

ADMINISTRATIVE ACTION

**I-26 CONNECTOR
I-40 TO US-19-23-70 NORTH OF ASHEVILLE
BUNCOMBE COUNTY, ASHEVILLE, NORTH CAROLINA**

**FEDERAL AID PROJECT NO: MA-NHF-26-1(53)
STATE PROJECT NO: 34165.1.1
TIP No: I-2513**

DRAFT ENVIRONMENTAL IMPACT STATEMENT

VOLUME 1 OF 2

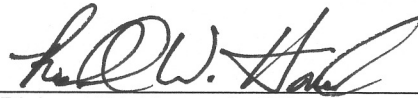
**U.S. Department of Transportation
Federal Highway Administration
and
North Carolina Department of Transportation**

Submitted Pursuant to the National Environmental Policy Act 42 U.S.C. 4332(2)(c)

Cooperating Agencies:

U.S. Army Corps of Engineers

10/13/2015
Date of Approval



Richard W. Hancock, PE
Manager
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation

10-13-15
Date of Approval



John F. Sullivan, III, P.E.
Division Administrator
Federal Highway Administration*

The following persons may be contacted for additional information concerning this document:

John F. Sullivan, III, P.E.
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, NC 27601-1418
(919) 856-4346 ext. 122

Richard W. Hancock, PE
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548
(919) 707-6000

The documented needs for the transportation project in Buncombe County are presented in the report. The existing conditions of the study area are described and the alternatives are assessed in terms of environmental impacts, compatibility with local planning goals, relative cost-effectiveness and public opinion.

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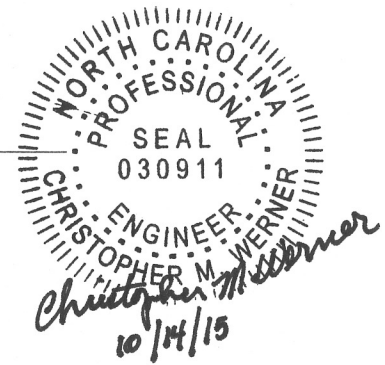
Prepared by:

URS Corporation – North Carolina

10/14/15 

Date Jeffrey C. Weisner, AICP
Project Manager

10/14/15 
Date Christopher M. Werner, P.E.
Project Engineer



For the:
North Carolina Department of Transportation

10/13/15 
Date Derrick Weaver, P.E.
Consultant Engineering Unit Head

10-13-2015 
Date Michael Wray, P.E.
Project Manager

Project Commitments

- Construction authorization will not be requested until Endangered Species Act compliance is satisfied for the northern long-eared bat.
- NCDOT will manage invasive plant species on the Department's right-of-way, as appropriate.

Summary

Federal Highway Administration

Administrative Action: Draft Environmental Impact Statement (DEIS).

The content of this DEIS conforms to the requirements of the Council on Environmental Quality (CEQ) guidelines, which provide direction regarding implementation of the procedural provisions of the National Environmental Policy Act of 1969 (NEPA) and the Federal Highway Administration (FHWA) *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (USDOT/FHWA 1987).

The North Carolina Department of Transportation (NCDOT) and FHWA are the lead agencies for the proposed project.

Contacts

The following individuals may be contacted for additional information regarding the DEIS:

Federal Highway Administration

John F. Sullivan, III, P.E.
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, NC 27601-1418
(919) 856-4346 ext. 122

North Carolina Department of Transportation

Richard W. Hancock, PE
Environmental Director
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548
(919) 707-6000

Overview

The process of completing a DEIS helps FHWA, NCDOT, and regulatory agencies make an informed decision on the selection of a preferred alternative. It assists them in developing alternatives that will meet the objectives of the project, analyzing the pros and cons of each alternative, and selecting a preferred alternative. It is also a means of informing the public regarding how and why decisions were made.

For this project, the first step in the DEIS process was developing a Purpose and Need statement describing why the project is necessary and what objectives the project would meet or accomplish. This established a method for developing preliminary alternatives that were evaluated in the DEIS. During this process, NCDOT considered and evaluated alternatives developed in previous planning studies, as well as alternatives that were determined to be technically and economically feasible and met the Purpose and Need. In addition, a No-Build Alternative was included in the analysis as a baseline to measure the other alternatives against;

the No-Build Alternative is considered a viable alternative throughout the DEIS process. The focus of the DEIS is providing an in-depth analysis of potential impacts from the project.

In March 2008, a DEIS was completed for the I-26 Connector project (the subject of this DEIS), which has since been rescinded by FHWA and NCDOT and is referred to throughout this document as the “Rescinded 2008 DEIS.” Following the public hearing held for the Rescinded 2008 DEIS in September 2008, NCDOT, in coordination with FHWA, determined that a new alternative (Section B – Alternative 4-B) should be added to the suite of alternatives being considered for this project; in conjunction with this change, one of the existing alternatives (Section B – Alternative 2) would be eliminated from the suite of alternatives being considered. NCDOT also developed a new alternative for Section B, Alternative 3-C, with a smaller footprint and connection farther to the south of US 19-23-70. This alternative would generate fewer environmental impacts than Alternative 3 as well as avoid impacts to the Emma Road Community. Due to the addition of Alternative 4-B and the elimination of Section B – Alternative 2, as well as the refinement of many of the technical studies supporting the DEIS, FHWA and NCDOT determined that it was necessary to completely rescind the 2008 DEIS and prepare a new DEIS to incorporate the most current information available into a single document.

Within the framework of the DEIS development, the selection of the preferred alternative is often a complicated process. The preferred alternative must meet the Purpose and Need and comply with federal and state laws and regulations. These include the Threatened and Endangered Species Act, Clean Water Act, Clean Air Act, National Historic Preservation Act, Section 4(f) of the US Department of Transportation Act, and various other federal, state, and local laws and regulations, which are referenced throughout this document. Project decision makers, which include FHWA and NCDOT, also consider potential impacts to the social, physical, and natural environments and input received from regulatory agencies and the public.

The results of the alternatives analysis contained in this DEIS are being made available to regulatory agencies and the public for comments and feedback. No decision will be made on a preferred alternative until after the public hearing and comment period. All comments received will be considered in the selection of the preferred alternative.

The following summary provides a synopsis of the information presented in the body of the DEIS and is meant to convey a brief summary of general information about the project. For a more detailed description of the elements of the study, please refer to the information presented in the body of the DEIS. At the end of this summary, Tables S-1 and S-2 present a quantitative summary of the project impacts.

Purpose and Need

What is the I-26 Connector project?

The I-26 Connector project is an interstate freeway project that would connect I-26 in southwestern Asheville to US 19-23-70 in northwest Asheville and have a total length of approximately 7 miles. The I-26 Connector would extend I-26 from I-40 to US 19-23-70 and would allow for the eventual designation of I-26 from Charleston, South Carolina, to Johnson City, Tennessee, once a remaining section from the north end of this project to Mars Hill, North Carolina, is completed. The I-26 Connector would upgrade and widen I-240 from I-40 to Patton Avenue and then cross the French Broad River as a new freeway to US 19-23-70 slightly south of the Broadway interchange.

Why is the I-26 Connector needed?

The project is needed to address traffic capacity problems along the existing I-240 corridor (future I-26), across the Captain Jeff Bowen Bridges to US 19-23-70. Presently numerous areas do not meet interstate design standards and cannot be designated I-26 without being improved. The project would improve traffic flow, address the substandard roadway features, and provide an interstate roadway through West Asheville for the I-26 Corridor.

What is the history of the I-26 Connector?

The I-26 Connector was first studied as part of the Asheville Urban Area Corridor Preservation Pilot Project from 1989 to 1995. A preferred corridor was identified in the *Phase I Environmental Analysis – Asheville Urban Area* report. Since 1995, the NCDOT Project Development and Environmental Analysis Branch has been working with the community and conducting detailed studies for the project.

In 2000, NCDOT held the Project Educational Forum and the Project Design Forum, which added the I-26/I-40/I-240 interchange to the project and included several new alternatives for the area around the Captain Jeff Bowen Bridges. A DEIS was released in March 2008, and a public hearing was held on September 16, 2008. Due to several changes in the project alternatives and the technical studies for the project, the 2008 DEIS was rescinded and replaced by this DEIS.

How will traffic operate if the project is not built?

Traffic operations are evaluated using a “Level of Service” rating ranging from A (best) to F (worst). Federal law (Title 23 U.S.C. §109(b)) and regulation (23 C.F.R. §625.4(a)) require this project to accommodate the types and volumes of traffic anticipated for such project for the 20-year period commencing on the date of approval of the plans, specifications, and estimates for construction of such project. For urban areas, FHWA has adopted through regulation, a Level of Service (LOS) D requirement for interstates in urban areas. The roadways in the study area are broken into segments and intersections and analyzed. In 2007, 11 of the 80 freeway elements were operating at an unacceptable LOS of E or F, and 3 of 14 signalized intersections were operating at an unacceptable LOS of E or F. If no improvements are made, in 2033, 41 of the 80 freeway elements will operate at an unacceptable LOS of E or F, and 4 of 14 signalized intersections will operate at an unacceptable LOS of E or F.

What are the existing safety problems along the corridor?

To evaluate safety along the corridor, the roadways were broken into 11 segments and crash data were analyzed to determine whether the crash rates exceeded the statewide average for similar facilities or whether they exceeded the critical crash rate. This allows identification of segments that have statistically significant crash rates that may denote a safety deficiency. Three of the 11 segments exceeded the statewide average and the critical crash rate. Based on an analysis of the types of crashes for the segments that exceeded the critical crash rate, it is apparent that rear-end collisions due to vehicles being stopped or slowed down make up the majority of the accidents.

What are the roadway deficiencies along the existing corridor?

The existing route that is currently serving I-26 traffic has numerous design deficiencies that do not meet current standards. The corridor was evaluated based on 19 design criteria and 24 locations were shown to have at least one substandard element; 14 of these locations had multiple deficiencies.

The most common deficiency in the existing corridor is substandard horizontal clearance, including locations where bridge widths are inadequate. Of the 24 locations with roadway deficiencies, 12 locations are due to bridge width and horizontal clearance deficiencies; for an additional 7 locations, bridge width or horizontal clearance is a contributing factor.

Geometric deficiencies can be found at 12 locations. Geometric deficiencies occur where there are inadequate speed change lanes, substandard horizontal or vertical alignment, low vertical clearance at structures, left-hand entrances or exits, and interchanges that do not provide for all movements.

Other existing deficiencies include undesirable cross-section elements such as vertical curbs and narrow roadway shoulders in five locations, three locations with deficient stopping sight distance, and one location with a break in the control of access. Table 1-6 provides a complete summary of the existing deficiencies and the sites where they are located.

Alternatives

What are the different sections of the project?

The project is broken into three separate sections. The first section, Section C, was added after the Project Design Forum in 2000 and includes the area around the I-26/I-40/I-240 interchange. Section A of the project is the widening and improvements along I-240 from slightly north of the I-26/I-40/I-240 interchange to slightly south of Patton Avenue. Section B of the project is from slightly south of the Patton Avenue interchange to US 19-23-70 near the Broadway interchange and includes a new roadway and bridges across the French Broad River.

What alternatives are being considered for the I-26 Connector?

NEPA requires that a full range of alternatives be considered for this project. Five general types of alternatives were considered and were evaluated to determine whether they could meet the stated Purpose and Need. The No-Build Alternative assumes that the study area would evolve as currently planned, but without constructing the I-26 Connector project. The Transportation Systems Management Alternatives would coordinate the individual elements of the transportation system to achieve the maximum efficiency, productivity, and utility of the existing system while minimizing cost and inconvenience to motorists. It could include improving signal timing and coordination, minor realigning of intersections, and adding turning lanes. The Travel Demand Management Alternatives would improve the efficiency of the transportation by reducing travel demand rather than increasing the capacity of the roadway. Measures such as ridesharing, flexible work schedules, telecommuting, bicycling, and walking are often used. The Mass Transit Alternatives would provide high-capacity, energy-efficient transportation through the use of bus or passenger rail facilities. The build alternatives would include construction of transportation facilities to improve the traffic operations of the transportation system.

What alternatives were examined and eliminated from further consideration?

Following the evaluation of the preliminary alternatives, the No-Build, Transportation Systems Management, Travel Demand Management, and Mass Transit Alternatives were determined to not be reasonable because they would not meet the Purpose and Need for the project. The No-Build Alternative must be carried forward under NEPA to allow for a basis of comparison of the detailed study alternatives. Therefore, the only type of alternative that would meet the Purpose and Need would be the construction of a Build Alternative. FHWA has adopted by regulation a LOS D or better for traffic operations in urban areas. In order to provide the required number of lanes along this section to meet capacity demands and to meet the FHWA regulation, a detailed traffic capacity analysis was performed. As detailed in Section 2.5.2.2, the build alternatives for the project would require eight basic freeway lanes on I-26/I-240, from I-40 to US 19-23-74A (Patton Avenue) and six basic freeway lanes on I-26, from US 19-23-74A (Patton Avenue) to US 19-23-70 to meet the capacity need presented in the Purpose and Need for the proposed project. The alternative evaluation considered numerous build alternatives, and several were eliminated from further consideration due to either not meeting the Purpose and Need for the project or not being feasible from an engineering standpoint.

What alternatives were selected for detailed study and why?

Following the evaluation of the preliminary alternatives, four build alternatives in Section C, one Build Alternative in Section A, and four build alternatives in Section B were selected as detailed study alternatives. The following is a brief description of each of the alternatives carried forward as detailed study alternatives.

Section C – Alternative A-2: Alternative A-2 would include upgrading the I-26/I-40/I-240 interchange to a four-level interchange with four high-speed flyover ramps for the left turn movements. Alternative A-2 would include improvements to the US 19-23-74A (Smoky Park Highway) interchange and also upgrade the Brevard Road interchange on I-40 by replacing the loop in the southeast quadrant of the interchange with a ramp in the southwest quadrant. The westbound direction of I-40, between Brevard Road and I-26/I-240, would include a parallel roadway that would allow for traffic exiting and entering the freeway to make the movements away from the main through traffic along I-40. In the eastbound direction of I-40, the exit ramp to Brevard Road would be bridged over the entrance ramp from I-26/I-40. Traffic from I-26/I-240 would not be allowed to exit to Brevard Road along I-40.

Section C – Alternative C-2: Alternative C-2 would also provide a four-level interchange at I-26/I-40/I-240, similar to Alternative A-2; however, two of the four flyover ramps would be converted to loops. Alternative C-2 would include minor improvements to the US 19-23-74A (Smoky Park Highway) interchange and also upgrade the Brevard Road interchange along I-40, with the general configuration remaining the same as the existing interchange. Both the eastbound and westbound direction of I-40, between Brevard Road and I-26/I-240, would include a parallel roadway that would allow for traffic exiting and entering the freeway to make the movements away from the main through traffic along I-40.

Section C – Alternative D-1: Alternative D-1 would be similar to both Alternatives A-2 and C-2 but would include three high-speed flyover ramps and one loop for the left turn movements at the I-26/I-40/I-240 interchange. Alternative D-1 would include minor improvements to the US 19-23-74A (Smoky Park Highway) interchange and also upgrade the Brevard Road interchange on I-40 by converting it to an interchange with ramps in all four quadrants. The

eastbound and westbound direction of I-40, between Brevard Road and I-26/I-240, would include the ramps connecting to I-40 being bridged over the ramps from I-40.

Section C – Alternative F-1: Alternative F-1 would maintain the existing two-level interchange configuration of the I-26/I-40/I-240 interchange and provide the two missing movements. Alternative F-1 would upgrade the existing interchange by providing additional through lanes and would provide a new loop from I-240 westbound to I-40 eastbound and a ramp from I-40 westbound to I-240 eastbound. Alternative F-1 would include minor improvements to the US 19-23-74A (Smoky Park Highway) interchange. A portion of the Brevard Road interchange along I-40 would be upgraded, with the general configuration remaining the same as the existing interchange. Due to the increased distance between the interchanges, no special features are needed to alleviate the traffic operations problems with weaving vehicles.

Section A – I-240 Widening Alternative: The I-240 Widening Alternative would include expanding the existing I-240 four-lane roadway to an eight-lane roadway with interchanges at Brevard Road, Amboy Road, and Haywood Road. During the traffic capacity analysis for this project, this section was also analyzed as a six-lane roadway. However, the roadway segments operated at a LOS of E or F as a six-lane roadway. FHWA has adopted by regulation a LOS D or better in urban areas, this roadway was determined to require eight lanes. The most substantial change in the configuration of Section A would be the extension of Amboy Road across I-240 to Brevard Road, opposite Shelburne Road. The Amboy Road extension would provide for all traffic movements, which would be an upgrade from the existing interchange. The interchange at Brevard Road would include ramps in all quadrants except the northeast quadrant. Traffic destined for Brevard Road from I-240 westbound/I-26 eastbound would exit at the Amboy Road exit and use the Amboy Road extension to Brevard Road. The interchange at Haywood Road would be similar to the existing configuration, with a few minor changes. The exit ramp from I-240 eastbound to Hanover Street would be eliminated and the ramp would connect directly to Haywood Road. In addition, the short segment of the I-240 eastbound entrance ramp that allows traffic in both directions would be eliminated.

Section B – Alternative 3: Alternative 3 would begin slightly south of Patton Avenue and extend I-26 to the north, while I-240 would remain along its existing path across the Captain Jeff Bowen Bridges. A new service road on the north side of Patton Avenue would be constructed that would provide access to Westgate Shopping Center, Regent Park Boulevard, and Resort Drive and include ramps to and from I-26. North of Patton Avenue, I-26 would run northward and cross over the Blue Ridge Southern Railroad and Emma Drive, before turning to the northeast and crossing the French Broad River. I-26 would connect to existing US 19-23-70 on the east side of the French Broad River, approximately one-half mile south of the Broadway interchange. The Patton Avenue/I-240/US 19-23-70 interchange on the east side of the French Broad River would not be modified under Alternative 3.

Section B – Alternative 3-C: Alternative 3-C is almost identical in configuration and design to Alternative 3 with the exception of the new alignment location for the I-26 freeway after the I-240 split. The Alternative 3-C alignment would turn east instead of going north and would cross the French Broad River on two bridge structures approximately 2,500 feet north of the Captain Jeff Bowen Bridges before connecting with US 19-23-70.

Section B – Alternative 4: Alternative 4 would also begin slightly south of Patton Avenue and would extend I-26 along a similar path as Alternative 3, crossing the French Broad River and connecting to US 19-23-70 approximately one-half mile south of the Broadway interchange. The major difference in Alternative 4 is that it would separate local and I-240 traffic across the

Captain Jeff Bowen Bridges by rerouting I-240 to the north along a pair of new flyover bridges. Alternative 4 includes a standard interchange configuration at Patton Avenue, with ramps in all four quadrants, on the west side of the French Broad River. Ramps on the north side would include a pair of ramps that connect Patton Avenue to both I-240 and I-26. On the east side of the French Broad River, the Patton Avenue/I-240/US 19-23-70 interchange would be modified to allow I-240 to curve to the north and include a partial interchange that connects to Patton Avenue. For Alternative 4, Patton Avenue would become a local street and the Captain Jeff Bowen Bridges would be converted from an interstate freeway to a local street crossing.

Section B – Alternative 4-B: Alternative 4-B is similar to Alternative 4 by separating the local and I-240 traffic across the Captain Jeff Bowen Bridges. However, Alternative 4-B would strive to minimize the footprint of the design and include I-26 turning to the east and crossing the French Broad River approximately one-half mile north of the existing Captain Jeff Bowen Bridges. Alternative 4-B would be identical to Alternative 4 in the vicinity of the Patton Avenue/I-240/US 19-23-70 interchange and include flyover ramps for I-240 that are similar to those in Alternative 4. The interchange configuration at Patton Avenue would be slightly different for Alternative 4-B, with a loop in the southwest quadrant that connects to Patton Avenue opposite Regent Park Boulevard. The I-26 crossing would be shifted farther to the south and result in a more compact interchange on the east side of the French Broad River. I-26 would follow the existing alignment of US 19-23-70 for a longer distance along the edge of the Montford Neighborhood through the Broadway interchange. As with Alternative 4, Alternative 4-B would allow Patton Avenue to become a local street and the Captain Jeff Bowen Bridges would be converted from an interstate freeway to a local street crossing.

How many lanes would be included for the I-26 Connector?

The design standards for interstate facilities require that the design must accommodate the traffic volumes for at least 20 years from the time the project begins construction. Therefore, the minimum number of lanes required to accommodate the projected traffic volumes were evaluated for each section of the project. The I-26 Connector would include eight through travel lanes (four in each direction) for the section from I-40 to Patton Avenue (where it is combined with I-240) and six through travel lanes (three in each direction) from Patton Avenue to Broadway.

How would traffic operate for each of the alternatives once the I-26 Connector is constructed?

All the detailed study alternatives were designed to accommodate the projected 2033 traffic volumes at a LOS of D or better within the limits of construction for the proposed project.

Would there be any roadway deficiencies after the project is completed?

Each of the alternatives was designed to meet the 13 controlling criteria defined by FHWA for approval of the interstate designation for I-26. Several of the alternatives would include design features that are not preferred, but are acceptable for inclusion as an interstate route. In addition, several of the alternatives would not address some of the roadway deficiencies that are beyond the limits of construction and were not essential to the I-26 Connector project. The substandard elements not included within the construction of the I-26 Connector project could be addressed as part of another project in the future.

How much would each alternative cost?

The cost for each of the alternatives includes the cost to construct the roadway, purchase the right-of-way for the roadway, and relocate utilities. The total cost for each of the alternatives is as follows:

Section C – Alternative A-2:	\$314,900,000
Section C – Alternative C-2:	\$294,100,000
Section C – Alternative D-1:	\$299,200,000
Section C – Alternative F-1:	\$222,500,000
Section A – I-240 Widening Alternative:	\$138,500,000
Section B – Alternative 3:	\$236,100,000
Section B – Alternative 3-C:	\$230,700,000
Section B – Alternative 4:	\$304,700,000
Section B – Alternative 4-B:	\$332,000,000

Affected Environment and Environmental Consequences

Community Effects

How would the project impact community facilities and services?

Both Carrier Park, which is located partially within the Direct Community Impact Area, and the French Broad River Greenway, which will eventually link Carrier Park with Hominy Creek River Park, would be directly affected by the project. The NCDOT project team is coordinating with City of Asheville officials to minimize effects. To the greatest extent possible, efforts to avoid and minimize impacts to these resources were applied during preliminary design of the project alternatives, and these efforts will continue throughout the subsequent project development phases of the project.

While no schools would be displaced by any alternatives of any sections of the project, it is anticipated that temporary impacts and changes in access would result for the Isaac Dickson School located on Hill Street as a result of Alternatives 4 and 4-B. In addition, the existing driveway that connects to the I-240 eastbound entrance ramp at Haywood Road in Section A would be eliminated, requiring access modifications to the Asheville City Schools Preschool.

The EIS Relocation Reports indicate that Community Baptist Church in the Burton Street Community would be displaced as a result of Section A. The Christian Church of Hope in the Emma Road Community would be displaced for Section B – Alternatives 3 and 4.

The First Church of God at 20 Hanover Street south of Haywood Road may be affected, but not relocated by the project. Widening existing I-240 and modifying the exit ramp to Haywood Road may change the existing access to the First Church of God due to the closure of Hanover Street at Haywood Road.

How would the project affect neighborhoods and community cohesion?

Several communities located within the study area show signs of cohesion and several communities have strong neighborhood bonds. Overall, the proposed project is not anticipated to result in substantial negative effects to the cohesiveness of the overall study area. The effects to communities within the study area were evaluated in detail, with the effects to each

community being rated based on a scale that included high benefit, moderate benefit, low benefit, neutral affect, low burden, moderate burden, and high burden. The analysis shows that for Section C of the project, Alternative D-1 would have the least effect on the Clairmont Crest Mobile Home Park and the Willow Lake Mobile Home Park located in proximity to the I-26/I-40/I-240 interchange. In Section A of the proposed project, the three communities located south of US 19-23 Business (Haywood Road) would have an overall effect of neutral or low burden. For the two neighborhoods in Section A that are located north of Haywood Road (Burton Street Community and Westwood Place Community), the evaluation was completed for the overall neighborhood and included the combination of Section A with the effects of the four alternatives being considered in Section B.

For the alternatives in Section B (including the entirety of the Burton Street Community and the Westwood Place Community), the alternatives that would provide the most benefits to the communities would be Alternatives 4 and 4-B, with one community rated a moderate benefit and two rated as low benefit, while Alternatives 3 and 3-C would have no communities rated as having a benefit. Both Alternatives 4 and 4-B would include two communities with an overall effect of moderate burden, while Alternatives 3 and 3-C would have one community rated as a moderate burden.

How would the project affect concentrations of low income or minority populations?

The effects on low-income and minority populations were evaluated based on the effects included above, combined with the identification of communities that had high concentrations of low-income or minority populations. Based on the evaluation, the project study team determined that for any community with an overall effect of moderate or high burden, the project would potentially have a disproportionately high and adverse effect on a protected low-income or minority community. Therefore, to make a conclusion on Environmental Justice, it is recommended that additional public outreach occur for any protected population that would incur a moderate or high burden as a result of the proposed project. Based on this method, it is recommended that the following communities receive additional public outreach and evaluation in order to determine whether the project would result in a disproportionately high and adverse effect on a protected population:

- Burton Street Community (Section A and Section B – Alternatives 3 and 3-C)
- Houston/Courtland Community (Section B – Alternatives 4 and 4-B)

Would the project be consistent with local and regional plans?

There are over 20 local and regional plans that include recommendations for areas within the project study area. Based on an evaluation of these plans, the following denotes, in general, how consistent each alternative would be with the local and regional plans.

- Section C – All Alternatives: Consistent with 14 plans and mostly consistent with 5 plans.
- Section A: Consistent with 14 plans, mostly consistent with 4 plans, and inconsistent with 1 plan.
- Section B – Alternative 3 and 3-C: Consistent with 14 plans, mostly consistent with 1 plan, partially consistent with 2 plans, and inconsistent with 7 plans.
- Section B – Alternatives 4 and 4-B: Consistent with 16 plans, mostly consistent with 4 plans, partially consistent with 2 plans, and inconsistent with 1 plan.

The purpose of the project does not require that the alternatives considered meet the recommendations of the local plans; therefore, the consistency with these plans will be used as an evaluation measure to compare each alternative and will be taken into consideration when a preferred alternative is selected by the project team.

How would the project affect bicycle and pedestrian transportation?

In general, the I-26 Connector project would improve both bicycle and pedestrian mobility within the study area through the inclusion of bicycle lanes and sidewalks on many of the cross street roadways affected by the project. The project is generally consistent with the local pedestrian, bicycle, and greenway plans. NCDOT policies prescribe that certain pedestrian improvements require partial funding by and formal requests from the local governments; therefore, until a preferred alternative is selected, it cannot be definitively determined what elements will be included in the final design of the project. All four of the alternatives in Section C and the single alternative in Section A would either provide the improvements recommended in the local multimodal plans or could be modified to include the elements at the request of the City of Asheville. Section B would also either provide or have the ability to provide the recommended improvements for most of the recommended multimodal elements.

Would the project require relocating any houses, businesses, or cemeteries?

The project would require the relocation of houses and businesses to construct the improvements being made for each alternative. The project would not affect any cemeteries within the study area. In Section C, Alternatives C-2 and F-1 would have the least number of relocations with 32 residential relocations for Alternative C-2 and 31 residential relocations for Alternative F-1. Alternative D-1 would require 38 residences and 7 businesses be relocated, while Alternative A-2 would require the most relocations with 50 residences and 6 businesses. The single alternative in Section A is estimated to require the relocation of 81 residences and 17 businesses. In Section B, Alternative 3-C would require the fewest overall number of relocations, with 23 residences and 33 businesses. Alternative 3 would require 34 residential relocations and 24 business relocations. Alternative 4 would require 46 residential relocations and 24 business relocations, while Alternative 4-B would require that 33 residences and 34 businesses be relocated.

How would the existing business community be affected?

Because the project is not diverting traffic away from the existing highway corridor, it is not likely that there would be any negative long-term effects on retail sales as a result of the proposed project. Approximately half of the business relocations would be considered retail establishments and would result in a loss of retail sales if they were unable to be relocated. It is likely that some negative effects on retail sales may occur during the construction of the proposed project; however, it is not likely that the project would result in substantial effect on the retail sales in the area of the proposed project. In addition, the proposed project does not substantially alter the existing access to and from the freeway and is not likely to lead to any large commercial developments outside of the central business district; therefore, it is not likely to have a substantial adverse effect on established business districts.

Cultural Resource Effects

Would historic resources be affected?

The study area includes 16 historic resources that are either on the National Register of Historic Places or eligible for inclusion on the register. Based on consultation with the State Historic Preservation Office, the historic resources are evaluated in accordance with Section 106 of the National Historic Preservation Act and the effects on the property are determined based on the magnitude of the effect on the property. Three classifications are included in the evaluation: “no effect,” “no adverse effect,” and “adverse effect.” The project would have “no effect” on all alternatives for six of the historic resources. Six additional properties were determined to have “no adverse effect” for all alternatives being considered. Section B – Alternatives 3 and 3-C would have “no effect” for the Montford Area Historic District and “no adverse effect” for Alternative 4, but would have an “adverse effect” for Alternative 4-B. The Montford Hills Historic District would have a “no adverse effect” for Alternative 4-B and “no effect” for Alternatives 3, 3-C, and 4. The Montford Hills/Hibriten Drive Boundary Expansion would have “no adverse effect” for Alternatives 3, 3-C, and 4 and “no effect” for Alternative 4-B. West Asheville/Aycock School Historic District would have an “adverse effect” in Section A.

Would archaeological resources be affected?

The study area includes four archaeological sites that have been determined to be eligible for the National Register of Historic Places and an additional seven sites that would require additional evaluation to determine whether they are eligible. The project would potentially affect several of the archaeological sites, and additional evaluation will occur once a preferred alternative is determined.

Natural Resource Effects

How would biotic resources be affected?

Biotic resources are the terrestrial and aquatic communities and wildlife within the study area. Three terrestrial communities were identified within the study area for the proposed project: Mesic Mixed Forests, Alluvial Hardwood Forests, and Maintained/Disturbed. In Section C, Alternative F-1 would have the lowest impact to these communities, while Alternatives A-2 would have the largest impact. In Section B, Alternative 3-C would have the lowest impact to the these terrestrial communities, while Alternative 4 would have the highest impact. Fragmentation and loss of wildlife habitat would be an unavoidable consequence of all the detailed study alternatives. However, the proposed project is not expected to result in adverse impacts to wildlife due to the existing urbanized nature of the project study area. Impacts to water resources in the project study area may result from activities associated with the construction of any of the detailed study alternatives. Temporary construction impacts due to erosion and sedimentation would be minimized through implementation of a stringent erosion control schedule and the use of BMPs. Long-term impacts to streams along the eventually selected corridor would be limited to stream reaches within the road facility footprint only. Impacts to stream reaches adjacent to the facility footprint would be temporary and localized during construction. Long-term impacts to adjacent reaches resulting from construction are expected to be negligible.

How would water quality be affected?

The project is not expected to have a significant effect on drainage patterns or groundwater, but would increase the amount of impervious surface due to the expanded roadway. The effects on surface water would likely be proportional to the increase in impervious surface and dependent on how feasible it would be to provide mitigation to improve the water quality. In Section C, Alternative F-1 would have the smallest percent increase in impervious area, while Alternatives C-2 would include the largest percent increase. Section A of the proposed project would include a 75 percent increase in impervious surface. In Section B, Alternative 4 would have the smallest percent increase in impervious surface area, while Alternative 3 would have the largest percent increase in impervious surface area. Given the minimal indirect effects of the project, any contribution of the project to cumulative effects resulting from current and planned development patterns should be minimal. For these reasons, potential indirect and cumulative effects to downstream water quality should be minimal.

What impacts would occur to waters under the jurisdiction of the United States Army Corps of Engineers?

The U.S. Army Corps of Engineers has jurisdiction over wetlands and streams within the study area, and any impacts to these resources would need to be mitigated. In Section C, Alternative F-1 would have the lowest impact on wetlands and streams. Alternative C-2 would have the second lowest impact on wetlands, while Alternative A-2 would have the greatest impact on wetlands and streams. In Section A, 0.01 acre of wetland and 798 linear feet of streams would be impacted. In Section B, Alternatives 3-C and 4-B would impact 0.11 acre and 0.10 acre of wetlands, respectively, while Alternative 3-C would have the second highest impact on streams. Alternative 3 would have the highest impact on both wetlands and streams.

Would habitat used by threatened and endangered species be affected?

Buncombe County has 13 species that are protected under the provisions of Section 7 of the Endangered Species Act. Of the 13 species listed for Buncombe County, only 6 of the species have habitat present within the study area. It was determined that the biological conclusion for the Appalachian Elktoe and Tan Riffleshell would be “may affect, not likely to adversely affect.” The biological conclusion for 10 threatened or endangered species was that the project would have “no effect.” The biological conclusion for the Gray bat and the Northern long-eared bat would be “unresolved.” Screening and subsequent surveys will be the responsibility of the NCDOT Biological Surveys Group.

Physical Characteristic Effects***How would traffic noise levels change?***

The existing noise levels in the study area range from approximately 35 to 78 decibels (dBA). A residential receiver is considered impacted under the noise abatement criteria when the noise level is 66 dBA or greater. Noise level increases less than 3 dBA are barely perceptible to the human ear; for increases of 5 dBA, there is a readily perceptible change; while a 10 dBA increase would be perceived as being twice as loud. In 2033, the noise levels in the study area are projected to increase by 0 to 15 dBA in Section C over the existing levels without noise walls in place. The 2033 noise levels in Section A are projected to increase by 0 to 11 dBA in Section A over the existing levels without noise walls in place. For Section B, the 2033 noise levels are projected to increase by 0 to 23 dBA over existing levels without noise walls in place. 2033 was

used as the future year for the traffic noise analysis since it was also the future year for the traffic forecast and traffic capacity analysis. When the travel demand model was updated after the traffic forecast was finalized in 2010, a study was performed to compare the potential future year traffic volumes based on the different models, since the updated model used a future year of 2040. This study showed that the changes in traffic volumes would not be substantial enough to warrant a new traffic forecast, which also means that the noise levels would not change substantially with future year 2040 traffic volumes.

Would the project include noise walls?

The noise study completed for the project has determined that several noise walls would be reasonable and feasible and are recommended for inclusion in the design of the project. Section C would include one recommended noise wall (for all alternatives), while Section A would include recommendations for noise walls along both sides of the freeway from north of Amboy Road to slightly south of Patton Avenue (including portions of all of the Section B alternatives). The alternatives in Section B include recommended noise walls in various locations depending on the alternative selected. Additional public involvement will occur to determine whether the noise walls will be constructed at each of the locations where they are recommended.

How would the project affect air quality?

Buncombe County has been designated as either an attainment area or unclassified for the seven pollutants that are monitored by the Clean Air Act. The proposed project would not result in any locations where carbon monoxide levels would exceed the standards and it is not likely that the project would have a negative effect on air quality within the region.

How would the visual quality be changed?

Visual quality within the study area would be affected by the proposed project. In Section C, Alternative F-1 would have the least effect on the viewshed in the southern portion of the study area because it maintains the existing configuration. Alternatives A-2, C-2, and D-1 would introduce a four-level interchange, which would include flyover ramps approximately 60 feet higher than the existing roadways. All the Section C alternatives would have a negative effect on the viewshed from the Biltmore Estate due to the increased number of lanes along I-40. Section A would affect the visual quality along the existing corridor by increasing the visual prominence of the freeway for people traveling along the freeway as well as those viewing it from afar. For the Section B alternatives, the visual impacts would likely be enhanced or improved for those driving along the facility, but degraded for those viewing the freeway from off of the road. Each of the alternatives would include a new bridge for I-26 over the French Broad River, which would introduce a new prominent feature into the viewshed that would be out of context with the existing viewshed. Alternatives 4 and 4-B would also include a pair of new flyover bridges carrying I-240, which would add additional prominent features that would be out of context with the existing viewshed. Alternative 4-B would also move the interchange farther south along US 19-23-70, which would reduce the visual effect for the northern end of the Montford Neighborhood, but have a larger visual presence along the southern end of the neighborhood due to loss of vegetation, and affect the viewshed from Riverside Cemetery.

How would the project affect hazardous material sites?

Based on preliminary evaluations of hazardous materials within the study area, it was determined that the severity of impact as a result of crossing any of the sites would be low, with

the exception of the landfill along the east bank of the French Broad River. Impacts to the former landfill, which would occur for any of the four Section B alternatives, would be classified as high.

How would the project affect floodplains?

Due to the linear nature of the project and the existing roadway configurations, no practicable alternative exists that would completely avoid impacts to floodplains. Impacts to floodplains were minimized to the greatest extent possible. In Section C, Alternative F-1 would have the lowest impact on floodplains, while Alternatives A-2 and C-2 would have the highest impact. Section A would impact 10.30 acres of floodplain due to the increased width of the roadway and expanded interchange at Amboy Road. In Section B, Alternative 4-B would have the lowest impact on floodplains, with Alternative 3 having the highest impact.

How would the project affect traffic during construction?

An evaluation of the construction effects was completed for each of the build alternatives and any effects were classified as either low, moderate, high, or severe.

The Section C construction effects evaluation indicates that all four alternatives would have multiple sites with impacts that rate high or severe. Construction for this section is expected to last approximately 4 years.

The Section B construction effects evaluation indicates that all four alternatives would have multiple sites with impacts that rate high or severe. Construction for this section is expected to last approximately 4 to 4.5 years, depending on the selected alternative.

Indirect and Cumulative Effects

What indirect and cumulative effects could be expected within the study area as a result of the project?

The proposed project is not anticipated to result in substantial indirect or cumulative effects. Indirect effects are effects that occur later in time as a result of the project, including changes in land use, population density, or growth rate. In general, the project is located within a developed area and would not be providing additional access to areas that are currently not developed. The project does have the potential to somewhat accelerate planned infill, redevelopment, and development in the vicinity of the project; however, it is not expected to result in a noticeable impact to natural resources or downstream water quality. Cumulative effects are effects on the environment that occur from the incremental effect of the project combined with past, present, and reasonably foreseeable future projects. Overall, the proposed project, while affecting some neighborhoods through relocations, improving traffic flow in the general vicinity, and combining with other development activity in the area, imparts low to moderate cumulative effects in the Asheville area.

What cumulative effects could be expected along the entire I-26 Corridor as a result of the proposed projects in the region?

In addition to the cumulative effects on the study area, the cumulative effects on the overall region were analyzed to determine the effects of the planned improvements along the I-26

Corridor. The study concluded that on a regional basis the proposed I-26 Connector would impart minimal indirect and cumulative effects to the region.

Required Permits and Actions

What permits would be required for the I-26 Connector project?

The project is anticipated to require the following permits:

- North Carolina Division of Water Quality: Section 401 Certification and Stormwater Certification
- North Carolina Division of Forest Resources: Burning Permit
- United States Army Corps of Engineers: Section 404 Permit and Section 10 Permit
- United States Coast Guard: Section 9 Permit
- United States Fish and Wildlife Service: Section 404 and Section 10 Permit Review and Section 7 Consultation: Appalachian Elktoe and Tan Riffleshell.
- Tennessee Valley Authority: Section 26a of the Tennessee Valley Authority Act

What are the unresolved issues for the I-26 Connector project?

Several issues are not yet resolved and will be developed further as the project development process continues. The unresolved items include additional coordination, investigation, and documentation relating to historic resources; additional hazardous material investigations; coordination on threatened and endangered species; coordination with permitting and regulatory agencies; and additional coordination and evaluation of impacts to affected environmental justice populations.

Section 4(f)

Would resources that are protected by Section 4(f) of the Department of Transportation Act of 1966 be used?

Section 4(f) provides protection to historic properties, public parks, and recreation areas. The proposed project would result in a “use” of five to six historic properties and two park/recreation areas, depending on the selected alternative. Use of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility; or when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose; or when there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired). The following resources would include use of a Section 4(f) property: Biltmore Estate (Section C – Alternatives A-2 and C-2), Asheville School (all Section C alternatives), West Asheville/Aycock School Historic District (Section A), Carrier Park (Section A), French Broad River Greenway (Section A), William Worley House (all Section B alternatives), Montford Hills Historic District (Section B – Alternative 4-B), and Montford Hills & Hibriten Drive Expansion (Section B – Alternatives 3, 3-C, and 4).

Would any of the impacts to resources protected by Section 4(f) be de minimis impacts?

De minimis impacts are impacts that would not result in an “adverse effect” on the protected resource. For historic properties, *de minimis* impacts are defined as a determination of “no

adverse effect” or “no historic properties affected” in compliance with Section 106 of the National Historic Preservation Act. For parks and recreational facilities, *de minimis* is defined as impacts that do not “adversely affect the activities, features, and attributes” of the protected resource. For the proposed project, the following protected properties would be considered *de minimis* impacts: Biltmore Estate (Section C – Alternatives A-2 and C-2), Asheville School (all Section C alternatives), William Worley House (all Section B alternatives), Montford Hills Historic District (Section B – Alternative 4-B), and Montford Hills & Hibriten Drive Expansion (Section B – Alternatives 3, 3-C, and 4), Carrier Park (Section A), and proposed French Broad River Greenway (Section A).

How do impacts to resources protected by Section 4(f) affect the selection of the preferred alternative?

If the analysis of the project alternatives determines that there is no feasible and prudent avoidance alternative to impacting Section 4(f) resources, FHWA may only approve the alternative that causes the least overall harm to the Section 4(f) resource. The proposed project currently does not include a feasible and prudent avoidance alternative; therefore, it is anticipated that a least overall harm analysis will be conducted to determine the preferred alternative for the project. The least overall harm is determined by balancing the following factors:

- Ability to mitigate adverse impacts to each Section 4(f) property
- Relative severity of remaining harm to each Section 4(f) property after mitigation
- Relative significance of each Section 4(f) property
- Views of officials with jurisdiction
- Degree to which an alternative meets Purpose and Need
- Magnitude of adverse impact to non-Section 4(f) resources
- Substantial differences in cost among alternatives

Public and Agency Involvement

What are the opportunities for public involvement in the I-26 Connector project?

There have been numerous opportunities for public involvement over the past decade that have provided important insight into the study area and the potential alternatives for the project. A public hearing was held on September 16, 2008, at the Renaissance Hotel to solicit input from the public and to answer any questions about the project. In 2014 the public was re-introduced to the project. Another public hearing will be held following the publication of this document, and the public is strongly encouraged to attend, ask questions, and provide comments on the various alternatives presented for the project.

How do I provide comments on the I-26 Connector project?

Comments can be provided as either written or verbal comments. Verbal comments will be taken at the public hearing and through the project hotline. Written comments can be made in one of three ways: by e-mail to djoyner@ncdot.gov, through the web site at www.ncdot.gov/projects/i26connector/, or through the mail to:

Drew Joyner, PE
Human Environment Section Head – North Carolina Department of Transportation

1548 Mail Service Center
Raleigh, NC 27699-1598

What comments and concerns have been expressed by the public during previous public involvement efforts?

The major comments and concerns previously expressed by the public include the following:

- Comments supporting Alternative 4-B and requesting that it be included in the DEIS
- A request that NCDOT consider an alternative with six lanes for Section A
- Comments that the preferred alternative should separate local and interstate traffic across the Captain Jeff Bowen Bridges
- Concerns about the impacts to residences and businesses and how it would affect the local economy and tax base
- Comments requesting a greater emphasis on multimodal amenities such as bicycle, pedestrian, and transit solutions

What comments and concerns have been expressed by the environmental resource and regulatory agencies?

There has been coordination with the environmental resource and regulatory agencies throughout the duration of the project development process. Currently, no major comments have been raised by the agencies.

What are the controversial issues for the I-26 Connector?

The two main issues of controversy for the project are the need for eight lanes for Section A of the project to accommodate the projected future traffic volumes and the local desire to have the separation of local and interstate traffic included as part of the Purpose and Need.

Next Steps

When will a preferred alternative be selected and how will the decision be made?

Following the publication of this DEIS, NCDOT will conduct a public hearing and collect comments from the public and regulatory agencies. At the end of the comment period, NCDOT will hold an internal meeting to review the comments and determine whether any additional studies need to be completed. Once any additional studies are completed, an evaluation will be conducted to determine which alternative would likely result in the least overall harm to the protected Section 4(f) resources. Following the development of the evaluation, the Merger Team will meet to select the least environmentally damaging alternative, or preferred alternative, for the project.

Will there be more information provided on the preferred alternative once it is selected?

Once a preferred alternative is selected for the project, any additional studies required for the project would be completed and a Final Environmental Impact Statement disclosing the impacts for the preferred alternative will be developed and presented to the public and agencies for comment.

When will construction on the I-26 Connector begin?

NCDOT's 2016-2025 State Transportation Improvement Program shows construction for Section C beginning in 2021, construction for Section B beginning in 2024, and construction for Section A in unfunded future years.

Quantitative Summary of Project Impacts

A summary of the impacts for the alternatives within the individual sections is presented in Table S-1. Table S-2 shows the overall impacts that are anticipated based on the combination of alternatives from each section of the project.

Table S-1: Summary of Project Impacts by Section

Resource	Section C (I-26/I-40/I-240 Interchange)				Section A	Section B (New Location across French Broad)			
	Alt. A-2	Alt. C-2	Alt. D-1	Alt. F-1	I-240 Widening	Alt. 3	Alt. 3C	Alt. 4	Alt. 4B
Project Features									
<i>Length (miles)</i>									
I-26	2.2	2.2	2.2	2.2	2.0	2.4	2.5	2.4	2.5
I-40/I240	2.9	3.2	2.8	2.8	0.0	0.6	0.6	1.5	1.5
Total Length	5.1	5.4	5.0	5.0	2.0	3.0	3.1	3.9	4.0
Interchanges	3	3	3	3	3	2	2	3	3
Railroad Crossings	2	2	2	2	0	3	3	8	5
Navigable Waterway Crossings	1	1	1	1	0	2	3	4	4
Construction Cost	\$286,100,000	\$269,700,000	\$263,100,000	\$203,300,000	\$105,700,000	\$190,200,000	\$191,200,000	\$255,600,000	\$291,300,000
Right-of-Way Cost	\$26,600,000	\$22,400,000	\$33,800,000	\$17,100,000	\$29,400,000	\$42,800,000	\$36,200,000	\$45,500,000	\$36,800,000
Utilities Cost	\$2,200,000	\$2,000,000	\$2,300,000	\$2,100,000	\$3,400,000	\$3,100,000	\$3,300,000	\$3,600,000	\$3,900,000
Total Cost	\$314,900,000	\$294,100,000	\$299,200,000	\$222,500,000	\$138,500,000	\$236,100,000	\$230,700,000	\$304,700,000	\$332,000,000
Socioeconomic Features									
<i>Relocations</i>									
Residential	50	32	38	31	81	34	23	46	33
Business	6	6	7	5	17	24	33	24	34
Nonprofit	0	0	0	0	1	2	1	2	1
Total	56	38	45	36	99	60	57	72	68
Schools Relocated	0	0	0	0	1	0	0	0	0
Churches Relocated	1	1	1	1	1	0	0	1	1
Parks and Recreational Areas Impacted	1	1	1	1	2	0	0	0	0
Cemeteries Impacted	0	0	0	0	0	0	0	0	0
Physical Environment									
Noise Impacts (No-Build)	193	193	193	193	181	94	94	243	243
Noise Impacts (before abatement)	218	255	214	304	198	193	133	312	224
Noise Impacts (after abatement)	188	225	184	274	94	60	37	126	89
Hazardous Material Sites (moderate or high) Impacted	1	1	1	1	0	1	1	1	1

Resource	Section C (I-26/I-40/I-240 Interchange)				Section A	Section B (New Location across French Broad)			
	Alt. A-2	Alt. C-2	Alt. D-1	Alt. F-1	I-240 Widening	Alt. 3	Alt. 3C	Alt. 4	Alt. 4B
Floodplain Impacts (acres)	20.53	20.39	18.06	16.63	8.36	9.36	7.65	8.13	3.91
Floodway Impacts (acres)	2.74	4.23	2.27	2.00	1.94	2.88	2.96	0.69	0.38
<i>Land Use Impacts by Zoning Category (acres)</i>									
Residential Single-Family Districts	19.3	12.7	19.7	12.5	8.4	4.0	4.3	6.4	7.5
Residential Multifamily Districts	21.4	15.4	15.2	16.0	26.5	26.5	17.0	27.6	17.0
Neighborhood Business District	0	0	0	0	0	0.2	0.2	0.3	0.1
Community Business Districts	0.0	0.0	0.0	0.0	4.9	0.1	0.1	0.04	0.0
Industrial	0	0	0	0	0	4.0	0.0	2.4	0.4
Institutional District	38.6	38.6	35.4	34.5	13.6	0.4	0.4	0.2	0.4
Office	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Highway Business District	11.4	9.6	9.7	7.8	1.9	14.8	15.8	14.0	14.3
Regional Business District	32.3	32.4	34.1	27.1	0.0	15.4	15.4	9.3	10.5
Central Business District	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.3
Commercial	28.7	31.4	30.8	24.8	2.7	0.0	0.0	0.0	0.0
Resort District	0.0	0.0	0.0	0.0	0.0	22.1	21.5	37.2	19.6
River District	0.0	0.0	0.0	0.0	6.3	11.2	24.8	16.1	22.3
Total	151.8	140.1	144.9	122.6	64.7	98.9	99.7	113.7	92.5
Human Environment									
<i>Community Effects (# of communities within or adjacent to study area with benefit or burden from proposed alternatives)</i>									
High Benefit	-	-	-	-	-	-	-	-	-
Moderate Benefit	-	-	-	-	-	-	-	1	1
Low Benefit	-	-	-	-	-	-	-	2	2
Neutral	-	-	2	-	1	5	5	1	1
Low Burden	2	2	-	2	3	4	4	4	4
Moderate Burden	-	-	-	-	1	1	1	2	2
High Burden	-	-	-	-	-	-	-	-	-
Cultural Resources									
Historic Properties – Section 106 Effects	0	0	0	0	1 Adverse Effect	0	0	0	1 Adverse Effect

Resource	Section C (I-26/I-40/I-240 Interchange)				Section A	Section B (New Location across French Broad)			
	Alt. A-2	Alt. C-2	Alt. D-1	Alt. F-1	I-240 Widening	Alt. 3	Alt. 3C	Alt. 4	Alt. 4B
Historic Properties Impacted	2	2	1	1	2	2	2	2	2
Archeological Sites Impacted	5	6	5	6	2	1	1	1	0
Natural Environment									
<i>Biotic Resources (acres)</i>									
Maintained/ disturbed	192.86	191.47	188.84	171.93	91.08	87.85	83.96	126.50	124.82
Mesic Mixed Forest	140.72	137.11	135.08	111.26	47.41	39.02	33.32	40.02	40.67
Alluvial Hardwood Forest	8.97	9.11	8.33	6.55	1.50	5.87	4.76	3.10	3.88
Open Water	0.19	0.39	0.24	0.17	0	0.00	0.00	0.00	0.00
Total	342.75	338.07	332.49	289.90	139.99	132.74	122.04	169.63	169.37
Impervious Surface Increase (acres)	74.43	82.03	61.33	57.12	27.45	29.68	28.37	38.26	40.45
Stream Impacts (#)	12	12	13	12	4	7	6	6	7
Stream Impacts (linear feet)	2,965	2,779	2,938	1,984	798	3,874	3,639	1,839	2,128
Wetland Impacts (#)	13	12	13	12	1	3	2	4	2
Wetland Impacts (acres)	2.62	2.36	2.01	1.86	0.01	0.22	0.11	0.22	0.10
Pond Impacts(#)	0	0	0	0	0	3	0	3	0
Pond Impacts(acres)	0	0	0	0	0	0.6	0	0.53	0
Protected Species Adversely Affected	0	0	0	0	0	0	0	0	0

^aStream, wetland, and pond impacts calculated using design slope stakes plus 25-foot buffer. All other impacts calculated using right-of-way.

Table S-2: Summary of Overall Project Impacts

Resource	Section C: A-2 Section A Section B: 3	Section C: C-2 Section A Section B: 3	Section C: D-1 Section A Section B: 3	Section C: F-1 Section A Section B: 3	Section C: A-2 Section A Section B: 3-C	Section C: C-2 Section A Section B: 3-C	Section C: D-1 Section A Section B: 3-C	Section C: F-1 Section A Section B: 3-C	Section C: A-2 Section A Section B: 4	Section C: C-2 Section A Section B: 4	Section C: D-1 Section A Section B: 4	Section C: F-1 Section A Section B: 4	Section C: A-2 Section A Section B: 4-B	Section C: C-2 Section A Section B: 4-B	Section C: D-1 Section A Section B: 4-B	Section C: F-1 Section A Section B: 4-B
Project Features																
<i>Length (miles)</i>																
I-26	6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.7
I-40/I240	3.5	3.8	3.4	3.4	3.5	3.8	3.4	3.4	4.4	4.7	4.3	4.3	4.4	4.7	4.3	4.3
Total Length	10.1	10.4	10.0	10.0	10.2	10.5	10.1	10.1	11.0	11.3	10.9	10.9	11.1	11.4	11.0	11.0
Interchanges	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9
Railroad Crossings	5	5	5	5	5	5	5	5	10	10	10	10	7	7	7	7
Navigable Waterway Crossings	3	3	3	3	4	4	4	4	5	5	5	5	5	5	5	5
Construction Cost (millions)	\$582.0	\$565.6	\$559.0	\$499.2	\$583.0	\$566.6	\$560.0	\$500.2	\$647.4	\$631.0	\$624.4	\$564.6	\$683.1	\$666.7	\$660.1	\$600.3
Right-of-Way Cost (millions)	\$98.8	\$94.60	\$106.0	\$89.3	\$92.2	\$88.0	\$99.4	\$82.7	\$101.5	\$97.3	\$108.7	\$92.0	\$92.8	\$88.6	\$100.0	\$83.3
Utilities Cost (millions)	\$8.7	\$8.50	\$8.8	\$8.6	\$8.9	\$8.7	\$9.0	\$8.8	\$9.2	\$9.0	\$9.3	\$9.1	\$9.5	\$9.3	\$9.6	\$9.4
Total Cost	\$680.8	660.20	\$665.0	\$597.1	\$684.1	\$663.3	\$668.4	\$591.7	\$758.1	\$737.3	\$742.4	\$665.7	\$785.4	\$764.6	\$769.7	\$693.0
Socioeconomic Features																
<i>Relocations</i>																
Residential	165	147	153	146	154	136	142	135	177	159	165	158	164	146	152	145
Business	47	47	48	46	56	56	57	55	47	47	48	46	57	57	58	56
Nonprofit	3	3	3	3	2	2	2	2	3	3	3	3	2	2	2	2
Total Relocations	215	197	204	195	212	194	201	192	227	209	216	207	223	205	212	203
Schools Relocated	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Churches Relocated	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Parks and Recreational Areas Impacted	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cemeteries Impacted	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical Environment																
Noise Impacts (No-	468	468	468	468	468	468	468	468	617	617	617	617	617	617	617	617

Resource	Section C: A-2 Section A Section B: 3	Section C: C-2 Section A Section B: 3	Section C: D-1 Section A Section B: 3	Section C: F-1 Section A Section B: 3	Section C: A-2 Section A Section B: 3-C	Section C: C-2 Section A Section B: 3-C	Section C: D-1 Section A Section B: 3-C	Section C: F-1 Section A Section B: 3-C	Section C: A-2 Section A Section B: 4	Section C: C-2 Section A Section B: 4	Section C: D-1 Section A Section B: 4	Section C: F-1 Section A Section B: 4	Section C: A-2 Section A Section B: 4-B	Section C: C-2 Section A Section B: 4-B	Section C: D-1 Section A Section B: 4-B	Section C: F-1 Section A Section B: 4-B
Build)																
Noise Impacts (before abatement)	609	646	605	695	549	586	545	635	728	765	724	814	640	677	636	726
Noise Impacts (after abatement)	342	379	338	428	319	356	315	405	408	445	404	494	371	408	367	457
Hazardous Material Sites (moderate or high) Impacted	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Floodplain Impacts (acres)	38.3	38.1	35.8	34.3	36.5	36.4	34.1	32.6	37.0	36.9	34.5	33.1	32.8	32.7	30.3	28.9
Floodway Impacts (acres)	7.6	9.1	7.1	6.8	7.6	9.1	7.2	6.9	5.4	6.9	4.9	4.6	5.0	6.5	4.6	4.3
<i>Land Use Impacts by Zoning Category (acres)</i>																
Residential Single-Family Districts	31.8	25.2	32.2	24.9	32.1	25.5	32.5	25.3	34.2	27.6	34.5	27.3	35.3	28.6	35.6	28.4
Residential Multifamily Districts	74.4	68.5	68.2	69.1	64.9	59.0	58.7	59.6	75.5	69.5	69.2	70.1	64.8	58.9	58.6	59.5
Neighborhood Business District	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1
Community Business Districts	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Industrial District	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4	0.4	0.4	0.4	0.4
Institutional District	52.7	52.6	49.5	48.5	52.7	52.7	49.5	48.5	52.5	52.4	49.3	48.3	52.7	52.6	49.5	48.5
Office	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Highway Business District	28.2	26.3	26.5	24.6	29.2	27.3	27.5	25.6	27.4	25.5	25.7	23.8	27.7	25.8	25.9	24.0
Regional Business District	47.7	47.8	49.5	42.5	47.7	47.8	49.5	42.5	41.6	41.7	43.4	36.4	42.8	42.9	44.6	37.6
Central Business	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7

Resource	Section C: A-2 Section A Section B: 3	Section C: C-2 Section A Section B: 3	Section C: D-1 Section A Section B: 3	Section C: F-1 Section A Section B: 3	Section C: A-2 Section A Section B: 3-C	Section C: C-2 Section A Section B: 3-C	Section C: D-1 Section A Section B: 3-C	Section C: F-1 Section A Section B: 3-C	Section C: A-2 Section A Section B: 4	Section C: C-2 Section A Section B: 4	Section C: D-1 Section A Section B: 4	Section C: F-1 Section A Section B: 4	Section C: A-2 Section A Section B: 4-B	Section C: C-2 Section A Section B: 4-B	Section C: D-1 Section A Section B: 4-B	Section C: F-1 Section A Section B: 4-B
District																
Commercial	31.5	34.2	33.5	27.5	31.5	34.2	33.5	27.5	31.5	34.2	33.5	27.5	31.5	34.2	33.5	27.5
Resort District	22.1	22.1	22.1	22.1	21.5	21.5	21.5	21.5	37.2	37.2	37.2	37.2	19.6	19.6	19.6	19.6
River District	17.4	17.4	17.4	17.4	31.1	31.1	31.1	31.1	22.4	22.4	22.4	22.4	28.6	28.6	28.6	28.6
Total Land Use Impacts by Zoning Category (acres)	315.5	303.7	308.5	286.3	316.3	304.6	309.3	287.1	330.3	318.6	323.4	301.1	309.0	297.3	302.1	279.9
Human Environment																
<i>Community Effects</i>																
High Benefit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moderate Benefit	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Low Benefit	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2
Neutral	6	6	8	6	6	6	8	6	2	2	4	2	2	2	4	2
Low Burden	9	9	7	9	9	9	7	9	9	9	7	9	9	9	7	9
Moderate Burden	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
High Burden	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cultural Resources																
Historic Properties – Section 106 Effects	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
Historic Properties Impacted	6	6	5	5	6	6	5	5	6	6	5	5	6	6	5	5
Archeological Sites Impacted	8	9	8	9	8	9	8	9	8	9	8	9	7	8	7	8
Natural Environment																
<i>Biotic Resources (acres)</i>																
Maintained/disturbed	371.8	370.4	367.8	350.9	367.9	366.5	363.9	347.0	410.4	409.0	406.4	389.5	408.8	407.4	404.7	387.8
Mesic Mixed Forest	227.2	223.5	221.5	197.7	221.4	217.8	215.8	192.0	228.2	224.5	222.5	198.7	228.8	225.2	223.2	199.3
Alluvial Hardwood	16.3	16.5	15.7	13.9	15.2	15.4	14.6	12.8	13.6	13.7	12.9	11.1	14.4	14.5	13.7	11.9

Resource	Section C: A-2 Section A Section B: 3	Section C: C-2 Section A Section B: 3	Section C: D-1 Section A Section B: 3	Section C: F-1 Section A Section B: 3	Section C: A-2 Section A Section B: 3-C	Section C: C-2 Section A Section B: 3-C	Section C: D-1 Section A Section B: 3-C	Section C: F-1 Section A Section B: 3-C	Section C: A-2 Section A Section B: 4	Section C: C-2 Section A Section B: 4	Section C: D-1 Section A Section B: 4	Section C: F-1 Section A Section B: 4	Section C: A-2 Section A Section B: 4-B	Section C: C-2 Section A Section B: 4-B	Section C: D-1 Section A Section B: 4-B	Section C: F-1 Section A Section B: 4-B
Forest																
Open Water	0.2	0.4	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.4	0.2	0.2
Total Biotic Resources	615.5	610.8	605.2	562.6	604.8	600.1	594.5	551.9	652.4	647.7	642.1	599.5	652.1	647.4	641.8	599.3
Impervious Surface (acres)	131.6	139.2	118.5	114.3	130.3	137.9	117.2	112.9	140.1	147.7	127.0	122.8	142.3	149.9	129.2	125.0
Stream Impacts (#)	23.0	23.0	24.0	23.0	22.0	22.0	23.0	22.0	22.0	22.0	23.0	22.0	23.0	23.0	24.0	23.0
Stream Impacts (linear feet)	7,636.5	7,451.0	7,609.6	6,655.8	7,402.2	7,216.7	7,375.3	6,421.5	5,602.1	5,416.6	5,575.2	4,621.4	5,891.1	5,705.6	5,864.2	4,910.4
Wetland Impacts (#)	17	16	17	16	16	15	16	15	18	17	18	17	16	15	16	15
Wetland Impacts (acres)	2.8	2.5	2.2	2.0	2.7	2.4	2.1	1.9	2.8	2.5	2.2	2.0	2.7	2.4	2.1	1.9
Pond Impacts(#)	3	3	3	3	0	0	0	0	3	3	3	3	0	0	0	0
Pond Impacts(acres)	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
Protected Species Adversely Affected	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

^aStream, wetland, and pond impacts calculated using design slope stakes plus 25-foot buffer. All other impacts calculated using right-of-way.

Table of Contents

Chapter 1. Purpose and Need for the Project.....	1-1
1.1 Project Area.....	1-1
1.2 Project Needs.....	1-1
1.3 Purpose of the Proposed Action.....	1-3
1.4 Project Description.....	1-3
1.4.1 Project Setting and Land use.....	1-3
1.4.2 Project History.....	1-5
1.5 System Linkage.....	1-7
1.5.1 Modal Interrelationships.....	1-8
1.6 Transportation Demand.....	1-13
1.6.1 Population Trends.....	1-13
1.6.2 Economic Development.....	1-14
1.7 Transportation Planning.....	1-15
1.7.1 Local and Regional Plans.....	1-16
1.7.2 Statewide Plans.....	1-16
1.8 Traffic Capacity.....	1-20
1.8.1 Existing Traffic Capacity Analysis.....	1-20
1.9 Roadway Deficiencies.....	1-28
1.10 Traffic Safety Analysis.....	1-29
Chapter 2. Description of Alternatives Considered.....	2-1
2.1 No-Build Alternative.....	2-1
2.2 Transportation System Management Alternatives.....	2-1
2.2.1 Operational Improvements.....	2-1
2.2.2 Physical Improvements.....	2-2
2.3 Transportation Demand Management Alternatives.....	2-2
2.4 Mass Transit Alternatives.....	2-3
2.4.1 Bus Alternatives.....	2-3
2.4.2 Rail Alternatives.....	2-3
2.4.3 Transit Express Lane Alternatives.....	2-4
2.4.4 Ability of Mass Transit Alternatives to Meet Purpose and Need.....	2-4
2.5 Build Alternatives.....	2-5
2.5.1 Logical Termini/Independent Utility.....	2-5
2.5.2 Design Features.....	2-6
2.5.3 Evaluation of Alternatives Developed in Previous Studies.....	2-17
2.5.4 Evaluation of Preliminary Study Alternatives By Project Section.....	2-22
2.5.5 Description of Detailed Study Alternatives.....	2-48
2.6 System Linkage.....	2-81
2.6.1 Section C.....	2-82
2.6.2 Section A.....	2-82
2.6.3 Section B.....	2-83
2.7 Traffic Operations Analyses.....	2-85
2.7.1 Year 2033 No-Build Traffic Projections.....	2-85
2.7.2 Year 2033 No-Build Capacity Analysis.....	2-85
2.7.3 Year 2033 Build Traffic Projections.....	2-88
2.7.4 Year 2033 Build Traffic Capacity Analysis.....	2-88
2.7.5 Traffic Operations Summary.....	2-104

2.8	Roadway Deficiencies	2-112
2.8.1	Section C	2-112
2.8.2	Section A	2-114
2.8.3	Section B	2-118
2.9	Comparison of Detailed Study Alternatives To Project Purposes	2-127
2.9.1	Section C	2-127
2.9.2	Section A	2-129
2.9.3	Section B	2-129
2.10	Costs	2-131
2.11	Summary of Alternatives Considered.....	2-132
Chapter 3.	Existing Environments	3-1
3.1	Human Characteristics	3-1
3.1.1	Population Characteristics	3-4
3.1.2	Economic Characteristics.....	3-7
3.1.3	Community Facilities and Services.....	3-9
3.1.4	Neighborhoods and Communities	3-17
3.1.5	Title VI of the 1964 Civil Rights Act and Environmental Justice	3-23
3.2	Land Use and Transportation Planning.....	3-25
3.2.1	Land Use Plans.....	3-25
3.2.2	Transportation Plans.....	3-33
3.3	Physical Environment Characteristics	3-37
3.3.1	Noise	3-37
3.3.2	Air Quality	3-38
3.3.3	Farmlands.....	3-41
3.3.4	Utilities	3-43
3.3.5	Visual Quality.....	3-46
3.3.6	Hazardous Material.....	3-47
3.3.7	Mineral Resources	3-55
3.3.8	Floodplains/Floodways.....	3-56
3.3.9	Protected Lands.....	3-56
3.4	Cultural Resources	3-60
3.4.1	Historic Architectural Resources	3-62
3.4.2	Archaeological Resources	3-66
3.5	Natural Environment Characteristics.....	3-68
3.5.1	Soils and Geology.....	3-68
3.5.2	Biotic Resources	3-69
3.5.3	Water Resources	3-74
3.5.4	Jurisdictional Issues.....	3-77
Chapter 4.	Environmental Consequences.....	4-1
4.1	Direct Impacts.....	4-1
4.1.1	Human Environment	4-1
4.1.2	Land Use and Transportation Planning	4-19
4.1.3	Physical Environment.....	4-50
4.1.4	Cultural Resources	4-90
4.1.5	Natural Environment	4-96
4.1.6	Construction.....	4-122
4.1.7	Irretrievable and Irreversible Commitment of Resources.....	4-138
4.1.8	Relationship Between Long-Term and Short-Term Uses/Benefits.....	4-139
4.2	Indirect and Cumulative Effects	4-139
4.2.1	Indirect and Cumulative Effects – Project Study Area	4-139

4.2.2	Cumulative Effects – Regional Level.....	4-142
4.2.3	Cumulative Effects Study Conclusions.....	4-148
4.3	Summary of Environmental Consequences.....	4-150
4.3.1	Direct Impacts.....	4-150
4.4	Required Permits and Actions.....	4-162
4.4.1	Required Permits.....	4-162
4.4.2	Required Actions/Issues to be Resolved.....	4-164
Chapter 5.	Section 4(f).....	5-1
5.1	Description of Section 4(f) Resources.....	5-1
5.1.1	Historic Sites.....	5-2
5.1.2	Archaeological Resources.....	5-4
5.1.3	Public Parks and Recreation Areas.....	5-4
5.2	Use of Section 4(f) Property.....	5-5
5.2.1	Permanent Incorporation of Property.....	5-5
5.2.2	Temporary Occupancy of Property.....	5-8
5.2.3	Constructive Use of Property.....	5-9
5.2.4	Summary of Use of Section 4(f) Properties.....	5-9
5.3	<i>De Minimis</i> Impacts.....	5-9
5.3.1	Historic Sites.....	5-10
5.3.2	Archaeological Resources.....	5-11
5.3.3	Parks and Recreation Areas.....	5-11
5.4	Avoidance Alternatives.....	5-11
5.4.1	Total Avoidance Alternatives.....	5-12
5.5	Measures to Minimize Harm.....	5-12
5.5.1	Historic Sites.....	5-12
5.5.2	Archaeological Resources.....	5-15
5.5.3	Parks and Recreation Areas.....	5-15
5.6	Relative Comparison of Section 4(f) Impacts.....	5-16
5.7	Least Overall Harm.....	5-18
5.8	Coordination.....	5-18
Chapter 6.	List of Preparers.....	6-1
Chapter 7.	List of Agencies, Organizations, and Persons to Whom Copies of the Statement are Sent.....	7-1
7.1	Federal Agencies.....	7-1
7.2	Regional Offices.....	7-1
7.3	State Agencies.....	7-1
7.4	Local Governments and Agencies.....	7-2
7.5	Interest Groups.....	7-2
7.6	Public Libraries.....	7-3
7.7	Website.....	7-3
Chapter 8.	Agency Coordination and Public Involvement.....	8-1
8.1	Agency Coordination.....	8-1
8.1.1	History of Agency Coordination.....	8-1
8.1.2	Agency Coordination Meetings.....	8-3
8.1.3	Agency Correspondence.....	8-3
8.2	Public Involvement.....	8-3
8.2.1	Outreach Methods.....	8-3
8.2.2	Meeting Summary.....	8-29
8.2.3	Committees.....	8-35

8.3	Public Comments on Purpose and Need and Alternatives	8-37
8.4	Public Comments on the Rescinded 2008 DEIS	8-38
8.5	Controversial Issues	8-38
8.5.1	Eight Lanes Versus Six Lanes	8-38
8.5.2	Separation of Local and Interstate Traffic.....	8-38
Chapter 9.	References	9-1
Chapter 10.	List of Acronyms.....	10-1

List of Figures

Figure 1-1: Project Vicinity Map	1-2
Figure 1-2: Project Study Area	1-4
Figure 1-3: Existing Roadway Network	1-9
Figure 1-4: Existing Roadway Network	1-10
Figure 1-5: Existing Roadway Network	1-11
Figure 1-6: Proposed Passenger Route Alternatives.....	1-12
Figure 1-7: 2007 FBRMPO Comprehensive Transportation Plan	1-17
Figure 1-8: STIP Projects in the Vicinity	1-19
Figure 1-9: 2007 Existing/2033 No-Build Average Daily Traffic	1-21
Figure 1-10: 2007 Existing/2033 No-Build Average Daily Traffic	1-22
Figure 1-11: 2007 Existing Average Daily Traffic and Level of Service.....	1-26
Figure 1-12: 2007 Existing Average Daily Traffic and Level of Service.....	1-27
Figure 1-13: Roadway Deficiencies Summary.....	1-30
Figure 1-14: Accident Analysis Summary.....	1-32
Figure 2-1a: Typical Sections for Build Alternatives	2-12
Figure 2-1b: Typical Sections for Build Alternatives	2-13
Figure 2-2: Project Study Area with Expansions and Sections	2-15
Figure 2-3: Timeframe of Alternatives Considered	2-16
Figure 2-4: Phase I Study Corridors.....	2-19
Figure 2-5a: Section C Preliminary Study Alternatives	2-24
Figure 2-5b: Section C Preliminary Study Alternatives	2-26
Figure 2-5c: Section C Preliminary Study Alternatives	2-29
Figure 2-5d: Section C Preliminary Study Alternatives	2-31
Figure 2-6: Section A Preliminary Study Alternative	2-32
Figure 2-7a: Section B Preliminary Study Alternatives	2-35
Figure 2-7b: Section B Preliminary Study Alternatives	2-39
Figure 2-7c: Section B Preliminary Study Alternatives.....	2-41
Figure 2-8: Section C – Alternative A-2 Detailed Study Alternative.....	2-49
Figure 2-9: Section C – Alternative C-2 Detailed Study Alternative	2-52
Figure 2-10: Section C – Alternative D-1 Detailed Study Alternative	2-56
Figure 2-11: Section C – Alternative F-1 Detailed Study Alternative.....	2-59
Figure 2-12: Section C – Alternative F-2 Detailed Study Alternative.....	2-62
Figure 2-13: Section A Detailed Study Alternative.....	2-63
Figure 2-14: Section B – Alternative 3 Detailed Study Alternative	2-66
Figure 2-15: Section B – Alternative 3-C Detailed Study Alternative.....	2-70
Figure 2-16: Section B – Alternative 4 Detailed Study Alternative	2-73
Figure 2-17: Section B – Alternative 4-B Detailed Study Alternative.....	2-76
Figure 2-18: 2007 Existing/2033 No-Build Average Daily Traffic	2-86
Figure 2-19: 2007 Existing/2033 No-Build Average Daily Traffic	2-87
Figure 2-20: 2033 No-Build Average Daily Traffic and Level of Service	2-89
Figure 2-21: 2033 No-Build Average Daily Traffic and Level of Service	2-90
Figure 2-22: Section C – Alternative A-2 2033 Build Average Daily Traffic and Level of Service	2-92
Figure 2-23: Section C – Alternative C-2 2033 Build Average Daily Traffic and Level of Service	2-93
Figure 2-24: Section C – Alternative D-1 2033 Build Average Daily Traffic and Level of Service	2-94
Figure 2-25: Section C – Alternative F-1 2033 Build Average Daily Traffic and Level of Service	2-96

Figure 2-26: Section A 2033 Build Average Daily Traffic and Level of Service	2-97
Figure 2-27: Section B – Alternative 3 2033 Build Average Daily Traffic and Level of Service	2-98
Figure 2-28: Section B – Alternative 3-C 2033 Build Average Daily Traffic and Level of Service	2-100
Figure 2-29: Section B – Alternative 4 2033 Build Average Daily Traffic and Level of Service	2-102
Figure 2-30: Section B – Alternative 4-B 2033 Build Average Daily Traffic and Level of Service	2-103
Figure 2-31: Section C – Alternative A-2 Roadway Deficiencies	2-113
Figure 2-32: Section C – Alternative D-1 Roadway Deficiencies	2-115
Figure 2-33: Section C – Alternative F-1 Roadway Deficiencies.....	2-116
Figure 2-34: Section A Roadway Deficiencies.....	2-117
Figure 2-35: Section B – Alternative 3 Roadway Deficiencies	2-119
Figure 2-36: Section B – Alternative 3-C Roadway Deficiencies	2-123
Figure 2-37: Section B – Alternative 4 Roadway Deficiencies	2-124
Figure 2-38: Section B – Alternative 4-B Roadway Deficiencies.....	2-126
Figure 3-1: Future Land Use Study Area.....	3-2
Figure 3-2: Direct Community Impact Area and Demographic Study Area	3-3
Figure 3-3a: Community Facilities	3-10
Figure 3-3b: Community Facilities	3-11
Figure 3-4: Communities.....	3-14
Figure 3-5a: Block Groups with Minority Populations Above the Threshold.....	3-26
Figure 3-5b: Block Groups with Poverty Rates Above the Threshold	3-27
Figure 3-6a: Existing Land Use	3-28
Figure 3-6b: Existing Land Use	3-29
Figure 3-7: Zoning.....	3-31
Figure 3-8: Noise Receptors	3-40
Figure 3-9: Total Annual Emission Rate.....	3-42
Figure 3-10a: Utilities	3-44
Figure 3-10b: Utilities	3-45
Figure 3-11: Hazardous Materials Sites	3-54
Figure 3-12a: Floodplains and Floodways.....	3-58
Figure 3-12b: Floodplains and Floodways.....	3-59
Figure 3-13: Protected Lands.....	3-61
Figure 3-14: Historic Architectural Resources	3-65
Figure 3-15a: Biotic Resources	3-70
Figure 3-15b: Biotic Resources	3-71
Figure 3-16a: Jurisdictional Streams and Wetlands	3-80
Figure 3-16b: Jurisdictional Streams and Wetlands	3-81
Figure 3-16c: Jurisdictional Streams and Wetlands.....	3-82
Figure 3-16d: Jurisdictional Streams and Wetlands	3-83
Figure 3-16e: Jurisdictional Streams and Wetlands	3-84
Figure 4-1: Section C – Alternative A-2 Noise Study Areas and Receptors	4-54
Figure 4-2 : Section C – Alternative C-2 Noise Study Areas and Receptors.....	4-55
Figure 4-3: Section C – Alternative D-1 Noise Study Areas and Receptors	4-56
Figure 4-4: Section C – Alternative F-1 Noise Study Areas and Receptors	4-57
Figure 4-5: Section A Noise Study Areas and Receptors	4-58
Figure 4-6: Section B – Alternative 3 Noise Study Areas and Receptors.....	4-59
Figure 4-7: Section B – Alternative 3-C Noise Study Areas and Receptors	4-60
Figure 4-8: Section B – Alternative 4 Noise Study Areas and Receptors.....	4-61

Figure 4-9: Section B – Alternative 4-B Noise Study Areas and Receptors	4-62
Figure 4-10: Section C – Alternative A-2 Proposed Hydraulic Crossings.....	4-73
Figure 4-11: Section C – Alternative C-2 Proposed Hydraulic Crossings.....	4-75
Figure 4-12: Section C – Alternative D-1 Proposed Hydraulic Crossings.....	4-77
Figure 4-13: Section C – Alternative F-1 Proposed Hydraulic Crossings	4-80
Figure 4-14: Section A Proposed Hydraulic Crossings	4-82
Figure 4-15: Section B – Alternative 3 Proposed Hydraulic Crossings	4-83
Figure 4-16: Section B – Alternative 3-C Proposed Hydraulic Crossings.....	4-85
Figure 4-17: Section B – Alternative 4 Proposed Hydraulic Crossings	4-87
Figure 4-18: Section B – Alternative 4-B Proposed Hydraulic Crossings	4-89
Figure 4-19: Section C – Alternative A-2 – Jurisdictional Impacts	4-106
Figure 4-20: Section C – Alternative C-2 – Jurisdictional Impacts	4-107
Figure 4-21: Section C – Alternative D-1 – Jurisdictional Impacts	4-108
Figure 4-22: Section C – Alternative F-1 – Jurisdictional Impacts.....	4-109
Figure 4-23: Section A Jurisdictional Impacts.....	4-110
Figure 4-24: Section B – Alternative 3 Jurisdictional Impacts	4-111
Figure 4-25: Section B – Alternative 3-C Jurisdictional Impacts	4-112
Figure 4-26: Section B – Alternative 4 Jurisdictional Impacts	4-113
Figure 4-27: Section B – Alternative 4-B Jurisdictional Impacts.....	4-114
Figure 4-28a: Section A Project Footprint Scenarios	4-135
Figure 4-28b: Section A Project Footprint Scenarios.....	4-136
Figure 4-29: Cumulative Effects Study – Study Area.....	4-144
Figure 5-1: Section 4(f) Resources.....	5-3
Figure 5-2: Avoidance Alternatives.....	5-13

List of Tables

Table 1-1: Population Trends, 2000-2010	1-14
Table 1-2: Other STIP Projects in the Vicinity of the Study Area	1-18
Table 1-3: Existing Roadway Characteristics	1-20
Table 1-4: Guidelines for Selection of Design Level of Service	1-23
Table 1-5: Year 2007 Level of Service Analysis (Existing Conditions).....	1-23
Table 1-6: Roadway Deficiencies within the Existing Roadway Network	1-28
Table 1-7: Accident Analysis – Comparison to Statewide Average and Critical Crash Rate	1-31
Table 2-1: Roadway Design Criteria.....	2-7
Table 2-2: Maximum Peak Hour Volumes to Achieve LOS	2-9
Table 2-3: Minimum Number of Lanes Required for Peak Hour Volumes to Achieve LOS D	2-9
Table 2-4: Roadway Deficiencies for Section C – Alternative A-2.....	2-112
Table 2-5: Roadway Deficiencies for Section C – Alternative D-1	2-114
Table 2-6: Roadway Deficiencies for Section C – Alternative F-1.....	2-114
Table 2-7: Roadway Deficiencies for Section A – I-240 Widening Alternative	2-118
Table 2-8: Roadway Deficiencies for Section B – Alternative 3	2-120
Table 2-9: Roadway Deficiencies for Section B – Alternative 3-C.....	2-122
Table 2-10: Roadway Deficiencies for Section B – Alternative 4	2-122
Table 2-11: Roadway Deficiencies for Section B – Alternative 4-B.....	2-127
Table 2-12: Construction and Right-of-Way Cost Estimates.....	2-131
Table 2-13: Comparison of Alternatives to Project Purposes Summary	2-134
Table 3-1: Population Trends (2000-2010).....	3-4
Table 3-2: Population Projections (2010-2035)	3-4
Table 3-3: Population by Race/Ethnicity (2010).....	3-5
Table 3-4: Limited English Proficiency Data by Block Group (2007-2011).....	3-6
Table 3-5: Median Age (2010).....	3-7
Table 3-6: Unemployment Rate (2000 to 2013 Rates)	3-8
Table 3-7: Percentage of Population Below Poverty Level (2011)	3-9
Table 3-8: Community Characteristics (2010)	3-18
Table 3-9: Ambient Noise Levels (Leq)	3-38
Table 3-10: USTs, Landfills, and Other Potentially Contaminated Sites	3-48
Table 3-11: Drainage Areas of Major Streams	3-56
Table 3-12: Existing Hydraulic Crossings.....	3-57
Table 3-13: Historic Architectural Resources in the APE	3-64
Table 3-14: Soils in the Study Area	3-69
Table 3-15: Water Resources in the Study Area	3-74
Table 3-16: Physical Characteristics of Water Resources in the Study Area	3-75
Table 3-17: Jurisdictional Characteristics of Water Resources in the Study Area.....	3-78
Table 3-18: Jurisdictional Characteristics of Wetlands in the Study Area	3-85
Table 3-19: Federally Protected Species Listed for Buncombe County	3-86
Table 4-1: Relocations Associated with each Alternative	4-4
Table 4-2: Overall Community Effect by Community in Section C	4-9
Table 4-3: Overall Community Effect by Community in Section A	4-9
Table 4-4: Overall Community Effect by Community in Section B	4-9
Table 4-5: Land Use Impacts by Zoning Category (in acres).....	4-20
Table 4-6: Predicted Traffic Noise Impacts by Alternative	4-50
Table 4-7: Preliminary Noise Barrier Evaluation Results	4-51
Table 4-8: Preliminary Noise Barriers Not Feasible and Reasonable	4-64

Table 4-9: Vehicle Miles Travelled (VMTs).....	4-65
Table 4-10: USTs, Landfills, and Other Potentially Contaminated Sites	4-70
Table 4-11: FEMA Floodplain and Floodway Impacts (in acres).....	4-72
Table 4-12: Proposed Hydraulic Crossings – Alternative A-2	4-74
Table 4-13: Proposed Hydraulic Crossings – Alternative C-2	4-76
Table 4-14: Proposed Hydraulic Crossings – Alternative D-1	4-78
Table 4-15: Proposed Hydraulic Crossings – Alternative F-1	4-79
Table 4-16: Proposed Hydraulic Crossings – I-240 Widening Alternative	4-81
Table 4-17: Proposed Hydraulic Crossings –Alternative 3.....	4-84
Table 4-18: Proposed Hydraulic Crossings –Alternative 3-C	4-84
Table 4-19: Proposed Hydraulic Crossings –Alternative 4.....	4-86
Table 4-20: Proposed Hydraulic Crossings –Alternative 4-B	4-88
Table 4-21: Determination of Effect to Historic Resources According to Section 106	4-91
Table 4-22: Property Takings (in acres) of Historic Architectural Resources by Alternative (Right-of-way/Easement)	4-92
Table 4-23: Anticipated Vegetative Community Impacts	4-99
Table 4-24: Impervious Surface Area.....	4-102
Table 4-25: Wetlands Impacts for Section C Alternatives	4-115
Table 4-26: Stream Impacts for Section C Alternatives	4-115
Table 4-27: Wetlands Impacts for Section A – I-240 Widening Alternative	4-116
Table 4-28: Stream Impacts for Section A – I-240 Widening Alternative	4-116
Table 4-29: Wetlands Impacts for Section B Alternatives	4-116
Table 4-30: Stream Impacts for Section B Alternatives	4-116
Table 4-31: Federally Protected Species listed for Buncombe County	4-118
Table 4-32: Geodetic Monuments	4-125
Table 4-33: Summary of Project Impacts by Section	4-152
Table 4-34: Summary of Project Impacts	4-155
Table 4-35: Qualitative Evaluation of Consistency with Local Plans	4-158
Table 5-1: Section 4(f) Applicability Evaluation.....	5-1
Table 5-2: Use of Section 4(f) Properties in Acres (Right-of-way/Easement).....	5-6
Table 5-3: Summary of Uses of Section 4(f) Properties.....	5-9
Table 5-4: Relative Comparison of Section 4(f) Impacts.....	5-16
Table 6-1: 2015 DEIS List of Preparers.....	6-1
Table 6-2: Rescinded 2008 DEIS List of Preparers	6-4
Table 8-1: Agency Coordination Activities	8-4
Table 8-2: Agency Correspondence.....	8-21
Table 8-3: Public Involvement Activities	8-30

List of Appendices

Appendix A: Correspondence

Appendix A1: Correspondence from Federal Agencies

Appendix A2: Correspondence from State Agencies

Appendix A3: Correspondence from Local Agencies and Organizations

Appendix A4: Newsletters

Appendix B: Records of Meetings and Concurrence Points

Appendix B1: Merger Meetings and Concurrence Points

Appendix B2: Records of Other Agency Meetings

Appendix B3: Records of Public Meetings

Appendix C: Relocation and Right-of-Way Reports

Appendix D: Federal Register Publication of the Notice of Intent

Appendix E: Report of Comment/Response Database

Appendix F: Coordination Relating to Section 4(f) *De Minimis*