

# CH. 3 COMMENTS AND COORDINATION AFTER THE DRAFT EIS



Chapter 3 details coordination efforts with the public, as well as federal, state, and local agencies, that have taken place since the Draft EIS was published (April 2009). A summary of substantive comments on the Draft EIS and responses to those comments also are included.

## 3.1 PUBLIC INVOLVEMENT

Public involvement has been, and continues to be, integral to the planning process for the Gaston East-West Connector. Public involvement activities since the Draft EIS have included Pre-Hearing Open Houses, Public Hearings, and small group meetings. The Pre-Hearing Open Houses and Public Hearings are summarized in *Summary – Citizens Informational Workshop Series #4 – Public Hearings for the Gaston East-West Connector* (December 2009), incorporated by reference.

### 3.1.1 AVAILABILITY OF DRAFT EIS FOR REVIEW

A Notice of Availability of the Gaston East-West Connector Draft EIS was published in the Federal Register on May 22, 2009 (Federal Register Volume 74, No. 98, page 24006). The Draft EIS was made available for public review beginning May 13, 2009, at local libraries and government offices, as listed in Section 11.5 of the Draft EIS. The Draft EIS in its entirety also is available for download at the NCTA's Web site: [www.ncturnpike.org/projects/gaston](http://www.ncturnpike.org/projects/gaston).

### 3.1.2 PRE-HEARING OPEN HOUSES AND PUBLIC HEARINGS

#### 3.1.2.1 Advertisement of Pre-Hearing Open Houses and Public Hearings

The Pre-Hearing Open Houses and Public Hearings held in June 2009 were announced via a postcard to area property owners and residents (18,776 postcards), newspaper advertisements, website postings, and letters to project study area churches.

Attendance totaled approximately 887 at the Pre-Hearing Open Houses and approximately 785 at the Public Hearings.

The public notice was provided by the NCTA and the US Army Corps of Engineers (USACE), and published in local papers. Advertisements were published in the *Charlotte Observer* on June 3, 10, 17, 21, 23, and 26, 2009. Advertisements were published in the *Gaston Gazette* on June 3, 10, and 17, 2009.

#### 3.1.2.2 Pre-Hearing Open Houses and Local Officials Meeting

Four Pre-Hearing Open Houses were held the week of June 22, 2009 to present the Draft EIS and Recommended Alternative. Attendees were encouraged to sign-in, read the handout, view the slideshow and project displays, and to discuss the project one-on-one with project team representatives. There were no formal presentations given at the open houses.

The first Pre-Hearing Open House was held at the Gastonia Adult Recreation Center on June 22, 2009, from 4:00 pm to 8:00 pm. Approximately 287 people attended and 25 comments were placed in the comment box.

The second Pre-Hearing Open House was held on June 23, 2009, from 2:30 pm to 6:30 pm at Forestview High School. Approximately 352 people attended and 59 comments were placed in the comment box.

The third Pre-Hearing Open House was held on June 24, 2009, from 2:30 pm to 7:30 pm at South Point High School. There were 191 people in attendance, and 28 comments were submitted.

The fourth Pre-Hearing Open House was held on June 25, 2009 from 2:30 pm to 6:30 pm at Olympic High School. There were 57 attendees and five comments submitted.

A Local Officials Meeting was held from 1:00 pm to 2:30 pm on June 22, 2009 at the Gaston County Police Department. Twenty-seven people attended this meeting.



Pre-Hearing Open House at Forestview High School

### 3.1.2.3 Public Hearings

Public Hearings were held on June 23 and June 25, 2009, in conjunction with the Pre-Hearing Open House series. The auditorium at Forestview High School (in Gaston County) was used on June 23, and the auditorium at Olympic High School (in Mecklenburg County) was used on June 25.



Public Hearing at Forestview High School

The Public Hearings began with a formal presentation by NCTA followed by a comment period. Citizens were provided the opportunity to sign up to speak in advance at the Pre-Hearing Open Houses, through the project website, via email, or by calling the NCTA. Citizens could also sign up to speak immediately prior to each Public Hearing. Attendees who had not pre-registered to speak could do so after the pre-registered speakers. Each speaker was allotted three minutes. Anyone requesting additional time was allowed to return after all others were given an opportunity to speak.

Approximately 700 people attended the June 23 Public Hearing at Forestview High School and approximately 85 people attended the June 25 Public Hearing at Olympic High School. There were 53 speakers at the June 23 Public Hearing and 29 speakers at the June 25 Public Hearing.

**3.1.2.4 Public Comment Period**

Comments regarding the project have been accepted throughout the planning process. However, the formal public comment period on a Draft EIS is set based on the date a Draft EIS Notice of Availability is posted in the Federal Register, which for this project was May 22, 2009. Sixty days following that date is July 21, 2009. SAFETEA-LU mandates that the Draft EIS comment period not exceed 60 days, unless agreement is reached with the lead agencies, the project sponsor, and all participating agencies. The public review period ended July 21, 2009.

As discussed in **Section 3.3**, numerous comments were received from the public, interest groups, and federal, state, and local agencies via letter, comment form, email, petition, or resolution, or verbally during the Public Hearing. Comments received between April 25, 2009 (the date the Draft EIS was signed) and July 21, 2009 are included in **Appendix B**, along with responses to comments, as needed.

**3.1.3 SMALL GROUP MEETINGS**

Throughout the study process, project representatives have met with a variety of organizations, agencies, and groups to exchange information, collect data, or to make a presentation about the project at a group’s request. Small group meetings prior to publication of the Draft EIS are summarized in Section 9.1.3 of the Draft EIS. **Table 3-1** provides a summary of the small group meetings that have occurred since the Draft EIS was prepared.

**TABLE 3-1: Small Group Meeting Summaries**

Meeting Date	Group/Agency	Meeting Purpose and Summary
5/1/09	Gaston Chamber	Project representatives described the Recommended Alternative (DSA 9), next steps, and project schedule followed by a question and answer period. The questions primarily involved the project limits, schedule, and bridge issues.
5/5/09	Charlotte Chamber Southwest Chapter	The formulation of the NCTA and the project background were presented. The presentation also included a summary of the Draft EIS, stakeholder involvement, project milestones, and a description of the Recommended Alternative.
7/2/09	Mount Holly Development Foundation	Project representatives described the NEPA process and provided a summary of the project followed by a question and answer period. Primary concerns included stream crossings and growth.
07/07/09	Broomfield Neighborhood Watch	Project representatives described the Recommended Alternative (DSA 9) followed by a question and answer period. Primary citizen concerns included direct impacts to property and issues related to right-of-way acquisition. Access to the Matthews Acres subdivision (Belfast Drive area) was discussed.
10/19/09	Carolina Speedway	Discussed potential impacts to the Carolina Speedway and possible design modifications.

**TABLE 3-1: Small Group Meeting Summaries**

Meeting Date	Group/Agency	Meeting Purpose and Summary
11/04/09	Charlotte Douglas International Airport (CDIA) and Charlotte Department of Transportation (CDOT)	Discussed the NCDOT STIP Project R-2248H Garrison Road/I-485 interchange, the Gaston East-West Connector project, and CDIA projects (intermodal facility, STIP Project U-3411 West Boulevard project) in the area. It was agreed that attendees would continue to coordinate potential phasing and design solutions. Key points included constructability, minimizing impacts to the intermodal facility, and minimizing “throwaway” work.
01/06/10	NCDOT, CDOT, and Norfolk Southern	Based on the input received at the November 4, 2009 meeting described above, two new design concepts for the Gaston East-West Connector interchange with I-485 were developed by NCTA and presented at this meeting. It was agreed that NCTA, NCDOT, CDOT, and Norfolk Southern would continue to coordinate potential phasing and solutions. Attendees agreed that both concepts would work, but preferred Concept 1.
01/19/10	CDIA and CDOT	Discussed the two new design concepts for the Gaston East-West Connector interchange at I-485 that were discussed at the January 6, 2010 meeting with NCDOT, CDOT, and Norfolk Southern. CDIA and CDOT preferred Concept 1, the concept incorporated into the Preferred Alternative Refined Preliminary Design described in this Final EIS.
01/19/10	Duke Energy	Discussed the requirements for the application for a FERC (Federal Energy Regulatory Commission) permit revision to allow for a roadway crossing of Lake Wylie.
02/25/10	Charlotte & Gastonia Chambers	NCTA was invited to give a presentation to the two chambers. NCTA provided an update on the Preferred Alternative selection and changes to the preliminary design, the status of the project in the planning process, the project schedule, and the financial program.
03/03/10	Pisgah ARP Church	NCTA was invited to present at a regular Wednesday meeting. NCTA provided an update on the Preferred Alternative selection and changes to the preliminary design, the status of the project in the planning process, the project schedule, and the financial program. The Preferred Alternative would not directly impact the Pisgah ARP Church.
4/21/10	Bruce’s Iron & Metal	Discussed potential impacts on Bruce’s Iron & Metal, a scrap metal recycling company, based on the refined preliminary design for Preferred Alternative. Bruce’s Iron & Metal has special operational requirements that were not readily apparent via a review of mapping and GIS data. Due to their specialized operational requirements, relocation to a new site likely would not be possible. Relocation on-site of the impacted facilities would have substantial costs. NCTA has included a Project Commitment to review the refined preliminary design during final design to evaluate ways to minimize costs and impacts.

### 3.2 AGENCY COORDINATION

Agency coordination regarding the project is discussed in Section 9.2.3 of the Draft EIS. Agency coordination meetings have been held throughout the project development process (since 2001) to receive comments on project studies, achieve concurrence points, and solicit issues and concerns from the agencies.

#### 3.2.1 TEAC MEETINGS

When the NCTA assumed administration of the project in 2005, the NCTA continued to initiate agency coordination at regularly scheduled monthly meetings, referred to as Turnpike Environmental Agency Coordination (TEAC) meetings. Agencies participating in these meetings include FHWA, NCDOT, USACE, US Fish and Wildlife Service (USFWS), US Environmental Protection Agency (USEPA), NC Wildlife Resource Commission (NCWRC), NC Division of Water Quality (NCDWQ), NC Department of Cultural Resources State Historic Preservation Office (HPO), Mecklenburg-Union Metropolitan Planning Organization (MUMPO), and Gaston Urban Area MPO (GUAMPO).

**Table 3-2** provides summaries of the TEAC meetings held for the Gaston East-West Connector since the Draft EIS was prepared. The TEAC meetings were held to discuss the NEPA/404 Merger process Concurrence Point 3 (Least Environmentally Damaging Practicable Alternative [LEDPA]) and Concurrence Point 4a (Avoidance and Minimization of Impacts to Jurisdictional Resources). **Appendix G** includes the forms for Concurrence Points 3 and 4a, and an email update from USEPA dated July 1, 2010 (discussed in **Section 3.2.3**). The forms for Concurrence Points 1, 2, and 2a are included in the Draft EIS in Appendix A-1.

**TABLE 3-2: TEAC Meeting Summaries**

Meeting Date	Meeting Purpose and Summary
08/12/09	Concurrence Point 3 meeting. Discussed comments received from the agencies and the public on the Draft EIS. Introduced information in order to achieve agreement on the LEDPA. USEPA stated that it would not be able to concur on a LEDPA until issues associated with the Clean Air Act, Clean Water Act, and the 303(d) streams are satisfactorily addressed. USACE indicated they have no issues of concern related to the project. Agreement was reached on the plan to achieve the LEDPA.
09/08/09	Concurrence Point 3 meeting. Reviewed responses to substantive comments received on the Draft EIS relative to selection of the LEDPA and Preferred Alternative and discussed scope of work for the Quantitative Indirect and Cumulative Effects (ICE) Study. Agreement was reached that the LEDPA selection would take place at the October 2009 TEAC meeting.
10/13/09	Concurrence Point 3 meeting. Discussed method for identifying the LEDPA. Meeting attendees concurred that DSA 9 is the LEDPA. FHWA, NCTA, NCDOT, GUAMPO, MUMPO, USACE, NCDWQ, and NCWRC signed Concurrence Point 3. USEPA cannot officially concur on a LEDPA until air quality issues and water quality are resolved. <b>Appendix G</b> includes the Concurrence Point 3 form.
02/16/10	Concurrence Point 4a meeting. This meeting was held to present the Preferred Alternative design refinements, proposed preliminary service roads, and reductions achieved in impacts to jurisdictional resources. FHWA, NCTA, NCDOT, USACE, USFWS, NCDWQ, and NCWRC signed Concurrence Point 4a at the meeting. USEPA conditionally concurred, but stated they cannot officially concur on Concurrence Point 4a until air quality and water quality issues are resolved. GUAMPO, MUMPO, and SHPO did not attend the meeting. They signed the Concurrence Point 4a form on later dates ( <b>Appendix G</b> ).

### 3.2.2 OTHER AGENCY MEETINGS

Two additional noteworthy meetings took place since the Draft EIS was prepared. The first meeting was a Practical Design Workshop, which took place on August 26, 2009. Representatives from FHWA, NCDOT, NCTA, NCWRC, NCDWQ, MUMPO, GUAMPO, the City of Gastonia, and other project consultants participated in the day-long workshop. The purpose of the workshop was to identify ideas and potential measures for constructing a cost effective project within the context of the project environment that meets the transportation needs with a reasonable application of design and construction standards. The ideas developed during the workshop will be provided to potential design-build teams prior to the bidding process. The ideas are intended to springboard the innovation possibilities of the design-build teams as they develop a cost effective and context sensitive final design for the project.

The second meeting took place on March 16, 2010. Representatives from FHWA, USACE, USEPA, NCTA, NCDOT, and NCDENR (DWQ, EEP), and the project consulting team met to discuss and agree upon the mitigation approach for project impacts to jurisdictional resources. It was agreed that a Conceptual Mitigation Plan would be prepared and summarized in this Final EIS. The *Gaston East-West Connector Conceptual Mitigation Plan* (PBS&J, June 2010) is discussed in **Section 2.5.4.4**.

### 3.2.3 SELECTION OF DSA 9 AS THE LEDPA

Based on Clean Water Act Section 404(b)(1) Guidelines (40 CFR 230.10(a)), the LEDPA is the alternative that is the least damaging to aquatic resources (e.g. wetlands, streams, and other Waters of the US), so long as the alternative does not have other significant adverse environmental consequences. The regulations define practicable as “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

The evaluation of practicable alternatives must consider the impact to Waters of the US that would result from an alternative before compensatory mitigation is considered, and requires the selection of an alternative that avoids and minimizes impacts to wetlands and other waters of the US. The Section 404(b)(1) Guidelines require that the LEDPA to aquatic resources be chosen by the USACE for permitting purposes.

Based on impact evaluations, DSA 9 has been selected as the Preferred Alternative as well as the LEDPA. It is one of the three DSAs with the fewest impacts to jurisdictional resources and the one which provides the best overall balance of impacts when considering both jurisdictional and non-jurisdictional resources. DSA 9 was in the lower range of impacts to ponds, wetlands, and perennial streams, and had the fewest number of stream crossings.

Selection of the LEDPA and Preferred Alternative was discussed at TEAC meetings on August 12, September 8, and October 13, 2009. A concurrence form for Concurrence Point 3 (LEDPA), included in **Appendix G**, was signed by the FHWA, NCTA, NCDOT, USACE, USFWS, NCDWQ, NCWRC, NCDCR SHPO, GUAMPO, and MUMPO. The USEPA provided a memo (included in **Appendix G**) stating “EPA does not believe that the LEDPA is ‘ripe for concurrence’ until the Metrolina area air quality ozone issues are resolved first and avoidance and minimization can be demonstrated for Section 303(d) listed impaired waters.”

As listed in **Table 3-2**, Concurrence Point 4a (Avoidance and Minimization) also was achieved on February 16, 2010, with all parties concurring except USEPA, who officially abstained due to concerns relating to the Clean Air Act and Clean Water Act. In an email update from USEPA dated July 1, 2010 (**Appendix G**), USEPA acknowledged that their concerns related to the Clean Air Act and air conformity have been resolved. However, they still had concerns regarding the ability to provide adequate compensatory mitigation for jurisdictional impacts to Waters of the US and they had not yet received a conceptual mitigation plan as requested. The *Conceptual Mitigation Plan* (Section 2.5.4.4) was made available to USEPA on July 6, 2010. The plan demonstrates there is adequate potential compensatory mitigation available for the project.

### 3.3 SUBSTANTIVE COMMENTS ON THE DRAFT EIS AND RESPONSES

This section discusses comments received relative to the Draft EIS and selection of the Preferred Alternative. **Appendix B** includes all comments received from state and federal agencies, local governments, interest groups and organizations, and the public during the comment period for the Draft EIS ending July 21, 2009, along with individual responses to comments. An introduction included in **Appendix B** explains the organization of the appendix, and there is a table of contents for each section of the appendix.

Generally, there were approximately twice as many public comments received opposing the project compared to those supporting the project. Comments from the general public are discussed in more detail in **Section 3.3.1**. Local governments and local groups such as Gaston Regional Chamber, Montcross Area Chamber of Commerce, Gaston County Travel and Tourism Advisory Board, Gaston 2012, Gaston Together, Gaston Southeast Connector Coalition (citizen group) and the South New Hope Road Committee (citizen group), provided letters and/or adopted resolutions supporting the project and/or DSA 9 (**Appendices B2 and B3**).

Interest groups submitting letters in opposition to the project (**Appendix B3**) included Catawba Riverkeeper Foundation and the Southern Environmental Law Center. Also included in **Appendix B3** are letters from four citizens opposing the project. These letters were included in **Appendix B3** (rather than with other public comment letters in **Appendix B4**) because they were in response to the USACE public notice regarding the project (**Section 3.1.2.1**).

#### 3.3.1 SUMMARY OF COMMENTS FROM THE GENERAL PUBLIC

Comments from the general public were received via comment forms, emails, and letters, and through the verbal comment period provided at each Public Hearing (**Section 3.1.2**). Comments from the general public, and responses to each comment, are found in the following subsections of **Appendix B**:

**Appendix B4** – Public Comment Letters (17 letters (15 people))

**Appendix B5** – E-Mailed Public Comments (62 e-mails)

**Appendix B6** – Public Comment Forms (156 comment forms)

**Appendix B7** – Public Hearing Transcripts (84 speakers)

In addition to letters, emails, and comment forms, three petitions were received, as summarized below. The petitions were not reviewed for duplicate signatures or for the validity of signatures.

Due to size, the petitions are incorporated by reference into this Final EIS, and copies are available upon request by contacting the NCTA (via email to [gaston@ncturnpike.org](mailto:gaston@ncturnpike.org) or telephone (919) 571-3000).

- Over 7,000 signatures (approximate) – Opposed to the Garden Parkway – submitted by William Toole, a representative of [stopthetollroad.com](http://stopthetollroad.com)
- 275 signatures – Opposed to the Garden Parkway – submitted by the Harrison Family.
- 109 signatures – Opposed to Segment KX1 due to potential impact to Mt. Pleasant Baptist Church Cemetery– submitted by Barbara Hart. (*Segment KX1 is not a part of DSA 9, the Recommended Alternative. However, Segment K3A, which is a part of DSA 9 has the same preliminary design footprint in the area of the Mt. Pleasant Baptist Church cemetery based on the Draft EIS preliminary design. Note: As discussed in Section 2.3.1.10, the Preferred Alternative refined preliminary design would not impact gravesites in the existing or historic boundaries of the cemetery*).

Of the public comment letters received from the fifteen senders, fourteen letters are in opposition to the project and one is neutral. Of the e-mailed comments and public comment forms, approximately 29 percent expressed support for the project, approximately 50 percent expressed opposition, and approximately 21 percent did not indicate a clear position.

Listed below, in no specific order, are general issues frequently stated in the public comments received, along with a response. The *Summary – Citizens Informational Workshop Series #4 – Public Hearings for the Gaston East-West Connector* (December 2009) includes additional summaries of comments received.

- A new connection across the river is needed.
  - The project's purpose (**Section 1.1.3**) includes establishing direct access between the rapidly growing area of southeast Gaston County and western Mecklenburg County.
- DSA 9 is a reasonable choice.
  - DSA 9 was identified as the Preferred Alternative because it has lower overall impacts to the natural, physical, cultural and human environments than the other alternatives considered (**Section 2.2**).
- The road will encourage needed economic development.
  - The indirect and cumulative effects of the project, including effects on land use, were evaluated quantitatively for the Preferred Alternative, as discussed in **Section 2.5.5**.
- The project should provide sidewalks at cross streets.
  - During final design, the NCTA will work with local jurisdictions to provide sidewalks and other crossings where appropriate and that can be funded.
- Ending the project at US 321 will adversely impact traffic on this overcrowded roadway and will bring trucks through the historic York-Chester neighborhood.
  - The ultimate project would extend from I-85 west of Gastonia to I-485 in Mecklenburg County. At this time, based on available information, the NCTA is planning on initially constructing the entire length of the project, with four lanes

from I-485 to US 321, and two lanes from US 321 to I-85. The section from US 321 to I-85 would be upgraded to four lanes by 2035.

- The Garden Parkway will only benefit developers and land owners.
  - The purpose of the project is to improve east-west mobility and connectivity within southern Gaston County and between southern Gaston County and western Mecklenburg County. The mobility and travel time benefits provided by the project would benefit all types of travelers traveling within and through the project area.
- The Garden Parkway costs too much, and this money should be spent on education.
- The Garden Parkway is not the best use of taxpayer dollars.
  - Funding to construct the project will be from multiple sources over the course of several years. The majority of this project will be funded through the sale of revenue bonds, which will be repaid with the tolls collected along this roadway. A final investment grade traffic and revenue study, needed to sell bonds, will be prepared during the final design phase of the project. In addition to toll revenue bonds, the \$35 million per year appropriation from the NC General Assembly will back the sale of additional bonds. This \$35 million per year of “gap” funding is fixed unless the NC General Assembly changes the amount. Any additional needed funds will come from other sources.
- Air quality is bad in the region and this project will not help.
  - The Charlotte-Gastonia-Rock Hill air quality region is a non-attainment area for ozone, meaning the area is exceeding the National Ambient Air Quality Standards (NAAQS) for this pollutant. The North Carolina Division of Air Quality develops the State Implementation Plan (SIP) to describe how North Carolina will maintain or achieve compliance with the NAAQS in non-attainment and maintenance areas. For transportation resources, the region is evaluated as a whole for conformity with the SIP through the region’s long range transportation plans and transportation improvement programs. At this time, the Gaston Urban Area Metropolitan Planning Organization’s (MPO’s) Long Range Transportation Plan and the Mecklenburg Union MPO’s Long Range Transportation Plan have been determined to be in conformity with the State’s plans to comply with the NAAQS. USDOT made a conformity determination on the MUMPO and GUAMPO 2035 LRTPs and TIPs on May 3, 2010 and the amended 2035 LRPT and 2009-2015 TIP on October 5, 2010. The Gaston East-West Connector is included in these long range transportation plans designed to conform to the SIP. This topic is addressed in more detail in **Section 2.5.2.2**.
- The Garden Parkway will spur more development and urban sprawl. There will not be enough money to build schools and other facilities associated with development.
  - Gaston County and Mecklenburg County each prepare comprehensive land use plans to aid in determining projected population and land uses. These plans are used by local governments to help determine capital improvements needed to accommodate anticipated growth, and it is the responsibility of local government to provide services such as water, sewer, and schools to their populations. The comprehensive land use plans of both Gaston County and Mecklenburg County

include the Gaston East-West Connector. Since the Gaston East-West Connector is included in the comprehensive plans for the area, it is assumed that the project is being taken into account when planning is conducted for other services. It is not the responsibility of NCTA or FHWA to ensure that these facilities are being provided.

- This project will change the rural character of Gaston County that the residents have chosen.
  - In accordance with NCDOT procedures, a qualitative Indirect and Cumulative Effects Assessment for the Gaston East-West Connector was prepared and is summarized in Chapter 7 of the Draft EIS. The qualitative analysis concludes that all Detailed Study Alternatives (DSAs) have a "High" potential for accelerated growth and indirect land use effects in Gaston County. A more detailed quantitative indirect and cumulative effects assessment was prepared for the Preferred Alternatives and is summarized in **Section 2.5.5** of the Final EIS. The quantitative assessment provides more detail regarding potential land use changes and indirect and cumulative impacts to water quality and other notable resources with and without the proposed project.
- This road will be another Greenville, South Carolina, Toll Road.
  - Preliminary traffic and revenue studies prepared for the Gaston East-West Connector showed that the project would be viable as a toll road. Final investment grade traffic and revenue studies will be prepared prior project construction. In order to obtain the funding needed, the final investment grade study will need to demonstrate that the project would generate sufficient revenue

### 3.3.2 RESPONSES TO GENERALIZED COMMENTS

Substantive comments received relative to the Preferred Alternative selection can generally be divided into the following categories: purpose and need; travel times and traffic forecasts; range of alternatives; air quality; water quality and jurisdictional resources; indirect and cumulative effects and wildlife; cultural resources, community characteristics, and farmland. Generalized comments and their responses, by category, are found below. These comments were received from a number of sources, including environmental resource and regulatory agencies, interest groups and organizations, and citizens.

#### 3.3.2.1 Responses to Generalized Comments on Purpose and Need

**Comment:** *The project will not improve traffic flow on I-85, US 321, US 29 and US 74, and it may increase congestion in the future.*

**Response:** Traffic forecasts and operations and regional travel demand statistics are described in detail in the Draft EIS in Appendix C, Section 2.2.6.3 (Improve Existing Roadways Alternatives), and Section 2.2.7.2 (New Location Alternatives). Draft EIS Appendix C includes 2030 forecasts and operations analyses for I-85, US 321, and US 29-74.

As discussed in these sections, the Improve Existing Roadways Alternatives that include widening I-85 would achieve only minimal improvements to traffic flow on I-85. A widened I-85 (widened to 8-10 lanes) would continue to operate at LOS E and F in 2030. Most improvements to

traffic flow achieved by increasing capacity would be offset by the increase in traffic volumes attracted to the facility.

On the other hand, a New Location Alternative would reduce traffic volumes on I-85 primarily from NC 279 eastward compared to the No-Build Alternative, although levels of service would remain at LOS E or F in 2030. More importantly, however, the New Location Alternative provides an additional east-west route between Gaston and Mecklenburg Counties that would operate at LOS D or better, which is a traffic flow benefit that cannot be achieved under either the Improve Existing Roadways Alternatives or the No-Build Alternative.

Levels of service along US 29-74 west of McAdenville would primarily be a LOS D or better and fall to LOS F east of McAdenville. This would be true for both the No-Build and New Location Alternatives. Along US 321, levels of service would be similar for all options; however, the New Location Alternative may result in higher traffic volumes along US 321, south of the proposed alignment, as vehicles use US 321 to access the New Location Alternative.

In considering regional statistics, comparisons of congested vehicle miles traveled (VMT) and congested vehicle hours traveled (VHT) between the No-Build Alternative, Improve Existing Roadway Scenario 4, and New Location Alternative (Toll Scenario) are made in Table C-1 of Draft EIS Appendix C. The year 2030 congested VMT and congested VHT are highest for the Improve Existing Roadways Alternative. The New Location Alternative (Toll Scenario) and the No-Build Alternative result in about the same congested VMT and VHT, with the New Location Alternative Toll Scenario performing slightly better, even with the expanded mobility and additional roadway capacity provided by the project.

In conclusion, while existing and future deficiencies of I-85 and US 29-74 are acknowledged in the Draft EIS, improving these specific roadways are not identified as purposes for this project. The project purpose is to improve east-west transportation mobility in the area around the City of Gastonia, between Gastonia and the Charlotte metropolitan area, and particularly to establish direct access between the rapidly growing area of southeast Gaston County and western Mecklenburg County. The Draft EIS adequately demonstrates that improving I-85 or other area roadways cannot effectively meet this project purpose.

**Comment:** *The stated need to connect southern Gaston County and western Mecklenburg County is not supported by quantifiable data. The Draft EIS fails to show that an additional bridge over the Catawba River would respond to any existing mobility need south of the existing bridges.*

**Response:** The need to connect southern Gaston County and western Mecklenburg County is supported by the local land use plans and long range transportation plans and demonstrated by travel demand modeling. Appendix B of the Draft EIS shows the Gaston Urban Area MPO's (GUAMPO's) population projections for 2010, 2020 and 2030 from the 2030 Long Range Transportation Plan (LRTP). These indicate substantial increases in population in the southern half of Gaston County will occur. Mecklenburg County is projected to continue to be the economic and employment center of the region. Residential growth projected in southern Gaston County and residential and employment growth in western Mecklenburg County will continue to increase demand for improved connectivity and east-west mobility since there is a lack of east-west routes in southern Gaston County and a lack of connections to Mecklenburg County.

**Comment:** *NCTA cannot reconcile its mandate to build specific toll road projects with federal law. Rather than identifying an underlying purpose that the project might fulfill, the Draft EIS restates the specific project design that meets the NCTA's mandate to build the Garden Parkway*

toll road. The resulting project purpose is too narrow to support consideration of the reasonable range of alternatives required by NEPA.

**Response:** The project purpose is stated in Section 1.3 of the Draft EIS: “The purpose of the proposed action is to improve east-west transportation mobility in the area around the City of Gastonia, between Gastonia and the Charlotte metropolitan area, and particularly to establish direct access between the rapidly growing area of southeast Gaston County and western Mecklenburg County.”

Criteria used in the alternatives evaluation to determine whether a particular alternative concept would meet the project purpose are listed in Section 2.2.1 of the Draft EIS:

- Reduce travel distance and/or travel times between representative origin/destination points within southern Gaston County and between southern Gaston County and Mecklenburg County.
- Provide a transportation facility that would operate at acceptable levels of service (generally LOS D or better on the mainline) in the design year 2030 for travel between Gaston and Mecklenburg County.
- Reduce congested vehicle miles traveled and/or congested vehicle hours traveled in Gaston County compared to the No-Build Alternative in 2030.

This project purpose does not include any statements that the purpose of the project is to construct a toll facility.

A variety of alternatives could meet the criteria stated above. In accordance with Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14) and FHWA guidance and regulations (FHWA Technical Advisory T6640.8A, 1987 and 23 CFR 771.123), a reasonable range of alternatives, including non-toll alternatives, were evaluated in Chapter 2 of the Draft EIS as well as the *Addendum to the Final Alternatives Development and Analysis Report* (October 2008) and eliminated for a variety of reasons, as documented in that chapter.

### 3.3.2.2 Responses to Generalized Comments on Traffic and Travel Times

**Comment:** *The Draft EIS traffic projections predict that the new toll highway would cause further traffic congestion on much of I-85 and US 29/74. The Draft EIS presents inflated estimates of traffic volumes in the project area which make the need for the connector seem greater than it is. There appears to be little to no change in travel time savings from most of Gaston County and the project study area.*

**Response:** This response is divided into three sections: traffic congestion, traffic volumes, and travel times.

**Traffic Congestion.** In response to the first comment, please refer to the first comment/response under Responses to Generalized Comments on Purpose and Need.

**Traffic Volumes.** The comment regarding inflated traffic volumes in the project area refers to volumes reported for the existing year 2006 in the Draft EIS as compared to traffic counts prepared by the North Carolina Department

*Travel time savings in 2030 realized by constructing the proposed project compared to the No-Build Alternative would be substantial for many specific origin/destination pairs, and the project also would have a positive effect on overall average travel times for trips throughout the project study area.*

of Transportation Planning Branch's Traffic Survey Group. The commenters state that the traffic volumes reported for I-85, US 321, and US 29-74 in the Draft EIS are greater than actual counts for the years 2006 and 2007.

The traffic forecast methodologies and results used in developing the purpose and need and alternatives as summarized in the Draft EIS are documented in the *Traffic Forecasting for Toll Alternatives Report* (August 2008). The project forecasts were prepared using a travel demand model, and in accordance with all FHWA and NCDOT standards (NCDOT *Project Level Traffic Forecasting Administrative Procedures Handbook*, 2007). Generally, travel demand models are used for simulating current travel conditions and forecasting future travel patterns and conditions. Travel demand modeling is a function of socioeconomic conditions such as residential densities, locations of jobs and services, and trip lengths and distributions for the various types of trip purposes.

All scenarios discussed in the Draft EIS were forecasted from the same base model. The NCTA consultants who conducted the traffic forecasts did so utilizing the official Metrolina Regional Travel Demand Model (MRM), version 6.0, current at the time the traffic forecasts began. The MRM is used for all traffic forecasts for projects within the 13-county region surrounding Charlotte. The base year of this version of the MRM is 2000, with horizon years of 2010, 2020, and 2030. The MRM was calibrated based on observed traffic counts from 2000. It was adopted by MUMPO, GUAMPO, Cabarrus-Rowan MPO (CRMPO), NCDOT, and FHWA after results showed that it met all FHWA calibration and validation standards.

The MRM was used to forecast traffic for the project's base year of 2006 and the 2030 design year. The traffic operations analysis used these values. The traffic operations analysis levels of service for existing (2006) and 2030 no-build conditions reported in Section 1.6.2 of the Draft EIS are documented in the *Final Traffic Operations Technical Memorandum for I-85, I-485, US 29-74, and US 321 Under Various Scenarios – Gaston East-West Connector* (PBS&J, September 2008). These levels of service were calculated using methodologies and models consistent with NCDOT standards (*NCDOT Congestion Management Capacity Analysis Guidelines*).

The MRM, the traffic forecasts developed based on the MRM, and the traffic operations analysis are consistent with NCDOT and FHWA standards and are the best available tools and methods for evaluating and comparing traffic conditions for the project area. Additional details are provided below.

Traffic forecasts for the Preferred Alternative were updated to 2035 for the Final EIS. As discussed in **Section 2.3.5.1**, the updated 2035 traffic forecast for the Preferred Alternative is documented in the *Gaston East West Connector Updated Traffic Forecast and Preliminary Design Traffic Capacity Analysis for the Preferred Alternative* (HNTB, May 2010). The 2035 forecasts used a more recent version of the MRM (Version 6.1.1), which incorporated updated socio-economic data and a base year of 2005. The 2035 forecast volumes along the Gaston East-West Connector are projected to be higher than the previously forecasted 2030 Toll scenario volumes. Generally, traffic volumes on the modeled network are higher in the 2035 forecast year compared to the 2030 forecast year. Updating the existing conditions information and 2030 no-build traffic operations analysis reported in Chapter 1 of the Draft EIS was not necessary for making decisions regarding the proposed project. Forecasts and levels of service for individual roadway segments for 2006 and 2030 might be different when estimated using the later version of the MRM. But overall, the important conclusion that traffic growth is expected to continue in the region and

congestion would occur on area roadways in the future, especially I-85, did not change with updates to the MRM.

Regarding the 2006 forecast traffic volumes presented in the Draft EIS, these volumes were interpolated from the 2000 base year MRM model and the 2030 no-build MRM model. A large amount of growth is projected to occur in Gaston County, particularly in the later horizon years of the Long Range Transportation Plan (LRTP). Since the travel demand model was calibrated to year 2000 traffic volumes, it can be expected that actual counts for any given subsequent year will vary at some locations. A comparison of the model's 2006 results (Existing Conditions scenario) with actual 2006 annualized average daily traffic counts along I-85 show that there is reasonably good correlation between the modeled and measured 2006 values for most of the study area. In areas where there are notable differences, measured volumes are lower by about 7 percent or less west of Exit 26 (Belmont Mount Holly Road), and lower by about 10-11 percent east of Exit 26. A review of multiple years of NCDOT traffic counts along I-85 show that between 2000 and 2006, traffic counts along segments can increase or decrease from year to year and can change at non-constant rates. For example, traffic counts along I-85 from Exit 27 to Exit 29 were 104,000 AADT in 2003, 103,000 AADT in 2004 (a change of -0.9 percent), and 120,000 AADT in 2005 (a change of 16.5 percent). The model may have projected more robust growth rates for the period 2000-2010 than what had actually occurred up to 2006, resulting in lower actual traffic counts for that particular year compared to forecasted values.

Keeping in mind that the regional approved MRM was calibrated based on known traffic volumes in the year 2000 none of the differences in 2006 modeled volumes compared to 2006 counted volumes would invalidate the project studies or year 2030 forecasts. It could be expected that variations in economic and other conditions and swings in growth rates would normalize over the course of the 30-year forecast. The majority of the analyses reported in the Draft EIS, in particular those used to compare alternatives, were based on the 2030 forecasts (based on approved forecasts of socioeconomic data), not the 2006 forecasts, and are reasonable values to use in the planning process. Year 2006 traffic information was included in the Draft EIS to document existing conditions and the changes predicted to occur by the horizon year. It is noted that in the case of the Gaston East-West Connector, the roadway that would experience the most influence from the presence of the toll facility is I-85, and the year 2006 forecasts and 2006 counts correlate well along I-85 throughout the study area.

The measure of congestion used in the Draft EIS is level of service. The level of service (LOS) is a "qualitative measure describing operational conditions within a traffic stream" (Transportation Research Board 2000:2-2). The analysis was performed in accordance with *NCDOT Congestion Management Capacity Analysis Guidelines* using the North Carolina Level of Service (NCLOS) software, Version 1.3. The NCLOS software provides an overall level of service, representative of general peak hour conditions. The LOS thresholds (density/speed) for each facility type are based on *Highway Capacity Manual 2000* (Transportation Research Board Special Report 209) methodology, the accepted national standard. The software and method were appropriate for the type of analysis and information needed for making decisions regarding the proposed project. The analysis is documented in *Final Traffic Operations Technical Memorandum for I-85, I-485, US 29-74, and US 321 Under Various Scenarios – Gaston East-West Connector* (PBS&J, September 2008).

The traffic operations analysis uses a number of assumptions and estimates, including the traffic forecasts and estimates of directional distribution, peak hour percentage of daily traffic, and

percentages of trucks. An individual driver's experience on any particular day at any particular peak hour will vary depending on the day and hour. These individual events and experiences may or may not appear to correlate with the predicted measures of general congestion along a route calculated using the accepted methods described above. Also, it should be noted that even if a roadway segment such as the segment of I-85 from Exit 26 to Exit 27 is already calculated to be operating at LOS F during the peak period, it is still possible for that roadway to carry more vehicles, the likely result being that congestion may worsen during the peak periods and/or the peak periods get longer.

*Travel Times.* Regarding travel times, two types of travel times are reported in the Draft EIS. One is the origin and destination travel time estimate, reported in the Draft EIS in Section C.2 of Appendix C. The other type is an average change in travel time, and this is discussed in Section 7.5.1 of the Draft EIS. Both are different outputs from the approved Metrolina Regional Travel Demand Model that were used to forecast traffic for the proposed project.

The origin/destination travel time savings estimates are comparisons between the No-Build Alternative for the year 2030 and the New Location Alternative (Toll Scenario) for the year 2030. These travel times would not necessarily correlate to travel times experienced today. As shown in Table C-4 in Appendix C of the Draft EIS, travel time savings under the New Location Alternative for trips within Gaston County are greatest (8-9 minutes) for trips starting and ending in southern Gaston County, reflecting the increased mobility the proposed project would provide within southern Gaston County. For trips between southern Gaston County and western Mecklenburg County, the travel time savings would be greater, ranging from 9-28 minutes depending on origin and destination (Table C-5 in Appendix C of the Draft EIS). These time savings are representative of these specific trips. Travel times of other trips within the project study area may vary.

The second type of travel time reported is described in Section 7.5.1 of the Draft EIS. This travel time (an output from the Metrolina Regional Travel Demand Model) is an overall travel savings experienced by ALL trips in a particular traffic analysis zone (TAZ), whether those trips actually use the proposed project or not. Since this reported value includes many types of trips (through trips, local trips, trips that use the proposed project, trips that do not use the project, home-to-work trips, home-to-shopping trips, etc.), it would not be expected to show such dramatic savings as specific origin/destination pairs. These calculations of average travel time savings provide a basis for assessing the overall effect of the project on travel times in each TAZ and help to show locations that would experience increase mobility. They do not represent travel time savings for specific origin/destination pairs and would be expected to be smaller values. Results from this type of analysis show that average travel time savings would be greatest for areas immediately surrounding the project in Gaston and Mecklenburg Counties.

*What is a Traffic Analysis Zone (TAZ)?*

*A TAZ is a delineated area used for tabulating traffic-related data often corresponding to US Census tract and block group boundaries. The boundaries typically follow physical features such as streets, rivers, or canals and are updated as part of the decennial census.*

In conclusion, the travel time savings in 2030 realized by constructing the proposed project compared to the No-Build Alternative would be substantial for many specific origin/destination pairs, and the project also would have a positive effect on overall average travel times for trips throughout the project study area.

### 3.3.2.3 Responses to Generalized Comments on Range of Alternatives

**Comment:** *The Draft EIS disregards the TSM and Mass Transit Alternatives and did not provide a full range of reasonable alternatives. Objectives could be reached by improvements to I-85 (including widening and HOT lanes), interim TSM approaches to US 29 and US 74, and other combinations of transportation improvements. The Draft EIS does not address how a combination of alternatives might be able to meet purpose and need. The Draft EIS did not consider improvements to the area's transit and freight rail facilities as an alternative.*

**Response:** In accordance with 40 CFR 1502.14(a), agencies are required to: "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated". The Draft EIS (Section 2.2) evaluated the full range of reasonable alternatives as required by 40 CFR 1502.14(a) and 23 CFR 771.123(c), and as suggested by FHWA Technical Advisory T66430.8.A (October 1987) when considering improvements to the transportation system. The Draft EIS discusses TSM and Mass Transit Alternatives in Draft EIS Sections 2.2.3 and 2.2.5, respectively. Combination alternatives also are addressed in Section 2.2.5.

*The Draft EIS (Section 2.2) evaluated a range of reasonable alternatives as required by 23 CFR 771.123(c) and as suggested by FHWA Technical Advisory T66430.8.A (October 1987) when considering improvements to the transportation system.*

None of these alternatives were determined to meet the project's purpose and need. TSM and TDM alternatives were eliminated because they would not noticeably improve mobility, access, or connectivity within southern Gaston County, nor between southern Gaston County and western Mecklenburg County. The Mass Transit Alternative, using expanded bus service on existing roadways or expanded rail service on the existing rail line near I-85, was eliminated from further study because it would not establish direct connectivity within southern Gaston County or between southern Gaston County and western Mecklenburg County.

The Mass Transit Alternative, including bus rapid transit or light rail on new alignment, could provide connectivity within southern Gaston County and between southern Gaston County and west Mecklenburg County and provide shorter travel times or distances for the transit users. However, the Mass Transit Alternative on new alignment would carry a much lower volume of trips than a new highway facility and would be ill-suited to the dispersed low-density land uses in southern Gaston County (resulting in even less trips). The resulting lower volume of trips accommodated would not noticeably reduce vehicle miles traveled and/or congested vehicle hours traveled in Gaston County compared to the No-Build Alternative.

The ability of Improve Existing Roadway Alternatives to meet the project purpose and need are addressed in the Draft EIS Section 2.2.6. See also the first comment under Responses to Generalized Comments on Purpose and Need in **Section 3.3.2.1** of this Final EIS.

The environmental resource and regulatory agencies and the public were afforded opportunities to review and provide input throughout the alternatives development and screening analysis process. All environmental resource and regulatory agencies participating in the Turnpike Environmental Agency Coordination (TEAC) meetings signed a concurrence form in October 2008 concurring on three points: the Purpose and Need (Concurrence Point 1), the Detailed Study Alternatives to be carried forward in the Draft EIS (Concurrence Point 2), and the Bridging and

Alignment Decisions (Concurrence Point 2a). This concurrence form is included in Appendix A-1 in the Draft EIS.

Recent work by NCDOT on the Piedmont and Northern Railway corridor, which is a rail corridor north of I-85, was mentioned in a comment. The Piedmont and Northern Railway corridor is located in Gaston and Mecklenburg Counties. At this time, the corridor in Gaston County is inactive. Portions of the corridor in Mecklenburg County are active, except for the Cedar Yard terminus near uptown Charlotte, which is inactive. The corridor is approximately 16 miles long. It begins in downtown Gastonia and runs north of I-85 through Ranlo, Lowell, and Mount Holly. It crosses the Catawba River just south of the NC 27 crossing of the river. The corridor then swings south to end at South Cedar Street, just east of I-77. There is a spur that runs south from the corridor and ties into downtown Belmont. The NCDOT acquired the inactive Piedmont and Northern mainline corridor in 1991.

There has been some interest in reactivating this line for short line freight service. Section 26.1 of Session Law 2008-191 (House Bill 2431) directed NCDOT to study the Piedmont and Northern Railway line in Gaston County to determine the cost to bring the full line into operation. The resulting report to the Joint Legislative Transportation Oversight Committee: *Cost to Reactivate Piedmont and Northern Rail Line* (January 15, 2009) (available for download at [www.bytrain.org/quicklinks/reports/P&N\\_Report\\_15Jan08.pdf](http://www.bytrain.org/quicklinks/reports/P&N_Report_15Jan08.pdf)) describes the improvements that would need to be made to the rail line and corridor in order to provide freight service and also possible future passenger rail service. At this time, “freight service is anticipated only on the 11.6 mile segments from Mount Holly to Gastonia and the northernmost 1.5 miles of the Belmont Spur” as documented in *Cost to Reactivate Piedmont and Northern Rail Line* (January 15, 2009).

Following the report to the legislature, a federal Categorical Exclusion (CE) for reactivation of the Piedmont and Northern Railroad Corridor for freight service was signed by FHWA on July 9, 2009. The proposed action identified in the CE is reactivation of freight rail service between Mount Holly and Gastonia and along the Belmont Spur to the north of Belmont/Mount Holly Road (SR 2093). The CE states: “At the time of this document, there are no plans in the foreseeable future to implement passenger rail service on any portion of the corridor. Passenger service would be covered under a separate document process if determined feasible.”

Future passenger service on the Piedmont and Northern Rail corridor could provide additional transportation options between Gaston County and Mecklenburg County and could benefit the region’s transportation network, but it would not meet the Gaston East-West Connector purpose and need for the reasons listed for the Mass Transit Alternative in Section 2.2.5.1 of the Draft EIS. It would not improve mobility within southern Gaston County because it is located north of I-85. It would not improve connectivity between southern Gaston County and western Mecklenburg County because the Piedmont and Northern Rail corridor crosses the Catawba River in the north half of Gaston County, in Mount Holly, just south of NC 27. It also would not reduce congested vehicle miles or congested vehicle hours traveled in Gaston County because it is not anticipated to attract enough trips to make a noticeable difference in traffic volumes on area roadways.

**Comment:** *The Draft EIS should have studied ending the project at US 321 if that is an interim phase.*

**Response:** The proposed project is included in the 2030 LRTP for the GUAMPO area as starting at I-85 and continuing eastward to the Mecklenburg County line. The GUAMPO

includes this entire proposed project as a toll facility in its 2035 LRTP. US 321 was announced by the NCTA as a potential interim western project terminus during discussions with the public and local officials about funding. Like many large roadway projects in North Carolina, the Gaston East-West Connector would need to be constructed and funded in phases. US 321 was identified as a potential interim terminus based on information available at the time regarding project costs, potential available funding, and traffic forecasts. The highest travel demand is projected along the eastern segments of the proposed project. The ultimate project extends from I-485 in Mecklenburg County to I-85 west of Gastonia, and this is the project NCTA intends to construct as soon as financing can be obtained. Based on currently available information, NCTA is planning on initially constructing the entire length of the project in the first phase, with four lanes from I-485 to US 321 and two lanes from US 321 to I-85. The section from US 321 to I-85 would be upgraded to four lanes by 2035

*The ultimate project extends from I-485 in Mecklenburg County to I-85 west of Gastonia, and this is the project NCTA intends to eventually construct as soon as financing can be obtained.*

**Comment:** *The decision to study only toll alternatives in the EIS is not consistent with the CEQ regulations at 40 CFR 1502.14(a) and (c). The EIS might have also considered a comparison with a freeway.*

**Response:** The regulations at 40 CFR 1502.14(a) and (c) are:

In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.

Alternatives for the project were rigorously explored and evaluated, as documented in the *Addendum to the Final Alternatives Development and Evaluation Report for the Gaston East-West Connector* (October 2008) and summarized in Chapter 2 of the Draft EIS. A Mass Transit Alternative, which would not be within the jurisdiction of the FHWA, NCDOT, nor NCTA, was included in the evaluation. Environmental resource and regulatory agencies signed a concurrence form in October 2008 concurring with the Detailed Study Alternatives identified for the project.

The current NCDOT 2009 – 2015 *State Transportation Improvement Program* (STIP) includes the project as a toll facility, and traditional (non-toll) transportation funding for this project is not likely in the foreseeable future. GUAMPO, as part of the metropolitan planning process, has decided to allocate the limited available federal and state funds to other projects. In September of 2000, the GUAMPO TAC passed a resolution stating that it supports the use of alternative funding methods, including payment by toll.

Based on preliminary traffic and revenue forecasts, the NCTA determined that the Gaston East-West Connector is financially feasible with the collection of tolls. Using tolls, the NCTA can provide the funding and construct the project many years earlier than with traditional funding sources. Using tolls as the funding mechanism for construction and maintenance allows needed capacity to be added when budget shortfalls would otherwise prevent or delay completion of critical projects.

### 3.3.2.4 Responses to Generalized Comments on Air Quality

**Comment:** *Prior to issuance of the Final EIS and ROD, NCTA should demonstrate that the new location project will be included in an approved SIP and will be in conformity.*

**Response:** The 2035 LRTPs for GUAMPO and MUMPO include the proposed project as a toll facility. USDOT made a conformity determination on the LRTPs and TIPs on May 3, 2010. A copy of this letter, along with USEPA's April 22, 2010 review, can be found in **Appendix K** of this Final EIS.

However, there were still two inconsistencies between the Preferred Alternative and the project included in the GUAMPO 2035 LRTP. The GUAMPO 2035 LRTP included an interchange at Bud Wilson Road, and there were different assumptions for the year 2015 configuration (**Section 2.5.2.2**). The Bud Wilson Road interchange has been eliminated from the Preferred Alternative (**Section 2.3.1.6**). Current plans are for the Preferred Alternative in 2015 to be constructed as a four-lane facility from I-485 to US 321 and as an interim two-lane facility from US 321 to I-85. The remaining two lanes for the segment from US 321 to I-85 would be constructed by 2035.

After the May 3, 2010 conformity determination made by the USDOT, the GUAMPO prepared an amendment to the 2035 LRTP and 2009-2015 TIP so that the project design concept and scope included in the LRTP and TIP is consistent with the Preferred Alternative. GUAMPO made a conformity determination on the amended 2035 LRTP and 2009-2015 TIP on August 24, 2010. USDOT issued a conformity determination on the amendments on October 5, 2010. A copy of the USDOT letter is included in **Appendix K** of this Final EIS.

**Comment:** *The Draft EIS does not address quantitative air quality impacts as they relate to Mobile Source Air Toxics (MSATs). The Draft EIS does not offer any mitigation measures to address the project's impact on air quality, specifically concerning MSAT emissions exposures at schools, hospitals, parks, etc.*

**Response:** The MSAT analysis was conducted in accordance with the Federal Highway Administration *Interim Guidance on Air Toxic Analysis in NEPA Documents* (February 3, 2006). The interim guidance establishes three levels of review:

- No analysis for projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

Projects requiring a quantitative analysis include projects that have the potential for meaningful differences among project alternatives. To fall into this category, projects must:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the annual average daily traffic volumes (AADT) are projected to be in the range of 140,000 to 150,000, or greater, by the design year; and also

- Be proposed to be located in proximity to populated areas, or in rural areas in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

The project would not qualify as requiring a quantitative analysis because it would not significantly alter a major intermodal facility, nor would the AADT be in the range of 140,000 to 150,000.

Updated guidance was published by the FHWA on September 30, 2009. This updated guidance is summarized in **Section 1.3.2.2** and **Appendix D** of this Final EIS. The updated guidance did not change the criteria used to determine the level of MSAT analysis needed.

The overall approach applied in the MSAT guidance characterizes the trend in MSAT emissions and the difference in MSAT emissions between alternatives, but does not attempt to characterize health risks or microscale impacts, due to the uncertainty associated with available analysis tools. In late 2007, the US District Court in the Southern District of Maryland upheld this approach in ruling on a challenge to the Inter-County Connector project, stating that “the Defendants’ methodology was reasonable and should be upheld...Defendant’s failure to consider Plaintiffs’ approach to the health effects analysis, which could be ascertained, if at all, only through uncertain modeling techniques, did not preclude informed decision-making under NEPA.”

**Comment:** *The EIS should address greenhouse gas emissions.*

**Response:** On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under Section 202(a) of the Clean Air Act ([www.epa.gov/climatechange/endorsement.html](http://www.epa.gov/climatechange/endorsement.html)):

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA’s proposed greenhouse gas emission standards for light-duty vehicles ([www.epa.gov/oms/climate/regulations.htm](http://www.epa.gov/oms/climate/regulations.htm)), which were jointly proposed by EPA and the Department of Transportation’s National Highway Safety Administration on September 15, 2009.

FHWA does not believe it is informative at this point to consider greenhouse gas (GHG) emissions in a Draft EIS for an individual road construction project, such as the Gaston East-West Connector. The climate impacts of greenhouse gas emissions are global in nature. Analyzing how alternatives evaluated in a project-level Draft EIS might vary in their relatively small contribution to a global

*The climate impacts of greenhouse gas emissions are global in nature. Analyzing how alternatives evaluated in a project-level Draft EIS might vary in their relatively small contribution to a global problem will not better inform decisions.*

problem will not better inform decisions. Further, due to the interactions between elements of the transportation system as a whole, emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concludes that greenhouse gas emissions cannot usefully be evaluated in this Draft EIS in the same way that other vehicle emissions are addressed.

FHWA is actively engaged in many other activities with the DOT Center for Climate Change to develop strategies to reduce transportation's contribution to GHGs—particularly CO<sub>2</sub> emissions—and to assess the risks to transportation systems and services from climate change. FHWA will continue to pursue these efforts as productive steps to address this important issue. FHWA will review and update its approach to climate change at both the project and policy level as more information emerges and as policies and legal requirements evolve.

Lastly, it is important to note that while the Gaston East-West Connector project will provide new road capacity, the new capacity will be priced (tolled), which serves as a demand management tool in addition to providing needed project financing. The traffic forecasting for this project shows that the Gaston East-West Connector project would result in some increases in both vehicle-miles traveled (VMT) and vehicle-hours traveled (VHT) within the project study area.

NEPA does not require analyses that will not provide useful information to the decision maker (See Pub. Citizen, 541 US at 767 (agencies are to “determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision-making process”). FHWA concludes that carbon dioxide emissions cannot usefully be evaluated in this EIS in the same way that other vehicle emissions are addressed. The proposed project's increase in VMT does not necessarily correlate with an increase in GHG emissions because many factors will affect the amount of GHG emissions that may result from the project, such as increased speeds, improved vehicle fuel economy, and the use of cleaner fuels. Moreover, many of the factors affecting the amount of GHG emission potentially attributable to the project are outside the control of FHWA, thereby making an analysis of global climate change speculative at the project level. NEPA does not require analysis of impacts that are highly speculative. (Deukmejian v. Nuclear Regulatory Commission, 751 F.2d 1287, 1300 & n.63 (DC Cir 1984), vacated on other grounds, 760 F.2d 1320 (DC Cir. 1985) (EIS need not address “remote and highly speculative consequences”); see MooreFORCE, Inc. v. US Dept of Transportation, 243 F. Supp. 2d 425, 439 (MDNC 2003) (stating that an EIS need not “consider potential effects that are highly speculative or indefinite”).

### 3.3.2.5 Responses to Generalized Comments on Water Quality and Jurisdictional Resources

**Comment:** *Concerns were expressed about sediment and erosion impacts that could result from this project. Erosion control measures should adhere to the Design Standards in Sensitive Watersheds. The possible effects of storm water runoff associated with this project could negatively affect the project area.*

**Response:** As discussed in Draft EIS Section 6.2.4, an erosion and sedimentation plan will be developed for the Preferred Alternative prior to construction in accordance with all applicable regulations and guidance. The FHWA and NCTA will work with the permitting agencies to determine the appropriate best management practices to implement for the project.

A quantitative indirect and cumulative effects (ICE) analysis also was prepared for the Preferred Alternative, and the land use analysis results are reported in Final EIS Section 2.5.5. The quantitative ICE analysis also addresses water quality issues.

**Comment:** *Concerns about the amount of mitigation needed and that it will not be available in the area; every effort should be made to further avoid and minimize impacts to streams and wetlands and to provide on-site mitigation. Mitigation should focus on improving degraded streams in the area. A conceptual mitigation plan should be provided in the Final EIS, with information about on-site mitigation opportunities.*

**Response:** The FHWA and NCTA intend to use the NC Ecosystem Enhancement Program (EEP) for most project mitigation needs. Over the past several years, NCTA has been coordinating with EEP regarding this project and projected mitigation needs. A conceptual mitigation plan is summarized in the Final EIS in Section 2.5.4.4. The *Gaston East-West Connector Conceptual Mitigation Plan* (PBS&J, June 2010) addresses both off-site mitigation through EEP and potential on-site mitigation.

**Comment:** *Direct impacts to existing 303(d) listed impaired streams and other waters at risk from further degradation have not been fully addressed from the standpoint of avoidance and minimization (e.g. right of way and median widths, shoulder widths, etc.).*

**Response:** As stated in the *Section 6002 Coordination Plan for the Gaston East-West Connector Project*, this study, to the extent possible, will follow the environmental review process consistent with the requirements for “Projects on New Location” as described in the Section 404/NEPA Merger 01 Process Information. The Merger process requires Concurrence Point 4a (avoidance and minimization) be achieved after Concurrence Point 3 (identification of LEDPA).

As discussed in Final EIS Section 2.3.3, a number of design refinements were made to the Preferred Alternative. These refinements include reducing the median width, compressing and eliminating interchanges, and realignments. The refined design result in an approximately 25 percent reduction in stream impacts (2.36 miles), an approximately 6 percent reduction in wetland impacts (0.4 acre), a slight increase in impacts to ponds (0.4 acre), and a slight decrease in Catawba River buffer impacts. Agreement on Concurrence Point 4a was achieved at the February 16, 2010 Turnpike Environmental Agency Coordination (TEAC) Meeting. Appendix G includes the Concurrence Point 4a form.

### 3.3.2.6 Responses to Generalized Comments on Indirect and Cumulative Effects and Wildlife

**Comment:** *The Draft EIS has no specific discussion of mitigation for indirect and cumulative impacts. There are no quantitative data presented in the Draft EIS concerning potential ICE to wetlands, streams, water quality and wildlife habitat. A quantitative ICE analysis should be prepared for the Preferred Alternative. The Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality should be consulted when developing mitigation measures.*

**Response:** In accordance with NCDOT procedure, a qualitative *Indirect and Cumulative Effects Assessment* (Louis Berger Group, Inc., March 2009) was completed and included in the Draft EIS. Several comments on the Draft EIS requested that a quantitative indirect and cumulative effects assessment be performed.

The *Gaston East-West Connector Quantitative Indirect and Cumulative Effects Analysis* (Louis Berger Group, Inc., August 2010) was prepared for the Preferred Alternative, and is summarized in **Section 2.5.5** of this Final EIS. Prior to commencement of this study, scoping with the environmental resource and regulatory agencies was conducted to ensure the study approach and scope met the expectations of the agencies.

The quantitative analysis discusses mitigation measures. It should be noted that FHWA and NCTA would not have any authority over most types of mitigation measures that could be effective at minimizing indirect/cumulative impacts, such as local land use controls and ordinances. However, as stated in NEPA's Forty Most Asked Questions, prepared by CEQ:

*Question 19b. How should an EIS treat the subject of available mitigation measures that are (1) **outside the jurisdiction** of the lead or cooperating agencies, or (2) **unlikely** to be adopted or enforced by the responsible agency?*

*A. All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies. Sections 1502.16(h), 1505.2(c). This will serve to [46 FR 18032] alert agencies or officials who can implement these extra measures, and will encourage them to do so. Because the EIS is the most comprehensive environmental document, it is an ideal vehicle in which to lay out not only the full range of environmental impacts but also the full spectrum of appropriate mitigation.*

*However, to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed. Thus the EIS and the Record of Decision should indicate the likelihood that such measures will be adopted or enforced by the responsible agencies. Sections 1502.16(h), 1505.2. If there is a history of nonenforcement or opposition to such measures, the EIS and Record of Decision should acknowledge such opposition or nonenforcement. If the necessary mitigation measures will not be ready for a long period of time, this fact, of course, should also be recognized.*

NCTA can encourage local governments to adopt regulations and land use plans that would help protect significant natural resources, but FHWA and NCTA lack any enforcement authority to ensure their adoption or adherence.

Provisions regarding FHWA's legal responsibility and authority for mitigating project impacts are found in FHWA's Environmental Impact and Related Procedures 23 CFR 771.105(d):

*Measures necessary to mitigate adverse impacts will be incorporated into the action and are eligible for Federal funding when the Administration determines that:*

- 1. The impacts for which the mitigation is proposed actually result from the Administrative action; and*
- 2. The proposed mitigation represents a reasonable public expenditure after considering the impacts of the action and the benefits of the proposed mitigation measures. In making this determination, the Administration will consider, among other factors, the extent to which the proposed measures would assist in complying with a Federal statute, Executive Order, or Administration regulation or policy.*

Furthermore, as stated in the FHWA Position Paper: Secondary and Cumulative Impact Assessment in the Highway Project Development Process:

*After the analysis is complete a valid question will remain: If a proposed highway improvement is determined to cause potential secondary and cumulative effects, what can and should be done to mitigate the adverse impacts? This is a difficult question for which there are no simple solutions. Consistent with existing FHWA regulations mitigation proposals must be both reasonable and related to project impacts. However, the opportunities for environmental enhancement that are now available under the highway program may greatly expand our traditional view of mitigation. Changing a proposed transportation improvement to lessen its contribution of indirect impacts may likely result from a combination of mitigation and enhancement measures that address area-wide concerns, not just the immediate influence of the project. Unfortunately, measures that would be appropriate to offset most future developmental impacts in the area of a project often will be beyond the control and funding authority of the highway program. In these situations, the best approach would be to work with local agencies that can influence future growth and promote the benefits of controls that incorporate environmental protection into all planned development.*

**Comment:** *Negative impacts to terrestrial resources and wildlife, including fragmentation of terrestrial habitat, are a significant concern.*

**Response:** The *Gaston East-West Connector Quantitative Indirect and Cumulative Effects Analysis* (Louis Berger Group, Inc., August 2010) summarized in **Section 2.5.5** of this Final EIS discusses wildlife habitat fragmentation.

### **3.3.2.7 Responses to Generalized Comments on Cultural Resources, Community Characteristics, and Farmland**

**Comment:** *The Draft EIS missed the subject of historic Stowesville, Stowes Factory, Gaither Mill, Stowesville Cemetery, and the old Methodist church.*

**Response:** Draft EIS Section 5.3.1.2 discusses the Stowesville site. Additional archaeological research was conducted for this site and related sites as part of the *Gaston East-West Connector Intensive Archaeological Survey* prepared for the Preferred Alternative (Coastal Carolina Research, February 2010). The results of this intensive survey are summarized in Final EIS **Section 2.5.3.2**. Site 31GS0377/377\*\* is the location of the Stowe's Cotton Factory/Gaither's Mill complex, which dates to the mid-nineteenth century. Site 31GS0365/365\*\* appears to be the community of mill workers which grew up around the cotton factory (Site 31GS0337/337\*\*). Neither site was determined to be eligible for listing on the National Register of Historic Places.

**Comment:** *Environmental justice (EJ) populations would receive a higher percent of impact from the new facility in terms of air quality and noise impacts, but would not necessarily receive a proportionate benefit from the project due to potential toll costs.*

**Response:** Environmental justice issues are discussed in Section 3.2.5 of the Draft EIS. As stated in Section 3.2.5 of the Draft EIS, any of the Gaston East-West Connector DSAs would provide a new, limited-access, east-west route in the region. Completing the project would benefit all motorists, including low-income motorists who may choose not to use the toll facility or may tend to use it less frequently.

All travelers would still have the same access to the major existing roadways in the study area, including I-85, US 29-74, and US 321. If travelers choose to use existing routes, their travel distance would remain the same as it is today. Travel times may be slightly better on existing

roadways with the Preferred Alternative since overall, as discussed in Appendix C of the Draft EIS, congested vehicle hours traveled and congested vehicle miles traveled in Gaston County are expected to be less in 2030 with the proposed project in place compared to the No-Build Alternative.

Minorities comprise approximately 21 percent of the Demographic Study Area. Although the Preferred Alternative has one of the highest percentages of minority relocations (approximately 28 percent of the 344 relocations) it has neither the highest nor lowest total number of relocations (all DSAs ranged from 326 to 384 residences). DSA 9 was selected as the Preferred Alternative based upon the balance of impacts to human, natural, cultural, and environmental resources, as discussed in detail in **Section 2.2**.

The difference in percent minorities relocated compared to the Demographic Study Area minority population as a whole is not disproportionate. As discussed in Section 3.2.5.2 of the Draft EIS, many of the estimated minority relocations occur where the Preferred Alternative passes through an area of single family subdivisions along Shannon Bradley Road that have predominantly African-American residents (Matthews Acres and Spring Valley). The Preferred Alternative preliminary design, and the design of other DSAs that use the same corridor in this area (DSAs 4 and 5), was developed to minimize relocation impacts to the extent practicable.

Minority and low-income populations would not receive a disproportionate level of noise impacts. As discussed below, the percentages of residential receptors predicted to be impacted by project-related traffic noise that are estimated to be minority or low-income are approximately the same as the percentages of minority populations and low-income populations within the Demographic Study Area as a whole. Therefore, there would be no disproportionately high and adverse noise effects to these populations.

The following method was used to estimate the approximate percentage of minority populations and low-income populations that could be impacted by increases in traffic noise levels with implementation of the Preferred Alternative. The total numbers of noise-impacted receptors along each Preferred Alternative corridor segment (based on the 2035 noise contours shown in **Appendix J**) was multiplied by the percent of minority population or percent population in poverty of the segment's corresponding census block group. For example: Segment H2A (I-85 to US 29-74) has 46 noise-impacted receptors, and its corresponding Census Tract 318 Block Group 1 is approximately 70 percent minority. Therefore, it was estimated that approximately 32 of the 46 noise-impacted receptors in this area are minority. Applying this method to the entire length of the Preferred Alternative, it is estimated that approximately 55 noise-impacted receptors may be minority. Total numbers of potentially noise-impacted residences are estimated to be approximately 279 (**Table 2-7**). Therefore, approximately 20 percent of the residences predicted to be impacted by noise are minority. The Demographic Study Area as a whole (Figure 3-1 in Draft EIS) is approximately 21 percent minority (Section 3.2.1 in the Draft EIS).

The same method was used to estimate the numbers of low-income residences predicted to be impacted by noise. Low-income was defined as persons living in poverty. Approximately 27 noise-impacted receptors along the Preferred Alternative are estimated to be living in poverty, which is approximately 10 percent of the total number of noise-impacted receptors. The Demographic Study Area as a whole includes approximately 10 percent of the population living in poverty (Table 7 in the Gaston East-West Connector Community Characteristics Report, PBS&J, November 2007).

Many of the noise-impacted receptors would experience lower predicted noise levels through construction of noise barriers. Preliminary analyses shows noise barriers may be reasonable at eleven locations along the Preferred Alternative, as described in **Section 2.5.2.1** and shown in **Figure 2-4a-b**. These noise barriers include Noise Barrier 1-1, located along the east side of the Preferred Alternative at Spring Valley.

Air quality impacts from the Preferred Alternative are discussed in **Section 2.5.2.2**. On a regional basis, the Preferred Alternative is included in long range transportation plans found to be in conformity with the State Implementation Plan, which is the document that describes how North Carolina will maintain or achieve compliance with the National Ambient Air Quality Standards in non-attainment and maintenance areas. On a local basis, similar to potential traffic noise impacts, populations nearest the Preferred Alternative would have the highest potential to be affected by localized air quality impacts such as mobile source air toxics; and the same conclusions can be reached regarding general consideration of air quality effects. Which are, there would not be disproportionate air quality effects to minority populations or low-income populations because these populations do not comprise a disproportionate number of residents located in proximity to the Preferred Alternative.

**Comment:** *The Draft EIS does not offer any potential avoidance and minimization measures to potentially reduce impacts to farmlands. Concerns about the availability of replacement property for farms that need to be relocated*

**Response:** The locations of farms and voluntary agricultural districts (VADs) were incorporated into the development of the preliminary new location corridors, and these areas were avoided where possible, taking into consideration other resources in the area. No other mitigation is required.

The relocation reports prepared for the proposed project indicate replacement property for farms is available and can be found in Appendix F of the Draft EIS.