omitted).

B. The Alternatives Analysis Fails to Analyze Traffic Patterns and Potential Time Savings.

The stated purpose of improving travel times in the study area is a legitimate goal and should help guide a thorough and rigorous examination of alternatives for the Complete 540 project. Given this goal, however, it is surprising that NCDOT has settled on a range of expensive highway options that result in such meager travel time improvements—even 20 years out. Moreover, the Alternatives Analysis fails to address two key considerations: Where are travelers in the project study area going and how will this project help them? The DEIS fails entirely to look at the percentage of traffic in the corridor that is local, i.e. moving within a town or traveling from one town in the study area to another, and the percentage that is traveling through the project area. Without some knowledge of this basic information, it is impossible to determine which alternatives will be most effective.

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The DEIS states that "[i]t is expected the project could reduce travel times to the area's major employment and commercial centers by as much as ten minutes or more." [48] The DEIS itself contains no information on projected time-savings aside from this fleeting mention, despite time-savings already being the primary purpose of the entire project. The DEIS likewise does not elaborate on how this estimate was derived, or to which trips the estimate would apply. Indeed, as highlighted above, the "representative" trips selected for the Alternatives Analysis, with an RTP or Brier Creek origin during "PM peak" travel periods, yielded an average time savings of far less than 10 minutes under a New Location Highway alternative.[49]

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Many questions that would help in understanding the 10 minute time-savings estimate are left unanswered. For example, when would these time-savings be realized? Will drivers who use existing roadways, as opposed to the toll road, experience these time savings? What is the average time-savings for drivers in the study area? Which origin and destination points were considered in the DEIS's broad "as much as ten minutes or more" time savings estimate? What percentage of drivers in the study area actually takes those trips? Such questions must be answered in order to fully evaluate the ability of different alternative solutions to meet the purpose of the project, and to fairly evaluate whether the potential time-savings can justify the high costs—financial, human and environmental—of the project.

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The 2011 Purpose and Need Statement—which as discussed above, relies on outdated data—briefly notes that "more than 25 percent of residents within the project study area

[48] DEIS at 104.

[49] Alternatives Analysis at Table 2-2: Average Travel Time from RTP to Listed Destinations (2035) – PM Peak Period, Table 2-3 Average Travel Time from Brier Creek to Listed Destinations (2035) – PM Peak Period.

commute to RTP."[50] There is no support or explanation for how this number was determined. Without more, such as pertinent information about *where* in the study area such trips to RTP originate, this percentage does little to illuminate the demand for or anticipated use of a toll highway. There is nothing in the EIS to suggest that all 25% of the commuters headed to RTP would be willing or able to pay a toll to use the project. Moreover, there is no information about the regular commutes of the remaining 75% of residents in the project study.

Travel-time savings Tables buried in an appendix to a technical report present an incomplete picture of the potential time savings associated with building the toll road. The tables provide no clue as to how the "ten minute" travel-time estimate came about. Instead, the tables show great variation in the travel time savings for various representative trips within the project area—but the savings are overwhelmingly slim. Considering all 264 trips represented in the tables, the average amount of time saved from a No-Build scenario compared to a Build Scenario in the year 2035 is a mere *3.44 minutes.* Notably, trips during the peak morning hours would save an average of only 1.75 minutes, while the time-savings in the peak evening hours would average 5.13 minutes. More than 41% of all trips studied would not experience any time-savings at all, and 231 of the trips, or 87.5% of the trips, would see *less than 10 minutes saved*. Even if the trips with at least 1 minute or more of time-savings are isolated, of which there are 154, the average time saved for those trips is 5.9 minutes. Even then, while 264 representative trips are analyzed, there is no indication of which trips are most popular. In other words, there is no explanation or analysis of what percentage of commuters travel between any given origin and destination point, thus limiting the utility of the travel time savings estimates.

26 In addition, it is unclear from the DEIS, but after questioning NCDOT staff at the recent public meeting it became clear that the travel time savings documented in the trip tables are limited to potential users of the proposed toll-highway. The DEIS and technical reports do not document how—if at all—travel time savings that might accrue to drivers who opt to remain on the existing, non-toll road network. This failing is significant because elsewhere the DEIS states that construction of this project will have benefits for users of the entire transportation network.[51]

C. The Alternatives Analysis Lacks any Documentation of Demand or Anticipated Use of a Toll Highway in the Project Area.

The DEIS also fails to document how many people it anticipates will actually use the road, a criticism raised by the EPA early when it noted that the "[r]eport does not identify social and economic demands for the project."[52] The response to this comment was that the population of the project area has grown and is expected to grow;[53] however, a potentially growing population does not necessarily mean there is a demand for a new location toll road through the project area. Similarly, the ICE Report states, without any supporting data or analysis, that "[i]t is expected that many of those who currently travel between locations in the project area and employment and commercial centers within and outside the project area would use the proposed

[50] Purpose & Need Statement at 9.
[51] DEIS at 40 ("Compared with other concepts, the new highway concept provided the largest decrease in average travel times and the largest reductions in congestion on the local roadway system."); *id.*at 85.
[52] Alternatives Analysis Report at 6-19.
[53] *Id*.

facility because it would provide a faster, more direct route to these areas."[54] There is simply no support for this statement.

Use of the road would largely be dictated by the price of tolls, which has yet to be estimated or disclosed. In other words, NCDOT appears to assume, without justification, that people will use the toll road regardless of the duration of their trip in the project area, and regardless of the toll price associated with that trip. Drivers will be even less likely to opt for paying a toll in light of the limited travel-time savings associated with the project. As the EPA highlighted in comments on an earlier draft of the Alternatives Analysis Report, "[t]here is no actual traffic data or public surveys demonstrating why commuters would leave local free roadways where there is little to no congestion and utilize a 6-lane toll facility."[55]

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The current public outcry over the planned I-77 toll facility north of Charlotte underscores the North Carolina public's disapproval of toll facilities.[56] Similar sentiments were echoed during the public hearing for the Complete 540 project on December 9, 2015. Without more information about projected actual use of the toll road, which depends on the cost of tolls, it is not at all clear that a toll road would actually improve mobility or decrease congestion. Moreover, without more information on likely users of the project it is impossible to determine if such a toll road project is financially feasible.

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D. The Transportation Agencies Must Consider a Full Range of Reasonable Alternatives and Combinations of Alternatives.

Agencies have a "duty under NEPA . . . to study all alternatives that appear reasonable and appropriate for study at the time of drafting the EIS, as well as significant alternatives suggested by other agencies or the public during the comment period." *Roosevelt Campobello Int'l Park Comm'n. v. U.S. EPA*, 684 F.2d 1041, 1047 (1st Cir. 1982) (internal quotation marks omitted). Only unreasonable alternatives can be eliminated. 40 C.F.R. § 1502.14(a). NCDOT's initial screening of alternatives took place prior to 2011[57] and was based on outdated and flawed methodology as discussed above. This Alternatives Analysis prematurely eliminated a number of reasonable alternatives which would avoid much of the harmful environmental impacts associated with the current iterations of the Complete 540 road.

The DEIS appears to contain a large number of DSAs, but each "alternative" is simply a slight alteration of the same, new-location toll highway alternative. In fact, the 17 DSAs are fundamentally variations on three basic routes. Such tunnel vision hurts the NEPA process and prevents a fair and thorough evaluation of other, non-road building alternatives. *See California v.*

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[54] ICE Report at 13.
[55] Stakeholder Report at 177 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report).
[56] *E.g.* Steve Harrison, *Charlotte City Council is Now the Decider for I-77 Toll Lanes*, THE CHARLOTTE OBSERVER, Jan. 2, 2016, http://www.charlotteobserver.com/news/politics-government/article51335005.html, Attachment 11; Lacey Hampton & Carrie Causey, *Towns Talk Tolls*, THE HERALD WEEKLY, Dec. 10, 2015, http://huntersvilleherald.com/news/2015/12/10/14336/towns-talk-tolls, Attachment 12.
[57] Alternatives Analysis Report at 2-1 (incorporating results of Southeast Extension First Tier Screening Traffic Memorandum from 2011).

Block, 690 F.2d 753, 767 (9th Cir. 1982) (holding that an agency's decision to consider only a narrow set of alternatives prohibited a "reasoned choice" by decision-makers).

30 As discussed above, the Alternatives Analysis screening process was severely flawed and biased against TDM, TSM, mass transit or multi-modal, and upgrade-existing alternatives. Each of these alternatives is these is more practicable and less-environmentally damaging than the toll road alternatives, and each would provide some degree of mobility improvement. Moreover, a combination of these alternative solutions could provide the best alternative to meet the project's purpose and need while costing far less and correlating to far fewer environmental impacts. *See Davis v. Mineta*, 302 F.3d 1104, 1121-22 (10th Cir. 2002) (agency decision was arbitrary and capricious when it only evaluated alternatives "standing alone," not cumulatively). The below sections review how these alternatives were unreasonably eliminated from consideration and why they must be considered in developing the FEIS.

1. Improvements to Existing Highways

Failure to give "substantial treatment" to this reasonable alternative—improving existing highways—without providing "adequate justification for its omission" is necessarily arbitrary and a violation of NEPA. *Southeast Alaska Conservation Council v. FHWA*, 649 F.3d 1050, 1059 (9th Cir. 2011). Yet, that is precisely what NCDOT has done here.

The Alternatives Analysis eliminated three different alternatives pertaining to improving existing roadways. These alternatives consisted of widening existing expressways in the project study area, upgrading a primary parallel arterial road, or a combination of such improvements.[58] Each of the alternatives would widen some portions of I-40, I-440 and the US 64/US 264 Bypass to 12 lanes.[59] Improve Existing Roadways 1 consists entirely of widening parts of these expressways throughout the project study area.[60] Improve Existing Roadways 2 would widen segments of NC 55 and NC 42 to six lanes in addition to widening eastern parts of I-40, I-440 and US 64/264. Improve Existing Roadways 3 would likewise widen the eastern segments of the freeways, and would widen sections of Jessie Drive and Ten Ten Road.[61]

For each of these, the Alternatives Analysis concludes that the road improving alternatives would not "result in a comparatively large reduction in travel times relative to the other Build Alternative Concepts."[62] In reality, the diminutive differences in time savings between the alternatives, as noted above, show that all the alternatives were comparable in terms of their improvements over the No-Build Alternative. Upgrade alternatives are more competitive and practicable than the faulty MOEs and quartile ranking system suggested, and their
31 environmental impacts and feasibility should be evaluated as against the costly, destructive toll highway DSAs. In particular, upgrading existing roadways should be considered in combination with TDM, TSM, and mass transit options as discussed below.

[58] Alternatives Analysis at 2-4.
[59] *Id.*
[60] *Id.*
[61] *Id.*
[62] *Id.* at 2-25.

2. Hybrid Alternatives

The Alternatives Analysis reviewed three "hybrid" alternatives, each of which involved "a combination of constructing a roadway on new location and either widening existing expressways or upgrading a primary parallel arterial roadway between NC 55 Bypass in Apex and I-40."[63] These alternatives performed nearly as well as, or better than, the New Location Highway option under the travel times review in the Alternatives Analysis.[64] Additionally, Hybrid alternatives 1 and 3 consistently performed well under the other MOEs.

Hybrid 1's environmental, human, and feasibility impacts were never considered despite its strong potential to meet the project's purposes. Because of a quartile ranking of "2" in the Average Speed MOE, Hybrid 1 was eliminated from consideration early in the screening process. Strangely, the Alternatives Analysis concluded that this alternative would simultaneously "result in a comparatively large reduction in travel times relative to the other Build Alternative Concepts," but "result in a reduction in average travel speeds."[65] The Alternatives Analysis does not investigate this counterintuitive result, and instead dismissed the option because of its apparent inability to improve average speeds in the travel area.

Hybrid 1 also would use only the western segments of the toll highway that already have funding programmed in the North Carolina State Transportation Improvement Program.[66] In contrast, Hybrids 2 and 3 would have included a segment of the toll highway which currently lacks any funding,[67] as discussed in greater detail below.[68] Given Hybrid 1's secured funding and relatively strong performance in the comparison of alternatives, this alternative should have received greater evaluation to determine whether it could achieve the project's purposes at a lower environmental and human cost than the expensive, full toll highway option.

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3. Transportation Demand Management

The DEIS also includes an insufficient analysis of TDM options that might work in conjunction with other alternatives by reducing demand for the road infrastructure. The DEIS and Alternatives Analysis report rejected TDM because "there is no evidence to suggest that significantly larger percentages of area workers will begin to take advantage of TDM strategies."[69] The report, however, provides no contrary evidence suggesting workers and employers would *not* be able to utilize TDM strategies. Indeed, a preparer of the DEIS acknowledged in an earlier draft of the document that there is *not* evidence that reaching 60% participation in TDM strategies is unattainable.[70]

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[63] *Id.* at 2-5.
[64] *Id.* at Table 2-2: Average Travel Time from RTP to Listed Destinations (2035) – PM Peak Period, Table 2-3 Average Travel Time from Brier Creek to Listed Destinations (2035) – PM Peak Period.
[65] *Id.* at 2-26.
[66] *See id.* at 2-5–2-6.
[67] *See id.* at 2-6.
[68] *See infra* notes 197 – 204.
[69] Alternatives Analysis at 2-20; DEIS at 39.
[70] Draft DEIS document titled "Lochner responses to DOJ comments 1-4", at 24 attached as Attachment 13 (see comments NCDOJ 112 and JS113). The preparer attempted to address this through citation to supporting technical documents; the final version of the DEIS cites to the Alternatives Analysis to "support" The claim that there is no

The Alternatives Analysis was purportedly able to generate data and provide research regarding the new location highway alternatives and should have done likewise for the TDM alternative. The purpose of the NEPA process is to generate and evaluate evidence regarding different alternatives, including TDM strategies. NCDOT and the DEIS highlight that the main traffic problems in the project study area occur during peak commute times, which makes TDM a particularly appropriate and effective solution.

In fact, NCDOT itself has evidence on point, suggesting that significantly larger percentages of workers could indeed take advantage of TDM strategies. NCDOT has successfully implemented TDM strategies to manage traffic in relation to its Fortify 440 project, which is adjacent to the northern boundary of the Complete 540 project study area. NCDOT recently celebrated the collaborative effort between "NCDOT and local, transportation, business, and community leaders," noting "[i]n addition to drivers taking advantage of alternate routes . . . they have also changed their working hours and started telecommuting to help limit the traffic impact."[71] NCDOT staff attribute this success to a "significant" number of individuals who have adjusted the times of day they travel through the project zone, or who avoid the project zone altogether.[72] Such statements fly in the face of the suggestion that there is no evidence that significant numbers of workers in the area would use TDM strategies. NCDOT even has an entire website devoted to TDM-style strategies around the Fortify Project, including resources for employers about flexible work schedules and teleworking,[73] and commuting resources for drivers in the area.[74] NCDOT cannot now arbitrarily claim that while TDM strategies have been successful with the Fortify 440 project, such strategies would not be feasible elsewhere.

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Elsewhere, the Alternatives Analysis asserts that "60,000 traffic study area workers," or "60 percent of maximum TDM-eligible employees" would have to use TDM strategies "to achieve a congested VHT reduction comparable to the Build Alternative Concepts."[75] This does not reveal what the vehicle hours traveled ("VHT") reduction would be in such a scenario—nor does it provide information about what sort of VHT reductions could occur with a different number of workers utilizing TDM. For example, if 30,000 workers utilizing TDM could still reduce congested VHT over the No-Build scenario, and if having 30,000 workers utilizing TDM strategies is feasible, that is information necessary for evaluating this alternative's practicability.

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This inadequate review of TDM strategies did not provide sufficient justification to eliminate the TDM alternative from review. The TDM alternative should have advanced to later stages of study, where its environmental, economic, and human impacts could have been evaluated. Moreover, it should have been studied as one aspect of a combination of solutions.

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evidence large numbers of commuters would use TDM strategies, yet the Alternatives Analysis likewise contains no evidence to support this claim as noted above. *See id.*; DEIS at 39 n.1.

[71] News Release, NCDOT, *Improving Fortify Travel Times a Collaborative Effort* (Nov. 20, 2015), https://apps.ncdot.gov/newsreleases/details.aspx?r=11993, Attachment 14.

[72] *Id.*

[73] *See* NCDOT.gov, *Employer Resources, Fortify NC*, http://www.ncdot.gov/fortifync/employer-resources/ (last accessed Dec. 22, 2015), Attachment 15.

[74] *See* NCDOT.gov, *Driver Resources, Fortify NC*, http://www.ncdot.gov/fortifync/driver-resources/ (last accessed Dec. 22, 2015), Attachment 16.

[75] Alternatives Analysis at 2-16.

4. Transportation System Management

TSM strategies received similarly inconsistent and inadequate review in the Complete 540 NEPA process. The Alternatives Analysis Report claimed that "TSM improvements can increase speeds on freeways/expressways and major arterials by 2 to 3 percent"—an increase comparable to the road-building alternatives—but that "these types of facilities only account for a small portion of traffic study area roadway facilities in the 2035 TRM."[76] The Alternatives Analysis Report then concludes that the small percentage and small number of applicable roads means that TSM cannot compete at the same level of the road-building alternatives. By contrast, the MOEs used to evaluate the alternatives, all refer to the "major roadway network in the project study area" which presumably would be comprised of the freeways, expressways, and major arterials in the area, such as those eligible for TSM improvements.[77]

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Additionally, the Alternatives Analysis Report should have included more information about the "small portion" of TSM-eligible roadway facilities—such as what percentage of the roadways they reflect, and what that two to three percent change in travel speeds would mean for a representative trip in the study area, as the Alternatives Analysis did for road-building concepts evaluated under the MOEs. TSM strategies represent yet another feasible alternative that should have received detailed review.

NCDOT's implementation of TSM strategies along US 74 in Union County demonstrate how effective these methods can be in decreasing congestion. Beginning in 2007, "NCDOT implemented several measures to improve traffic flow along existing US 74 and partially mitigate congestion."[78] TSM improvements were applied to 23 intersections along US 74 and included measures such as signal timing optimization and directional crossovers.[79] After implementing these low cost TSM strategies, average travel speeds along US 74 increased from approximately 20 to 30 MPH in 2007 to approximately 40 to 44 MPH during peak travel times.[80] An additional TSM improvement—constructing a superstreet facility for certain intersections along US 74—is scheduled for construction later this year.[81]

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If TSM strategies in the Complete 540 study area could yield gains in average speed *half* as great as those along US 74, a TSM alternative would outperform the toll highway option in forecast average speed improvements.[82] The success of TSM improvements along US 74 establish the necessity of thoroughly reviewing the ability of TSM strategies to address the Complete 540 project's legitimate purposes and needs. TSM strategies should be studied independently, as well as in combination with other concepts, such as TDM, upgrading existing roadways, and mass transit.

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[76] *Id.* at 2-21.
[77] *Id.* at 2-7–2-8.
[78] Monroe Connector /Bypass Draft Supplemental Final EIS, Chapter 1 at 1-3, Attachment 17.
[79] Monroe Connector /Bypass Draft Supplemental Final EIS, Chapter 2 at 2-10–2-12, Attachment 18
[80] Monroe Connector /Bypass Draft Supplemental Final EIS, Chapter 1at 1-6–1-7, Attachment 17.
[81] Monroe Connector /Bypass Draft Supplemental Final EIS, Chapter 2 at 2-12, Attachment 18.
[82] Alternatives Analysis at Table 2-1: Average Daily Travel Speeds in Traffic Study Area (2035) – PM Peak Period (showing the forecast average speed for a No-Build scenario as 44.8 mph, and for a New Location Highway as 44.7 mph—a difference of less than 3 mph).

5. Increased Public Transportation

The mass transit/multi-modal alternative was also unfairly evaluated in the Alternatives Analysis. After acknowledging that the TRM could not determine travel times for a mass transit/multi-modal alternative, the only evaluation of this alternative was the unsubstantiated statement "[b]uses may actually increase travel times due to frequent stops."[83] The report made a similar fleeting statement regarding average speeds, conceding that buses could improve speeds, but that they also may reduce speeds due to stops.[84] These unhelpful, vague conjectures are an insufficient basis to determine that a mass transit/multi-modal option is not reasonable—particularly when considered alongside other solutions.

The DEIS and Alternatives Analysis note that the "number of buses serving the study area on a daily basis would need to increase from the 50 or so that are currently in use to nearly 600, and each would need to consistently operate at nearly full capacity . . . in order to achieve a decrease in study area traffic congestion and an improvement in travel times sufficient to meet the project's primary purposes."[85] Importantly, the project purposes do not contain a threshold level of reductions or quantitative measures; the purposes are generally to increase mobility and reduce congestion, and not by any particular amount. Either NCDOT has some preconceived requisite amounts of congestion and mobility in mind, or it compared these alternatives to the specific numbers attainable by building the toll road.

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For example, what if increasing bus service to 300 buses would reduce congestion and increase mobility by a discernible amount, even if not by as much as the toll road? This, in conjunction with other alternatives' elements such as TDM, TSM, and improving existing roadways, could combine to *better* achieve the project's purposes with less costs and fewer impacts than the Complete 540 toll highway. Such considerations are particularly relevant now that Wake County has released its recent long-term transit plan, which includes quadrupled bus service within the county and adding a commuter rail line connecting Garner with Raleigh, NCSU, Morrisville, RTP, Cary, Durham, and Duke.[86] This plan will directly impact the feasibility of a mass transit/multi-modal alternative, as well as other alternatives, within the project study area.

The DEIS also suggests that increasing bus service to 600 buses within the project study area would not be feasible due to cost: "The cost associated with such a large expansion of bus service would be high . . . . It is unlikely that these expansion and ongoing operation costs could be met by bus fares alone."[87] Such an assertion is unsupportable when the toll highway will cost upwards of $2 billion, and no financial plan is in place to pay for it. The EPA even suggested that mass-transit would be a reasonable alternative to the new toll highway option because it would create new, permanent jobs "without the disproportionate requirement for infrastructure

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[83] *Id.* at 2-11.
[84] *Id.* at 2-10.
[85] DEIS at 39-40; Alternatives Analysis at 2-14–2-15.
[86] RECOMMENDED WAKE COUNTY TRANSIT PLAN, at 8-11 (Dec. 2015), Attachment 3; Rebecca Martinez, *$2.3 Billion Recommended Wake Transit Plan Would Quadruple Bus Service*, WUNC, Dec. 9, 2015, http://wunc.org/post/23-billion-recommended-wake-transit-plan-would-quadruple-bus-service#stream/0, Attachment 19.
[87] DEIS at 40.

maintenance," as well as with "fewer and less substantial indirect and cumulative impacts."[88] Without more supporting data about bus costs, the comparative cost of bus service does not provide a rational basis for rejecting the mass transit/multi-modal alternative.

6. Combination of Strategies

The Alternatives Analysis also failed to consider a combination of alternatives which might meet the project's purpose. While the Alternatives Analysis consistently rejected the upgrade existing roads, TDM, TSM, and mass transit alternatives as not being able to meet the project's purposes to the same degree as the toll highway option, the Alternatives Analysis never considered whether combining two or more of these options would meet the project purposes as well or better than a toll highway option—and at a lower cost, with fewer environmental and human impacts.

41 The agencies must investigate alternatives such as TDM, TSM, mass transit/multi-modal, and upgrading existing roadways, separately and in combination, in order to fulfill their obligations under NEPA to rigorously review a reasonable range of alternatives. Indeed, the EPA suggested that NCDOT evaluate a combination alternative early on.[89] As highlighted above, it is unreasonable to reject this slate of alternatives because any one might not achieve the same levels of congestion-relief or mobility as building the 540 toll road. And indeed, due to the flawed analysis, these alternatives may well perform better than suggested in the Alternatives Analysis. NCDOT must evaluate whether combining these unreasonably rejected alternatives could meet the project purpose. *See Mineta*, 302 F.3d at 1121-22. *C.f. Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 814 (9th Cir. 1999) ("A 'viable but unexamined alternative renders the environmental impact statement inadequate.'" (quoting *Citizens for a Better Henderson v. Hodel*, 768 F.2d 1051, 1057 (9th Cir. 1985))).

IV. UNPRECEDENTED AND SEVERE IMPACTS

The DEIS presents 17 different DSAs, each of which is environmentally destructive. All of the DSAs would impact thousands of feet of streams, dozens of acres of wetlands and ponds, and correspond to destructive indirect and cumulative impacts through shifting traffic and land use patterns. Most of the DSAs would also imperil the endangered dwarf wedgemussel by crossing over the portion of Swift Creek that is most important to the species. While the DSAs using the Red Route would avoid most of the direct impacts to the dwarf wedgemussel, and correspond to far fewer environmental impacts in comparison to the other DSAs, these Red Route options are still environmentally damaging. The excessive impacts associated with all DSAs underscore the need for a more thorough examination of non-toll highway alternatives which would avoid most of these harmful effects.

A. Each DSA Would Result in Significant Adverse Impacts to Water Quality Which Would Not Occur With Non-Toll Highway Alternatives.

[88] Stakeholder Report at 178 (2012 EPA Technical Assistance Comments on Draft Alternatives Development and Analysis Report).

[89] *Id.* at 180 ("Light rail was not considered for the mobility analysis nor was a full comparative combination of alternatives, such as some TSM, some modest increases in express bus services from significant commuting areas and a light rail connecting major commuting center and destinations.").

42 A cursory examination of the direct impacts associated with any and all of the DSAs easily establishes the excessive environmental damage that would be caused by this project. Even the DSAs with the associated "least" environmental damage would result in substantial adverse impacts on wetlands, streams, and other natural resources. By way of comparison, the EPA had previously considered the proposed Garden Parkway project in Union and Mecklenburg counties to be one of the most environmentally damaging North Carolina projects in the preceding ten years of the NEPA/Section 404 Merger process with 36,416 linear feet of impacted streams, 7.02 acres of impacted wetlands, 4.5 acres of impacted ponds and 91 impacted stream crossings.[90] Here, every single DSA has a far greater number of impacts as to each of these environmental features, with even the "least" harmful option, DSA 7, corresponding to 51,582 linear feet of impacted streams, 51.4 acres of impacted wetlands, 17.7 acres of impacted ponds, and 106 impacted stream crossings.[91] Moreover, once the indirect impacts from changed land uses and induced growth are considered, the environmental consequences will be even more severe.

1. Miles of Impacted Streams and Ponds

Direct impacts from the DSAs would affect anywhere from 51,582 to 78,087 linear feet of impacted streams, including anywhere from 106 to 142 separate stream crossings.[92] DSAs 6 and 7, which use the Red Route, are associated with the fewest stream impacts.[93] The possible 51,582 to 78,087 linear feet of stream impacts translates to anywhere from just under *10 miles* of affected streams to more than *fourteen miles* of affected streams. These stream impacts make the Complete 540 DSAs significantly worse than the previously mentioned Garden Parkway project.

43 Additionally, building the proposed toll road would directly impact anywhere from 25 to 44 ponds, comprising a total of 17.7 to 27.6 acres of ponds.[94] Streams and ponds provide vital ecosystem resources, in addition to contributing to the natural beauty of this area. For example, many of the streams and ponds are inhabited by a diverse array of aquatic wildlife,[95] including a rich variety of mussel species.[96] Additionally, the section of the Neuse River and many of its tributaries flowing through the study area is recognized by North Carolina resource agencies as Anadromous Fish Spawning Area ("AFSA") and as a Primary Nursery Area ("PNA").[97] The AFSA designation means that anadromous fish species—which are fish species that begin their lives in freshwater, migrate to the open ocean for their adult lives, and return to freshwater areas to spawn—have been directly observed in the area.[98] While the Red Route DSAs represent the

[90] Letter from Heinz J. Mueller, U.S. EPA, to Jennifer Harris, N.C. Turnpike Authority (Feb. 22, 2011), Attachment A: FEIS Detailed Review Comments, Gaston East-West Connector Toll Facility, at 4, Attachment 20.
[91] DEIS at 108, Comparative Evaluation Matrix
[92] *Id.*
[93] *Id.*
[94] *Id.*
[95] Natural Res. Tech. Report at 11.
[96] *Id.* App. E: Freshwater Mussel Survey Report (Mar. 2011), at i-ii.
[97] DEIS at 27; Natural Res. Tech. Report at 5; NAT'L MARINE FISHERIES SERV., A REFERENCE GUIDE TO THE DISTRIBUTION OF ANADROMOUS FISHES IN NORTH CAROLINA RIVERS (2010), at 5 (listing tributaries within Neuse River AFSA, including, for example, Swift Creek and Middle Creek) *available at* https://connect.ncdot.gov/resources/hydro/Hydraulics%20Memos%20Guidelines/A%20Reference%20Guide%20to%20the%20Distribution%20of%20Anadromous%20Fishes%20in%20NC.pdf, attached as Attachment 21.
[98] DEIS at 27.

options with the fewest impacts to ponds and other water resources, the Red Route is also the only route to directly impact approximately 6.7 acres of the Swift Creek Critical Watershed.[99] The Swift Creek Critical Watershed is a water supply watershed, and development within the watershed is limited according to Wake County's Swift Creek Land Management Plan.[100] The DEIS fails to explain how these limits on development would affect the project and provides no information about the nature of the impacts to the 6.7 affected acres. The Red Route would cross Swift Creek between Lake Wheeler and Lake Benson, a section of the creek particularly susceptible to increased pollution and other ill effects.

44 As documented in the DEIS, the nature of the impacts to water resources include increased sedimentation, increased turbidity, habitat degradation to aquatic species, changes in water temperature, increased pollution from highway runoff and construction activities, and changes in water flows. [101] While preventive measures such as sedimentation and erosion controls are mentioned in the DEIS, there is no commitment they will be followed and it is unlikely they will be fully successful. Because the water resources at stake include essential fish habitat and long stretches of streams, these impacts are even more alarming.

45 The DEIS also lacks much information regarding stream and water quality impacts. Fish monitoring of the streams in the area appears to have been very limited, with data being collected at *one location* within a mile of the study area back in June of 1991 and again in April of 1995.[102] Likewise, the benthic monitoring within the study area is dated, with the majority of the designations coming from the 1980s or early 1990s.[103] The site with the most recent benthic water quality assessment is from July 2000.[104] This dated, incomplete information harms the NEPA process by failing to provide information necessary to the selection of a preferred alternative.

2. Already Impaired Waters

Many of the streams in the Complete 540 project area are already listed as impaired under Section 303(d) of the CWA ("Section 303(d)" or "303(d)"), meaning that the streams' water quality levels are below the applicable water quality standards. In other words, these impaired streams are already polluted, and their polluted status would only worsen with the addition of more impervious paved surfaces and conversion of natural areas into commercial and industrial developments,[105] which would result in increased stormwater runoff, nonpoint pollution, and sedimentation issues within the affected watersheds as noted above. Four of the DSAs would impact more than one thousand linear feet of already impaired streams, and another ten would impact between 500 and 1,000 linear feet of 303(d) impaired streams.[106]

[99] DEIS at 108, Comparative Evaluation Matrix.
[100] Community Impact Assessment (June 2015), at 38.
[101] DEIS at 87-88.
[102] Natural Resources Technical Report (Aug. 2014) at 5
[103] Natural Resources Technical Report (Aug. 2014) at 5
[104] Natural Resources Technical Report (Aug. 2014) at 5
[105] Indirect and Cumulative Effects Report (Dec. 2014), at E-4–E-5.
[106] DEIS at 108, Comparative Evaluation Matrix

Aside from its numeric summary of Section 303(d) impacts in the Comparative Evaluation Matrix, the DEIS only makes fleeting mention of these 303(d) impaired waters in a general section about Water Resource Protection: "Section 303(d) of the CWA prohibits the addition of certain new sources of pollutants into waters listed as not meeting water quality standards. Several water bodies in the Complete 540 study area are on the North Carolina Section 303(d) list."[107] On the following page, in a discussion specific to the Neuse River, the DEIS notes that "the Neuse River in the study area . . . is listed on the North Carolina 2014 Final 303(d) list of impaired waters due to high copper levels," and "portions of Swift Creek in the study area" are on the Section 303(d) list due to "impaired benthic integrity."[108] Terrible Creek and Beddingfield Creek are also listed under 303(d) due to their impaired benthic community,[109] and Little Creek and Middle Creek are on the 303(d) list due to impaired benthic integrity and a poor fish community.[110] As noted in the Natural Resources Technical Report prepared prior to the DEIS, both the Neuse River and Middle Creek had previously been listed as impaired due turbidity.[111] The Indirect and Cumulative Effects ("ICE") Report identifies still more 303(d) streams within reach of future land use impacts caused by the project, including Crabtree Creek, Walnut Creek, Kenneth Creek and Neills Creek.[112]

46 This is the extent of the DEIS's documentation of Section 303(d) impaired waters—there is no analysis of how the impaired streams would be further impacted and no discussion of how NCDOT intends to prevent further impairment. As previously noted, the DEIS succinctly summarized and acknowledged the import of Section 303(d) in prohibiting "the addition of certain new sources of pollutants into waters listed as not meeting water quality standards."[113] Yet, the DEIS omits any discussion of the nature of the projected impacts to the several hundred linear feet of Section 303(d) listed streams.

47 This lack of sufficient explanation of impacts must be corrected in order to provide the public and resource agencies with necessary project information. Pursuant to § 401 of the Clean Water Act, 33 U.S.C. § 1341, the state of North Carolina must certify that any discharge from the Project complies with the relevant provisions of the Clean Water Act. The North Carolina Division of Water Resources ("DWR") has explained that certification is predicated on a determination that a project "does not result in cumulative impacts, based upon past or reasonably anticipated future impacts, that cause or will cause a violation of downstream water quality standards."[114] For "projects such as roads on new location," DWR requires a "[q]uantitative (i.e. [d]etailed) [a]nalysis of water quality impacts."[115] According to DWR policy, impaired waters listed pursuant to CWA Section 303(d), "warrant special attention with

[107] DEIS at 26.
[108] DEIS at 27.
[109] DEIS at 29.
[110] DEIS at 27, 29.
[111] Natural Resources Technical Report at 5.
[112] Indirect and Cumulative Effects Report (Dec. 2014), at E-3, 21-22.
[113] DEIS at 26.
[114] N.C. DIV. WATER QUALITY, CUMULATIVE IMPACT POLICY FOR THE 401 AND ISOLATED WETLAND PERMITTING PROGRAMS, at 1(April 10, 2004) *at* http://portal.ncdenr.org/c/document_library/get_file?uuid=b567bb9e-09fd-4ec0-9231-6d47e19e085e&groupId=38364 (citing 15A NCAC 2H .0506 and 15A NCAC 2H .1300), attached as Attachment 22.
[115] *Id.* at 2.

respect to cumulative impact analysis since existing regulatory programs often have not adequately addressed pollution sources for these waters."[116] DWR therefore advises that "a detailed, quantitative analysis should be conducted by DOT to determine 1) if cumulative impacts are likely," and "2) what non-point source control measures will be needed and how they are to be implemented."[117] DWR goes on to explain that "[t]his analysis will often require watershed-level modeling using export coefficients, estimated levels of treatment for BMP's and comparison to numerical water quality standards or numeric water quality goals."[118]

48 Here, the DEIS and supporting reports fail entirely to discuss potential cumulative—or any—impacts to impaired waters within the project study area as directed by the DWR guidance. This lack of study and documentation of impacts to CWA 303(d) streams will make obtaining Section 401 certification difficult, if not impossible.

3. Devastated Wetlands

In addition to the thousands of yards of impacted streams, each DSA would directly impact at least 135 separate wetlands and as many as 161 wetlands, comprising a total of 51.4 to 75.6 acres of impacted wetlands.[119] These numbers comprise only the wetlands directly impacted by the various proposed DSAs, as the underlying Natural Resources Technical Report identified far more wetlands within the study area as a whole—a total of 543 wetlands—which would likely be impacted by the indirect impacts of the project.[120]

49 Much like the DEIS's cursory overview of the quantitative impacts on streams, the DEIS and Natural Resources Technical Report fail to document the extent or nature of any of the wetlands impacts. Nonetheless, in reviewing the maps associated with the project and in light of nature of the project, it appears that large areas of wetlands would be completely destroyed, and others would be impaired or damaged by consequent increases in runoff and pollution. While the DEIS does not specifically discuss sedimentation, turbidity, increased runoff and pollution issues within its specific wetlands impacts section,[121] the DEIS identified these impacts in the general section on water resources.[122] The noted direct impacts to water resources apply to wetlands, and may have greater negative impacts in light of the sensitive nature and ecological importance of wetlands. Additionally, wetlands in the project area would suffer more impacts in the form of indirect and cumulative impacts as land uses change and development shifts—thus the impacts to wetlands would be even worse than what is already depicted in the DEIS.

4. Lack of Buffer Protections

The DEIS and ICE Report emphasize that existing state and local buffer rules provide protection for waterways within the study area.[123] The ICE Report highlights that some local

[116] *Id.* at 3.
[117] *Id.*
[118] *Id.*
[119] DEIS at 108: Comparative Evaluation Matrix.
[120] Natural Res. Tech. Report at 12.
[121] DEIS at 90-91.
[122] *Id.* at 88-89.
[123] *Id.* at 27; ICE Report at E-4, 32.

jurisdictions within the study area have imposed more stringent buffer requirements. In making this observation, however, the DEIS and ICE Report fail to document the impacts of the proposed project on these riparian buffers established or protected by local ordinance. 50

Exclusive reliance on the enforcement of state-mandated buffer protections is questionable given the myriad steps taken by the North Carolina General Assembly to weaken the State's riparian buffer protection requirements. First, in recognition of the breadth of buffer protections currently afforded by local ordinance, the legislature recently sought to restrict the authority of local governments in this arena. Legislation passed earlier this year prevents any local government, absent completed review and approval by the State prior to 2017, from enacting, implementing, or enforcing any buffer ordinance unless "necessary to comply with or implement federal or State law or a condition of a permit, certificate, or other approval issued by a federal or State agency." 2015 N.C. Sess. Laws 246 § 13.1(b) (Sept. 23, 2015) (enacting N.C. Gen. Stat. § 143-214.23A). The same legislation limited the ability of local governments to enforce buffer ordinances in their extraterritorial jurisdiction, regardless of observed impacts on water quality. *Id.* § 3 (amending N.C. Gen. Stat. § 160A-365). Thus, the ICE Report's statement regarding local ordinances providing more stringent buffers is outdated, and NCDOT cannot assume such protections will be in place to assist in reducing impacts from the Complete 540 project. 51

The State's disregard for the water quality protection afforded by riparian buffers is also evidenced by a recent reduction in required mitigation when a project impacts existing riparian buffers. A 2015 law eliminated all mitigation requirements previously applicable under state law to account for impacts to riparian buffers bordering intermittent streams. 2015 N.C. Sess. Law 286 § 4.31(a) (Oct. 22, 2015) (amending N.C. Gen. Stat. § 143-214.7C). In other words, the DEIS cannot genuinely claim that selected routes would have a smaller impact on "protected buffer zones" than suitable alternatives when it fails to consider actions by the State to narrow the scope of protected buffer zones. The DEIS fails to fully and fairly assess the project's potential impacts to buffer zones in light of recent state legislation, and assumes that many now-defunct local buffer zones would be in place. These buffer zone considerations will have a serious effect on environmental impacts in the project area, as well as a serious impact on measures NCDOT may be required to undertake to provide additional buffer protections in light of these legislative changes.

A. Building the Toll Highway Would Jeopardize an Endangered Species in Violation of the Endangered Species Act

Under the Endangered Species Act ("ESA"), federal agencies must consult with the U.S. Fish and Wildlife Service to ensure that "any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical." 16 U.S.C. § 1536(a)(2). The Complete 540 project is subject to this mandate, and indeed, the project cannot legally proceed because it would jeopardize the continued existence of the endangered dwarf wedgemussel—and possibly other rare, soon-to-be federally listed species. 52

Thirteen rare aquatic species occur within the project study area, including the federally-listed endangered dwarf wedgemussel, and a number of species that will likely be listed before project construction is scheduled to begin on this project. Here, all but DSAs 6 and 7 would cause direct adverse effects to the dwarf wedgemussel, as well as likely damaging effects on the 12 other rare aquatic species. It is possible that even DSAs 6 and 7, through indirect or cumulative impacts, could jeopardize the continued existence of the dwarf wedgemussel.

1. Building the Toll Road Would Result in Severe Direct, Indirect, and Cumulative Impacts to the Dwarf Wedgemussel

As documented throughout the DEIS and supporting reports, an essential population of the dwarf wedgemussel occurs within the Swift Creek watershed.[124] The North Carolina Wildlife Resources Commission includes the Swift Creek Watershed on a list of 25 areas in the state "considered essential for the continued survival of endangered or threatened aquatic wildlife species."[125] The USFWS considers Swift Creek as being essential for the recovery of the dwarf wedgemussel.[126] All of the DSAs cross Swift Creek, with the majority crossing Swift Creek downstream of Lake Benson. The section of Swift Creek upstream of Lake Benson is not known to support dwarf wedgemussels, while the section downstream of Lake Benson supports a well-documented, persistent population of dwarf wedgemussels. As stated in the ICE Report, the "portion of Swift Creek downstream of the Lake Benson dam is particularly important for the long-term survival of this species."[127]

The DSAs not using the Red Route all cross Swift Creek below Lake Benson, in the stretch of Swift Creek where dwarf wedgemussels have been consistently observed in stream surveys. Indeed, the Orange Route segment "appear[s] to connect with I-40 at a particularly unfavorable location with regard to potential impacts to the dwarf wedgemussel," placing the I-40 and US 70 Bypass interchanges "on top of several tributaries to Swift Creek and also in close proximity to Swift Creek mainstem. These routes would tear up these critical portions of Swift Creek, and the dwarf wedgemussel would suffer further direct impacts from erosion and siltation resulting from construction of the road. [128] The only route that would avoid the direct impacts on the dwarf wedgemussel is the Red Route, which is included only in DSAs 6 and 7.

53 The indirect and cumulative impacts identified by USFWS and the ICE Report would jeopardize the dwarf wedgemussel's continued existence under any of the current DSAs. Given the induced growth and other indirect and cumulative impacts likely to occur with this road, even DSAs 6 and 7 may jeopardize the dwarf wedgemussel's continued existence.[129] The USFWS expressed concern about this project's indirect impacts to the dwarf wedgemussel early on,

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[124] *E.g. id.* at 30.
[125] Dwarf Wedgemussel Viability Study: Phase 1 (Mar. 2014), at 1 [hereinafter "DWM Viability Report"].
[126] *Id.* at 1.
[127] ICE Report, at E-3.
[128] Letter from Gary Jordan, USFWS, to Jennifer Harris, NCTA (Feb. 3, 2010), at 1-2, Attachment 23; *see also* Sarah McRae, USFWS, Powerpoint Presentation: ESA Consultation Considerations for Complete 540 Transportation Project (Feb. 3, 2015), at slide 18, Attachment 24.
[129] Natural Res. Tech. Report, App. E: Freshwater Mussel Survey Report, at ii ("[D]irect impacts to the dwarf Wedgemussel are unlikely to occur if the Red Corridor is constructed; however, conclusions regarding Indirect and Cumulative Impacts to the population cannot be determined at this time, and will need to be addressed with all alternates within the study area.").

noting that "[t]his population of dwarf wedgemussel is at risk . . . from indirect effects associated with the degradation of water quality from secondary development induced by the new road."[130] USFWS further noted that additional impervious surfaces in the area and increased storm water runoff due to the induced development would further degrade water quality in the Swift Creek watershed.[131] In turn, the ICE report acknowledges likely cumulative effects on the dwarf wedgemussel, noting that this species is "extremely sensitive to urban pollutants," and "urban development activities lead to soil erosion and sedimentation that also harms the species."[132] In other words, the increased level of urban development anticipated to occur as a result of the building of the road would have serious impacts on the dwarf wedgemussel's viability, in addition to the direct impacts associated with the direct devastation of the road crossing at Swift Creek.

The initial dwarf wedgemussel viability study completed in conjunction with the DEIS acknowledges the dwarf wedgemussel's susceptibility to direct, indirect, and cumulative impacts while also noting the population's recent rebound. The study establishes that "there are numerous stressors to aquatic communities, particularly the DWM population, the [Swift Creek Watershed]," with many of the stressors resulting from urbanization of the watershed.[133] The study further reports that declines in the mussel population "appear to have leveled off," and evidence indicates that "mussel recruitment has increased within the last few years."[134]

54 The study confusingly appears to focus on the current viability of the dwarf wedgemussel, rather than the viability of the dwarf wedgemussel in the event any of the DSAs are built.[135] The Endangered Species Act protections do not depend upon a species' viability—indeed, such an interpretation would be in complete contravention of the purpose of recovering and conserving species whose viability are of concern precisely because of their endangered or threatened status. Instead, the key question for ESA protection is whether the species or habitat supporting it exists within the area. 16 U.S.C. § 1536(a)(2)Viability becomes relevant only when reviewing whether or not a proposed action would threaten the species' survival. *Id.*; *see id.* at § 1536(b)(3)(A) (at conclusion of consultation, FWS will provide "a summary . . . detailing how the agency action affects the species or its critical habitat," and "suggest those reasonable and prudent alternatives which . . . would not violate" the ESA). Nonetheless, recent studies suggest the dwarf wedgemussel population may be rebounding.[136] The toll road would reverse that trend of improvement and doom this dwarf wedgemussel population.

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[130] Letter from Gary Jordan, USFWS, to Jennifer Harris, NCTA (Feb. 3, 2010), at 1-2, Attachment 23; *see also* Sarah McRae, USFWS, Powerpoint Presentation: ESA Consultation Considerations for Complete 540 Transportation Project (Feb. 3, 2015), at slide 18, Attachment 24.

[131] Letter from Gary Jordan, USFWS, to Jennifer Harris, NCTA (Feb. 3, 2010), at 1-2, attached as Attachment 23.

[132] ICE Report, at 77; *see also* letter from Gary Jordan to Jennifer Harris, NCTA (Feb. 3, 2010), at 2, attached as Attachment 23 (noting that "[a]dditional cumulative impacts may occur in conjunction with the proposed widening of I-40 within this same study area").

[133] DWM Viability Report at ii.

[134] *Id.*

[135] *Id.* at 47 (noting goal of determining "long term viability").

[136] *Id.* at 75 ("The decline [in dwarf wedgemussel populations] seems to have leveled off in recent years, which when coupled with evidence of recent reproduction and recruitment, may suggest a chance for the species to persist into the future.").

55 Under the strictures of the ESA and its implementing regulations, this project cannot legally proceed if it will jeopardize the dwarf wedgemussel or adversely affect the dwarf wedgemussel's critical habitat. 16 U.S.C. § 1536(a)(2); 40 C.F.R. § 230.10(b)(3). The required ESA consultation process with USFWS is still underway.[137] Until USFWS completes its consultation process, which will determine whether the project is likely to jeopardize the dwarf wedgemussel or adversely affect its habitat, the NEPA process and project as a whole cannot proceed.

Simply stated, building DSAs 1-5 and 8-17 is illegal under the ESA, and construction of DSAs 6 and 7 may also be barred under the ESA once additional research is completed. NCDOT should explore non-highway options that will not place the species in jeopardy.

2. Insufficient Information Impedes Full Review of the Impacts to the Dwarf Wedgemussel

56 While the DEIS acknowledges some of the possible adverse effects, it is also incomplete in its analysis and defers the full ESA evaluation for later. The DEIS states "[t]he Biological Conclusion for this species is unresolved," and states NCDOT will not undergo the necessary Consultation process until a preferred alternative is selected, at which point the consultation results will be published in the FEIS or ROD.[138]

57 Additionally, the mussel survey relied upon in the DEIS for documenting mussel species, including the existence of dwarf wedgemussels within portions of Swift Creek, was completed more than five years ago.[139] It appears that each included segment was surveyed only once during the study period.[140] This study's limits and dated nature require that additional mussel surveys be conducted to better document the presence of a variety of rare mussel species.

3. A Propagation Facility Cannot "Offset" Impacts to the Dwarf Wedgemussel or Comply with the ESA

58 Documents obtained from NCDOT raise the concern that the agencies may attempt to circumvent the ESA's conservation mandate through a mussel propagation program that would simply put more mussels into an uninhabitable environment once the Complete 540 toll road is built. Correspondence between NCDOT and USFWS staff reveal that the agencies are coordinating on a plan that would establish a dwarf wedgemussl propagation facility in conjunction with North Carolina State University. Given the plan's development in conjunction with NCDOT and relative to the Complete 540 DEIS, the plan appears to be intended to offset or "mitigate" harm to dwarf wedgemussels that may result from the Complete 540 toll highway, rather than a plan developed independently to assist the viability of the species in its current

59 state. NCDOT has presented no evidence to suggest that the dwarf wedgemussel could be successfully propagated in captivity and then reintroduced into the wild.

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[137] DEIS at 95.
[138] *Id.* at 95-96.
[139] Natural Res. Tech. Report, App. E: Freshwater Mussel Survey Report at 2.
[140] *Id.* at 1-2.

60 Even if NCDOT could successfully propagate mussels in captivity and release them into the wild, the time for implementing such a program has passed.[141] It is too late to successfully complete such a program so as to augment the current mussel population, rather than effectively replace the current mussel population once wiped out by the proposed Complete 540 toll road.[142] More than a year and a half ago, USFWS warned NCDOT that such "population augmentation" would be a time-sensitive and resource-intensive process:

> [T]he process of acquiring a captive propagation facility and developing a captive propagation program would take considerable time to accomplish. After acquiring the necessary facility and equipment, dwarf wedgemussel brood stock would need to be acquired from Swift Creek and progeny produced and raised to sufficient size to release into the wild—a process that takes years.[143]

USFWS emphasized that "time is of the essence" in collecting possible brood stock for such a propagation venture. That warning was issued more than a year and a half ago, and yet NCDOT has not collected the necessary brood stock that would enable NCDOT to successfully augment the existing wild population in advance of the current expected construction start date in 2018, less than two years away. Strangely, despite USFWS's initial cautionary words about the time and resources necessary for propagation efforts, USFWS included such measures in a later draft document regarding conservation of the dwarf wedgemussel in Swift Creek.[144] This document, and the DEIS, fail to explain how propagation will help the dwarf wedgemussel population if decreased water quality and habitat degradation resulting from construction of the toll road leaves Swift Creek uninhabitable by wild or captive-propagated dwarf wedgemussels.

Additionally, given the supposedly limited number of wild individuals in Swift Creek, it is unclear how NCDOT would be able to acquire a sufficient brood stock to support such a program. In fact, when discussing how to improve viability of the Swift Creek dwarf wedgemussel population, USFWS's first recommended strategy is to "[i]dentify habitat refugia" and "[p]rovide long term protection of the best habitats in Swift Creek."[145] Such protections are paramount, and if habitat in Swift Creek cannot be adequately protected, a mussel augmentation program would be a fool's errand. A senior USFWS fisheries and ecological services biologist raised this concern in e-mail correspondence with NCDOT and others involved in a possible mussel propagation facility:

> It is my firm belief that captive propagation, augmentation and reintroductions should be sparingly-used*; the optimal way to ensure sustainability of at-risk and*

[141] Sarah McRae, USFWS, Powerpoint Presentation: ESA Consultation Considerations for Complete 540 Transportation Project (Feb. 3, 2015), at slide 31, attached as Attachment 24 (stating that in order to successfully propagate dwarf wedgemussels for population augmentation, "[n]eed to collect DWM broodstock ASAP").
[142] USFWS, Draft Proposal: Conservation of Dwarf Wedgemussel in Swift Creek (Neuse), Including Captive Propagation Needs and Future Augmentation Scenarios (Feb. 2015), at 4, Attachment 25 (describing augmentation plan which would require releases of 3-year old dwarf wedgemusselsl annually over a 10-year period).
[143] Letter from Gary Jordan, USFWS, to Jennifer Harris, NCDOT (May 14, 2014), at 1–2, Attachment 26.
[144] USFWS, Draft Proposal: Conservation of Dwarf Wedgemussel in Swift Creek (Neuse), Including Captive Propagation Needs and Future Augmentation Scenarios (Feb. 2015), Attachment 25.
[145] Sarah McRae, USFWS, Powerpoint Presentation: ESA Consultation Considerations for Complete 540 Transportation Project (Feb. 3, 2015), at slide 19, Attachment 24.

> *imperiled species is to ensure the quality and quantity of the habitat which sustains them*, as well as enforcing existing protective measures already in place under both state and federal statutes. In the absence of such complementary education, habitat, and enforcement measures, my concern is that *we will just be placing valuable and costly captive-propagated individuals in harms way alongside their remaining wild companions.*[146]

Unlike impacts to wetlands and streams, impacts to endangered species cannot be "offset" or "mitigated." Protected species are not fungible, and raising dwarf wedgemussels in captivity or releasing them somewhere other than Swift Creek will not satisfy the ESA conservation mandate to ensure the species' viability in the wild. While another USFWS biologist promised that, "[r]est assured, we will not pursue propagation and augmentation without simultaneous habitat protection," no habitat protection plan appears to have been developed to buttress the current augmentation plan.[147]

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Finally, the highway cost estimates in the DEIS do not appear to include the costs associated with such a mussel propagation facility. In order to present a full cost of althernatives that will require construction of such a facility NCDOT must disclose the full costs that would be associated with its construction and running.

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4. NCDOT Must Fully Study Other Species Which Will be Federally Listed Prior to Completion of the Project

In addition to the dwarf wedgemussel, Swift Creek supports 12 other rare aquatic species,[148] including a number that USFWS is currently considering to propose for listing as endangered or threatened under the ESA.[149] USFWS has directly informed NCDOT of these pending listings, stating that these species—the Atlantic pigtoe, the yellow lance, the green floater, the Carolina madtom, the American eel, and the Neuse River Water dog—may be listed as "threatened or endangered *prior to the completion of the project.*"[150] The 2011 Freshwater Mussel Survey completed for the DEIS documented 41 Atlantic pigtoe individuals, 8 yellow lance individuals, and 39 green floater individuals within the project area.[151] Moreover, USFWS considers Swift Creek a "stronghold for yellow lance in [the] Neuse basin."[152] According to a USFWS presentation, the listing decisions and rulemaking process for these species will begin October 2016.[153] With that in mind, NCDOT should thoroughly study these other species now rather than later in order to fully evaluate how a listing of any of these species would affect the current DSAs.

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[146] E-mail from Wilson Laney, USFWS, to Ken Bridle, Piedmont Land Conservancy, et al. (Jan. 26, 2015), Attachment 27 (emphasis added).
[147] E-mail from Sarah McRae, USFWS, to Wilson Laney, USFWS (Jan. 27, 2015), Attachment 27 (same chain).
[148] See DWM Viability Report at Table 1. Rare Aquatic Species in Swift Creek.
[149] *See* Natural Res. Tech. Report, App. E: Freshwater Mussel Survey Report at 1; Letter from Gary Jordan, USFWS, to Jennifer Harris, NCDOT (May 14, 2014), at 2, Attachment 26
[150] Letter from Gary Jordan, USFWS, to Jennifer Harris, NCDOT (May 14, 2014), at 2, attached as Attachment 26.
[151] Natural Res. Tech. Report, App. E: Freshwater Mussel Survey Report at Tables 3–111.
[152] Sarah McRae, USFWS, Powerpoint Presentation: ESA Consultation Considerations for Complete 540 Transportation Project (Feb. 3, 2015), at slide 12, attached as Attachment 24.
[153] *Id*.

B. The DEIS Contains an Insufficient Analysis of Air Quality.

Like many aspects of the DEIS, NCDOT's cursory analysis of air quality suffers from insufficient information. While the Air Quality Report documents the relevant Clean Air Act ("CAA") standards and suggests that this project would not lead to violations of those standards, the report fails to provide a complete analysis of how the project might affect the quality of air for those living and working in the project area. First, the report provides only a vague qualitative assessment of likely increases in ambient air pollution from increased vehicular traffic throughout the project study area. Second, the report likewise provides an insufficient, ambiguous discussion of increased concentrations in air toxics from cars. Third, the report fails to consider the indirect and cumulative effects on air quality that could result from the project, particularly as a result of induced growth in the project area. Finally, the report fails to even mention possible impacts on greenhouse gas emissions ("GHGs").

1. Unacknowledged Harmful Increases in Ambient Pollution

Pollutants from cars include harmful carbon monoxide ("CO"), nitrogen oxides ("NO_x"), and volatile organic compounds ("VOCs").[154] In turn, NO_x and VOCs emissions are precursors to ozone, which is associated with a variety of detrimental human health and ecological effects.[155] NO_x are also a precursor to nitrogen dioxide ("NO_2") The CAA regulates certain air pollutants, called "criteria pollutants", including CO, NO_2, and ozone, through National Ambient Air Quality Standards ("NAAQS"). Attainment of these NAAQs is assessed on a region-by-region basis.

64 The Air Quality Analysis failed to document the deleterious effects associated with any of the criteria pollutants. In particular, the Air Quality Analysis failed to discuss future ozone levels in the project study area beyond the observation that Wake and Johnston Counties are in attainment under the ozone NAAQs.[156] This naked observation about the current attainment status provides no information about the toll highway's impact on ozone levels in Wake and Johnston Counties. Indeed, localized ozone levels would almost certainly increase along the toll highway. Given the smog-causing nature of ozone, as well as its severe impacts on human health, the Air Quality Analysis needs to provide more information about the Complete 540 project's impacts on ozone, and not just the current ozone attainment status of the affected regions.

2. Incomplete and Vague Evaluation of Toxic Pollutants from Cars

The CAA authorizes EPA to regulate emissions of toxic air pollutants emitted by motor vehicles that are associated with significant adverse health effects, known as mobile source air toxics ("MSATs"). 42 U.S.C. § 7521(1). The Air Quality Report reviews the Complete 540 project's possible increases in MSATs in a cursory, qualitative fashion, and the Report fails to

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[154] EPA, AUTOMOBILE EMISSIONS: AN OVERVIEW 2 (1994), *available at* http://www3.epa.gov/otaq/consumer/05-autos.pdf, Attachment 28; EPA, *Greenhouse Gas Emissions: Transportation Sector Emissions*, http://www3.epa.gov/climatechange/ghgemissions/sources/transportation.html (last updated September 11, 2015), Attachment 29.

[155] EPA, *Ground-Level Ozone*, http://www3.epa.gov/ozonepollution/ (last updated October 1, 2015), Attachment 30.

[156] Air Quality Analysis Report (Oct. 2015), at 12.

then explain the corresponding health impacts from such an increase in tail pipe pollution. MSATs include chemical compounds such as benzene, 1,3-butadiene, formaldehyde, acetaldehyde, polycyclic organic matter ("POM"), naphthalene, and diesel particulate matter.[157] MSATs can cause cancer and a variety of respiratory, neurological, cardiovascular, liver, kidney, and other harmful health effects.[158]

Section 7 of the Complete 540 Air Quality Report primarily disclaims responsibility for analyzing MSATs, explaining that "[w]hile much work has been done to assess the overall health risk of air toxics, many questions remain unanswered."[159] Nonetheless, the Air Quality Report repeatedly notes that even if VMT rates increase with the toll highway, the EPA's stringent new vehicle requirements will result in lower MSAT emission levels over the long-term.[160] In doing so, the Report does not provide any information about the analysis conducted to reach this conclusion. Even if MSAT emission levels will reduce 20 or 30 years out, the focus on the long-term improvement fails to acknowledge the possible increased emission levels in the short-term, before EPA's new fuel and vehicle regulations fully take effect. The Air Quality Report advances the dubious rationale that while "it is expected there would be slightly higher MSAT emissions in the project study area relative to the No Build Alternative due to the increased VMT . . . . current tools and science are not adequate to quantify them"—nor apparently to provide any information other than a hopeful assessment that "EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions" in MSATs. [161]

This optimistic analysis fails to provide the basis for a meaningful assessment of the DSAs' environmental impacts, as required by NEPA. The DEIS should catalogue the schools, hospitals, public parks and other locations in the project area where sensitive populations would likely suffer exposure to MSAT generated by the toll road. Indeed, the Air Quality Report acknowledges that the DSAs "will have the effect of moving some traffic closer to nearby homes, schools and businesses," and that "under each DSA there may be localized areas where ambient concentrations of MSAT would be higher under certain DSAs than others."[162] Yet the DEIS and Air Quality Report do not attempt to document how this would impact the health of those families living and working in these areas. A possible increase in MSATs is especially important given that "[n]umerous schools, places of worship, parks, recreation areas, and other community resources" are within the project corridor area.[163] Children and the elderly are particularly susceptible to air pollution, thus the proximity of the proposed toll highway to such community resources is troubling. Twenty-five Wake County public schools and six of Johnston County's public schools fall within the Demographic Study Area.[164] Additionally, "several

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[157] EPA, Mobile Source Air Toxics – Basic Information, http://www3.epa.gov/otaq/toxics.htm (last updated June 26, 2014), as Attachment 31.
[158] *See, e.g.*, EPA, *Mobile Source Air Toxics – Health Effects and Risk*, http://www3.epa.gov/otaq/toxics-assessment.htm#health (last updated Oct. 29, 2012), Attachment 32.
[159] Air Quality Analysis Report at 14.
[160] *Id.* at 14–15.
[161] *Id.* at 19.
[162] *Id.* at 17.
[163] Community Impact Assessment at E-3; Final Community Characteristics Report at E-3.
[164] Community Impact Assessment at 25.

private schools" fall within the project corridor, as do "dozens of private daycare centers and preschools."[165]

The DEIS should estimate the likely emissions exposures at important community locations—such as schools and daycare centers—using accepted testing methods, relate these estimates to findings in contemporary, peer-reviewed health studies of MSAT exposures, and discuss specific mitigation measures that could safeguard the identified sensitive populations. Finally, the DEIS should compare these dollar and human health costs with those associated with a plausible alternative that does not involve a new-location toll road, such as upgrades to existing highways, transit, and TDM and TSM strategies in the study area.

The Report suggests that "information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated" the current DSAs.[166] Given the clear link between the MSATs in vehicle exhaust and health impacts, the question is not whether the toll highway will have negative health effects for those who live nearby. Rather, the question is the extent of those impacts, and how accurately they can be predicted. The agencies may not have a computer model specifically designed for this task and there may be limits on how accurately the health impacts in the area can be predicted. But the purpose of NEPA is to force agencies to consider and disclose the reasonably foreseeable consequences of their actions; the Air Quality Report focuses instead on justifying its failure to consider these consequences. The agencies must model the health impacts of the increased MSAT exposure to the extent practicable to fully inform resource agencies and the public about the air quality impacts associated with building the toll highway.

3. No Analysis of Indirect and Cumulative Effects on Air Quality

66 In addition to possible increases in MSAT emissions, the DEIS and related documents wholly fail to consider the indirect and cumulative impacts on air quality in the project area. Building any of the DSAs will correlate to significant shifts in land uses and growth patterns in the project area. In turn, these changed land uses will have indirect and cumulative effects on air quality throughout the project area—but the DEIS fails to evaluate the effects of induced growth and changed land uses resulting from building the toll highway. The DEIS admits this general shortcoming, stating that the 2035 forecast traffic conditions used for developing the project "do not reflect the reallocation of land use that would be expected from the project not being built."[167] Instead, NCDOT will not complete "a quantitative assessment of the indirect effects of the build and no-build scenarios on land use and associated traffic conditions" until a preferred alternative is selected.[168] Moreover, the current, qualitative ICE Report fails to mention even the possibility of indirect and cumulative effects on air quality. Such information about the indirect and cumulative impacts associated with changed land uses and growth as between a no-build and build scenario is essential to a complete understanding of the air quality impacts of the Complete 540 toll highway.

[165] *Id.* at 25; Final Community Characteristics Report at 24.
[166] Air Quality Analysis Report at 17.
[167] DEIS at 15 n.*.
[168] *Id.*

For example, the massive toll highway would likely induce growth and development in previously undisturbed areas, which would cause greater amounts of air pollution. Most of the DSAs would pull such induced growth south, expanding development away from the already developed Raleigh metropolitan region into less-developed areas. This development could take the form of residential, commercial, and industrial growth,[169] each of which causes impacts to air quality. Such sprawling development would correspond to longer commutes, and longer commutes equate to more tailpipe emissions decreasing air quality.

Building roads also can paradoxically cause an increase in congestion. Travelers who previously avoided congested roads by foregoing discretionary trips or by traveling at non-peak hours might now opt to take more trips at different times. Moreover, development might expand along the new road, creating new communities and new travel demands. As such, building roads entices new vehicle trips, creating what is known as "induced demand" and in turn causing more, not less, congestion. This indirect effect that would result from building the Complete 540 toll highway is not mentioned in the Air Quality Report or ICE Report.

The DEIS fails to document any of these induced-growth effects on air quality. These likely air quality impacts again underscore the need to consider other alternatives, like TDM, TSM, and mass-transit, which would correspond to less induced growth and fewer air quality impacts.

4. No Review of Greenhouse Gas Emissions

Finally, the DEIS and its corresponding Air Quality Analysis Report fail to include any reference to possible impacts on greenhouse gas emissions ("GHGs"). In December 2014, the Council of Environmental Quality ("CEQ") issued draft guidance on "Consideration of Greenhouse Gas Emissions and the Effects of Climate Change," under NEPA. Revised Draft Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change, 79 Fed. Reg. 77801 (Dec. 24, 2014), attached as Attachment 33. The draft guidance instructs agencies to consider impacts on GHGs when conducting a NEPA analysis. As recognized by the CEQ's draft guidance, while "climate impacts are not attributable to any single action," they are "exacerbated by a series of smaller decisions, including decisions made by the government" and should be analyzed as such. Revised Draft Guidance, 79 Fed. Reg. at 77825. Thus, even if the agencies were to assert that the project's effects on GHGs would be negligible, they must model those effects for the sake of being able to evaluate cumulative impacts on GHG levels. Prior to publishing any FEIS, the agencies must complete an analysis of the Complete 540 project's impacts on GHG levels as directed by the CEQ draft guidance.

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[169] *See* Community Impact Assessment at E-4 ("The municipalities in the project area anticipate that the project will spur commercial and industrial growth near interchange areas . . . ."); *id.* at 42.

C. The DEIS Fails to Provide an Adequate Analysis of Community and Public Interest Impacts.

All of the DSAs currently considered by NCDOT would have significant human and community impacts. Each DSA would force families and businesses to relocate and disrupt established communities. The costs of the toll highway—much of which would be borne by commuters paying the toll and taxpayers across the state—along with the unexplained and limited time-savings, do not outweigh the community and public interest impacts.

As highlighted in the discussions above, unprecedented environmental destruction and exorbitant estimated costs vastly outweigh the meager time-savings benefits that building the toll road under any of the 17 DSAs would encompass. Figures from the DEIS suggest that the majority of commuters would save less than 10 minutes if the road is constructed—and will be charged a toll to do so. The project is currently estimated to cost anywhere from $2 billion to nearly $2.6 billion—in other words a financial cost of approximately $200 to $260 million per minute of travel time saved.[170] The DEIS and Alternatives Analysis fail to provide any indication of how many people would be likely to use the facility.

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Moreover, the DEIS provides no explanation of the benefits—if any—that would accrue to drivers opting to remain on existing roads. When asked at the recent public hearings NCDOT staff were unable to provide any answer to such questions.[171] If only those able to pay for the toll would stand to experience the time-savings benefits, the project would unfairly benefit only the wealthy while effectively pricing out low-income families. In turn, the project's potential disproportionate impact on low-income and minority communities, given the cost of using the road, must be evaluated and mitigated, as required by Executive Order 12898. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994) The Community Impacts Assessment contains one-page on the possible effects on tolling, but notably absent is any discussion of the cost of tolls.[172] In a table listing general environmental justice considerations for toll facilities, the row for "cost of toll" states "(to be added after traffic and revenue study."[173] The Community Impact Assessment acknowledges that "travel times for drivers using non-toll routes could be slightly greater than using the new facility" but provides no further explanation to help assess the extent of the differences in travel times, or if non-toll highway users would reap any benefit from the $2.6 billion project.[174]

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In contrast to the variable possible time savings, the toll road would displace neighborhoods and uproot hundreds of families. Depending on the DSA selected, there would be anywhere from 234 to 550 necessary residential relocations.[175] Those not forced to leave would

[170] See Southeast Extension – First Tier Screening Traffic Memorandum Appendix A: Travel Time Calculations.
[171] Attorneys Kym Hunter and Ramona McGee attended the public meeting on December 8, 2015 at Holly Springs High School on behalf of the Conservation Groups. The attorneys were directed to Bradley Reynolds to discuss issues regarding traffic forecasting. When Mr. Reynolds was asked what travel time savings would accrue to those travelers who plan to continue using existing roads he stated that this issue had not been studied.
[172] Community Impact Assessment, at 53-54 & Table 20: General Environmental Justice Evaluation for Toll Facilities.
[173] Community Impact Assessment at Table 20.
[174] *Id.*
[175] DEIS at 107: Comparative Evaluation Matrix.

now have a massive toll road facility running through what was formerly their backyard. The road would run through natural areas providing aesthetic value for these neighborhoods. And given that this transportation facility would be a toll road, with an as of yet undisclosed price per trip, many of the people living along the road may not be able to afford the toll road or may not find the potential time-savings worth the cost of the toll.

70 This road's cost, , and the environmental and human damage are too great to justify the limited possible time savings, particularly when there are other practicable alternatives with fewer environmental impacts. This costly, community-disrupting, and environmentally devastating toll road is not in the public interest.

D. The Analysis of Indirect and Cumulative Effects Is Superficial and Inadequate.

71 While the sheer quantity of direct impacts to resources presented in the DEIS are deeply concerning standing alone, they do not represent the full extent of the DSAs' potential impacts. The DEIS fails to adequately address the project's indirect and cumulative effects, as required by CEQ regulations. In addition to direct impacts, Complete 540 would cause extensive indirect impacts and cumulative impacts. The ICE Report presents only a vague qualitative analysis of these effects—not specific to any particular DSA. Moreover, non-highway alternatives—like upgrading existing roads, TDM, TSM, and mass transit are not considered in the ICE Report, further complicating a fair and thorough review of alternatives.

The qualitative review does not assist in distinguishing between the DSAs. Even that non-numeric review demonstrates that additional environmental degradation would result through indirect and cumulative impacts to wetlands, streams, federally endangered species, and other natural resources.

1. Unstudied and Unaccounted-for Indirect Effects

NEPA requires consideration of indirect effects, defined as those effects that are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b). The CEQ regulations state that NEPA documents should specifically include "growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." *Id.*

72 All of the DSAs stand to have sweeping indirect effects, impacts caused by induced growth and changed land-use patterns. These effects go largely undocumented in the ICE Report, since it is merely a "qualitative" and generalized analysis, rather than a quantitative review of specific indirect impacts likely from any of the given DSAs. The DEIS and ICE Report make no attempt to quantify any of the superficial characterizations that typify its assessment of indirect impacts.

The ICE Report fails to acknowledge the indirect effect of attracting new, "induced growth" and development to the area. Building new, large transportation structures often attracts new growth and development along the highway and off its interchanges. A large highway

effectively facilitates greater growth rates in the vicinity of the highway than would occur in the area if the highway were not build, as highlighted by the Complete 540 consultants in e-mails with NCDOT staff. [176] With respect to Complete 540, NCDOT acknowledges that land use patterns are likely to change once the highway is constructed. Certain large scale new developments such as the Veridea development in Apex are unlikely to move forward without the toll highway.[177]

Moreover, the pattern of sprawling growth associated with large highways corresponds to paved over wetlands, clearcut forests, elimination of wildlife habitat, and increased pollution of waters through greater stormwater runoff. Such land use is thus more environmentally damaging than compact land use in an area with existing development.

73 While the amount of induced growth would be substantial under any of the current DSAs, the effects of that induced growth would vary greatly. Specifically, the DSAs with the Red Route would have fewer impacts associated with induced growth by concentrating that growth in areas which are already developed, whereas other DSAs would bring environmentally destructive development to undisturbed areas further south. The non-Red Route DSAs would enable more harmful, less-guided sprawling growth patterns—and such indirect effects should be documented in any future ICE analysis.

74 Most importantly, as the agencies have noted, the DEIS fails to include any consideration of "the reallocation of land use that would be expected from the project not being built."[178] As such, the DEIS fails to provide an honest assessment of the land use and development likely to occur under a No-Build scenario, and consequently fails to accurately present the extent of induced development and associated environmental damage that is attributable to the new road.

An accurate No-Build baseline is essential for a satisfactory NEPA review. *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 603 (4th Cir. 2012) (citing *Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1037-38 (9th Cir. 2008)); *see also Friends of Back Bay v. U.S. Army Corps of Eng'rs*, 681 F.3d 581, 588 (4th Cir. 2012) ("A material misapprehension of the baseline conditions existing in advance of an agency action can lay the groundwork for an arbitrary and capricious decision."); *Catawba Riverkeeper Found. V. N.C. Dep't of Transp.*, No. 5:15–CV–29–D, slip op. at 16, 2015 WL 1179646, at *8 (E.D.N.C. Mar. 13, 2015); *Openlands v. USDOT*, No. 1:13-cv-04950, 2015 WL 4999008, at *10 (N.D. Ill. June 16, 2015) (holding that without a true "no build" scenario, it is "impossible to determine the extent to which building the

[176] E-mail from Andrew Lelewski, NCDOT, to Theresa Ellerby, NCDOT, (Apr. 21, 2014), Attachment 34 (including Lochner's feedback on how interchanges between the proposed 540 extension and existing I-40 will provide "direct access between the managed lanes on I-40 and 540 will likely result in additional wetland and stream impacts for both the Orange and Lilac Corridors").

[177] ICE Report at 46 (noting Veridea development plans "are based on the assumption that a new interchange is built at NC 540 and Old Holly Springs-Apex Road . . . and that the Complete 540 project will connect this area to I-40 south of Raleigh"); *see id.*, App. A: Apex Town Hall Meeting Summary (Sept. 12, 2012) at 2-3 (noting that Apex's "land use and economic development objectives are highly dependent on the construction of the Southeast Extension," and "Veridea, in particular is heavily dependent on the project"); *id.*, App A: Wake County Conference Call Meeting Summary, at 3 ("The project will likely stimulate development of major and minor retail centers near interchanges and residential development nearby).

[178] DEIS at 15 n.*

Corridor will increase traffic on existing roads and the impact such increased traffic may have on the study area). Yet, NCDOT fails to include such an accurate baseline with regularity. *E.g. N.C. Wildlife Fed'n*, 677 F.3d at 603–04; *Catawba Riverkeeper*, slip op. at 16, 2015 WL 1179646, at *8; *N.C. Alliance for Transp. Reform v. USDOT*, 151 F. Supp. 2d 661, 689-90 (M.D.N.C. 2001). As such, NCDOT frequently presents NEPA documents that fail to account for the full extent of indirect environmental impact that is likely to result from major new highway construction.

In recognizing this fundamental deficiency, the DEIS suggests that the error is overcome because "a quantitative assessment of the indirect effects of the build and no-build scenarios on land use and traffic conditions will be evaluated," once a preferred alternative is selected. But this statement misses the point;[179] an accurate No-Build baseline is a necessary requirement of any analysis of induced growth regardless of the "build" alternative that is ultimately chosen and studied. Indeed, such information is needed *before* a preferred alternative is selected in order to compare the extent of the indirect impacts—at least generally—of all different "build" alternatives. NCDOT's current analysis lacking a realistic baseline provides a wholly incomplete picture of the indirect and cumulative impacts attendant to any and all of the DSAs.

Given that a comprehensive, quantitative indirect and cumulative effects study has yet to be completed for this project,[180] it is unclear how many more wetlands and streams within the project area would be impacted as induced growth results in changed land use and consequent additional pollution and destruction of wetlands in the project area. While the DEIS estimates
75 135 to 161 wetlands out of a total 543 wetlands in the area would be directly impacted, it is likely that far more would feel the impact of the new toll highway. Similarly, indirect impacts on water quality and aquatic ecosystems would further jeopardize the endangered dwarf wedgemussel and other rare aquatic species. The extent of the degradation of aquatic ecosystems would be significantly more extensive than what is documented in the DEIS.

2. Unstudied and Unaccounted-for Cumulative Impacts

In addition to indirect effects, NEPA requires consideration of cumulative impacts, defined as those impacts "which result[] from the impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. Cumulative impacts may result from "individually minor but collectively significant actions taking place over a period of time." *Id.* "The purpose of the cumulative impact analysis is to provide readers with a complete understanding of the environmental effects a proposed action will cause." *N.C. Alliance for Transp. Reform, Inc. v. US DOT*, 151 F. Supp. 2d 661, 698 (M.D.N.C. 2001).

The ICE Report devotes just five-pages to consideration of cumulative impacts. The majority of that discussion is devoted to simply identifying current and future actions and the
76 affected environment with only minimal conjecture about general cumulative effects of associated development in the project study area. The ICE Report lacks any detailed analysis of the cumulative impact of the project alternatives and thus does not fulfill NCDOT's NEPA obligations to consider cumulative impacts.

[179] DEIS at 15 n.*
[180] *See id.* at vi, 15 note *.

The ICE Report initially acknowledges that rapid development within the Neuse River Basin has already resulted in substantial increases in impervious areas, which ultimately has caused increased sedimentation, stream bank erosion, low dissolved oxygen levels and poor biological integrity.[181] The ICE Report then asserts that additional water quality and aquatic habitat degradation due to anticipated growth and development is likely to occur under a Build or No-Build scenario. Such an assertion ignores how a massive transportation facility would induce growth and alter land uses to a greater degree than under a No-Build scenario. The ICE Report fails to study or acknowledge how growth would be different under Build and No-Build scenarios, and instead treats all growth as inevitable, with its corresponding cumulative impact inevitable regardless of whether the toll highway is built. As highlighted above, this approach is arbitrary and capricious.

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The ICE Report admits in its generalized review that cumulative effects may be greater under a Build scenario due to possible increased development. For example: "[t]he addition of the Complete 540 project to this area will

add to the cumulative effects of [existing planned projects] on water quality and aquatic habitat in the Swift Creek watershed;" and "[b]y encouraging faster growth in this area, the build scenarios all have the potential to contribute to cumulative effects on Middle Creek, along with other planned projects." [182] The ICE Report also notes that under the No-Build scenario, development would likely occur near existing transportation facilities, thus constraining future development to already disturbed environments. In contrast, the Complete 540 project would likely pull that development southward into more undisturbed areas susceptible to greater environmental impacts—an effect that would be even more pronounced if an "orange" route alternative is selected[183]

The ICE Report briefly acknowledges the "potential" for specific locations of, or general increases in, development to cumulatively impact water quality and aquatic habitat, dwarf wedgemussel habitat, and terrestrial communities and habitat.[184] The ICE Report fails, however, to provide any meaningful distinction in cumulative impacts as between the DSAs and instead briefly dismisses cumulative impacts as inevitable. Such an analysis is insufficient to pass legal muster. *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 602 (4th Cir. 2012) ("Conclusory statements that the indirect and cumulative effects will be minimal or that such effects are inevitable are insufficient under NEPA."); *see also Western N.C. Alliance v. N.C. Dep't of Transp.*, 312 F. Supp.2d 765, 771-72 (E.D.N.C. 2003) (holding that defendants violated NEPA by failing to consider all reasonably foreseeable actions in cumulative impact assessment).

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The ICE Report fails to comprehensively study and document the likely indirect and cumulative effects of each of the DSAs. This information is essential to understanding the full extent of environmental impact of any of the DSAs, particularly in regard to the sensitive and endangered dwarf wedgemussel. Moreover, because this analysis was completed after elimination of the less-damaging alternatives of improving existing roadways, TDM, TSM, and

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[181] ICE Report at 75.
[182] *Id.* at 76.
[183] *Id.* at 77-79.
[184] *Id.* at 76-78

mass-transit, the report does not document how these alternatives would correspond to far less cumulative impact to the environment. NCDOT should review such alternatives in an exhaustive, updated ICE Report.

E. Of the Identified DSAs, Those That Include the Red Route Are the Least Environmentally Damaging Practicable Alternatives.

We reiterate that none of the currently studied DSAs represent the LEDPA, as a number of less-environmentally damaging and more practicable alternatives were prematurely eliminated from study. Additionally, there is nothing to suggest that any of the DSAs are financially practicable. Moreover, the agencies failed to study how a combination of solutions including upgrades to existing roads and other strategies could work to achieve the project purpose. It is likely that such an alternative if studied, would represent the true LEDPA. Nonetheless, of the DSAs presented in the DEIS, those utilizing the Red Route are the least environmentally damaging and most practicable given the associated costs and human impacts.

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The DSAs using the Red Route (DSAs 6 and 7) would impact the smallest acreage of wetlands, with each directly impacting approximately 52 acres of wetlands.[185] The DSAs using the Purple-Blue Corridor (DSAs 8-12) would impact the next smallest amount of wetlands - impacting an average of approximately 59 wetland acres.[186] By comparison, DSAs including the western segment of the Orange Route would impact the largest amount of wetlands with an average of approximately 74 acres of wetlands—which, according to the DEIS, is "approximately 43 percent greater than the average impact" of DSAs using the Red Route.[187] Similarly, the Red Route DSAs would impact the fewest linear feet of streams, with 53,014 feet for DSA 6 and 51,582 feet for DSA 7 versus the other DSAs which would impact anywhere from 61,322 to 78,087 linear feet of streams[188]

DSAs 6 and 7 would also have the fewest stream crossings, with 109 and 106 for DSAs 6 and 7 respectively.[189] The fewest number of ponds would also be impacted by the Red Route, with 28 ponds accounting for 20.0 acres corresponding to DSA 6, and 25 ponds accounting for 17.7 acres corresponding to DSA 7.[190] While these Red Route DSAs would impact 6.7 acres of the Swift Creek Critical Watershed, the thousands of fewer impacted streams, tens of acres less of affected wetlands and ponds, and the avoidance of harm to the dwarf wedgemussel may outweigh these smaller in size, but nonetheless significant, impacts to the Swift Creek Critical Watershed.[191]

Perhaps most importantly, the Red Route also represents the only alternative to not cross Swift Creek downstream of Lake Benson, thus likely avoiding all of the most direct impacts to the endangered dwarf wedgemussel.[192] As noted above, this represents an independent reason

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[185] DEIS at 90.
[186] *Id*.
[187] *Id.* at 91.
[188] *Id.* at 108: Comparative Evaluation Matrix.
[189] *Id.*
[190] *Id*.
[191] *Id*.
[192] *Id.* at 35-36.

for not issuing a Section 404 permit. However, it also helps inform the LEDPA analysis, since an alternative that stands to wipe out an essential population of an endangered species could hardly be considered the least-environmentally damaging, practicable alternative—particularly when alternatives exist which would avoid this impact. As noted above, it appears that NCDOT and USFWS are investigating a mussel mitigation facility to theoretically offset the impacts an Orange Route would have to the dwarf wedgemussel population. The feasibility of such a program to conserve the dwarf wedgemussel and to prevent a finding of jeopardy, however, has not been established. Moreover, the additional costs, time, and complications associated with such a propagation facility and population augmentation plan weigh toward such an option being impracticable. The Red Route DSAs, as well as non-toll highway options, would avoid the most severe and immediate impacts to the dwarf wedgemussel as well as the potential costs of a mussel propagation facility.

As between the selected DSAs, the Red Route DSAs would pull development less far south. In turn, the Red Route DSAs would likely result in less drastic indirect, induced growth related impacts by going through an area that is already developed, as opposed to other DSAs which would disrupt natural areas and bring new growth to previously undisturbed areas. Even then, the as-of-yet-undocumented indirect and cumulative effects associated with a Red Route DSA could still result in significant environmental degradation and negative impacts to the endangered dwarf wedgemussel.

82 Additionally, all of the alternatives using the full Orange Route—in other words, all alternatives not using the Red Route—would impact and possibly eliminate an existing mitigation site associated with the Northern Wake Expressway. The DEIS fails to mention this fact, and instead, the information is buried in the Natural Resources Technical Report which misleadingly states: "it is important to note that the Underhill Mitigation Site is located within the Orange (A) corridor which affects all alternatives currently under consideration."[193] The report provides no further details on this mitigation site's location, its size, or any plans to offset the potential impacts to the site.

According to NCDEQ's Ecosystem Enhancement Program's interactive map feature, the Underhill mitigation site is located near Swift Creek, within the triangular area created by the intersections of I-40 with NC-42, I-40 with 70, and NC-42 with 70.[194] While it is true that every DSA uses at least a segment of the Orange Route, alternatives using the Red Route (DSAs 6 and 7) do not use the eastern segment of the Orange Route nor the Lilac Route, both of which would 83 traverse the southern portion of the study area, near Swift Creek. In other words the Natural Resources Technical Report is wrong in saying that *all alternatives* would be affected by this mitigation site; only those alternatives not using the Red Route—DSAs 1-5 and 8-17—would be close enough in proximity to impact the Underhill mitigation site.

The EIS does not explain why a mitigation site was placed within the protected corridor for the Orange route where NCDOT expected to begin construction within a few years of the site's designation. The location of the Underhill mitigation site, however, provides a further

[193] Natural Res. Tech. Report at 12.

[194] *See* NCDEQ, DIV. OF MITIGATION SERVICES, *EEP Interactive Map*, http://portal.ncdenr.org/web/eep/interactive-mapping (last visited Jan. 7, 2016) (search for "underhill"), Attachment 35.

demonstration of how DSAs utilizing the full Orange route cannot be environmentally-preferred. Moreover, the fact that a site used to mitigate impacts from a highway project is already being disturbed only a few years after that highway project was constructed serves to illustrate why mitigation measures should only be used as a last resort, and avoidance of impacts must instead be prioritized. In the event NCDOT were to select one of these routes as the preferred alternative, NCDOT would need to not only provide compensatory mitigation for the Complete 540 project, but would need to provide further mitigation to replace the mitigation lost through destruction or harm to the existing Underhill mitigation site.

V. EXORBITANT, UNFUNDED PROJECT COSTS

Standing in contrast to the project's limited utility is its extraordinarily high project cost. The DEIS lists the cost of the various DSAs as between $2.1 and $2.6 billion—making it the most expensive project in North Carolina's history. Even then, it is not clear that the DEIS includes all project costs, such as the cost of a mussel propagation facility that would be needed to attempt to compensate for some of the more destructive alternatives. Even if the cost comes out at the low end of NCDOT's estimates—$2.1 billion—there is no financial plan in place to pay for the project. The high cost listed in the NEPA documents does not match the cost in state and federal planning documents and is far out of line with the cost estimate used to prioritize the highway over other statewide transportation needs. As such, the toll road cannot be considered "practicable." Other more affordable and less damaging alternatives that could actually achieve project funding in the next twenty years are better placed to provide the "*cost-effective"* transportation improvement desired by the local MPO and listed in the project statement of purpose and need.[195]

A. Funding Discrepancies in the STIP.

Federal regulations require that a highway project receiving federal funding must be part of a fiscally constrained State Transportation Improvement Program ("STIP"). 23 C.F.R. §450.222. FHWA guidance further requires that cost estimates in the STIP mirror those in the NEPA documents.[196] According to the guidance, a record of decision cannot be signed until these funding requirements are met.[197] The project cost estimates listed in the DEIS, however, did not match up with the STIP current at the time the document was published. That STIP, included Complete 540 as three separate projects: R-2721, R-2828, and R-2829 with a total cost of approximately $1.355 billion - a far cry from the $2–$2.5 billion costs noted in the DEIS.[198] Even then, not all of the listed cost was actually allocated in the 10-year STIP. The STIP allocated just $354.08 million for Project R-2721; $502.950 million for Project R-2828, and just $40.7 million for Project R-2829.[199] Thus allocating a total of just $897.73 million in funding: 70% percentage of the project cost listed in the STIP and only about 45% of the DEIS's $2 billion estimated cost.

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[195] Purpose & Need Statement at 2.
[196] FHWA, *Transportation Planning Requirements and Their Relationship to NEPA Approvals*, (Feb. 9, 2011), *available at* http://www.fhwa.dot.gov/planning/tpr_and_nepa/tprandnepasupplement.cfm, Attachment 36.
[197] *Id.*
[198] NCDOT June 2015 STIP, at 214, *available at* https://connect.ncdot.gov/projects/planning/STIPDocuments1/2016-2025%20STIP.pdf, Attachment 37.
[199] Funding for R-2829 is limited to right of way and utilities costs, not construction costs, see id.

85 Furthermore, the STIP suggested each of the three projects would largely be paid for with revenue bonds with only $463 million budgeted from the Highway Trust Fund. As noted below it is unlikely that toll revenue would be able to cover the discrepancy in project funding, and it was therefore unclear where the debt service pay for the bonds would come from.

The cost estimates in the STIP remained unchanged until yesterday. The January STIP—released yesterday, January 7, 2015—updated the projected costs for the Complete 540 segments, and the costs now appear to better match the DEIS's low-end cost estimates. The January STIP reflects a total project cost of $2.127, with much of that still coming from revenue bonds.[200] While the new STIP now better reflects the DEIS's cost estimates, even more of the funding is unaccounted for: $1.2 billion is unfunded.[201] Moreover under the new STIP, much of the funding is not available until much farther in the future, making the project's funding security even more questionable than the earlier STIP.[202] Only $370 million—or about 17% of the project cost—is allocated in the next 5 years, and that money would all go toward only one of the three segments.[203] Segment R-2828 does not have any funding allocated until 2024, and R-2829 has no allocated funding at all.[204]

B. Cost Estimate Discrepancies with the Strategic Transportation Investment Act.

86 Even more important, the huge project costs listed in the NEPA documents also fail to match up with the numbers used in the North Carolina project prioritization process, known as the Strategic Transportation Investments Act ("STI"). *See* N.C. Gen. Stat. § 136-189.11. The STI uses a variety of metrics including cost estimates, travel time benefits and other factors to prioritize where North Carolina's funding should be spent.[205]

Under the STI, the total actual cost of Complete 540 was listed as $1.328 billion—a significantly lower figure than the more than $2 billion cost estimate in the DEIS or the current STIP.[206] The cost to NCDOT, a key figure used to determine the rank of the highway in the prioritization process, was listed as totaling just $728 million for all three segments.[207] To arrive at this figure, NCDOT assumed that 46% of the project would be paid for with toll revenue—an assumption that is not supported by any traffic and revenue study. In fact, an internal NCDOT e-mail that included capital costs and toll revenue estimates—based on a 2009 analysis—suggested that the likely toll revenue would total $385.8 million, or less than 19% of a $2 billion price tag.[208] There is no explanation as to how NCDOT arrived at its toll revenue estimate.

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[200] NCDOT, Current STIP (Jan. 2015), at 96-97, *available at* https://connect.ncdot.gov/projects/planning/STIPDocuments1/LIVE_STIP.pdf Attachment 38.
[201] *Id.*
[202] *Id.*
[203] *Id.*
[204] *Id.*
[205] NCDOT, *Strategic Transportation Investments*, http://www.ncdot.gov/strategictransportationinvestments/ , (last visited January 7, 2016), Attachment 39.
[206] NCDOT, Highway STI Data, *available at* http://www.ncdot.gov/strategictransportationinvestments/stidata.html (last updated July 15, 2014), at rows 1238-1240, Attachment 40.
[207] *Id.*
[208] E-mail from Donna Keener, NCDOT, to Jennifer Harris, NCTA et al. (Dec. 18, 2013), Attachment 41.

NCDOT staff has recognized the importance of using accurate data during the STI process. When staff were asked to provide data for the Complete 540 project so that it could be run through the scoring process a NCDOT staffer noted the importance of data being substantiated and correct. Specifically, the staffer noted that the project's cost estimates "could well influence the final score" and ranking of the Complete 540 project.[209] Indeed, it appears the project gained priority and associated funding under false pretenses. "Cost to NCDOT" is used to calculate a project's "cost-benefit score"—a key factor in the project prioritization process that accounts for 25% of the project score.[210] As such, if an improperly low project cost is used, a project is likely to score more highly than it otherwise would. The use of data that is so divergent with reality is directly contrary to the purposes of the STI to take the politics out of the project selection process and choose highway projects based on objective facts. To determine if the more than $2 billion toll highway actually achieves a high enough score under the STI to gain priority over other projects, realistic project costs—including overall costs and costs to NCDOT— must be used. If realistic data is not used, the purpose of the STI is subverted.

In addition, now that the project cost estimates have been updated, it appears that the funding set in place may run afoul of the STI's "corridor cap," a provision of the STI that limits on funding for projects that fall within the same corridor. Under the law, the amount of funds to be allocated to projects within the same corridor from the "statewide" funding pot cannot exceed 10% of the total allotted statewide funds or about $200 million during a five year period. § 136-189.11 (d)(1)(b). In the current STIP, all funding for the Complete 540 project is expected to come from the statewide funds. In the next 5 year period, however, $370 million is allocated from statewide funds. Between 2021-2025, $907 million is allocated. And in future years an additional $1.22 billion remains to be funded. Even assuming that a portion of these costs will be covered by toll revenue, it is clear that the Complete 540 project will violate the corridor cap during every funding cycle.

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C. No Funding Feasibility

Under current laws and financial realities it is clear that NCDOT is unable to fund a project of this magnitude. During the alternatives screening process, NCDOT found that hybrid alternatives that completed just one or two segments of the Complete 540 project, in additional to other improvements, all failed to meet the project purpose and need. Because NCDOT is unable—legally and financially—to fund more than one project segment in the next ten years, NCDOT will be left only able to complete a part of the toll highway—just like under the hybrid options it rejected. It is therefore clear that each of the DSAs must also fail to meet the purpose and need, by NCDOT's own reasoning.

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Under current North Carolina law, not one of the DSAs can be constructed before 2026. Even then, the current STIP demonstrates that the project will still require $1.2 billion in project funding—and only then if the project with the lowest cost estimate is the one chosen. It would be impossible for this full amount could be allocated in the next five year project cycle due to the

[209] E-mail from Don Voelker, NCDOT, to David Wasserman, NCDOT et al. (Jan. 23, 2014), Attachment 42.
[210] NCDOT, *Strategic Transportation Investments*, http://www.ncdot.gov/strategictransportationinvestments/ , (last visited January 7, 2016), Attachment 39.

"corridor cap" constraint, and it is therefore unlikely that the project would be fully funded until at least 2031.

NCDOT and FHWA have previously rejected the feasibility of a transportation project much less expensive than this one precisely because of its high cost and questionable funding security. When considering the replacement of the Bonner Bridge project on North Carolina's Outer Banks, the agencies asserted that the anticipated cost of between $942.9 million and $1.441 billion for a "long bridge" option rendered such a solution "imprudent" due to its high costs.[211] The agencies not only determined the alternative was cost-prohibitive, but asserted they completed extensive studies and evaluation of the costs of the alternative which demonstrated it could not be funded.[212] The agencies asserted that the cost of the project would "consum[e] an excessive share of federal dollars made available to North Carolina" causing a variety of transportation projects to be deferred due to limited available funds.[213] The agencies specifically reviewed and rejected tolling as a funding option due to the cost of potential tolls, because tolls would only provide partial funding, and because "tolling would not make for a prudent business decision as the estimated toll revenue 'is not going to be sufficient to warrant the financial rating necessary to allow debt financing of this project.'"[214] The agencies were unwilling to look at other creative solutions due to what they deemed to be legal constraints.[215]

89 The agencies cannot arbitrarily decide that costs and the constraints of state laws and funding mechanism matter when analyzing one project and its alternatives, but ignore such constraints when analyzing another project and its alternatives—especially when the costs at stake are so incredibly high.

D. Insufficient Information About Tolling and Revenue

90 The agencies have failed to study and disclose both a thorough breakdown of costs of the Complete 540 proposed toll highway, as well as a thorough explanation of funding sources for the project. No traffic and revenue study has been completed.[216] No toll revenue estimates have been disclosed, and the only mention of possible toll costs is that certain traffic forecasts assumed a cost of $0.12 per mile.[217] There is no explanation of why how this assumed toll cost was developed or whether it was realistic in light of how much of the project's cost will purportedly come from tolls.

During public meetings for the Complete 540, project attorneys for the Conservation Groups asked Susan Pullium, director of Customer Service for the North Carolina Turnpike Authority, for information regarding the assumptions that NCDOT had used with regard to the

[211] Page-Proof Joint Answering Brief for Defs., Defenders of Wildlife v. N.C. Dep't of Transp., No. 13-2215, at 45, (Jan. 17, 2014), attached as Attachment 43. The cost estimates were in 2006 dollars. *Id.*
[212] *Id.* at 44–47.
[213] *Id.*at 45.
[214] *Id.* at 48.
[215] *Id.* at 48.
[216] *See* E-mail from Eric Midkiff, NCDOT, to Andy Wittman (Dec. 4, 2013) (explaining that "there is no plan of finance for the Complete 540 project currently under study between Apex and Knightdale," and that "the amount of available funding for the Complete 540 project is not a consideration in study of alternative routes"), Attachment 44.
[217] Traffic Forecast Tech. Mem. (Apr. 2014), at Table 2. Forecast Scenarios and Alternatives (assuming that the toll cost for using the highway would be $.12 per mile).

percentage of the project cost that would be borne by tolls. Ms. Pullium assured the attorneys that she would get back to them promptly with this information. A follow-up e-mail was sent to Ms. Pullium on December 9, 2015 date.[218] At a public hearing that same evening, Ms. Pullium noted her receipt of the e-mail and assured the attorneys she was looking into their questions. As yet, no response has been received from Ms. Pullium or anyone else at NCDOT.

The only information seeming to touch possible toll revenues is in an appendix to the 2014 Traffic Forecast Technical Memorandum, and even that information fails to explain how tolls can fund this project. The relevant appendix is a 2010 report on the development of a toll diversion model—it explains the Triangle Regional Toll Diversion Model, but does not reveal NCDOT's assumptions about how much tolls would cost or the revenue such tolls would generate. Even then, the model appears dated. The model relies on "willingness to pay" studies from 2010, 2009, and 2008, with the 2008 study being specific to the Complete 540 study area and allegedly providing the most "complete" information.[219] Moreover, the outdated willingness to pay study results are limited in their application because "[t]he calculations took into account only those who responded that they would be willing to pay under at least one of the scenarios presented to them"—thus survey respondents who said they would *not* be willing to pay under *any* scenario were not counted in the assessment.[220] Thus, this study does not illustrate the true demand or anticipated use for a toll highway in the Complete 540 study area. The technical memorandum as a whole fails to provide sufficient information about toll costs and actual anticipated use to help explain how the high costs for the toll highway will be funded.

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At a minimum, the agencies must demonstrate that their expensive preferred alternatives are able to be funded. They must evaluate and disclose the funding mechanisms at play, and fairly evaluate the costs associated with the toll road alternative as compared with other alternatives. In turn, the economic information used by agencies must be accurate to support their analysis of impacts and alternatives. Due to "the potential for misleading economic assumptions to defeat the functions of an EIS," courts must review "the economic assumptions underlying a project to determine whether the economic assumptions were so distorted as to impair fair consideration of the project's adverse environmental effects." *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996) (internal quotation marks omitted). Here, NCDOT's varied and unverified assumptions about the costs and funding for this project defeat the function of the DEIS. Without clear evidence of funding for this project and current, verifiable cost calculations, the DEIS cannot comply with NEPA and fails to inform the Corps' practicability analysis under Section 404.

E. The True Project Costs Will Exceed the $2.1- 2.6 Billion Projection.

The DEIS barely discusses costs other than listing, without explanation, various dollar amounts s in the Comparative Evaluation Matrix.[221] The costs included are the projected total, construction, right-of-way and relocation, utility, and environmental mitigation costs. The DEIS does not elaborate on any of these cost categories. Moreover, several categories of costs are

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[218] E-mail from Ramona McGee, SELC, to Susan Pullium, NCDOT (Dec. 9, 2015), attached as Attachment 45.
[219] Traffic Forecast Tech. Mem., App. D: Triangle Regional Toll Diversion Model Development, Tech. Mem. (Dec. 2010), at 2.
[220] *Id.*
[221] DEIS at 107: Comparative Evaluation Matrix.

92 conspicuously absent from this list, such as mitigation of impacts to historic sites and public parks protected under Section 4(f) Department of Transportation Act of 1966, 49 U.S.C. § 303, possible costs associated with building near hazardous materials and contaminations sites,[222] and perhaps most importantly, costs associated with any mussel propagation and augmentation program. As highlighted above, NCDOT and FWS appear to be contemplating what would be a multi-million dollar mussel propagation facility in an attempt to skirt ESA requirements regarding the dwarf wedgemussel. These costs are unaccounted for in the DEIS. NCDOT must provide a full, detailed explanation of anticipated project costs in order for the public and resource agencies to distinguish between alternatives—and to determine whether the project is even worth the cost.

None of the DSAs can be considered practicable given these significant funding questions and cost concerns. Before moving forward with an FEIS NCDOT must: Establish the full cost to the project for all alternatives.

- Establish the percentage of the cost that can reasonably be expected to be covered by toll revenue and therefore establish the true "cost to NCDOT."

- Establish, based on updated realistic costs, whether the project can score high enough to achieve any funding from the STI.

- Establish and disclose a realistic funding plan for the project.

VI. OBSTACLES TO OBTAINING SECTION 404 PERMIT

If a project will require the dredging or filling of material into waters of the United States, the agency proposing the project must secure a permit from the U.S. Army Corps of Engineers under Section 404 of the CWA ("Section 404 permit"). In deciding whether to issue a Section 404 permit, the Corps must apply the EPA's Section 404(b)(1) Guidelines. As required by the CWA, the guidelines specify where and under what conditions dredged or fill material can be discharged lawfully.

The Corps cannot issue a permit if any of the following are true: (i) there is a less harmful "practicable alternative" to the project, (ii) the project would cause a "significant degradation of the aquatic ecosystem," (iii) the applicant has not taken appropriate steps to "minimize potential harm to the aquatic ecosystem," or (iv) the Corps does not have "sufficient information" to make a reasonable permit decision. 40 C.F.R. § 230.12(a)(3). Moreover, the Corps' Section 404 Guidelines strictly prohibit issuance of a permit that would "jeopardize[] the continued existence of species listed as endangered or threatened under the Endangered Species Act . . . or result[] in likelihood of the destruction or adverse modification of a habitat which is determined . . . to be a critical habitat under the Endangered Species Act." 40 C.F.R. § 230.10(b)(3). The Corps is further constrained by its consideration of the public interest impacts of the project. 33 C.F.R. § 320.4(a).

[222] *Id.* at 102 (noting without any elaboration that "[t]he sites found are not expected to have a substantial effect on anticipated project costs or schedules").

The Corps often looks to a project's NEPA documents to assist in its decision of whether to issue a 404 permit for a particular project. The Corps is not limited to the information provided in the EIS or associated documents, and in some instances, it may be necessary for the Corps to conduct its own studies or investigations so as to be able to satisfy its Section 404 obligations.

Because the Complete 540 DSAs would impact wetlands and other federal waters, NCDOT must obtain a Section 404 permit from the Corps. As thoroughly established throughout these comments, this project would have unprecedented environmental impacts, would yield little in time-savings benefits, and would cost an exorbitant amount.

All of the DSAs would cause "significant degradation of the aquatic ecosystem" as thoroughly highlighted above. 40 C.F.R. § 230.12(a)(3)(ii). Most significantly, all but the Red Route DSAs would jeopardize the continued existence of the endangered dwarf wedgemussel. *Id.* at § 230.10(b)(3). Additionally, non-toll highway options exist which would be less-
93 environmentally damaging, and practicable in light of their lesser costs. *Id.*at § 230.12(a)(3)(i). The DEIS also fails to provide sufficient information about the extent of the toll highway's impacts—or its funding sources and tolling assumptions—to adequately inform the Corps' 404 analysis. Each of these characteristics of the Complete 540 project provide an independent and sufficient reason for the Corps to reject any Section 404 permit application for the toll highway.

The improbability of the Corps issuing a permit for any DSA is yet another reason that NCDOT must consider non-toll highway options which will be less environmentally damaging and more practicable in light of costs and human impacts. An alternative involving a combination of TDM, TSM, mass transit options, and upgrades to existing roads will cause far fewer environmental impacts. Such an alternative would also cost far less than the impracticable estimated $2.6 billion cost of the toll highway.

Nonetheless, as we have highlighted throughout these comments, the Red Route represents the least environmentally damaging practicable alternative ("LEDPA") of the presented DSAs. The Red Route DSAs avoid most of the direct impacts to the dwarf wedgemussel and also would result in the fewest impacts to streams, ponds, and wetlands. The Red Route DSAs—DSAs 6 and 7—are the "least damaging" DSAs out of a slate of
94 environmentally undesirable options.

The Red Route DSAs are no less practicable than any of the other DSAs. The DSAs including the Red Route are in the bottom half of DSAs for both cost and relocations. Ten DSAs are more expensive than the Red Route DSAs, and nine DSAs would cause more residential relocations than either of the Red Route DSAs.[223] The relatively lower cost and fewer relocations associated with the Red Route make it a more practicable alternative than most of the other alternatives. Nonetheless, the relocations associated with the Red Route is the most commonly cited reason against choosing a Red Route DSA. Yet each of the 17 DSAs would cause hundreds of relocations, and it is arbitrary and capricious to suggest that the 450 relocations associated with the Red Route make it untenable, but the approximately 240 plus relocations associated with other routes are acceptable. In turn, the Red Route DSAs have

[223] *See id.* at 108: Comparative Evaluation Matrix.

indisputably fewer environmental impacts on balance. As such, DSAs 6 and 7 represent the least environmentally damaging practicable alternatives of the 17 DSAs presented in the DEIS.

VII. INSUFFICIENT ANALYSIS OF SECTION 4(f) RESOURCES

Section 4(f) of the Department of Transportation Act of 1966 prevents a federal project from using publicly owned land unless "(1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use." 49 U.S.C. § 303(c).

When there is no feasible and prudent avoidance alternative, the regulation implementing Section 4(f) states that "the Administration may approve only the alternative that . . . [c]auses the least overall harm," using a balancing of seven factors. 23 C.F.R. § 774.3(c)(1); *see* 49 U.S.C. § 303(c)(2). At the heart of Section 4(f) lies the policy that "special effort should be made to preserve the natural beauty of the countryside," including "public park and recreation lands . . . and historic sites" in the development of transportation plans. *See* 49 U.S.C. § 303(a), (b). The Complete 540 Draft Section 4(f) Evaluation does not adhere to this preservation mandate, and
95 instead focuses on justifying potential impacts as being de minimis in nature or else unavoidable. Absent from the Draft Section 4(f) Evaluation is any acknowledgement of how a non-toll highway option could avoid and best mitigate harm to Section 4(f) resources.

Each of the Complete 540 DSAs stands to impact one or more 4(f) properties,[224] and yet the Draft Section 4(f) Evaluation fails to fully assess these impacts and possible feasible and prudent alternatives. Six Section 4(f) eligible existing or planned public parks or recreation sites would be impacted by the current slate of DSAs: Middle Creek School Park, the Watershed Extension loop trail in Clemmons Educational State Forest, the Neuse River Trail, the planned Sunset Oaks Park, the planned expansion area for White Deer Park, and the planned Bryan Road Nature Park.[225] In turn, 25 historic sites included in the National Register of Historic Places ("NRHP") or eligible for listing in the NRHP are within the project corridor and subject to Section 4(f).[226] Six of the 25 sites "have the potential to be affected by Complete 540 DSAs," and three—the Dr. L.J. Faulhaber Farm, the Bryan Farms Historic District, and the Baucom-Stallings House.[227]—"have the potential be adversely affected and have potential Section 4(f) use by DSAs."[228]

A. The Draft Section 4(f) Evaluation Erroneously Suggests Certain Impacts Would Be "De Minimis."

Several DSAs would impact the Middle Creek School Park, the Neuse River Trail, or the Clemmons Educational State Forest. The Neuse River Trail would be impacted under any

[224] Community Impact Assessment at 56.
[225] DEIS App. C: Draft Section 4(f) Evaluation at 2.
[226] Community Impact Assessment (June 2015), at 59.
[227] DEIS App. C: Draft Section 4(f) Evaluation at 2. "None of these sites are currently listed in the NRHP, but all have been determined to be eligible for listing." *Id.*
[228] *Id.*

DSA.[229] The Draft Section 4(f) Evaluation anticipates that the impacts to these resources would only be "de minimis" in nature, and thus not subject to the substantive Section 4(f) review. 49 U.S.C. 303(d); 23 C.F.R. § 774.3(b). Under the implementing regulations, an impact to "parks, recreation areas, and wildlife and waterfowl refuges" is de minimis if it "will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)." 23 C.F.R. § 774.l7. Thus, to demonstrate a de minimis impact to a park or other public lands, the agencies must consider the features and particular uses of the property. In turn, "use" within the meaning of Section 4(f) includes uses that result in the actual incorporation of land into a transportation facility, as well as constructive uses that create proximity impacts causing substantial impairment to a resource. *See* 23 CFR 774.17, 774.15.[230] In addition, temporary occupancies that do not satisfy all of conditions set forth in 23 C.F.R. § 774.13 (d) fall within the definition of use.

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1. All of the DSAs Would Impact the Neuse River Trail

The Neuse River Trail is a 27.5 mile paved Greenway Trail running through urban Raleigh to rural areas of Southeastern Wake and Johnston Counties. This is a valuable greenway resource, connecting urban and natural environments. The southern, less-developed segments of the trail provide a means of retreat from urban living into quieter, tree-lined and scenic areas of Wake and Johnston Counties. Users of the Neuse River Trail can enjoy the sounds of nature—not highways and traffic—on parts of the trail and river. The Trail follows the Neuse River, and is part of the Mountains-to-Sea Trail that begins in the Great Smoky Mountains and runs across North Carolina to the Outer Banks.

The Draft 4(f) Evaluation incorrectly asserts that impacts to the Neuse River Trail would be de minimis. The Draft Section 4(f) Evaluation suggests that because the trail already runs alongside existing roads and there are already "unsightly features such as wastewater treatment facilities," along the trail, adding an enormous toll highway near and crossing over the trail would not "create unusual conditions" along the trail.[231] This flawed reasoning suggests that once a Section 4(f) property has experienced *any* negative impacts, the "door is opened" for any other adverse impacts. Moreover, the reasoning ignores the significant difference between existing minor, arterial roadways in the project study area, and a massive, multi-lane toll highway which would be larger, have greater noise impacts, and generate greater environmental impacts than any of the current roadways near the Neuse River Trail. Particularly in this southern part of the Trail, the toll highway would indeed "create unusual conditions" along undeveloped portions of the Trail.

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[229] DEIS App. C: Draft Section 4(f) Evaluation at Table 1: Potential Effects on Section 4(f) Resources by Detailed Study Alternative.

[230] According to 23 C.F.R. § 774.15 (a):

> A constructive use, occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished.

[231] DEIS App. C: Draft Section 4(f) Evaluation at 9.

The figures depicting the impacts to the trail demonstrate how the toll highway would be exponentially larger than any existing roadways in the area and substantially alter the character of the Trail in the affected area.[232] The affected section of the Trail would not be an urbanized strip of open trail in Raleigh, instead, the affected portion of the trail runs through a forested and less-developed, scenic area of southeastern Wake County. The Brown Route—as included in DSAs 4, 5, 11, 12, 16 and 17—would not simply cross the Trail, but would run directly *over* the current trail and place an interchange above and following a 90-degree angle turn in the trail, covering several hundred feet of the current trail.[233] The Tan Route would cross the Trail twice within the span of a few hundred feet,[234] and the Mint Route would cross the Trail and run parallel alongside the Trail for several hundred feet, thus impacting the visual and sound aesthetics of the trail indirectly.[235] The Green Route would "simply" cross the trail once.[236]

These impacts to the Neuse River Trail would be more than de minimis, as they would "adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)." 23 C.F.R. § 774.l7. Under any alternative, users of the trail would now be subjected to increased traffic sounds and pollution and the eyesore of a giant toll highway—such impacts would adversely affect the experience of bicyclists, joggers, and walkers on this greenway, which currently does not have any comparable disturbances in this southern portion of the Trail.

2. Impacts to the Middle Creek School Park Must Be More Thoroughly Studied and Documented

Finally, the Draft Section 4(f) Evaluation suggests that the impacts to the Middle Creek School Park would be de minimis because the toll highway would only "directly affect a narrow strip of land at the extreme northern edge of Middle Creek School Park," affecting a total of approximately 1.6 acres.[237] The Draft Section 4(f) Evaluation notes the lack of "designated trails or other active recreational uses" after describing the affected area as "wooded open space" that
98 is half-a-mile away from existing recreational facilities, and a quarter-of-a-mile from a planned greenway trail.[238] While the report describes the uses of adjacent areas of the park, the Report fails to describe what the 1.6 acres of wooded open space are currently used for. The final Section 4(f) analysis should review how this strip of affected wooded open space is used. Likewise, further study and documentation should be completed to demonstrate that constructive uses would not substantially impair this resource.

3. DSAs 4 and 16 Would Impact Use and Management of the Clemmons Educational State Forest

99 The Draft Section 4(f) Evaluation also suggests that the impacts to the Watershed Extension Loop Trail in Clemmons Educational State Forest, impacts corresponding to DSAs 4

[232] *Id.* at Figures 22-25.
[233] *Id.* at Figure 25.
[234] *Id.* at Figure 24.
[235] *Id.* at Figure 23.
[236] *Id.* at Figure 22.
[237] *Id.* at 7.
[238] *Id.*

99 and 16, would be de minimis. However, this assertion is undercut by the North Carolina Forest Service's expressed concerns about the impacts to this site, including disruption of the trail system in the forest, losses of working forests, ranger patrol and fire control difficulties if the forest property were split into two.[239]

4. Feasible and Prudent Avoidance Alternatives to the Toll Highway DSAs Exist

100 The FHWA may approve a project with negative impacts to Section 4(f) resources only if no feasible or prudent alternative exists. Because each of the DSAs would likely have a negative impact on Section 4(f) resources, FHWA must examine feasible and prudent avoidance alternatives to the Complete 540 project, or establish that no such alternatives exist. The current feasibility analysis in the Draft Section 4(f) Evaluation fails to fulfill this obligation, and will need to be corrected to inform the Section 4(f) determination.

An alternative is infeasible under Section 4(f) "if it cannot be built as a matter of sound engineering judgment." 23 C.F.R. § 774.17. An alternative is not prudent if (1) after reasonable mitigation, it still causes "severe social, economic, or environmental impacts . . . or severe impacts to environmental resources protected under other Federal statutes"; (2) "[i]t results in additional construction, maintenance, or operational costs of an extraordinary magnitude"; or (3) "[i]t causes other unique problems or unusual factors." 23 C.F.R. § 774.17.

101 The feasibility analysis of the Draft Section 4(f) Evaluation is entirely limited to considering alignment shifts in the DSA routes that impact 4(f) resources and assumes that the only way to meet the project purpose is through completing the 540 Outer Loop.[240] For example, in suggesting that there are no feasible alternatives that would avoid the Neuse River Trail, the Draft Section 4(f) Evaluation broadly asserts that because "the Neuse River Trail follows the Neuse River for almost 30 miles in eastern Wake County, it is not possible for this project to completely avoid the trail."[241] This statement is false—non-toll highway alternatives could in fact completely avoid the Trail. The Draft Section 4(f) Evaluation never considers any of the many feasible, non-toll highway options that would avoid these impacts, such as upgrading existing roadways, TDM, TSM, or mass transit options, all of which would result in *fewer* severe environmental, social, and community impacts. Moreover, each of these would be more feasible and prudent than the current DSAs which lack secure funding for their estimated cost of over $2 billion.

The number of Section 4(f) resources in the project study area and the nature of the impacts to these resources underscore the necessity of further examining non-toll highway alternatives to the transportation needs of the project study area. A combination of upgrading existing roadways, implementing TDM and TSM strategies, and increasing mass transit options is a feasible and prudent alternative that would avoid impacts to Section 4(f) resources. FHWA must consider such alternatives as part of its Section 4(f) analysis.

[239] *Id.* at Attachment 3.
[240] *Id.* at 9-12.
[241] *Id.* at 12.

B. Section 4(f) Does Not Prevent FHWA from Sanctioning the Least-Environmentally Damaging Red Route Alternatives.

FHWA should look to feasible and prudent non-toll highway alternatives, but as between the current DSAs, the Red Route DSAs are the only feasible and prudent alternatives. The other DSAs all would result in much more severe environmental impacts than the Red Route DSAs, which in turn prevents FHWA from considering these other DSAs as prudent.

According to the Draft Section 4(f) Evaluation, the Red Route would likely negatively affect two parks and two historic sites,[242] and there are no viable mitigation or avoidance measures that could be incorporated into the Red Route to minimize the harm to Section 4(f) resources.[243] The Draft Section 4(f) discounts any possible shifts in alignment of the Red Route, stating that a modified Red Route was considered, but it "had such numerous design constraints that it was not a feasible alternative."[244]

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In turn, however, the only reasons given by the Alternatives Analysis for rejection of this modified Red Route was (1) that the alignment would be "operationally undesirable" even though it would still "meet minimum design standards," and (2) that if speeds were increased on this section the 540 Outer Loop—as NCDOT is doing for other sections—then the alignment of the route would need to be modified to accommodate the increased speed, which "would likely shift the right-of-way" for this modified Red Route into the Section 4(f) resources.[245] These supposed justifications for eliminating the modified Red Route fail to indicate that the route was infeasible or imprudent. There is no requirement that the full 540 Outer Loop have the same speed limit, nor that design standards must be exceeded. Indeed, FHWA recently announced intended revisions to its design standards to allow for greater flexibility for roadway designers. *See* FHWA Notice: *Revision of Thirteen Controlling Criteria for Design; Notice and Request for Comment*, 80 Fed. Reg. 60732 (Oct. 7, 2015), attached as Attachment 46. The spirit of design flexibility may allow for previously unevaluated modifications to the Red Route, or may make the formerly identified "design constraints" less problematic. FHWA must consider modifications to the Red Route when conducting its Section 4(f) analysis, and NCDOT should better evaluate and document whether this modified route is feasible.

The Red Route's 4(f) impacts are particularly significant because the Red Route DSAs are the least environmentally damaging alternatives under consideration. Between the current slate of DSAs, only Red Route DSA could possibly be found to be the "LEDPA" pursuant to section 404 of the Clean Water Act. This tension between the Section 4(f) and LEDPA determinations may pose a significant barrier to any of the DSAs receiving all necessary federal approvals, but ultimately, FHWA must consider the environmental effects of alternatives in determining whether the alternatives would be "prudent" under Section 4(f). 49 U.S.C. § 303(c)(1)–(2). As such, even if the DSAs without the Red Route did not have any impacts to Section 4(f) resources—which is not the case, as detailed above—an alternative using the Red

[242] *Id.* at 5-6 (documenting impacts to Dr. L. J. Faulhaber Farm and Bryan Farms Historic District), 9 (documenting impacts to White Deer Park Planned Expansion Area and Planned Bryan Road Nature Park).
[243] *Id.* at 10-12.
[244] *Id.* at 10.
[245] Alternatives Analysis at 5-40.

Route may still be selected if the other alternatives are not "prudent and feasible alternative[s]" to using the Section 4(f) resources that fall within the Red Route's path.

As thoroughly explained above in the analysis of impacts above,, the non-Red Route DSAs would directly jeopardize the endangered dwarf wedgemussel and would result in far greater and more severe environmental impacts. Moreover, if NCDOT and FWS were to create a mussel propagation facility to "offset" the non-Red Route DSAs' impacts to dwarf wedgemussels, this would "result in additional construction, maintenance, or operational costs of an extraordinary magnitude." *Id.* The impacts to the dwarf wedgemussel, standing alone, present "severe environmental impacts . . . or severe impacts to environmental resources protected under other Federal statutes," and would cause "other unique problems or unusual factors" if NCDOT attempted to address mussel impacts with a new mussel propagation facility. 23 C.F.R. § 774.17.

As recognized by the Fourth Circuit, "[a] cumulation of small problems may add up to a sufficient reason to use §4(f) lands." *Hickory Neighborhood Def. League v. Skinner*, 910 F.2d 159, 163 (4th Cir. 1990) (quoting *Eagle Found., Inc. v. Dole*, 813 F.2d 798, 805 (7th Cir. 1987). DSAs 6 and 7, which use the Red Route, are the least environmentally damaging DSAs and avoid the additional costs associated with mussel propagation and environmental mitigation measures. The cumulation of the non-Red Route DSAs' greater impacts to water quality, streams, wetlands, aquatic ecosystems, and rare and endangered species "add up to a sufficient reason to use" the Section 4(f) resources at stake here.

Thus, while Section 4(f) may counsel against selecting any of the DSAs over a non-toll highway alternative, Section 4(f) does not bar selection of the Red Route DSAs over the other currently considered DSAs. Indeed, Section 4(f) guides FHWA to select the "prudent and feasible" alternative, which would be a Red Route DSA in light of the other DSAs' extensive environmental impacts.

Nonetheless, the truly most prudent and feasible alternative will be one which does not involve building a toll highway, and which instead incorporates upgrades to existing roadways, TDM and TSM strategies, and increases to mass transit. Such an alternative will meet the project's purposes and avoid impacts to the discussed Section 4(f) resources.

VIII. PREDETERMINED DECISION-MAKING

The Council on Environmental Quality's NEPA regulations specifically require that an EIS be more than merely a "disclosure document," stating that an "environmental impact statement shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made." 40 C.F.R. §§ 1502.1, 1502.2(g). And the United States Court of Appeals for the Fourth Circuit itself has recognized that NEPA requires action and study based on "good faith objectivity rather than subjective impartiality." *Fayetteville Area Chamber of Commerce v. Volpe*, 515 F.2d 1021, 1026 (4th Cir.1975); *see also Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 199 (4th Cir. 2005) (noting that "NEPA of course prohibits agencies from preparing an EIS simply to 'justify decisions already made.'" (quoting 40 C.F.R. § 1502.2(g)). Predetermined decision-making is antithetical to the purpose of NEPA to fairly evaluate reasonable alternatives and disclose to the public the agency's findings regarding the different alternatives at a meaningful time

Here, NCDOT has made clear for decades that it would only build the Orange Route and would never build the Red Route. First, NCDOT designated the Orange Route as its preferred route in the 1990s by limiting development throughout that corridor. Second, as vocal opponents to the Red Route called for its elimination, NCDOT assured the public that the Red Route would never be built.

A. The Protected Orange Corridor Was Illegally Pre-determined.

103 The North Carolina General Assembly passed the Transportation Corridor Official Map Act ("Map Act") in 1987. This act allows NCDOT to designate and preserve certain roadway corridors for future transportation projects. In the 1990's, NCDOT used the Map Act to preserve what has become known as the Orange Route, limiting development throughout this corridor in anticipation of the 540 Outer Loop being completed along this route. NCDOT's commitment to this protected corridor for multiple decades demonstrates its predetermined decision to only build the Orange Route.

Moreover, NCDOT's determination to build the Orange Route has negatively impacted communities in the area. Residents in the area have been unable to sell their homes and move, unable to develop retirement properties, and have been living in limbo for the past two decades as a result of NCDOT's use of the Map Act.[246] The North Carolina Court of Appeals ruled that the Map Act is unconstitutional by allowing the state to effectively "take" residents' land by preventing residents from being able to derive economic value from their property. *Kirby v. N.C. Dep't of Transp.*, 769 S.E.2d 218 (N.C. Ct. App. 2015). The case is now on appeal to the Supreme Court of North Carolina. 775 S.E.2d 829 (Aug. 20, 2015).

B. Rejection of the Red Route Was Illegally Pre-determined.

104 After NCDOT designated the protected corridor of the Orange Route in the 1990s, environmental resource agencies expressed concern about the severe impacts this route would have on the dwarf wedgemussel and other natural resources in the area. In response, NCDOT developed the Red Route which would avoid direct impacts to the dwarf wedgemussel—but cross through developed areas of the Town of Garner. The Town of Garner voiced its strong opposition to the route, reaching out to the Governor and Secretary of Transportation to try and remove the Red Route from consideration.[247]

In response to Garner's outcry, NCDOT made repeated public statements indicating that it would never build the Red Route: "We were never going to build the red route. It was only for study."[248] News outlets explained that "[t]he Turnpike Authority has said it wouldn't use the red route because of its adverse impact" on the Town of Garner, "[b]ut the DOT had to study the

[246] Bruce Siceloff, *Road Worrier: On the Orange Route, NCDOT Holds Property Owners in Limbo*, THE NEWS & OBSERVER, Sept. 28, 2015, http://www.newsobserver.com/news/traffic/road-worrier-blog/article36833802.html, Attachment 47.
[247] E-mail chain from Ed Brown, to Tony Beasley, Town of Garner, (Feb. 22, 2011), attached as Attachment 48.
[248] Shirley Hayes, *With Red Route Gone, What's Next for I-540 Expressway Extension?*, GARNER NEWS, Mar. 29, 2011, Attachment 49; *see also* Colin Campbell and Bruce Siceloff, *DOT: We Won't Build Red Route*, GARNER-CLAYTON RECORD, Mar. 2, 2011, Attachment 50.

option because the Army Corps of Engineers requires that at least two proposed routes be studied."[249] According to Town of Garner e-mails, N.C. Turnpike Authority staff stated in November 2010 that the chances of the Red Route being built were "one in a million."[250] The animosity to the Red Route culminated in the North Carolina General Assembly passing a law in 2011 prohibiting the Complete 540 project from being located north of an existing, protected corridor—essentially outlawing the Red Route and attempting to guarantee the selection of the Orange Route. 2011 N.C. Laws S.L. 2011-7.

Federal agencies warned that more than one route would need to be studied and presented in order for the project to obtain federal approval.[251] Consequently, the Regional Transportation Alliance helped fund studies of route alternatives to the Red and Orange Routes so as to keep the Complete 540 toll highway project moving forward.[252]

RTA's involvement with this project provides further evidence of the transportation agencies' predetermined decision-making and disregard of the NEPA process. The non-governmental organization—an arm of the Raleigh Chamber—has a stated position in support of completing 540 as a toll highway along the orange route. The transportation agencies have granted RTA a special role to participate throughout the NEPA process while failing to offer the same level of access to other stakeholders, such as the Conservation Groups that favor other options.[253]

Despite RTA's assistance and study of additional routes,[254] the federal agencies refused to condone the project without the Red Route. In December 2012, FHWA and the Corps withdrew support for the project, informing NCDOT that they believed "the project can no longer move forward . . . and satisfy all federal environmental requirements."[255]

While grappling with how to handle the federal agencies' withdrawal of support, members of the Transportation Advisory Committee ("TAC") made statements to the effect of "even though we know the red route will never be built, to move this along," the TAC should encourage the N.C. General Assembly to repeal the law.[256] Eventually, in 2013, the N.C. General Assembly did remove its statutory restriction of routes to be studied for the Complete 540 project, see 2013 N.C. Laws S.L. 2013-94, despite the Town of Garner's strong

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[249] Bruce Mildwurf, *Without 'Red Route,' Feds to End Funding for Extending Wake Toll Road*, CAPITOL BROADCASTING CO., Apr. 10, 2012, Attachment 51.
[250] E-mail from Thomas H. Johnson to Hardin Watkins, Town Manager, Town of Garner (Nov. 22, 2010), Attachment 52.
[251] Bruce Mildwurf, *Without 'Red Route,' Feds to End Funding for Extending Wake Toll Road*, CAPITOL BROADCASTING CO., Apr. 10, 2012, attached as Attachment 51.
[252] Bruce Siceloff, *New TriEx Proposals May Save Garner from Red Route*, NEWS & OBSERVER, May 22, 2012, Attachment 53.
[253] E-mail from Eric Midkiff, NCDOT, to Jamille A. Robbins, NCDOT & Kiersten R. Bass, nHNTB (Aug. 22, 2013), Attachment 54.
[254] Bruce Siceloff, *New TriEx Proposals May Save Garner from Red Route*, NEWS & OBSERVER, May 22, 2012, Attachment 53.
[255] Letter from John F. Sullivan, FHWA, and Steven A. Baker, USACE, to Terry R. Gibson, P.E., NCDOT (Dec. 7, 2012), Attachment 55.
[256] Transp. Advisory Comm. Meeting Minutes (Dec. 12, 2012) at 4, Attachment 56.

opposition.[257] NCDOT resumed inclusion and study of the Red Route in the Complete 540 NEPA process. Nonetheless, given NCDOT's repeated promises to not build the Red Route, the route's perfunctory inclusion in the DEIS is merely an attempt to pass legal muster. In other words, in the current DEIS NCDOT attempts to justify its already-made decision to build the Orange Route—in contravention of NEPA's implementing regulations. 40 C.F.R. §§ 1502.1, 1502.2(g).

IX. CONCLUSION

No one—not the Conservation Groups, not NCDOT, nor any of the affected communities—wish to see the Town of Garner crushed by the Red Route. The route may avoid significant environmental impacts, including the devastating effects to the dwarf wedgemussel associated with other routes, but it still comes with an excessive environmental toll. Indeed, all of the routes under consideration correspond to both substantial environmental impacts and significant relocation impacts, with anywhere from 234 to 550 required residential relocations. The only truly reasonable and practicable alternative is for NCDOT to evaluate options other than the 17 DSAs included in the DEIS. NCDOT should refocus on upgrading existing roadways, incorporating TDM and TSM strategies, and integrating mass transit options where possible. Such alternative solutions would address mobility in the project area without wiping out existing neighborhoods, endangered species, and special, sensitive natural resources.

Sincerely,

Kym Hunter
Staff Attorney

Ramona H. McGee
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CC (via e-mail and US mail, w/attachments):

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[257] *See* Letter from Town of Garner to N.C. Gen. Assembly (Jan. 23, 2013), Attachment 57.

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Southern Environmental Law Center Letter – 1/8/16

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Project Cost	Project is impracticable because anticipated cost is more than the amount NCDOT has allocated in the STIP.	The project is practicable from a financing perspective. The costs reported in the Draft EIS are expressed in year of expected expenditure dollars, while the figures in the STIP are in current dollars. The project is planned for implementation in phases that extend beyond time span of the current STIP at the time of the Draft EIS, which only includes costs for the phases anticipated during the STIP time span. Project revenue sources will include local, state, and federal resources, along with toll bonds. The project is included in CAMPO's fiscally constrained transportation plan.
2	Project Cost	Project was scored in NCDOT's STI process using outdated, lower cost estimates. Project should be rescored.	The costs reported in the Draft EIS are expressed in year of expected expenditure dollars, while the figures in the STIP are in current dollars. The project has been rescored under NCDOT Prioritization 4.0, using revised cost estimates (in current dollars) and it did score high enough for inclusion in the Adopted 2018-2027 STIP.
3	Project Cost	Lack of information on projected users of the road and its projected revenue.	This information is detailed in the project's *Planning Level Traffic and Revenue Study*, which is summarized in Chapter 4 of the Final EIS.
4	Traffic	Data suggest most commuters in study area won't experience meaningful travel time savings.	The analysis in the Draft EIS includes an examination of forecast travel times between representative origin and destination points, showing travel time savings for the new location build alternatives between all origin and destination points examined, as compared with the No-Build Alternative.
5	Traffic	For users that will see travel time savings, benefits would average 10 minutes or less, equating to $200 million per minute saved.	This statement assigns the entire project cost to ten minutes saved by one person on one trip through the project area. More correctly, travelers would save several minutes of travel time each time they pass through the project corridor, and it is reasonable to assume thousands of trips would be taken through the corridor every day for decades to come.
6	Alternatives	NCDOT did not adequately consider many less expensive and less environmentally damaging alternatives.	Chapter 4 of the Draft EIS reports that a range of options, including transportation system management, transportation demand management, mass transit, improving existing local roads, and combination (hybrid) options, was examined to determine which would be feasible and practical for meeting the purpose of the project. Each of these options was ultimately rejected as not practicable. NCDOT, FHWA and USACE are all satisfied that the non-toll highway concepts are not practicable and therefore do not require any further analysis. As noted on page 48 in the Draft EIS, specific details regarding the full range of alternatives considered and the multi-tiered screening process used are documented in the *Alternatives Development and Analysis Report*. As outlined on pages 8 through 11 in the Section 6002 Project Coordination Plan for the project, the Purpose and Need for the project and the development and analysis of alternatives for detailed evaluation in the Draft EIS were vetted with participating regulatory and resource agencies as well as the public. .

Comment Number	Primary Topic	Paraphrased Comment	Response
7	Relocations	Project will force hundreds of relocations and will divide neighborhoods.	NEPA does not prevent implementation of projects with significant effects on the human environment. It is virtually impossible to construct a new, limited-access facility in a region as densely populated as the Triangle without incurring community impacts. During the NEPA process a project proponent is required to evaluate a full range of alternatives that achieve the project's purpose and need and then compare the impacts of the alternatives. The Draft EIS satisfies this requirement. Efforts to avoid and minimize impacts will continue as the project develops.
8	Natural Environment	Project would cause significant damage to the natural environment.	Similar to the response to comment #7, NEPA does not prevent implementation of projects with significant effects on the natural environment. It is virtually impossible to construct a new, limited-access facility without incurring environmental impacts. During the NEPA process a project proponent is required to evaluate a full range of alternatives that achieve the project's purpose and need and then compare the impacts of the alternatives. The Draft EIS satisfies this requirement. Efforts to avoid and minimize impacts have and will continue to be undertaken as the project develops.
9	Protected Species	Project would jeopardize existence of Dwarf Wedgemussel and affect other rare species.	NCDOT and FHWA worked collaboratively with USFWS to avoid jeopardizing the existence of protected species including the DWM. The Biological Assessment evaluates the potential effects of the project on federally listed species, per the Endangered Species Act. The BA, summarized in Chapter 4 of the Final EIS, details the conservation measures NCDOT proposes to use to help offset anticipated effects and promote the recovery of the DWM. Section 7 Consultation with USFWS will be finalized prior to publication of the Record of Decision (ROD) for the project.
10	Section 4(f)	Project would affect parks and historic sites; every DSA would cross Neuse River Trail.	Neither NEPA nor Section 4(f) of the Department of Transportation Act prohibit impacts to these resources. The preferred alternative would not have adverse effects on any NRHP listed or eligible sites and it would avoid non-*de minimis* effects on Section 4(f)-eligible park properties.
11	Study Methods	Methods used in Draft EIS declared illegal by Federal Court.	See response to comment #13.
12	Purpose and Need	Improving mobility and reducing congestion are the same thing.	Reducing congestion can contribute to improved mobility, but mobility is also defined in other ways, including reducing travel times independent of traffic congestion.

Comment Number	Primary Topic	Paraphrased Comment	Response
13	Traffic	Purpose and need based on outdated traffic data and analysis.	The traffic modeling tool used in the development of Draft EIS, North Carolina State Triangle Regional Model (TRM) versions V4-2008 and V4-2009, was the officially approved model at the time the Draft EIS was initiated and prepared. The TRM V4-2008 was used as a tool in the development of the First Tier Screening (2011), Complete 540 Detailed Study Alternatives Traffic Forecast (2012, 2014), and Complete 540 Detailed Study Alternatives Capacity Analysis (2015) memoranda. The TRM has since been updated to TRM, version V5 (TRM V5), the Triangle Region's officially approved travel demand model. TRM V5 was adopted in February 2016 after being developed by the Triangle Regional Model Service Bureau at the Institute of Transportation Research and Education. TRM V5 was used as a tool in the development of the Complete 540 Preferred Alternative Traffic Forecast (2016) and Complete 540 Preferred Alternative Traffic Capacity Analysis (2017) memoranda (2017), which are documented in Chapter 4 of the Final EIS. CAMPO developed a future year (FY) (2040) socioeconomic (SE) data set for use with the TRM V5, which is a tool used to plan for future transportation needs and to demonstrate air quality conformity. The FY SE data set was also used as an input to prepare the Preferred Alternative Traffic Forecast for the Complete 540 project. Based on information available, the 2040 FY SE data set is understood to represent a future year allocation of population and employment and associated land use conditions based on CAMPO's fiscally constrained 2040 Metropolitan Transportation Plan (MTP). The Complete 540 project is included in the 2040 MTP.
14	Purpose and Need	Study area's growth rate has substantially decreased since 2009 and new development has stagnated.	This is inaccurate. According to the NC Office of State Budget and Management, Wake County's population grew by almost 12 percent between 2010 and 2015, twice the Statewide rate. The US Census Bureau reported that Wake County was the nation's second fastest growing county with a population over 1,000,000 between 2010 and 2015. Communities in the project area, including Holly Springs, Apex, and Garner, continue to see new development.
15	Traffic	"Outdated" traffic forecasts didn't reflect Wake County Transit Plan.	See response to comment #13. The TRM, version V5, used in developing the traffic forecasts for the preferred alternative analysis includes Wake County's long-term transit plan and the effect of increase in mass transit in the study area.

Comment Number	Primary Topic	Paraphrased Comment	Response
16	Purpose and Need	"Illegal" approach to purpose and need traffic forecasts overstates level of congestion in no-build scenario.	The First Tier Screening Traffic Memorandum (2011) was completed using the TRM V4-2008 as a tool to quantitatively assess measures of effectiveness (MOEs) of alternative concepts at a region-wide level and within the project traffic study area in 2035. As part of the analysis, a No-Build alternative concept was developed that included all projects in the fiscally-constrained CAMPO 2035 LRTP highway and transit networks, except Complete 540. The first tier screening of alternative concepts has since been reassessed using TRM V5. The *Complete 540 First Tier Alternative Screening & Traffic Reassessment Report* (November 2017*)* examines the impacts on the transportation network when using the TRM V5 with both the official socioeconomic (SE) data and the SE data developed using CommunityViz for the Complete 540 Indirect and Cumulative Effects Memo series which removes any influence of the Complete 540 project on forecast growth. This report shows negligible changes in vehicle miles traveled, vehicle hours traveled, congested vehicle miles traveled, network speeds, and overall traffic volume assignments when comparing TRM model runs using both the official and ICE SE data sets.
17	Purpose and Need	Purpose and need statement is impermissibly narrow because it includes system linkage as a secondary purpose.	Secondary purposes are also known as "other desired outcomes." As is clearly stated in the Draft EIS and the supporting technical reports, Alternative Concepts were not eliminated if they could not meet the secondary purpose of the project. Only the primary purposes were used to eliminate/retain Alternative Concepts.
18	Alternatives Analysis	Draft EIS only offers one alternative (new location highway).	See response to comment #6.
19	Alternatives Analysis	Differences between Alternative Concepts according to Measures of Effectiveness (MOEs) are too small to justify eliminating any of the alternatives. The different MOEs purported to help distinguish the alternatives according to the results of the MOEs. In reality, the MOEs illustrate how indistinguishable the considered alternatives are in terms of their ability to relieve congestion or enhance mobility. Advancing the toll highway alternative over other alternatives, based on such slight differences, is arbitrary and capricious.	SELC appears to dismiss all MOEs used to assess the project, yet mentioned only average daily travel speed and travel times in their comments. SELC makes the statement that the average time savings between RTP and four representative destination points under the different build Alternative Concepts only range from 2.25 minutes (for Improve Existing 2 – Arterial) to 5.75 minutes (for New Location Highway), and concludes that this difference is not "significant." There are three key problems with this: • SELC calculated the average time savings for the New Location Highway concept incorrectly; the average time savings relative to the No-Build scenario for trips from RTP to the destination points is actually 8.25 minutes. This is a more than three-fold greater time savings than the 2.25 minute average time savings offered by Improve Existing 2 – Arterial. • SELC makes the arbitrary judgment that a specific number of minutes saved is not "significant." Whether or not the differences between the average time savings are "significant" is completely subjective. • SELC leaves out the important point that the reported time savings is per vehicle trip. Thousands of daily trips would benefit from the potential time savings.

Comment Number	Primary Topic	Paraphrased Comment	Response
20	Alternatives Analysis	Quartile ranking system artificially inflated significance of small differences between Alternative Concepts.	The quartile ranking system was used specifically to avoid setting arbitrary thresholds for the MOEs as it explicitly measures each concept relative to the other concepts. While the differences between the concepts may be small for some of the MOEs, they are larger for others. Examining the quartile rankings for several different MOEs showed that some concepts consistently performed better than the other options, across all the MOEs. The key point to note is that the ranking system and the rationale for eliminating concepts according to the rankings were clearly laid out in the alternatives analysis and all of the alternative concepts were subjected to the same process.
21	Alternatives Analysis	Different screening process used for non-roadway Alternative Concepts.	The Alternatives Development and Analysis Report clearly states that the non-roadway Alternative Concepts could not be modeled using the Triangle Regional Model. The discussion of each MOE includes a qualitative description of the predicted effect of each non-roadway Alternative Concept, using Census data and other available data sources to supplement the findings.
22	Alternatives Analysis	Alternatives screening method violates NEPA	Under NEPA, it is not necessary to fully evaluate all possible alternatives. Only those alternatives that would best meet the purpose and need for the project based on a standard screening process are evaluated in the Draft EIS. The rationale used to dismiss the alternatives not carried forward for more detailed study is detailed in the *Alternatives Development and Analysis Report* and summarized in the Draft EIS; all of this information has been available for public review and comment.
23	Alternatives Analysis	Without information about proportions of local and through traffic, it is impossible to predict the most effective alternatives.	A purpose of the project is "to improve transportation mobility for trips within, or traveling through, the project study area…"; i.e., the project purpose does not draw a distinction between local and through traffic. The MOEs also do not draw a distinction between local and through traffic, so information about the proportions of local and through traffic is not necessary to measure the ability of each Alternative Concept to meet the project purpose.
24	Alternatives Analysis	Not enough information is provided to support the Draft EIS statement that the project could reduce travel times by as much as ten minutes or more.	Using a reader-friendly approach to preparing the Draft EIS, the project team summarized key information in the supporting technical reports to make the information easily understandable. The *Alternatives Development and Analysis Report* includes detailed information about travel time analysis of the Alternative Concepts. The Draft EIS statement SELC indicates is unclear/unsubstantiated is, in reality, an accurate representation of information in the Alternatives Report, which is directly referenced in the Draft EIS on page 104. For example, Table 2-2 and 2-3 in the Alternatives Report show that the New Location Highway would shorten the trips to Clayton from RTP and Brier Creek by 17 minutes. This is consistent with stating that "the project could reduce travel times to the area's major employment and commercial centers by as much as ten minutes or more."
25	Alternatives Analysis	There are many unanswered questions about the stated time savings.	It is clear by the wording of the statement in question ("could reduce travel times…by as much as ten minutes or more") that the statement is not asserting that all trips by all travelers would see a reduction in travel times by ten minutes. It is the opinion of NCDOT and FHWA that the screening process followed in the *Alternatives Development and Analysis Report* provides sufficient information to, as SELC describes, "fully evaluate the ability of different alternative solutions to meet the purpose of the project."

Comment Number	Primary Topic	Paraphrased Comment	Response
26	Alternatives Analysis	No documentation is provided about travel time savings to drivers using existing road network.	As described on page 54 of the *Community Impact Assessment*, drivers who do not use the roll road would nonetheless benefit from reduced congestion on existing roadways as a result of traffic diversion onto the new roadway.
27	Tolls	There is no evidence that drivers will pay to use this facility when free roads with little to no congestion are nearby.	As documented in the Draft EIS, there is notable forecast congestion on roads near the proposed project that would make use of a tolled facility alternative. As a nearby example, traffic volumes on the existing NC 540 in western Wake County have grown by 24 percent per year since the road opened to traffic in 2012, and revenue from the roadway has exceeded forecasts.
28	Alternatives Analysis	Not enough information about tolls, road use, to determine financial feasibility.	See response to comment #3.
29	Alternatives Analysis	Not enough distinct alternatives were considered.	See response to comment #6.
30	Alternatives Analysis	Screening process was biased against Alternative Concepts other than the new location highway.	See response to comment #6.
31	Alternatives Analysis	Improving existing roadways concepts are more competitive than screening process suggests.	As described in the response to comment #20, the quartile ranking system was used specifically to avoid setting arbitrary thresholds for the MOEs as it explicitly measures each concept relative to the other concepts. The ranking system and the rationale for eliminating concepts according to the rankings were clearly laid out in the alternatives analysis and all of the alternative concepts were subjected to this process in the same way.
32	Alternatives Analysis	Hybrid 1 concept should have been studied in more detail.	See response to comment #31. The Hybrid 1 concept was eliminated after objective application of this screening process and therefore did not advance to more detailed study.
33	Alternatives Analysis	No evidence provided to suggest that 60% participation in TDM strategies is unattainable.	As described in the Community Impact Assessment, about 82 percent of workers in the project area currently travel to work in single-occupancy vehicles. To achieve 60 percent participation in TDM strategies would require over half of those who currently drive alone to work to switch to TDM strategies such as carpooling. Such a massive sociological shift in travel behavior would be unprecedented.
34	Alternatives Analysis	NCDOT has successfully implemented TDM strategies to manage traffic on its Fortify 440 project, which suggests that these strategies could be feasible on the Complete 540 project.	Fortify 440 is a poor comparison to the Complete 540 project as TDM strategies are being implemented for the project on a temporary basis, while work is being completed on relatively short individual segments. Additionally, as described in the response to comment #33, to achieve over 60 percent participation in TDM strategies would require over half those who currently drive alone to work in the 540 study area to switch to TDM strategies. There is no evidence from the Fortify 440 project to suggest that this proportion of drivers would switch to TDM strategies.

Comment Number	Primary Topic	Paraphrased Comment	Response
35	Alternatives Analysis	No indication of whether smaller increases in the number of workers using TDM strategies could make TDM concept feasible.	The *Southeast Extension First Tier Screening Traffic Memorandum* (2011), which is included as Appendix A in the *Alternatives Development and Analysis Report*, provides sufficient methodology, explanation, and quantitative estimates of 2035 average daily congested VHT comparisons in Table 2 to calculate VHT reduction estimates. In a TDM alternative scenario where over 60,000 (nearly 60 percent of maximum TDM-eligible) employees in the traffic study area use TDM, the congested VHT reduction would equal the reduction from the No-Build to Build alternative concepts. This would require rates of telecommuting and carpooling more than triple current levels on a long-term basis. There is currently no evidence to suggest that significantly larger percentages of area workers will begin to take advantage of TDM strategies.
36	Alternatives Analysis	Documentation provides inadequate review of TDM strategies and did not provide sufficient justification to eliminate the TDM alternative.	See response to comment #6.
37	Alternatives Analysis	TSM strategies could be used on many of the same roadways for which the build concepts were analyzed—how would using these strategies on these roadways affect travel times?	Not all the freeways, expressways, and major arterials in the study area would be eligible for TSM improvements. As explained on page 2-10 of the *Alternatives Development and Analysis Report*, while TSM improvements can result in small increases in speeds on freeways/expressways and major arterials, these types of facilities only account for 20 percent of the nearly 6,000-mile regional highway network. Page 2-15 of the report notes that roughly 53 percent of traffic study area VHT occurs on facilities that could accommodate TSM improvements. If all such TSM-eligible facilities in the traffic study area were improved, leading to 2 to 3 percent increases in speeds on those facilities and resulting in a 2.5 percent decrease in VHT on those facilities, the VHT reduction would still be substantially less than that achieved by the Build Alternative Concepts.
38	Alternatives Analysis	TSM implementation on US 74 in Union County shows that this strategy can be successful.	There is no facility in the Complete 540 study area that is analogous to US 74, a major arterial that crosses the entire Complete 540 project area from east to west. Moreover, NCDOT disagrees with the validity and basis of this comment that "after implementing these low cost TSM strategies, average travel speeds along US 74 increased from approximately 20 to 30 MPH in 2007 to approximately 40 to 44 MPH during peak travel times." These speeds compare traffic simulation computer model (Sim Traffic) travel times from 2007 and real-time travel times from 2013, which should not be directly compared. This is an invalid comparison of average travel speeds and, therefore, invalid to make a determination of TSM impacts to US 74 average travel speeds.
39	Alternatives Analysis	Documentation says that an increase to 600 buses in use would be needed "to meet the project's primary purposes." Doesn't this mean there was a threshold for congestion and mobility?	Increase in transit use would be necessary "to achieve a decrease in study area traffic congestion and an improvement in travel times comparable to other Alternative Concepts that the screening process showed would meet the project purpose." There was no threshold set for congestion and mobility. The 12-fold increase in buses would only meet the purpose of the project if they had sufficient ridership.
40	Alternatives Analysis	Assertion that expanded transit costs could not be met by fares is unsupportable in light of high cost of toll highway and its uncertain financing.	The comparison is invalid. The projected cost and financing strategy of a toll highway have no bearing on whether bus fares would be sufficient to pay for expanded transit costs on another facility.

Comment Number	Primary Topic	Paraphrased Comment	Response
41	Alternatives Analysis	NCDOT should examine an alternative that would combine non-toll highway options.	Non-toll highway options on new location are not financially practicable. Options to improve existing highway facilities were examined in the Alternatives Report and were not found to be reasonable and feasible as Detailed Study Alternatives. Additionally hybrid alternatives combining improving existing highway facilities and new location toll road options were examined in the Alternatives Report and were not identified for further consideration in the study process. The Alternatives Report showed that none of the options of transportation demand management (TDM), transportation systems management (TSM), mass transit/multi-modal, or upgrade existing roadways were reasonable options for further consideration since they did not satisfy the two primary project purposes. Likewise, combinations of these options would also not meet these purposes. These were eliminated in the first tier screening process. Hybrid 3 was an alternative that went beyond the first tier screening. Hybrid 3 was eliminated because of factors that would not have benefited from inclusion of TDM, TSM, mass-transit/multi-modal, or other existing roadway improvements beyond what is already programmed in the local area long-range transportation plan. Therefore, reasonable alternatives or combinations of alternatives were not prematurely rejected. The alternatives analysis process for this project was reviewed by an interagency team including the USEPA. The team did not identify any issue of concern about this analysis.
42	Natural Environment	Each DSA would have substantial adverse effects on wetlands, streams, and other natural resources	See response to comment #8.
43	Aquatic Environment	Each DSA would have significant negative effects on the aquatic environment.	As suggested in the response to comment #8, NEPA does not prevent implementation of projects with significant effects on the aquatic environment. It is virtually impossible to construct a new, limited-access facility without incurring environmental impacts. During the NEPA process a project proponent is required to evaluate a full range of alternatives that achieve the project's purpose and need and then compare the impacts of the alternatives. The Draft EIS satisfies this requirement. Efforts to avoid and minimize impacts to the aquatic environment will continue as the project develops.
44	Aquatic Environment	There is no commitment to implement erosion and sedimentation controls, and those strategies are unlikely to be successful.	Proper erosion and sedimentation controls will be implemented for the project. NCDOT is required by State law to comply with all rules and regulations described in the Sedimentation and Pollution Control Act and all requirements stipulated in the program delegation from the NC Department of Environmental Quality. In addition, Design Standards for Sensitive Watersheds will be used throughout the project as a conservation measure

Comment Number	Primary Topic	Paraphrased Comment	Response
45	Aquatic Environment	Draft EIS has insufficient information about stream and water quality impacts.	The state and federal agencies with the responsibility to participate in the process have been given formal opportunities to comment on the analyses conducted and conclusions reached over the course of the study. These agencies have concluded that the level of detail and methods used are adequate to render the required decisions. That process has continued after publication of the Draft EIS, and the Final EIS summarizes the technical findings and results of agency coordination that occurred after publication of the Draft EIS. Additional water quality data were gathered for the lower Swift Creek watershed after publication of the Draft EIS; this is summarized in the *Lower Swift Creek Water Quality Report* (2016), which has been incorporated by reference into the Final EIS. A quantitative water quality indirect and cumulative impacts analysis was completed after selection of the preferred alternative (after publication of the Draft EIS). This work is summarized in Chapter 4 of the Final EIS.
46	Aquatic Environment	Draft EIS has insufficient information regarding impacts to Section 303(d) impaired waters.	See response to comment #45.
47	Aquatic Environment	Insufficient information has been provided to meet requirements of the Clean Water Act.	See response to comment #45.
48	Aquatic Environment	Draft EIS doesn't include information about cumulative impacts to water quality.	A quantitative water quality indirect and cumulative impacts analysis was completed after selection of the preferred alternative (after publication of the Draft EIS) as is customary. This work is summarized in Chapter 4 of the Final EIS.
49	Wetlands	Each DSA would have significant negative effects on wetlands; Draft EIS has insufficient information on wetland impacts.	As suggested in the response to comment #8, NEPA does not prevent implementation of projects with significant effects on the wetlands. It is virtually impossible to construct a new, limited-access facility without incurring environmental impacts. During the NEPA process a project proponent is required to evaluate a full range of alternatives that achieve the project's purpose and need and then compare the impacts of the alternatives. The Draft EIS satisfies this requirement. Efforts to avoid and minimize impacts have continued as the project has developed (minimization is discussed in Chapter 4 of the Final EIS) and will continue during final design of the project. See also response to comment #45.
50	Riparian Buffers	Draft EIS doesn't document potential impacts on wider riparian buffer areas required under some local jurisdictions' ordinance.	NCDOT documented the DSAs' potential impacts to riparian buffers in accordance with USACE and NCDWR requirements. Riparian buffer impacts are summarized in the Comparative Evaluation Matrix on page 108 in the Draft EIS. NCDOT will continue to work with agencies and local government to minimize impacts to riparian buffers in accordance with applicable regulations.
51	Riparian Buffers	NCDOT cannot assume more stringent local buffer requirements will still be in effect to assist in reducing impacts from the Complete 540 project.	See response to comment #50.
52	Protected Species	Project would jeopardize existence of Dwarf Wedgemussel and affect other rare species.	See response to comment #9.
53	Protected Species	Project would have significant direct, indirect and cumulative impacts on the Dwarf Wedgemussel.	See response to comment #9.

Comment Number	Primary Topic	Paraphrased Comment	Response
54	Protected Species	Focus of the Dwarf Wedgemussel viability study is on current viability and not viability in the event that the Complete 540 project is built.	The Dwarf Wedgemussel (DWM) Viability Study was conducted at the request of USFWS specifically for the purpose of: characterizing existing conditions in the Swift Creek watershed; summarizing conservation measures implemented to protect DWM in Swift Creek watershed; and assessing historic trends and future viability of DWM population and habitat conditions. The results of the Viability Study informed the Biological Assessment to establish the environmental baseline. This baseline plus the anticipated effects of the project are disclosed in the Biological Assessment.
55	Protected Species	Until USFWS completes its consultation process for the Dwarf Wedgemussel the NEPA process and project as a whole cannot proceed.	See response to comments #9 and 54.
56	Protected Species	Draft EIS has insufficient information to allow full review of impacts to Dwarf Wedgemussel.	NCDOT and FHWA have consulted with USFWS on the possible effects on threatened and endangered species. NCDOT and FHWA have worked collaboratively with USFWS to satisfy the requirements of the Endangered Species Act. Additional DWM surveys have been conducted following publication of the Draft EIS, as noted in Chapter 4 of the Final EIS. A Biological Assessment, summarized in Chapter 4 of the Final EIS, has been prepared for the project.
57	Protected Species	Mussel surveys completed for the Draft EIS were completed more than five years ago. Each segment was surveyed only once during the study period.	Additional mussel surveys were completed and documented in the DWM Viability Study (May 2016) and in the Complete 540 Aquatic Species Survey Report (June 2017).
58	Protected Species	Including Dwarf Wedgemussel propagation as part of mitigation would not offset impacts or comply with the Endangered Species Act.	The Biological Assessment evaluates the potential effects of the project on the DWM as well as measures to offset and conserve the species in accordance with the Endangered Species Act. The 1993 USFWS Recovery Plan for the Dwarf Wedgemussel includes several actions to aid in species recovery. Within action 5 (on page 31) is the potential for augmenting species populations and re-establishing populations in suitable habitat. The proposal is consistent with the Recovery Plan. The consultation process with USFWS will be concluded prior to finalizing the Record of Decision.

Comment Number	Primary Topic	Paraphrased Comment	Response
59	Protected Species	NCDOT has presented no evidence of successful mussel propagation and reintroduction into wild.	The Biological Assessment reports that numerous imperiled freshwater mussel species have been successfully propagated and released into the wild for various projects in the United States, such as the Aquatic Fauna Restoration Project in the Cheoah River in Western North Carolina. This is an on-going cooperative effort between NCWRC, USFWS, and other private entities that has successfully propagated and released several freshwater mussels, including Appalachian Elktoe (Alasmidonta ravenelaina), which is federally listed, Slippershell Mussel (Alasmidonta viridis), Wavy-rayed Lampmussel (Lampsilis fasciola) and Rainbow (Villosa iris), as well as several native fish species and a federally threatened fish species, the Spotfin Chub (Erimonax monachus), into a nine-mile reach of the river. The Appalachian Elktoe and Slippershell Mussel are closely related to the DWM. To date there have not been any DWM population augmentation or re-introduction efforts using captive propagation. However, the species has successfully been propagated from two different source populations, the Po River of the York River Basin in Virginia and Moccasin Creek of the Neuse River Basin in North Carolina. There were 1,191 juveniles produced from two gravid females collected from Moccasin Creek; however, they were not released back into the creek due to logistical reasons regarding the State's species augmentation / re-introduction policy at that time. A number of the partners involved in the Cheoah River project will be an integral part of the proposed propagation facility. Lastly, the Dwarf Wedgemussel Workgroup for North Carolina concluded that propagation / augmentation was the highest priority management action for the Swift Creek population.
60	Protected Species	The time for implementing a mussel propagation program has passed.	Please see the response to Comment 58. In addition, Section 7 consultation with USFWS for impacts to DWM is ongoing. Potential indirect and cumulative impacts, which will inform the Section 7 consultation, have continued to be evaluated and the results have been shared with USFWS and the entire interagency team. One measure that NCDOT, NCWRC and the USFWS have undertaken is to conduct targeted surveys in the best habitats to find DWM and apply radio transmitter pit tags to the individuals to allow for easier recapture once the propagation facility is ready to accept individual mussels. Additionally, as part of this effort, future suitable release sites in Swift Creek have been identified.
61	Protected Species	No Dwarf Wedgemussel habitat protection plan appears to have been developed to buttress the current augmentation plan.	Existing DWM habitat protection strategies in the Swift Creek watershed were identified in the DWM Viability Study. One such protective measure arose from the Section 7 consultation for the Clayton Bypass, where NCDOT and USFWS worked in collaboration with local governments to implement impervious surface and nutrient limitations within riparian buffers. Additionally, NCDOT has committed to stream mitigation efforts in the larger Neuse River Basin for this project. While no sites have yet been identified in the Swift Creek Watershed, sites in other streams within the Neuse 01 Basin could provide locations for future introduction. The Regional Watershed Plan for the Neuse 01 Basin identifies Swift Creek as a restoration priority.

Comment Number	Primary Topic	Paraphrased Comment	Response
62	Protected Species	Project cost estimates don't include cost of mussel propagation facility.	Costs for environmental mitigation (wetland, stream, and buffer impacts) were included in the cost estimates for the project in the Draft EIS for all 17 DSAs. Specific mitigation and conservation measures for the DWM were not identified at the time of the Draft EIS. Therefore, specific costs for these measures were not available. The cost for a mussel propagation facility is relatively small as a percentage of the overall project cost. Therefore, cost differentials between DSAs would not be significantly changed if the cost for a propagation facility was added to those DSAs crossing Swift Creek below Lake Benson Dam. Additionally, with the potential listing of the Yellow Lance, and other freshwater mussel species, a propagation facility is likely a cost that would be applied to all 17 DSAs. The addition of the cost of a propagation facility would not alter the selection of the preferred alternative.
63	Protected Species	NCDOT should study all of the rare aquatic species with the potential to be listed as endangered or threatened.	NCDOT has conducted surveys for currently listed and several potentially listed species; the results are summarized in the Final EIS. Species that were specifically targeted in this effort include the Yellow Lance (*Elliptio lanceolata*), which is officially proposed for listing, and has been addressed in the Biological Assessment, as well as the petitioned Atlantic Pigtoe (*Fusconaia masoni*), Carolina Madtom (*Notorus furiousus*) the Green Floater (*Lasmigona subviridis*), and Neuse River Waterdog (*Necturus lewisii*). However, consultations and other issues associated with the ESA are limited to currently protected and proposed species, consistent with the ESA. These surveys were conducted to assist in developing environmental baselines for these species in the event that they become formally listed and subject to Section 7 before Complete 540 project completion. USFWS determined that the American Eel is not warranted for listing as of October 2015.
64	Air Quality	Air quality analysis has insufficient information about potential for increases in ambient air pollution.	The air quality analysis completed for the Draft EIS was completed to a level of detail consistent with policies of NCDOT and FHWA. Because ozone is primarily an area-wide pollutant, it is typically assessed in system-level planning as part of the air quality State Implementation Plan development and conformity process, not at an individual project level. According to FHWA's "Guidance for Preparing and Processing Environmental and Section 4(f) Documents," ozone air quality concerns are regional in nature and as such, meaningful evaluation on a project-by-project basis is not possible. Also, ozone is not produced at the roadside, but forms downwind from vehicle emissions and only when weather conditions (heat and sunlight) are supportive of its formation. It should also be noted that Wake County and Johnston County are in attainment with EPA's air quality standards, and the Complete 540 project is not anticipated to change this attainment status.

Comment Number	Primary Topic	Paraphrased Comment	Response
65	Air Quality	Air quality analysis has insufficient information about MSATs.	Following selection of the preferred alternative, NCDOT completed an Air Quality Report Addendum, including a qualitative MSAT analysis, completed in accordance with current FHWA policy and guidance. This is summarized in the Final EIS. A detailed analysis of MSAT concentrations at individual properties that may be used by sensitive populations is not part of the analysis. The tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. The air quality analysis explains that the science has not yet been advanced such that this information is available. Moreover, according to FHWA's 2016 "Updated Interim Guidance on MSAT Analysis in NEPA Documents," national trends project substantial overall reductions in MSATs due to stricter engine and fuel regulations issued by EPA.
66	Air Quality	There was no analysis of the indirect and cumulative effects on air quality.	The effect on land use, travel patterns and congestion of a roadway project is the responsibility of the local MPO as they develop their long range transportation plan. In order for the long range transportation plan to be approved, it must be shown to be in conformity with the State Implementation Plan. The Complete 540 project comes from a long-range plan that has been shown to be in conformity with the State Implementation Plan. Indirect and cumulative impacts are better addressed through consultation between NCDOT and the Capital Area MPO in developing the long-range transportation plan and associated air quality conformity determination. It is likely that any indirect and cumulative effects on air quality would follow a similar pattern to the project's indirect and cumulative effects on land development. A detailed quantitative study of the potential indirect and cumulative effects of the preferred alternative on land development has been completed and is summarized in Chapter 4 of the Final EIS.
67	Air Quality	There was no analysis of greenhouse gas emissions.	Comment noted. On April 5, 2017, the Council on Environmental Quality (CEQ) rescinded its guidance on greenhouse gas emissions and climate change. Consistent with FHWA policy, greenhouse gas emissions and climate change were not included in the Final EIS.
68	Traffic	There is no information on projected toll road usage.	This information is detailed in the project's *Planning Level Traffic and Revenue Study*, which is summarized in Chapter 4 of the Final EIS.
69	Traffic	There is no information on travel benefits to non-toll road users.	As described on page 54 of the *Community Impact Assessment*, drivers who do not use the roll road would nonetheless benefit from reduced congestion on existing roadways as a result of traffic diversion onto the new roadway. Drivers who elect to use the toll road would be removed from the non-toll network, which would indirectly benefit the users of the non-toll network.
70	Project Cost	Project cost and negative effects are too high to justify a build decision.	This is a statement of opinion and not a critique of the study process or documentation. Project benefits and burdens have been considered and disclosed in accordance with NEPA and other applicable laws, policies, and regulations.

Comment Number	Primary Topic	Paraphrased Comment	Response
71	Indirect and Cumulative Effects	Qualitative analysis of indirect and cumulative effects (ICE) is inadequate and doesn't distinguish between DSAs.	The Qualitative ICE Report clearly indicates that there would likely be differences in the indirect and cumulative effects of the different DSAs but the indirect and cumulative effects of each DSA would be of similar magnitudes. This is summarized on pages 104 and 105 of the Draft EIS and detailed discussion of each corridor are included in Chapter 6 of the Qualitative ICE Report. A more detailed quantitative analysis of the indirect and cumulative effects of the preferred alternative on land use has since been completed and is summarized in Chapter 4 of the Final EIS.
72	Indirect and Cumulative Effects	There was no quantitative analysis of potential indirect land use effects.	Although the differences in indirect and cumulative effects between each DSA were not relevant for decision-making between alternatives, a more detailed quantitative analysis of the indirect and cumulative effects of the preferred alternative on land use was completed after publication of the Draft EIS and is summarized in Chapter 4 of the Final EIS.
73	Indirect and Cumulative Effects	DSAs using Red Corridor would minimize indirect land use effects; documentation does not disclose this.	The Qualitative Indirect and Cumulative Effects Report includes extensive discussion of the relative indirect effects of each of the different corridors on land use in different parts of the study area. It is not accurate to say that the Red Corridor would minimize indirect land use effects. While DSAs using the Red Corridor could limit development pressures in areas at the southern edges of the study area, it would nonetheless cross undeveloped and less developed areas, including the Swift Creek Water Supply Watershed Critical Area, encouraging shifts to higher densities and more commercial development in these areas. It would also promote development patterns in direct conflict with local land use plans.
74	Indirect and Cumulative Effects	There was no fair quantitative comparison of ICE under build and no-build scenarios.	A detailed quantitative analysis of the indirect and cumulative effects under clear build and no-build scenarios was completed after publication of the Draft EIS and is summarized in Chapter 4 of the Final EIS.
75	Indirect and Cumulative Effects	There was no assessment of indirect and cumulative effects on wetlands and aquatic resources.	As described in the response to comment #45, the agencies involved in the project have concluded that the level of detail about potential impacts contained in the Draft EIS is adequate for decision-making among alternatives. As described in the responses to comments #48 and #67, a more detailed quantitative analysis of the indirect cumulative effects of the preferred alternative on land use has since been completed and is summarized in Chapter 4 of the Final EIS.
76	Indirect and Cumulative Effects	There is insufficient information about potential cumulative effects.	See response to comment #71.
77	Indirect and Cumulative Effects	There was no acknowledgement of the differences in growth under Build and No-Build scenarios.	This is incorrect. The Qualitative ICE Report includes extensive qualitative discussion of the differences in predicted growth patterns in the Build and No-Build scenarios. As described in the response to comment #70, a detailed quantitative analysis of the indirect and cumulative effects for the preferred alternative under clear build and no-build scenarios was completed after publication of the Draft EIS and is summarized in Chapter 4 of the Final EIS. The results are consistent with the qualitative assessment of indirect and cumulative effects.
78	Indirect and Cumulative Effects	ICE Report doesn't distinguish between predicted cumulative effects among the DSAs.	Each section of the cumulative effects discussion in the Qualitative ICE Report does address the varying potential for the different DSAs to lead to cumulative effects on the different resources examined.

Comment Number	Primary Topic	Paraphrased Comment	Response
79	Indirect and Cumulative Effects	ICE Report doesn't address indirect and cumulative effects of non-toll highway options.	As described in the response to comment #6, each of the non-new location highway options SELC mentions was ultimately rejected because it was found not to be a feasible or practical alternative for meeting the project purpose. Because these options did not advance to the level of detailed environmental studies, they were not subject to ICE analysis.
80	Alternatives	DSAs using the Red Corridor represent the least environmentally damaging and most practicable option among the alternatives presented.	This project is following the SAFETEA-LU Section 6002 process rather than the combined Section 404/NEPA Merger Process. For that reason, there is no signed agency concurrence with a project LEDPA. However, in accordance with Section 6002, NCDOT prepared a *Preferred Alternative Report*, detailing the selection of DSA 2 (which does not include the Red Corridor) as the project's preferred alternative, and provided this information to the agencies for review and comment. Under Section 6002, it is then the responsibility of the agencies to identify any issues of concern that could delay the project or could prevent an agency from granting a permit or other approval that is needed for the project. There were no issues of concern that were raised by any agency. While DSAs 6 and 7, which use the Red Corridor, would generally avoid DWM habitat and have the smallest impact on streams, they are the only alternatives that would directly affect the Swift Creek Critical Watershed Area, (regulated to protect drinking water). DSAs 6 and 7 would also affect four sites subject to Section 4(f) and two sites eligible for the National Register of Historic Places.
81	Permitting	The Red Corridor's minimization of direct impacts to Dwarf Wedgemussel habitat "…represents an independent reason to not issue a Section 404 permit."	Through interagency coordination following the Section 6002 process, FHWA and NCDOT have no reason to believe a Section 404 permit cannot be issued for the preferred alternative, which in part follows the Orange Corridor. No "issues of concern" have been raised by members of the interagency team regarding the preferred alternative.
82	Mitigation Site	Documentation has insufficient information about potential impacts to Underhill Mitigation Site.	Impacts to the Underhill Mitigation Site are addressed in the Final EIS for the preferred alternative. The impact is located at the extreme northern tip of the site and involves a bridge crossing of approximately 0.5 acres of this 84.5 acre site. The bridge vertically crosses approximately 20 feet above the mitigation site.
83	Mitigation Site	Natural Resources Technical Report (NRTR) does not indicate that DSAs using the Red Corridor would avoid the Underhill site.	When the NRTR was initially prepared, the Red Corridor was not under study. The DSAs using the Red or Lilac Corridors to cross Swift Creek would avoid the Underhill Site. See response to comment #82.
84	Project Cost	Discrepancy between project costs listed in Draft EIS and STIP.	As described in the response to comment #2, the costs reported in the Draft EIS are expressed in year of expected expenditure dollars, while the figures in the STIP are in current dollars.
85	Project Cost	Toll revenue likely won't be sufficient to cover bond payments.	This information is addressed in the project's *Planning Level Traffic and Revenue Study*, which is summarized in Chapter 4 of the Final EIS.
86	Project Cost	Discrepancy between project costs listed in Draft EIS and used in STI prioritization.	See response to comment #2.

Comment Number	Primary Topic	Paraphrased Comment	Response
87	Project Cost	Project would violate STI corridor cap.	NCGS 136 136-189.11(b)(7) exempts toll bond revenue from STI. Therefore, only the portion of the toll project that is funded from Statewide Strategic Mobility (SSM) funds is subject to the corridor cap. For the (2018-2027) STIP, the available SSM budget is $9.03 billion. $4.30 billion of the total is available for 2018-2022, resulting in a corridor cap of $430 million for that period. The remaining $4.73 billion is available for 2023-2027, for a corridor cap of $473 million. Based on the STIP, the anticipated STI cost for the portions of Complete 540 programmed for 2018-2022 is $198.55 million and for the portions programmed for 2023-2027, it is $328.8 million.
88	Project Feasibility	Due to STI corridor cap, NCDOT wouldn't be able to complete all segments of the project, meaning that purpose and need wouldn't be met.	See response to comment #87.
89	Project Cost	Agencies cannot arbitrarily decide that costs and the constraints of state laws and funding mechanisms matter when analyzing one project but not for other projects.	See response to comment #87. While tolling was not a feasible financing option for the Bonner Bridge, the Complete 540 project's *Planning Level Traffic and Revenue Study* shows that tolling is a feasible option for Complete 540. In addition, the financial analysis completed for the Bonner Bridge project was prior to enactment of STI, so the analysis was conducted using a different set of funding rules and is not directly comparable to the analysis for this project.
90	Project Cost	Lack of information on tolls and projected revenue.	This information is addressed in the project's *Planning Level Traffic and Revenue Study*, which is summarized in Chapter 4 of the Final EIS.
91	Project Cost	Draft EIS and supporting technical reports do not illustrate the true demand or anticipated use for a toll highway in the Complete 540 study area.	See response to comment #90.
92	Project Cost	Cost estimates in Draft EIS don't include all likely project costs.	Cost estimates for each of the 17 DSAs included construction, right of way, mitigation, and utility costs. These cost estimates were completed in the same manner and included the same cost elements for each of the DSAs. These cost estimates are based on the available information at the time that they are prepared. Contingencies are included for specific additional features that may be added as the project design is refined.
93	Permitting	Magnitude of impacts and lack of information in the Draft EIS would preclude ability of USACE to issue Section 404 permit.	As described in the response to comment #45, the agencies involved in the project have concluded that the level of detail about potential impacts contained in the Draft EIS was adequate for project decisions during that time period, and was adequately supplemented for decisions to date which are documented in this Final EIS. Additionally, the purpose of a Draft EIS is not to function as a Section 404 permit application. NCDOT, FHWA, and USACE recognize that additional analyses are required during the continuing project development process before a Section 404 individual permit application can be finalized.
94	Alternatives	Red Corridor DSAs are not less practicable than other DSAs.	See response to comment #80.

Comment Number	Primary Topic	Paraphrased Comment	Response
95	Section 4(f)	Draft Section 4(f) Evaluation doesn't address how non-toll highway options could avoid Section 4(f) sites.	As described in the response to comment #6, each of the non-new location highway options SELC mentions was ultimately rejected because it was found not to be a feasible or practical alternative for meeting the project purpose. Because these options did not advance to the level of detailed environmental studies, they were not subject to Section 4(f) evaluation. None of the alternatives that would meet the purpose of the project would avoid the Neuse River Trail.
96	Section 4(f)	The Draft Section 4(f) Evaluation erroneously anticipates that the impacts to these resources would be *de minimis* and thus not subject to substantive Section 4(f) review.	The FHWA Section 4(f) Policy Paper defines a *de minimis* impact as one that "would not adversely affect the activities, features, or attributes qualifying [the resource] for protection under Section 4(f). None of the potential impacts of the preferred alternative to these resources would adversely affect their use for recreation. This has been confirmed with the entities responsible for the two parks related to the preferred alternative and documented in the Stakeholder Involvement Report and the Final EIS.
97	Section 4(f)	Impacts to the Neuse River Trail would not be *de minimis*.	As described in the Final EIS, the trail would be accommodated under the preferred alternative (DSA 2) at the bridge over the Neuse River. This is a very common feature along greenway trails and would not adversely affect the trail's recreational use. Additionally, the existing Neuse River Trail crosses over or under several transportation facilities including similar highway facility crossings at I 540, I-495, US 1, US 401, and US 64. The *de minimis* determination has been confirmed with the City of Raleigh as the entity responsible for this resource.
98	Section 4(f)	More information is needed about the impacts to the Middle Creek School Park.	As noted in the Draft Section 4(f) Evaluation (Appendix C, page 7), the 1.6-acre wooded open space is simply a wooded buffer behind a residential neighborhood. It has no formal use beyond that. The *de minimis* determination has been confirmed with the Town of Cary as the entity responsible for this resource.
99	Section 4(f)	Impacts to Clemmons Educational State Forest would not be *de minimis*.	The preferred alternative completely avoids the Clemmons Educational State Forest.
100	Section 4(f)	Because each of the DSAs would likely have a negative impact on Section 4(f) resources, FHWA must examine feasible and prudent avoidance alternatives to the Complete 540 project, or establish that no such alternatives exist.	See response to comment #96. The two impacted Section 4(f) park resources along the preferred alternative have been determined to be *de minimis* and this determination has been confirmed with the entities responsible for these resources.
101	Section 4(f)	Impacts to Neuse River Trail could by avoided by non-new location highway options.	See response to comment #95.
102	Section 4(f)	Reasons listed for eliminating the modified Red Corridor, which would avoid Section 4(f) sites, are not sufficient.	As detailed in the Alternatives Report, the modified Red corridor is undesirable because its sharp curves and steep grades would create undesirable operational conditions. If the posted speed is increased on Complete 540 as has been done on other sections of the 540 Outer Loop, the alignment of this option would have to be modified to accommodate the higher speed. This would shift the alignment into the Section 4(f)/park sites that are trying to be avoided, eliminating the ability of this option to avoid Section 4(f) sites. Additionally, there are two Section 4(f)/historic sites that are impacted by the modified Red corridor that also preclude this option as a Section 4(f) avoidance alternative.

Comment Number	Primary Topic	Paraphrased Comment	Response
103	Alternatives	Orange Corridor was illegally predetermined.	Designation of a potential corridor two decades ago, so early in the 540 consideration process, does not establish a case of predetermination. NCDOT followed the State's Transportation Corridor Official Map Act in establishing the protected corridor for the project. No Federal or State law was violated by establishment of the protected corridor. In developing, analyzing and evaluating the project alternatives, NCDOT considered a range of alternatives in addition to the Orange Corridor (protected corridor), subjecting the Orange Corridor to the same detailed study process as the other alternatives. It is unreasonable to conclude that NCDOT was irreversibly and irretrievably committed to that corridor, even though it was ultimately selected.
104	Alternatives	Rejection of Red Corridor was illegally predetermined.	The Draft EIS and the supporting technical documentation show that the Red Corridor was subjected to the same analysis and evaluation process used to screen the other alternatives. DSAs using the Red Corridor were not selected as the preferred alternative because, based on analysis documented in the Draft EIS and on the comments on the project by agencies, local governments, other organizations, and the public, they did not represent the best option for balancing practicability with minimization of negative environmental effects. NEPA does not limit the ways that NCDOT can discuss the project and its alternatives with various stakeholders.

Maseman, Kristin

From: Milazzo II, Joe <Joe@letsgetmoving.org>
Sent: Thursday, December 10, 2015 9:02 AM
To: complete540@ncdot.gov
Cc: Robbins, Jamille A (jarobbins@ncdot.gov); Midkiff, Eric (emidkiff@ncdot.gov); Beau Memory (bmemory@ncdot.gov)
Subject: formal comments from RTA

Jamille and colleagues,

See below for written comments from RTA. Let me know if you have questions.

Thank you,
Joe

Comments from: Joe Milazzo II, PE, RTA Executive Director, 800 S Salisbury St., Raleigh NC 27601

- I serve as Executive Director of the Regional Transportation Alliance business coalition
- RTA is a regional program of the Greater Raleigh Chamber of Commerce
- We support the "Complete 540" initiative and the completion of all remaining sections of the proposed 540 freeway in southern and eastern Wake County
- The 540 southeast extension turnpike will help create a resilient transportation network in the southern part of the county for commuting, freight, transit, and more
- Unlike improvements to secondary roadways with traffic signals, this new stoplight-free roadway will provide free-flow, rapid mobility across Wake County both during peak periods and throughout the day
- Since the extension of 540 is proposed to be constructed as a toll road, the Turnpike Authority will be able to manage demand by time of day as traffic grows in the future, for example, by providing off-peak discounts or other measures to optimize travel flow
- Extending 540 into southern Wake County would also create an opportunity to support future express bus service in the area. Even today, GoTriangle, our regional transit agency, frequently uses portions of the existing 540 Triangle Expressway turnpike during peak periods to avoid congestion on I-40 and keep transit schedules on time
- While our organization has not endorsed any of the specific corridor alternatives, we urge NCDOT, Federal Highway Administration, and the many partner resource agencies to select the corridor and appropriate mitigation that will protect the environment while maintaining broad support from the community
- The RTA would like to thank NCDOT and their many federal and state partners for their leadership on this project, and for the opportunity to comment

Comments from Mark Helwig, RTA Freeways chair, 5429 Denberg Lane, Raleigh, NC 27606

- I serve as the Freeways vice chair for the Regional Transportation Alliance business coalition
- RTA represents the regional business community on transportation issues, policies, and priorities that are vital to the continued success of our market
- Our top new freeway priority is the completion of 540 between Holly Springs and the I-40/US 70 Clayton Bypass, and we support the completion of all remaining portions of the Raleigh Outer Loop between the Holly Springs bypass and the I-495/US 264 Knightdale bypass
- Completing 540 in southern Wake County will be an essential part of our future transportation backbone from the moment it opens to traffic, by creating vital linkages to major freeways and other roadways in the Triangle
- The extension of 540 will relieve overburdened secondary roads from congestion including N.C. 42, N.C. 55 and Ten Ten Road and reduce the traffic local travelers have to compete with on their local roadways

- The Triangle Expressway turnpike is already providing travelers with a mobility option that they may not have otherwise seen for decades, and as a result it is helping preserve our area's economic vitality and quality of life
- The Completion of 540 will continue that success, and serve us well both now and as we grow
- The RTA would like to thank NCDOT and their many federal and state partners for their leadership on this project, and for the opportunity to comment

Joe Milazzo II, PE
Executive Director
Regional Transportation Alliance
The business coalition advancing transportation solutions

w 919.664-7065
m 919.389-9285
joe@letsgetmoving.org
www.letsgetmoving.org

Regional Transportation Alliance – 12/10/15

Comment Number	Primary Topic	Paraphrased Comment	Response
--	Project Support	RTA supports completion of 540 as a new location toll road.	This support has been noted in the *Preferred Alternative Report*.

TRIANGLE GREENWAYS COUNCIL

December 12, 2015

ADVISORY BOARD MEMBERS
TERRY REEVES
SMEDES YORK
GREGORY POOLE

Eric Alsmeyer
USACOE, Raleigh Reg Field Office
3331 Heritage Trade Drive
Wake Forest, NC 27587

RECEIVED
DEC 16 2015
RALEIGH REGULATORY
FIELD OFFICE

RE: Corps Action ID#: SAW-2009-02240
STIP Project # R-2721, R-2828, & R-2829

Mr. Alsmeyer,

The Triangle Greenways Council (TGC) is a nonprofit conservation and land trust organization. It advocates for local government greenway systems and related issues regionally, statewide, and nationally. The TGC owns several riparian properties in proximity to one or more of the I-540 Triangle Expressway SE Extension, and the following comments address potential impacts to those properties and the greater surrounding watershed.

1 Purple Corridor. (1) Wake County REID# 13263, 24 acres on Middle Creek is in very close proximity to the proposed route. The parcel is jurisdictional wetland, floodplain, and limited adjoining sideslopes. The town of Holly Springs has a section of its paved greenway trail system crossing this property. (2) Wake County REID#s 231716, 238920, 230598 & 211676, constituting seventy-eight acres on Middle Creek approximately two miles downstream of the proposed route. These adjoining parcels are jurisdictional wetland (natural & beaver enhanced), floodplain, and minimum adjoining sideslopes. These parcels are on the edge of Cary's and Fuquay-Varina's land use jurisdictions, and are part of their designated future greenway system plans.

All Corridors are within the Neuse River Basin. Johnston County REID# 1405401, 79acres is on the Neuse River at US 70 (soon to be I-495) downstream of all the proposed/alternative routes. The parcel is jurisdictional wetland (including repetitive former channel/meander depressions), floodplain, and limited adjoining sideslopes. It is within Smithfield's land use jurisdiction, and part of its designated future greenway system plan. Further: (1) the Neuse River within Johnston County is also identified as the location of the State's proposed Mountains to Sea Trail, part of which has already been dedicated in Clayton and Smithfield; and (2) the TGC is currently preparing an assessment of the potential for National Water Trail (NWT) designation of the River through Wake, Johnston and Wayne Counties (122 river miles). TGC's existing Johnston County property is strategically located to serve as both a location for Smithfield's greenway trail & MST, as well as a location for camping/comfort facilities/ picnicking along a future NWT.

Based upon available screen-scale digital mapping, it does not appear that any of the TGC's current property holdings will be directly impacted by the current alternative

BOARD MEMBERS
JON ANDERSON, WILLIAM BREAZEALE, SKIP BROWDER, NORMAN CAMP, RICK CANNITY, SUSAN CARL, BONNIE ESTES,
WILLIAM FLOURNOY, LARRY GILES, ROBERT HINSON, ANDREW LEAGER, DAVID PERMAR, GRADY SHIELDS.

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2 Expressway corridors. Nevertheless, there is ample reason for concern about potential indirect and cumulative impacts.

While the NCDOT will have to meet minimum regulatory sediment control standards during construction, that does not equate to zero sedimentation above natural conditions. Given the scale of necessary land disturbance, there is a potential for significant incremental short-term sediment loss during the duration of construction, and a higher new-normal release thereafter. Further, the vulnerability of the construction area to infrequent but high-impact storms could result in devastating releases of sediment to the downstream environment.

The accelerated sedimentation that will result from completion of I-540 will be particularly damaging to impacted wetlands, as a habitat type, and their ecosystems. At a minimum the rate of transition from open water, to herbaceous, to wet meadow, to shrub, to bottomland hardwood forest will be increased throughout downstream riparian corridors. Likewise, storm driven sediment surges within stream channels will be even more frequent, because all storms will release sediment to watercourses, but all storms will not generate enough volume to overflow into the floodplains.

The TGC's wetlands, particularly its meander depressions on the Neuse and beaver enhanced ponding elsewhere, are uniquely vulnerable. They function as sediment basins, due to reduced flow rates and increased deposits/sedimentation. As a result, even a relatively short-term exposure to exaggerated sediment loads will have a disproportionate and permanent impact. While the more common wetlands and floodplains are less susceptible, they will also be exposed to increased rates of sedimentation.

Other indirect and cumulative impacts relate to the existing and likely public infrastructure within downstream floodplains. Multiple local governments (Raleigh, Knightdale, Garner, Holly Springs, Fuquay-Varina, Clayton, Smithfield, Goldsboro, etc) have greenway facilities (trails, bridges, benches, signage, etc) within riparian corridors that may be impacted by the proposed Expressway project. The management/maintenance costs of removing increasing amounts of sediment and otherwise maintaining facilities, in order to provide for public safety and quality of user experience, will continue to climb. Increased ware/damage to facilities and the lifespan of maintenance equipment, as well as additional staff requirements must be expected budget requirements. How the proposed Expressway is designed and executed will determine the rate of perpetual cost increase. Further, environmental and ecological interpretation will become a double-edged challenge, with an opportunity to explain the cause/effect of changes to fragile natural systems, offset by increased costs to accommodate more rapidly changing conditions.

3 The Prospect of National Water Trail designation on the upper Neuse River offers another potential indirect and cumulative impact. Water quality is a factor that influences several designation criteria. Hopefully the Expressway's design and

construction standards will include conditions that will insure water quality in the near and long-term. That will protect the opportunity for designation, trail user experience, interpretive and educational enhancements, regional quality of life, and natural resource based tourist economy built around the greenway & NWT corridor system. NWT designation will assure appropriate facility development (parking lots, river access, comfort stations, camping, picnicking, etc), and related maintenance costs over time will be more or less depending upon the expressway's design and construction standards.

In conclusion, the TGC does not oppose the proposed SE Expressway. However, it should proceed on the basis of criteria that exceed minimum standards where needed to avoid short and long-term degradation of current and future public infrastructure and the riparian corridors they occupy. This will require attention and appropriate responses to indirect and cumulative impacts, through focused completion of the NEPA process and involvement in project related permitting processes.

Sincerely,

Bill Flournoy

William L. Flournoy, Jr.
President

Triangle Greenways Council – 12/12/15

Comment Number	Primary Topic	Paraphrased Comment	Response
1	Alternatives	Concerns about potential impacts of Purple Corridor on planned greenways.	Comment noted. The Purple Corridor is not part of the preferred alternative.
2	Indirect and Cumulative Effects	Concerns about potential indirect and cumulative effects.	Comment noted. A quantitative analysis of the indirect and cumulative effects of the preferred alternative on land development and water quality was completed after publication of the Draft EIS and is summarized in Chapter 4 of the Final EIS. The results of the quantitative analysis were consistent with the qualitative analysis summarized in the Draft EIS and suggested that the project would lead to relatively small changes in land development and water quality as compared to the no-build scenario.
3	Natural Resources	The Neuse River may be designated a National Water Trail; the project design should protect water quality to the greatest extent possible.	Best management practices will be used for stormwater discharge from the project in order to protect receiving waters. The Neuse River has not yet been designated a National Water Trail by the National Park Service - Rivers, Trails, and Conservation Assistance Program. There is a 122.3 mile suggested water trail along the Neuse River from Falls Lake Dam to Seven Springs, NC that is sponsored in part by the Triangle Greenways Council. All 17 DSA corridors cross the Neuse River at relatively the same location east of Auburn Knightdale Road. There are no river access points in this area of the suggested water trail.

Maseman, Kristin

From: Maseman, Kristin <kmaseman@hwlochner.com>
Sent: Friday, January 08, 2016 8:08 PM
To: Sarah Gaskill; complete540@ncdot.gov
Subject: RE: support of the complete 540 project

Dear Ms. Gaskill,

Thank you for your email about the Complete 540 project. We understand the Morrisville Chamber's support for the project and we appreciate your taking the time to send your comments to us. Public comments like yours will play an important role as the project team advances the project. Your comments will be included in the official project record.

Sincerely,
Kristin Maseman

From: Sarah Gaskill [sarah@morrisvillechamber.org]
Sent: Friday, January 08, 2016 6:48 PM
To: complete540@ncdot.gov
Subject: support of the complete 540 project

Complete 540 project team,

The Morrisville Chamber of Commerce supports the Complete 540 project and urges that the proposed freeway move forward expeditiously to construction.

Completing the 540 loop is a top priority of the regional business community in the Triangle to create a resilient transportation network for commuting, shipping, and transit. The existing Triangle Expressway has been vital for commerce, residential growth, and the overall community. Freeway access is one of the major factors that site selectors evaluate when making decisions on the location of new businesses. The completion of 540 will enable our region to succeed both now and as we continue to grow.

Thank you for your leadership in our region and state, and for the opportunity to comment on this project.

Sincerely,
Sarah Gaskill

Sarah T. Gaskill, IOM
President
Morrisville Chamber of Commerce
260 Town Hall Drive, Suite A
Morrisville, NC 27560
Main: 919.463.7150 / Direct: 919.463.7159
sarah@morrisvillechamber.org / www.morrisvillechamber.org

Morrisville Chamber of Commerce – 1/8/16

Comment Number	Primary Topic	Paraphrased Comment	Response
--	Project Support	The Morrisville Chamber of Commerce supports completion of 540.	This support has been noted in the *Preferred Alternative Report*.

Public Comments Made During the Draft EIS Review Period / Public Hearings

During the comment period for the Draft EIS, from early November 2015 through January 8, 2016, comments addressing the DSAs, the Draft EIS, or other substantive project issues were received from 1,476 public commenters. The comments included 255 individual written comment forms plus one completed comment form photocopied and signed by 527 different individuals, 387 emails, 6 letters, and a petition with 239 signatures. There were also 34 people who gave oral comments during the December 9, 2015, Public Hearing and 5 people who gave oral comments at the public meetings on the preceding days. A transcript of the Public Hearing is in **Appendix E**. There were also 23 people who submitted comments via NCDOT's mySidewalk site. Most of the comments generally cited only preference for or opposition to particular color-coded corridor segments or DSAs.

There were also more specific comments that addressed aspects of the project design, the project development process, or information included in the Draft EIS. The table below summarizes the substantive public comments received during the Draft EIS comment period, along with the project team's response to each. It is important to note that many of these comments were expressed by numerous commenters. As listed in the table, each comment is paraphrased to capture the common issue expressed by those who addressed that particular topic.

Comment Index Number(s)	**Summary of Comment** (duplicate comments omitted)	**Response**
O-01	The preferred alternative should use the Orange Corridor, due to its long-term status as a protected corridor.	Comment noted.
O-02	Any alternative that includes the Red Corridor should not be selected, due to that corridor's extensive social impacts.	Comment noted.
O-03	The preferred alternative should use the Orange Corridor because the Orange Corridor affects the fewest homes.	Comment noted.
O-04	Alternatives that include the Blue and Purple Corridors should not be selected, due to their high relocations and other impacts.	Comment noted.
O-05	The project should not be a toll road.	Decisions regarding funding for transportation projects are made at the local level by regional transportation planning organizations, in this case, the Capital Area Metropolitan Planning Organization (CAMPO). In 2005, CAMPO requested that the NCDOT and the Turnpike Authority evaluate and construct the remaining sections of the Raleigh Outer Loop (western, southern and eastern sections) as toll facilities. CAMPO's current long range transportation plan does include tolling the existing northern sections of the Raleigh Outer Loop to pay for needed improvements.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-06	General support for the project expressed.	Comment noted.
O-07	Alternatives that include the Red Corridor should not be chosen simply to avoid affecting the endangered mussel species; human impacts are more important than impacts to mussels.	The effect the project would have on both the natural and the human environment must be (1) identified, (2) avoided to the greatest practical extent, and (3) minimized and mitigated to the greatest practical extent. Alternatives for meeting the project's purpose that would avoid affecting endangered species were developed, and the impacts of those alternative identified, to inform the final decision.
O-08	Alternatives that include the Green Corridor are preferred, given that this segment was identified long ago, and that the alternatives to the Green Corridor have greater impacts.	Comment noted.
O-09	The project as proposed should be dropped because (1) the environmental impacts are excessive and (2) the small travel time savings do not justify the cost and environmental impacts.	Comment noted. Federal and state agencies with jurisdiction over various affected resources are charged with ensuring the impacts to those resources comply with applicable regulations; they also provide information and advice that is used in making judgments about the merits, costs, and impacts of the proposed action. Likewise, the process required under National Environmental Policy Act produces information intended to inform decision makers about the expected consequences of the proposed action. With the knowledge that all applicable environmental regulations and procedures have been followed, a decision is made about whether the proposed action's benefits justify its expected impacts.
O-010	Regardless of the alternative chosen, there will be social impacts to adjacent residents.	The introduction of a new highway into the landscape creates both direct and indirect effects. Indirect social effects, outside of the immediate "footprint" of the project, are an unavoidable consequence of the project. Some of these can be positive, others negative. Negative indirect social effects are difficult to quantify and often cannot be mitigated; however, they have been identified to inform the final project decision.
O-011	Support for Detailed Study Alternative (DSA) 1, due to lower impacts in some categories.	Comment noted.
O-012	Relocations and access changes are a concern among some residents of the Bells Pointe community.	Comment noted. As the highway's construction plans are refined, accommodations for maintaining access to all properties are examined in close detail and modified, as needed, to ensure adequate access is maintained. Likewise, attempts are made to keep the number of relocations as low as possible.
O-013	Please select route that will protect environment, and mitigate impacts that will occur.	The National Environmental Policy Act, and other federal regulations, require that impacts to the natural and human environment be avoided to the greatest practical extent; impacts that cannot be avoided must be kept to a minimum, and the resulting impacts mitigated, to the greatest practical extent.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-014	Information presented in Draft EIS on water quality impacts, particularly the fact that Swift Creek has been designated as a 303(d) stream, means Orange Corridor not legally allowable because it would affect Swift Creek.	Streams with the 303(d) designation do not pose an absolute barrier to roadway construction. Federal permits must be granted to allow such construction, and are contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent further degradation of such streams.
O-015	Orange Corridor would be detrimental to Swift Creek watershed.	The North Carolina Division of Water Resources must review the proposed action and ultimately issue approval, contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent further degradation of the watershed.
O-016	Opposed to DSAs that include Orange Corridor.	Comment noted.
O-017	Support for DSAs that include the Green Corridor; Randleigh Farms and nearby cell towers should not be considered an important detriment to the selection of the Green Corridor.	Comment noted.
O-018	Opposed to the project as a whole because it would not solve traffic problems and would bring unwanted types of development near residential areas.	Two important objectives of the study process are ensuring that all applicable environmental regulations and procedures have been followed, and that accurate information about the proposed project's benefits and impacts is documented for use by decision makers. The ability of the proposed action to address the identified transportation needs has been documented in the study's Draft EIS. The types of land development allowed in residential areas are regulated by local and county governments.
O-019	Opposed to DSAs that include the Red Corridor, due to water quality and wetland impacts.	Both the US Army Corps of Engineers and the North Carolina Division of Water Resources must review the proposed action and ultimately issue permits or other approvals. These are contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent degradation of water resources. Opposition to the Red Corridor is noted.
O-020	The Orange Corridor should be shifted to avoid Turner Farms development.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement – all in an attempt to keep social and environmental impacts to a minimum and to balance impacts that cannot be avoided. If a particular residential area is affected, it means that there was no alternative location that would not cause other, similar impacts. Efforts to minimize impacts are ongoing.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-021	Concern about sediments entering the water supply during construction.	Both the US Army Corps of Engineers and the North Carolina Division of Water Resources must review the proposed action and ultimately issue permits or other approvals. These are contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent degradation of water resources.
O-022	Concern about traffic impacts and congestion, especially at Ten-Ten Road, Jordan Road, Dwight Rowland Road, US 70 bypass at Cornwallis Road, and local roads near White Oak.	Regardless of the outcome of the current study, ongoing growth and development in the area will result in changes to travel pattern on area expressway, major and minor arterial roads. These effects, which include traffic volume increases and decreases and changes in traffic patterns, could be somewhat different if the proposed project is built, due to the introduction of a new expressway and interchanges and the associated redistribution of traffic that would likely not occur otherwise. These effects could include the redistribution of traffic to the new Complete 540 expressway and away from existing major and minor roads near the expressway such as those mentioned. The proposed project has been developed in a manner that addresses these anticipated travel pattern changes by providing level of service D or better on Complete 540 and nearby intersections during peak travel hours. During construction, short-term disruptions to local traffic patterns may occur. To keep such disruptions to a minimum, specific “maintenance of traffic” plans are developed.
O-023	Concern about the impact of expansion of Jordan Road required as part of this project.	In general, when construction of a new highway requires modifications or expansion of a crossing roadway, those effects are identified and become a part of the overall decision making process. Often, those effects are temporary, occurring only during construction. In the case of Jordan Road, the proposed project has been modified such that there would be limited property impacts at Jordan Road.
O-024	Will residents have input into the noise analysis that is conducted?	The procedures used to calculate the noise impacts from highway projects have been developed and refined over many years by FHWA and State DOTs. These procedures, and computer models developed to carry them out, are highly technical and must be strictly followed to ensure accurate results. While the public is free to access and review the procedures, data, and guiding policies used to prepare the noise analysis, direct input into the analysis methods is not allowed. Where noise walls are found to be feasible and reasonable in accordance with the NCDOT Traffic Noise Policy, property owners and tenants benefited by potential noise walls will be allowed to vote on whether they want the walls to be constructed. The voting process occurs during final project design.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-025	The October 2010 public meeting held for the Complete 540 project generated 42 letters in support of the Orange Corridor, which should be included in the record.	All comments submitted over the course of the Complete 540 project are retained and taken into account in the decision making process.
O-026	Opposed to DSAs that include the Purple Corridor.	Comment noted.
O-027	Please find a way to propagate the Dwarf Wedgemussel, so that its presence in Swift Creek is not a key factor in the decision about a preferred alternative.	Propagation of this species has been discussed as a possible way of mitigating some of the effect the project could potentially have on this species. The project's Biological Assessment, summarized in Chapter 4 of the Final EIS, details several conservation measures NCDOT proposes to use to help offset the effects of the project on the DWM, including development of a mussel propagation laboratory at Yates Mill Pond.
O-028	The Draft EIS does not discuss how the project might decrease property values in the vicinity of the project.	Property values are influenced by a great number of variables, each of which can shift over time, for various reasons. Because highway projects represent only one of these many variables, it is not possible to isolate the effect a highway may have on property values. And, while the location of a highway can indeed effect land values, those affects can be both positive and negative.
O-029	Opposed to the project as a whole because the full range of alternatives was not examined in the Draft EIS.	The decision about which alternatives to consider is appropriately guided by reason and practicality. It is not necessary to analyze alternatives that the NCDOT and the Federal Highway Administration have rejected as being "too remote, speculative, impractical, or ineffective" (*Airport Neighbors Alliance, Inc. vs. United States* 1996). The alternatives presented in the Draft EIS have been judged to be practical; others that may fall within the full spectrum of those that are technically possible but have not been included in the Draft EIS have been deemed impractical.
O-030	Opposed to Alternatives that include the Mint Green Corridor.	Comment noted.
O-031	Concern about access to my property; requesting a re-design.	As the highway's construction plans are refined, accommodations for maintaining access to all properties are examined in close detail and modified, as needed, to ensure adequate access is maintained. Once all the refinements and modifications are made to the construction plans, they are presented at public meetings and are otherwise available for public review and discussion with representatives from the NCDOT.
O-032	Requesting a shift in the alignment of the Orange Corridor to avoid property impacts.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement – all in an attempt to keep social and environmental impacts to a minimum, and to balance impacts that cannot be avoided. If a particular residential area is affected, it means that there was no alternative location that would not cause other, similar impacts.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-033	Concerned about the Brown Corridor's effect on the Avalon subdivision.	Comment noted. See above response.
O-034	Concern about the project's effect on area businesses.	As with residential impacts, the location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement in an attempt to keep impacts to a minimum and to balance impacts that cannot be avoided. If a particular business is directly affected, it means that there was no alternative location that would not cause other impacts. Indirect effects on businesses are an unavoidable consequence of highway projects. Some of these effects can be positive, others negative. And, as with changes to property values, businesses are influenced by a great number of variables, each of which can shift over time. Because a highway project represents only one of these many variables, it is not possible to fully isolate the effect a highway may have on area businesses.
O-035	Concerned about effects on a local church and associated cemetery.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement – all in an attempt to keep social and environmental impacts to a minimum, and to balance impacts that cannot be avoided. If a particular place of worship area is affected, it means that there was no alternative location that would not cause other, similar impacts. In no instance would any known cemeteries be directly affected by any of the Alternatives.
O-036	Concerned about the Central Crops Research Station and its impact on NCSU Agriculture students.	Comment noted. The Tan Corridor is the only corridor segment would affect this property; it is not part of the preferred alternative.
O-037	Concern about congestion at approaches to the project's interchanges and increased congestion along area roads as a result of the project.	The Capital Area Metropolitan Planning Organization (CAMPO) is responsible for developing and updating the area's long range transportation plan. That planning effort takes into consideration the entire network of roadways, assessing future needs and, working with the NCDOT, assigning priorities for improvements. If the proposed project is approved, any additional improvements to local roads needed to adequately accommodate changing traffic patterns will be reflected in the transportation plan.
O-038	The cost of project is excessive.	While the cost of a project is certainly an important consideration, the first objective of a highway planning study is to understand the impacts the project would cause and benefits it would achieve. If the benefits justify the impacts, then a decision is made about whether the need for the project is extensive enough to justify the cost of implementing it.
O-039	Concerned about the cost of DSAs 8-12.	Comment noted. See above response.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-040	Concern about property values depreciating at Sunset Oaks.	Property values are influenced by a great number of variables, each of which can shift over time, for various reasons. Because highway projects represent only one of these many variables, it is not possible to isolate the effect a highway may have on property values. And, while the location of a highway can indeed effect land values, those affects can be both positive and negative.
O-041	The project design should utilize vacant land on Bells Lake Road.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement in an attempt to keep impacts to a minimum and to balance impacts that cannot be avoided. All undeveloped parcels in the study area were reviewed to determine their suitability for highway development. The vacant land on Bells Lake Road was not able to be used, due to surrounding land use constraints.
O-042	Concerned about displacing homes and neighborhoods.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement – all in an attempt to keep social and environmental impacts to a minimum, and to balance impacts that cannot be avoided. If a particular residential area is affected, it means that there was no alternative location that would not cause other, similar impacts.
O-043	Concerned about displacing senior communities.	Great care is taken with respect to possible impacts on senior communities because the elderly often experience additional impacts as result of having to relocate. If a particular senior community area is affected by any of the proposed alternatives, it means that there was no available location that would not cause other, similar impacts.
O-044	Concerned about the proximity of neighborhoods to the project with respect to noise and traffic.	A traffic noise analysis was completed to identify noise sensitive land uses where noise levels would approach or exceed levels where noise abatement must be considered. NCDOT has identified areas where impacts would occur due to traffic noise and where noise walls have been preliminarily identified as feasible and reasonable in accordance with our Traffic Noise Policy. During final project design, any noise walls found to be feasible and reasonable will be recommended. They will be constructed if residents/owners of affected noise receptors vote for their construction.
O-045	Concerned about the project physically dividing my community.	When a new highway is proposed, one type of impact that must be studied is called is “the barrier effect,” which refers to the introduction of a separation or partition between people, between people and places, or between two places. Avoiding such impacts was an important consideration in developing the project alternatives, and any such impacts that would occur are necessary to avoid other types of impacts. There will be crossing locations to connect communities on either side of the highway at interchanges and grade separated bridges.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-046	The project would have a positive effect on economic development in Harnett County, and economic growth in general.	Comment noted.
O-047	Concerned about the project's effect on endangered species.	Alternatives that meet the project's purpose that potentially could avoid or minimize affecting endangered species must be developed, and the impacts of those alternatives identified, before a final decision is made about the project's location. NCDOT and FHWA have worked collaboratively with USFWS to minimize impacts to threatened and endangered species and satisfy the requirements of the Endangered Species Act. The Biological Assessment, summarized in Chapter 4 of the Final EIS, details several conservation measures NCDOT proposes to use to help offset the effects of the project on the DWM and other aquatic species.
O-048	Concerned about environmental impacts.	The National Environmental Policy Act, and other federal regulations, require that impacts to the natural and human environment be avoided to the greatest practical extent; impacts that cannot be avoided must be kept to a minimum, and the resulting impacts mitigated, to the greatest practical extent.
O-049	Concern about property substantially losing value as a result of the project.	Property values are influenced by a great number of variables, each of which can shift over time, for various reasons. Because highway projects represent only one of these many variables, it is not possible to isolate the effect a highway may have on property values.
O-050	Suggestion that flood control ponds be considered as part of the project.	Comment noted. Hydraulic considerations will continue to be examined as the design process continues.
O-051	Concerned that the northern, existing segment of 540 is not a toll route, while the proposed project would require tolls.	Decisions regarding funding for transportation projects are made at the local level by regional transportation planning organizations, in this case, the Capital Area Metropolitan Planning Organization (CAMPO). In 2005, CAMPO requested that the NCDOT and the Turnpike Authority evaluate and construct the remaining sections of the Raleigh Outer Loop (western, southern and eastern sections) as toll facilities. CAMPO's current long range transportation plan does include tolling the existing northern sections of the Raleigh Outer Loop to pay for needed improvements.
O-052	Concerned about Garner communities, parks, and future growth if an Alternative that includes the Red Corridor is selected.	Comment noted. The types of impacts mentioned have been taken into consideration in the Draft EIS.
O-053	Concerned about how the project would affect growth of Holly Springs, Fuquay-Varina, and Clayton.	Comment noted. The types of impacts mentioned have been taken into consideration in the Draft EIS.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-054	Concerned about impacts to historic sites.	Historic sites that are on or qualify for listing on the *National Register of Historic Places* receive a high degree of protection from highway projects, in keeping with both Section 106 of the National Historic Preservation Act and Section 4(f) of the US Department of Transportation Act. Other, locally designated historic properties do not necessarily fall under these protections, but the NCDOT endeavors to avoid impacts to such properties to the greatest practical extent.
O-055	Humans are more important than protected species.	The effect the project would have on both the natural and the human environment must be (1) identified, (2) avoided to the greatest practical extent, and (3) minimized and mitigated to the greatest practical extent. Likewise, alternatives for meeting the project's purpose that would avoid affecting endangered species must be developed, and the impacts of those alternative identified, before a final decision is made.
O-056	Concerned about the project's effect on wells.	Both the US Army Corps of Engineers and the North Carolina Division of Water Resources must review the proposed action and ultimately issue permits or other approvals. These are contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent degradation of water resources that ultimately fill wells.
O-057	Concerned about impacts to River Ridge.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement – all in an attempt to keep social and environmental impacts to a minimum, and to balance impacts that cannot be avoided. If a particular residential area is affected, it means that there was no alternative location that would not cause other, similar impacts.
O-058	Concerned about impacts to the Juniper Level Botanic Garden.	Comment noted. It is not possible to shift the proposed Alternative in this area without affecting many additional residences.
O-059	Concerned about the project's involvement with Duke Energy Transmission lines and gas pipelines.	An extensive survey of all utility installations in the study has been conducted so that the location and type of each utility (including transmission lines and pipelines) could be taken into consideration in the development of project alternatives and the preparation of design plans.
O-060	Concerned about impact on McCullers cemetery.	The corridor segment has been shifted to avoid impact to this cemetery.
O-061	Concerned about impacts to Middle Creek.	Both the US Army Corps of Engineers and the North Carolina Division of Water Resources must review the proposed action and ultimately issue permits or other approvals. These are contingent upon established Best Management Practices being used and other precautions being taken during construction to prevent degradation of water resources.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-062	Concerned about the need for an interchange at Bells Lake Rd, displacing Bells Pointe subdivision.	The location of an interchange on the proposed project is the result of detailed investigations of future land uses and future traffic patterns. The placement of interchanges is also guided by state and federal policies concerning appropriate distances between interchanges. In locating and designing the layout of interchanges, attempts have been made to keep social and environmental impacts to a minimum, and to balance impacts that cannot be avoided. If a particular residential area is affected by an interchange, it means that there was no alternative that would not cause other, similar impacts.
O-063	Concerned about the need for the southern routes.	Comment noted.
O-064	Concerned about noise from construction and traffic.	The assessment of noise impacts is an important part of the study process. Construction and traffic noise is calculated to determine whether the project would create conditions that would require noise abatement measures to be developed (such as noise walls). Areas that would exceed certain established thresholds for noise, and that meet other feasibility and reasonableness requirements in accordance with NCDOT's Traffic Noise Policy, are recommended to receive noise walls.
O-065	Concerned about the cost of constructing noise walls.	The costs associated with constructing required noise walls are considered as part of the overall cost of the project. If noise walls are shown to be warranted in accordance with the NCDOT Traffic Noise Policy, they cannot be eliminated to lower the overall cost of the project.
O-066	Concerned about impacts to the Neuse River Trail; other parks.	Section 4(f) of the Department of Transportation Act stipulates that the Federal Highway Administration and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites, unless there is no feasible and prudent avoidance alternative to the use of land, and, the action includes all possible planning to minimize harm to the property resulting from such use; or, the Federal Highway Administration determines that the use of the property will have an extremely minor (*de minimis*) impact.
O-067	Concerned about pollution from vehicles.	The Capital Area Metropolitan Planning Organization (CAMPO) has the responsibility of assessing regional air quality and ensuring that federal standards for air quality are not exceeded (or, if they are currently exceeded, that steps are taken to bring them into conformance). The proposed projects contribution to regional air quality has been assessed to ensure it would not cause violations in these required air quality thresholds.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-068	Existing roads should be expanded before this project is developed.	The Capital Area Metropolitan Planning Organization (CAMPO) is the agency responsible for creating and periodically updating the area's long range transportation plan. That planning effort takes into consideration the entire network of roadways, assessing future needs and, working with the NCDOT, assigning priorities for improvements. Improvements to local roads will occur as needed, and will not eliminate the need for the proposed project.
O-069	Concerned about the ultimate disposition of property already purchased in the Orange (protected) Corridor if a DSA that includes the Orange Corridor is not selected as preferred.	If properties that have been purchased by the State are determined to not be needed for public purposes, they are made available for purchase, with the previous owner given the right of first refusal.
O-070	What is the process for buying land for highway right-of-way?	The NCDOT offers a fair market value for property based on an independent appraisal by a professional appraiser knowledgeable of the local market. The acquisition process is very much like any private real estate transaction except in the event that agreement cannot be reached on the property value, the courts become the final decider of value. NCDOT compensates residents that are required to move with relocation assistance services and compensation.
O-071	Concern about the relocation of TV towers in the southeast portion of the study area.	The communication towers in the southeastern portion of the study area are substantial in that they accommodate a wide variety of emergency, weather, and commercial uses. Additionally, the design of these towers is such that their relocation would be costly and disruptive. Attempts have been made to avoid affecting those towers in the development of project alternatives.
O-072	Concerned about the visual impacts of the project.	Most of the land along the DSAs consists of low-density suburban and rural uses, with visually pleasing landscapes that include open agricultural fields, pastures, forest-lined streams, and woodland areas. Overall, the visual changes experienced by those living or working along the DSAs would be intermittent, with some residents subjected to a view of the roadway and others shielded from the roadway by topography and vegetation.
O-073	Concerned about the visual impacts of noise walls.	Any noise walls required for the project would be designed according to the NCDOT's established aesthetic standards, helping to make such barriers more visually appealing. NCDOT requires that texture simulating brick and/or stone be applied to both the highway and community sides of noise walls. Noise walls are also stained on both sides. For each recommended noise wall, there will be a vote to determine if the property owners of each impacted receptor want the noise wall to be installed.

Comment Index Number(s)	Summary of Comment (duplicate comments omitted)	Response
O-074	Concerned about the project's effect on the area's waste water treatment plants.	While none of the area's wastewater treatment plant structures would be directly affected by any of the alternatives, two water treatment spray fields would be affected. The preferred alternative, which includes the Orange Corridor, would affect spray fields associated with the Dempsey E. Benton Water Treatment Plant. NCDOT has coordinated with and will continue to coordinate with the City of Raleigh relative to impacts to this site.
O-075	Concerned about wetlands impacts.	The US Army Corps of Engineers must review the proposed action and ultimately issue permits for any unavoidable filling of jurisdictional wetlands. Appropriate mitigation must be established for any wetland impacts, with mitigation plans approved by the Corps of Engineers.
O-076	Concerned about impacts to wildlife in general.	The location of each corridor segment is the result of a great deal of planning, scrutiny, and refinement in order to keep social and environmental impacts – including impacts to wildlife -- to a minimum. Any species listed as threatened or endangered under the Endangered Species Act receives special scrutiny; the project cannot be approved if the US Fish and Wildlife Service determines that it would jeopardize the continued existence of any endangered species. NCDOT and FHWA have worked collaboratively with USFWS to minimize impacts to threatened and endangered species and satisfy the requirements of the Endangered Species Act. The Biological Assessment for the project, summarized in Chapter 4 of the Final EIS, details several conservation measures NCDOT proposes to use to help offset the effects of the project on aquatic species.

APPENDIX K
SECTION 4(F) DE MINIMIS CONCURRENCE LETTERS

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 11, 2017

Mr. Doug McRainey, Director PK
Department of Parks, Recreation and Cultural Resources
Cary Town Hall
316 North Academy Street
Cary, NC 27513

Re: North Carolina Department of Transportation: STIP R-2721, R-2828, and R-2829
Complete 540 - Triangle Expressway Southeast Extension Project
Concurrence Request for *de minimis* Section 4(f) finding for Middle Creek School Park

Dear Mr. McRainey:

The Federal Highway Administration (FHWA) and North Carolina Department of Transportation (NCDOT) are preparing a Final Environmental Impact Statement (EIS) for the Complete 540 - Triangle Expressway Southeast Extension project. The proposed project would construct a six-lane expressway on new location between NC 55 Bypass in Apex to US 64/US 264 (I-495) in Knightdale **(Figure 1)**.

On August 28, 2015 NCDOT notified the Cary Department of Parks, Recreation and Cultural Resources concerning potential impacts to Middle Creek School Park for the various alternatives under consideration at the time of the Draft EIS. This letter also notified your department of FHWA's intention to make a *de minimis* determination relative to the impacts of the project on Middle Creek School Park. This intention was also contained in the Draft EIS and the Draft Section 4(f) Evaluation for the project, which was issued in November 2015.

In April 2016, FHWA and NCDOT announced Detailed Study Alternative 2 (DSA 2) as the Preferred Alternative for the project. DSA 2 includes the Orange – Green – Mint Green - Green color-coded corridors. The enclosed map (**Figure 1**) shows DSA 2.

Highway right of way would necessitate the acquisition of a narrow strip of land at the northern edge of Middle Creek School Park. The enclosed map (**Figure 2**) of the area around the park shows where the preliminary proposed right of way for the Preferred Alternative would encroach onto the park. A more detailed view of this impact area (**Figure 3**) is also attached. The narrow strip of land that would be converted from the park to highway right of way would total about 2.8 acres. Previous correspondence indicated that this impact was about 1.6 acres; but, this was based on only acquiring two triangular portions of this narrow strip instead of the entire narrow strip of parkland. The change is necessary because of highway design changes that were needed for geotechnical and drainage reasons. Existing vegetation will likely be removed and replaced in

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NC DEPARTMENT OF TRANSPORTATION
NC TURNPIKE AUTHORITY
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RALEIGH, NC 27699-1578

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Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1 SOUTH WILMINGTON STREET
RALEIGH, NC 27601

this narrow strip of land. Additionally approximately 0.1 acres of wetlands and 40 feet of streams are potentially impacted in the vicinity of the unnamed tributary to Camp Branch on this portion of the park.

The Southern Environmental Law Center (SELC) in their comments on the Draft EIS questioned the current use of the wooded space that would be impacted by the highway project. NCDOT addressed this question noting that this area has no formal park function and currently serves as a wooded area behind a residential neighborhood.

We did not receive any public comments specifically addressing the project's potential effects on Middle Creek School Park, but we did receive comments expressing general support for avoiding adverse effects on area park and recreation resources. There are no park facilities in the area of impact and all park facilities are well to the south of the potential right of way impact area.

As a recreational facility in public ownership, Middle Creek School Park is afforded special protections under Section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C. 138). Under the provisions of Section 4(f), if a proposed transportation project would result in adverse effects to the park or recreation facility, the transportation agency must conduct an evaluation to demonstrate that there is no prudent and feasible alternative to the use of the 4(f) property. In accordance with 23 C.F.R. Part 774 of the Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, FHWA is provided a method known as a *de minimis* (minimal) impact determination in cases where the official with jurisdiction over the park or recreation area concurs in a determination that the impacts from the transportation project "will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)." This concurrence enables FHWA to make a *de minimis* finding, which satisfies the requirements of Section 4(f) and precludes the need for a full Section 4(f) Evaluation. The proposed Complete 540 project, as planned, will not have an adverse effect on the use or function of Middle Creek School Park.

If you concur that the planned impact on Middle Creek School Park as shown on the attached figures would not adversely affect the recreational activities, features, and attributes that qualify this facility for protection under Section 4(f), NCDOT requests that you sign and date this letter in the spaces below. We will maintain a copy of this letter in the project file.

As the official with jurisdiction over Middle Creek School Park, I concur with the determination that the proposed transportation project as described in this letter and shown on the accompanying attachments would not adversely affect the features, attributes, or activities that qualify Middle Creek School Park for protection under Section 4(f). I have also been informed that, based on my concurrence, the FHWA intends to make a *de minimis* finding regarding impacts to Middle Creek School Park, thus satisfying the requirements of Section 4(f).

Signature: Michael J Boyette

Date: 11/7/2017

After signing and dating this letter, please return a copy within 30 days of the date of this letter by email to jnharris1@ncdot.gov or by mail to the following address:

North Carolina Turnpike Authority
Attention: Jennifer Harris
1578 Mail Service Center
Raleigh, NC 27699-1578

NCDOT appreciates the assistance of the Town of Cary in making this transportation project possible. Should you have any questions or concerns, please contact me at (919) 707-2710 or Jennifer Harris at (919) 707-2704.

Sincerely,

Rodger Rochelle, PE
North Carolina Turnpike Authority
Chief Engineer – Innovative Delivery

cc:
Donnie Brew, FHWA
Kiersten Bass, HNTB
Roy Bruce, H.W. Lochner, Inc.

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 11, 2017

Ms. Diane Sauer, Director
Raleigh Parks, Recreation and Cultural Resources Department
Raleigh Municipal Building
222 W. Hargett Street
Raleigh, NC 27601

Re: North Carolina Department of Transportation: STIP R-2721, R-2828, and R-2829
Complete 540 - Triangle Expressway Southeast Extension Project
Concurrence Request for *de minimis* Section 4(f) finding for the Neuse River Trail

Dear Ms. Sauer:

The Federal Highway Administration (FHWA) and North Carolina Department of Transportation (NCDOT) are preparing a Final Environmental Impact Statement (EIS) for the Complete 540 - Triangle Expressway Southeast Extension project. The proposed project would construct a six-lane expressway on new location between NC 55 Bypass in Apex to US 64/US 264 (I-495) in Knightdale (**Figure 1**).

On August 28, 2015 NCDOT notified the Raleigh Parks, Recreation and Cultural Resources Department concerning potential impacts related to crossing the Neuse River Trail for the various alternatives under consideration at the time of the Draft EIS. This letter also notified your department of FHWA's intention to make a *de minimis* determination relative to the impacts of the project on the Neuse River Trail. This intention was also contained in the Draft EIS and the Draft Section 4(f) Evaluation for the project, which was issued in November 2015.

In April 2016, FHWA and NCDOT announced Detailed Study Alternative 2 (DSA 2) as the Preferred Alternative for the project. DSA 2 includes the Orange – Green – Mint Green - Green color-coded corridors. The enclosed map (**Figure 1**) shows DSA 2.

The Southern Environmental Law Center (SELC) in their comments on the Draft EIS expressed their opinion that impacts associated with the proposed highway on the Neuse River Trail would not be *de minimis*. SELC indicated that the highway crossing of the trail would create unusual conditions along the trail. NCDOT has addressed this concern noting that the Neuse River Trail crosses over or under several transportation facilities including similar highway facility crossings at I-540, I-495, US 1, US 401, and US 64. Therefore, the Complete 540 crossing would not create an unusual condition that would affect the function and use of the trail.

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NC TURNPIKE AUTHORITY
1578 MAIL SERVICE CENTER
RALEIGH, NC 27699-1578

Telephone: (919) 707-2715
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Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1 SOUTH WILMINGTON STREET
RALEIGH, NC 27601

Citizen comments relative to the Neuse River Trail tended to be supportive of the proposed concept to cross the trail without adversely impacting the trail. There were some comments requesting that trail access be maintained during construction of the project.

On January 8, 2016 Mr. Todd Delk, Senior Planning Engineer with the City of Raleigh requested that NCDOT investigate bridging options for crossing the Neuse River Trail in lieu of using a culvert crossing. This request has been coordinated with the City of Raleigh and accommodated in the preliminary plans for the Preferred Alternative. The enclosed diagram (**Figure 2**) shows the preliminary plan for accommodating the Neuse River Trail under the bridge that crosses the Neuse River. Approximately a one-quarter mile section of the existing trail will be relocated to make this crossing possible. Refinement and finalization of this plan will be coordinated with your office at the time of the final design of the project. NCDOT will also coordinate with your department during construction of the highway to ensure that the Neuse River Trail remains open to trail users, to the extent practicable.

As a recreational facility in public ownership, the Neuse River Trail is afforded special protections under Section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C. 138). Under the provisions of Section 4(f), if a proposed transportation project would result in adverse effects to the park or recreation facility, the transportation agency must conduct an evaluation to demonstrate that there is no prudent and feasible alternative to the use of the 4(f) property. In accordance with 23 C.F.R. Part 774 of the Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, FHWA is provided a method known as a *de minimis* (minimal) impact determination in cases where the official with jurisdiction over the park or recreation area concurs in a determination that the impacts from the transportation project "will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)." This concurrence enables FHWA to make a *de minimis* finding, which satisfies the requirements of Section 4(f) and precludes the need for a full Section 4(f) Evaluation. The proposed Complete 540 project, as planned, will not have an adverse effect on the use or function of the Neuse River Trail.

If you concur that the planned relocation and accommodation of the Neuse River Trail as shown on the attached figure would not adversely affect the recreational activities, features, and attributes that qualify this facility for protection under Section 4(f), NCDOT requests that you sign and date this letter in the spaces below. We will maintain a copy of this letter in the project file.

As the official with jurisdiction over the Neuse River Trail, I concur with the determination that the proposed transportation project as described in this letter and shown on the accompanying attachments would not adversely affect the features, attributes, or activities that qualify the Neuse River Trail for protection under Section 4(f). I have also been informed that, based on my concurrence, the FHWA intends to make a *de minimis* finding regarding impacts to the Neuse River Trail, thus satisfying the requirements of Section 4(f).

Signature: _____

Date: 10/10/17

After signing and dating this letter, please return a copy within 30 days of the date of this letter by email to jhharris1@ncdot.gov or by mail to the following address:

North Carolina Turnpike Authority
Attention: Jennifer Harris
1578 Mail Service Center
Raleigh, NC 27699-1578

NCDOT appreciates the assistance of the City of Raleigh in making this transportation project possible. Should you have any questions or concerns, please contact me at (919) 707-2710 or Jennifer Harris at (919) 707-2704.

Sincerely,

Rodger Rochelle, PE
North Carolina Turnpike Authority
Chief Engineer – Innovative Delivery

cc:
Donnie Brew, FHWA
Kiersten Bass, HNTB
Roy Bruce, H.W. Lochner, Inc.

APPENDIX L
SOUTHERN ENVIRONMENTAL LAW CENTER LETTERS

Southern Environmental Law Center

Regional Transportation Alliance

March 7, 2016

Nicholas Tennyson
Secretary of Transportation
North Carolina Department of Transportation
1501 Mail Service Center
Raleigh, NC 27699-1501
NJTennyson@ncdot.gov

Beau Memory
Executive Director
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699-1578
bmemory@ncdot.gov

Dear Secretary Tennyson and Mr. Memory,

The Southern Environmental Law Center ("SELC"), on behalf of Sound Rivers and Clean Air Carolina, and the Regional Transportation Alliance ("RTA") business coalition share your commitment to creating transportation solutions that will serve our region – both now and as we grow – while preserving the natural environment and our communities.

This letter is a request for some additional information and clarifications about the proposed Complete 540 project to ensure that a transportation solution for Southeastern Wake County can fulfill those objectives and do so in a timely and cost-effective manner.

Overview

In the past few years the legislature has enacted both funding allocation reforms (i.e., the data driven Strategic Transportation Investments process) and a more balanced, access- and user fee-based funding model. Both SELC and RTA have applauded many of those critical improvements in how we prioritize and fund transportation investments. However, even with these enhancements, a significant funding gap exists and there are insufficient financial resources to complete the multimodal transportation network envisioned by regional and state planners in a timely fashion.

It is in the spirit of ensuring the most efficient use of the state's transportation resources that we are requesting additional information and clarification on the following pages about the proposed "Complete 540" toll road which, if constructed in its entirety as outlined in the Draft Environmental

Impact Statement, would be the most expensive highway project in state history. In addition, this letter also offers some suggestions for consideration that may serve to scale portions of the project in order to meet vital environmental protection, context sensitivity, and system resilience objectives.

1. Confirm cost increases and rescore if necessary

Our understanding is that the costs of the three Complete 540 segments – west of US 401, between 401 and I-40, and east of I-40 – have each increased by 42% to 75%. These increases are significant, as each project segment now costs more than $0.5 billion, with the total Complete 540 cost over $2 billion. While we recognize that NCDOT cannot constantly be rescoring projects every time project costs change, the STI loses credibility when substantially inaccurate project cost estimates are used in the scoring process.

Requests:

- Please verify that significant cost increases have occurred (i.e., more than $200 million for each of the three segments, representing more than 40% cost increases for each segment) subsequent to project scoring under STI, and whether this is an unusual level of post-scoring increase compared to other larger projects statewide in the current STIP.
- To the extent that these increases are accurate and that this is not a typical occurrence, please consider rescoring the project with newer, more accurate values, and note any resulting impact on prioritization.
- Consider creating a statewide policy whereby NCDOT will systematically rescore major projects when project costs have increased or decreased by more than 25% of the cost estimate used in STI.

2. Clarify the percentage of cost covered by tolls and the projected toll rates

We recognize that toll roads afford additional resources for transportation, by dedicating those user fees to a particular corridor and providing the opportunity to accelerate the creation of a particular travel option. However, while tolls can provide new transportation options much sooner, their use does create an additional cost on travelers and thus it is important to clarify the projected toll rates that users would pay. In addition, it is essential to determine how much of the project cost will be covered by toll revenue in order to assess the true cost of the project to state taxpayers.

Requests:

- Our understanding is that the "cost to NCDOT" in STI amounts to 34% of the current project cost listed in the STIP, implying that the remaining 66% of the project will be covered by toll revenue of $1.4 billion. Please verify that the projected 66% of costs covered by tolls is correct, differentiating between capital costs and any operational and maintenance costs.
- By way of comparison, please verify the current and projected percentage of project costs covered by tolls for the existing Triangle Expressway turnpike freeway.
- Please verify the projected percentage of Complete 540 project costs covered by tolls if the project were constructed in segments (e.g. if the portions west of I-40 were completed and opened several years sooner than the eastern portion).
- While we recognize that there is always a degree of uncertainty about toll rates prior to the completion of an investment grade traffic and revenue study, please verify to the extent possible the projected costs to users assuming all three proposed segments of 540 are open, and also assuming that only the segments from I-40 west are open.

3. Confirm traffic forecasts and projected time savings

When a new limited access roadway opens, several things may occur: users of the new road will typically gain immediate time savings, travelers on nearby roadways may or may not see significant travel time savings, and overall traffic patterns and levels may change in response to the new accessibility created by the new roadway, which may impact travel behavior over time.

In the recent environmental study, NCDOT provided a document detailing the expected travel time benefits from a variety of travel pairs (i.e., Alternatives Development and Analysis Report 2014, pp 174–186). This is the only document we are aware of that provides an indication of travel time savings estimates, and that document did not provide either the current or projected number of drivers between the travel pairs. Additional information about travel time savings and projected users will be helpful in determining the utility and feasibility of the project.

Requests:

- Please verify the travel time savings to users of the toll road who are traveling to and from various destinations, assuming the toll road is entirely open to I-495/US 64-264.
- If the portions west of I-40 were completed several years sooner than the eastern portion, please verify the resulting travel time savings and projected number of users.
- Please assess the travel time savings to travelers on nearby roadways in the above cases.
- Please assess the traffic levels and projected travel times if the turnpike were either not built, or only built west of I-40 for a period of time. To the extent possible, please consider modifications to the socio-economic baseline and land use changes associated with decreased corridor accessibility due to the absence of all or portions of the proposed road from the network.

4. Examine potential for scaling the project to reduce environmental impacts

The proposed turnpike freeway envisions six lanes (three each way) for the entire 30 mile length. Given that environmental impacts will depend on project footprint, and with the understanding that avoidance is a superior form of environmental protection, it may be that a reduced footprint in some sections would provide significant opportunities to either reduce impacts and/or lessen the reliance on mitigation techniques. While all segments would have impacts on several acres of wetlands and thousands of feet of streams, the most vulnerable environmental area is the section just west of the proposed I-40 interchange, which is the primary location of the habitat of the endangered dwarf wedgemussel and other sensitive species.

Requests:

- Given the traffic forecast requests above, consider whether a smaller footprint for portions of the corridor, to four or two lanes (i.e., two or one each way), could provide sufficient avoidance or mitigation without substantially compromising the immediate or ultimate travel objectives for the corridor, particularly immediately west of I-40, and perhaps with modified design standards.
- While "Complete 540" implies the completion of the entire circumferential freeway around Raleigh, consider whether the portions west of I-40 could be constructed sooner, with the reservation of right of way for a future transportation corridor east of I-40, and how doing so may impact traffic, revenue, toll levels, and overall costs and timelines.

Thank you and summary
We applaud and share your commitment to advance cost-effective, multimodal transportation options for our growing state. While our organizations do have unanswered questions, we appreciate NCDOT's work on this project to date. We also appreciate the opportunity to comment and request additional information on this important transportation corridor.

We believe that providing the above information will help ensure that fully informed decisions can be made about the proposed roadway in order to minimize impacts to the community, toll users, other travelers, and the environment while maximizing travel benefits including overall system resilience, both now and as we grow.

Thank you for your consideration of the requests outlined in this letter. We would be happy to meet with you at your convenience.

Sincerely,

Kym Hunter
Staff Attorney
Southern Environmental Law Center

Joe Milazzo II, PE
Executive Director
Regional Transportation Alliance

CC (via email and U.S.):
Matthew Starr, Sound Rivers
June Blotnick, Clean Air Carolina
Chris Lukasina, Capital Area MPO

Transportation

PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

April 28, 2016

Ms. Kym Hunter
Staff Attorney
Southern Environmental Law Center
601 West Rosemary Street, Suite 220
Chapel Hill, NC 27516

Mr. Joe Milazzo II, PE
Executive Director
Regional Transportation Alliance
P.O. Box 2978
Raleigh, NC 27602

Subject: Complete 540 - Triangle Expressway Southeast Extension
STIP Project Nos. R-2721, R-2828, and R-2829 (Wake and Johnston Counties)

Dear Ms. Hunter and Mr. Milazzo:

The North Carolina Department of Transportation received your March 7, 2016 letter, with questions regarding the various stages of project development for Complete 540. We thank you for taking the time to submit these questions and we are excited for this opportunity to provide information related to the projected benefits of Complete 540 and regarding the success of its companion project, the Triangle Expressway.

As you know, Southern Wake County and Johnston County have been experiencing tremendous population growth and this growth is expected to continue. Complete 540 will span nearly 30 miles through southeastern Wake County and will increase the overall capacity of the region's existing roadway network, diverting traffic from congested secondary roads. The North Carolina Department of Transportation (NCDOT) and the North Carolina Turnpike Authority (NCTA) are developing Complete 540 as planned in the Capital Area Metropolitan Planning Organization (CAMPO) long-range transportation plan. The Complete 540 project is subject to the Strategic Transportation Investments (STI) law and the project has been prioritized and programmed accordingly.

STI provides for a locally driven process for transportation decision-making. Local Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs) submit projects for consideration. Once submitted, projects are scored according to mutually agreed upon criteria and weights, including but not limited to congestion relief, safety and economic impact. The results of that scoring process are shared with stakeholders and eventually used to develop the State Transportation Improvement Program (STIP). As a turnpike project, STI requires the approval of the MPO and RPO requesting it.

Cost estimates used for STI project scoring and those used for STIP development contain different elements and should not be compared directly. Moreover, project cost elements are continually refined and updated throughout project development. Complete 540 is included in the STIP as three projects (R-2721, R-2828, and R-2829). The segment referred to as R-2721 is programmed in the first five years of the current STIP and did not need to be reevaluated during Prioritization 4.0 (P4.0). Segments R-2828 and R-2829 have been reevaluated during P4.0, and updated cost estimate information based on the recommended preferred alternative from February 2016 was used during that process. The comparable difference from the 2014 STI project costs and the most current 2016 project cost estimate is less than 18%.

The Triangle Expressway, Complete 540's companion facility, is exceeding all projections for transactions and revenue. Through 2015, project-to-date transactions and revenue have exceeded projections by 10% and 21%, respectively (January 2014 – December 2015 data presented in Figures 1 and 2). Traffic on the Triangle Expressway has increased year over year by 37% in 2014 and 26% in 2015 (Figure 3), and traffic is expected to continue to increase.

Figure 1: Triangle Expressway Transactions Projection vs. Actual

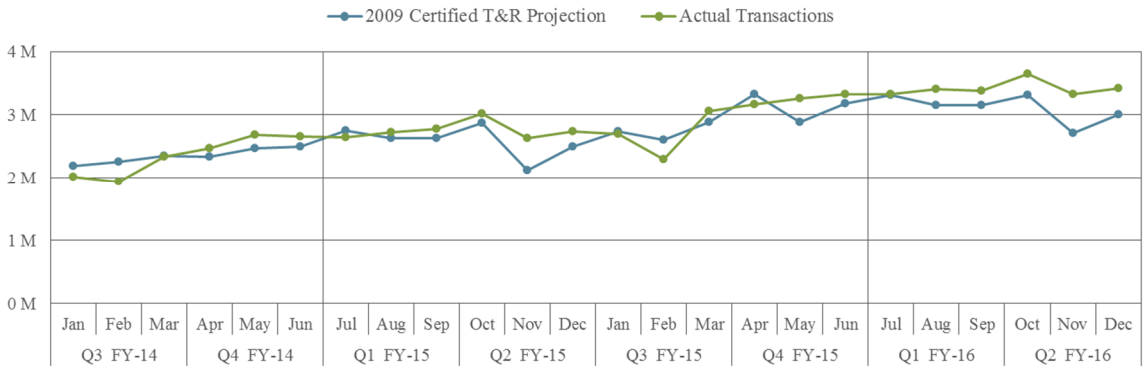


Figure 2: Triangle Expressway Revenue Projection vs. Actual

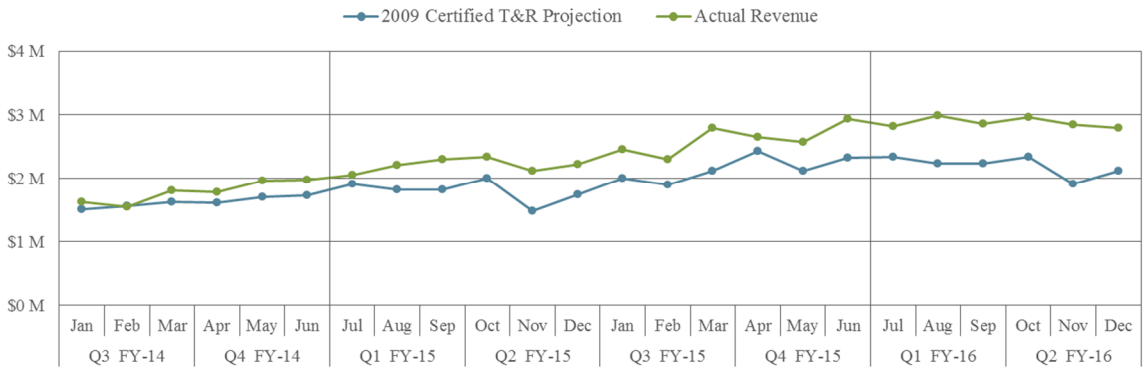
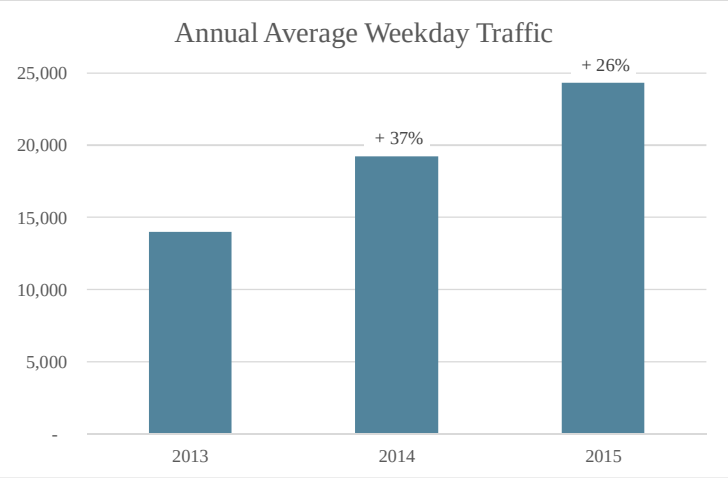


Figure 3: Triangle Expressway Annual Average Weekday Traffic



Projected toll revenues supported 65% of Triangle Expressway's implementation costs (including capital costs, reserve accounts, capitalized interest, and bond insurance) and 100% of roadway operations and maintenance costs. Preliminarily, toll revenue for Complete 540 (all three segments) is currently projected to cover at least 50% of capital and financing costs and 100% of operations and maintenance costs. However, these early estimates are likely to change as an investment level Traffic and Revenue Study is underway. The toll rates for Complete 540 have not been developed; however, rates are expected to be similar to the existing Triangle Expressway.

As discussed in the Draft EIS, congestion in the region continues to increase, growth in the region is one of the fastest in the state, and Complete 540 will provide a new transportation option to existing routes. Figures 4 and 5 illustrate the daily levels of service on the main roads in and around the Complete 540 study area. Figure 4 shows conditions in 2011. Figure 5 shows the projected conditions in 2035, without the Complete 540 project in place. Conditions in 2035 reflect the congestion on the existing main roads resulting from the projected population and employment growth in the region.

Like the Triangle Expressway, the Complete 540 project will be constructed as a high speed fully controlled access facility, with no traffic signals and utilizing all electronic tolling, providing a 70 mile per hour alternative to the existing surface street network. A traffic analysis indicates that commute times for those traveling from the Research Triangle Park and Brier Creek areas to Fuquay-Varina, Clayton, Garner, and Knightdale would decrease by an average of 11.5 to 13.7%. When comparing 2035 with Complete 540 to the No-Build Alternative, evening peak period congested vehicle miles traveled would decrease by 26%, and evening peak period congested vehicle hours traveled would decrease by 30% for the region.

Recognizing the significant need to provide relief for the motoring public within the region, NCDOT remains committed to avoid and minimize the impact of this project on the surrounding environment. NCDOT and the resource and regulatory agencies will continue to examine strategies for avoidance and minimization impacts. Although it is too early to determine what the final design will be for Complete 540, all parties will continue to develop an environmentally sensitive design solution that meets the stated purpose and need of the project.

Figure 4: 2011 Daily Level of Service

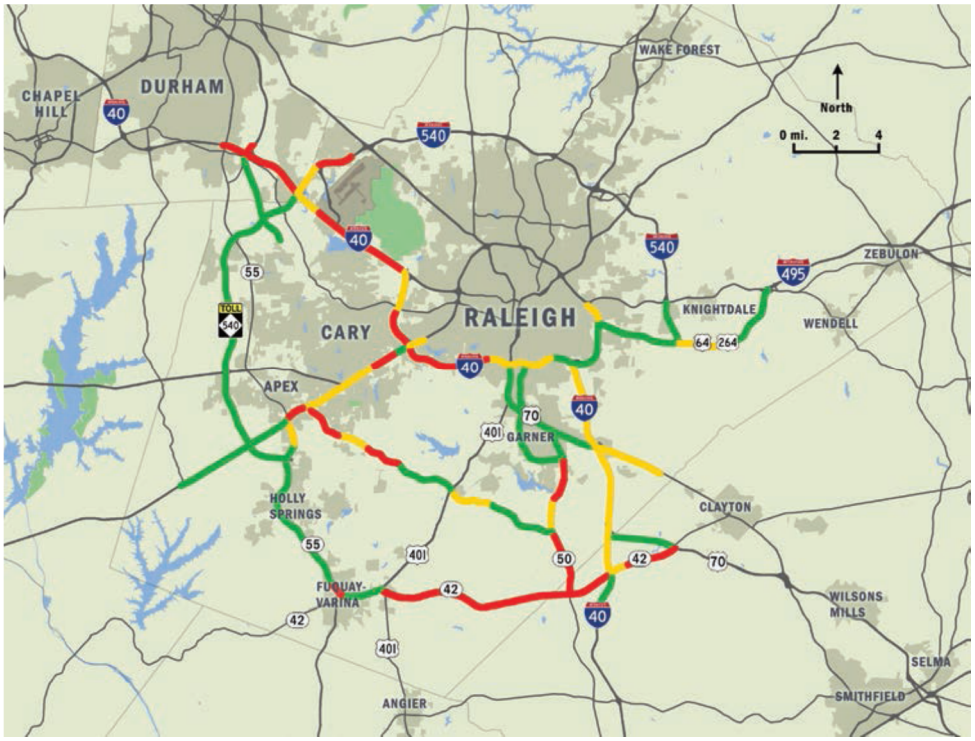
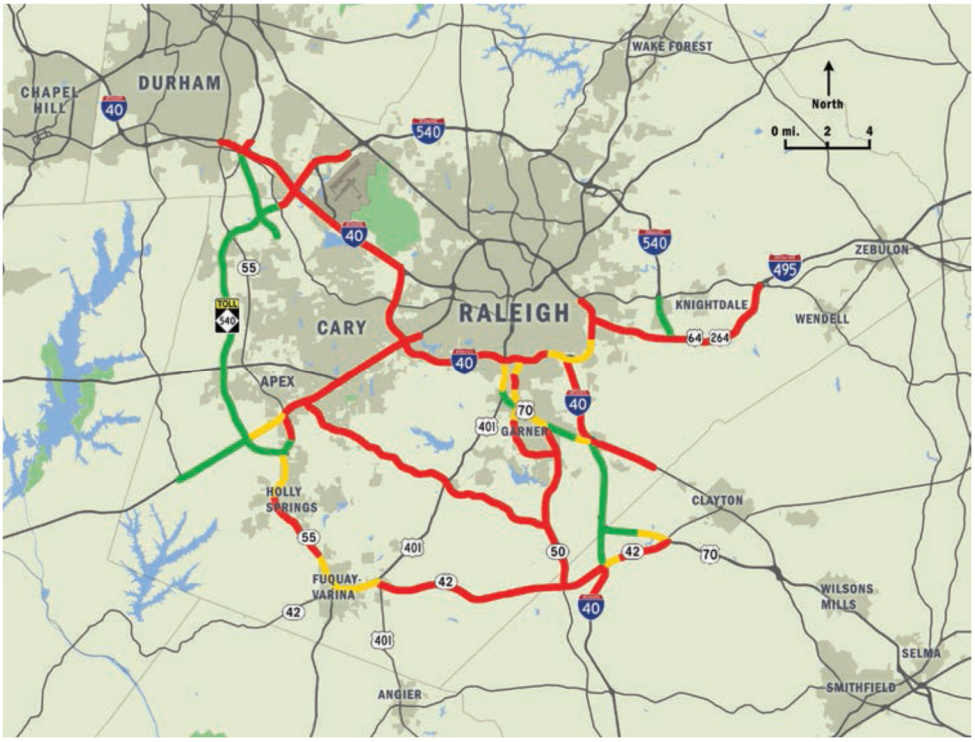


Figure 5: 2035 Daily Level of Service



Attached please find a memorandum with additional information specific to the detailed requests for each of the four topics included in your letter. If you have any questions regarding the above responses or would like to discuss the project, please contact me at bmemory@ncdot.gov or 919-707-2700.

Sincerely,

Beau Memory
Executive Director, NCTA

Attachment

cc: Nicholas Tennyson, Secretary of Transportation
Rob Hanson, PE, NCDOT
Chris Lukasina, Capital Area MPO
Matthew Starr, Sound Rivers
June Blotnick, Clean Air Carolina

SOUTHERN ENVIRONMENTAL LAW CENTER

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601 WEST ROSEMARY STREET, SUITE 220
CHAPEL HILL, NC 27516-2356

Facsimile 919-929-9421

July 5, 2016

Mr. Beau Memory
North Carolina Department of Transportation
1501 Mail Service Center
Raleigh, NC 27699-1501

Re: Analysis of Project Alternatives – "Complete 540"

Dear Mr. Memory:

On behalf of Sound Rivers and Clean Air Carolina, I am writing to ensure that the North Carolina Department of Transportation revisits its analysis of project alternatives for the "Complete 540" highway project in light of the recent North Carolina Supreme Court decision in *Kirby v. North Carolina Department of Transportation*, 2016 WL 3221090 (N.C. 2016).

As you know, in *Kirby* the Supreme Court held that property restrictions authorized by the Roadway Corridor Official Map Act ("Map Act") amount to a "taking" of property that triggers a constitutional requirement for the government to compensate the owners fairly. This ruling has significant implications for the "Complete 540" project.

On two occasions, in 1996 and 1997, NCDOT filed corridor maps with the Wake County Register of Deeds, pursuant to the Map Act. The maps depicted what was subsequently termed "the Orange Route" (R-2721, R-2828). The effect of the filings was to impose certain restrictions on development of property within the Orange Route corridor, for the purpose of minimizing land acquisition costs in the event NCDOT ultimately chose to construct a highway through that corridor. According to *Kirby*, by imposing those restrictions, NCDOT used the power of eminent domain to acquire property interests in lands within the Orange Route corridor, and the owners of those lands are entitled to just compensation for NCDOT's takings.

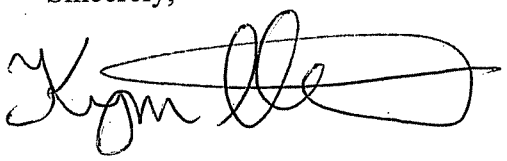
Subsequent to the Supreme Court ruling, therefore, the cost of acquiring property along the Orange Route has increased to include the value of the property interests taken by NCDOT since 1996 and 1997. When NCDOT issued its initial Draft Environmental Impact Statement ("DEIS") for the project in November 2015, these costs were not considered; nor were the costs taken into account when the agency announced its "Preferred Alternative," the Orange Route, this past February.

NCDOT must act swiftly to account for the *Kirby* ruling as it applies to the proposed "Complete 540" project. To comply with the National Environmental Policy Act, NCDOT must prepare a Supplemental Draft EIS that rigorously analyzes a full range of alternative solutions, and it must transparently present the post-*Kirby* cost estimates as part of that analysis. NCDOT must provide this information to the public so that informed decisions can be made about the

project. In addition, NCDOT must provide updated cost information to the United States Army Corps of Engineers so that it can accurately evaluate the "practicability" of all alternatives pursuant to section 404 of the Clean Water Act. NCDOT must also consider the new updated cost information in its analysis of projects under the Strategic Transportation Investments ("STI") ranking program.

We would be happy to discuss these concerns at your convenience.

Sincerely,



Kym Hunter
Staff Attorney

cc: Eric Alsmeyer