FHWA-NC-EIS-08-03-DS
Federal Highway Administration
Region 4

US 74 RELOCATION
GRAHAM COUNTY, NORTH CAROLINA
FROM US 129 IN ROBBINSVILLE TO NC 28 IN STECOAH

FEDERAL PROJECT NO. NHF-74(22)
STATE PROJECT NO. 8.T930201
WBS # 32572.1.1
T.I.P. PROJECT NO. A-9 B & C

ADMINISTRATIVE ACTION

DRAFT SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT
VOLUME I OF II

Submitted Pursuant to the National Environmental Policy Act 42 USC 4332 (2)(c)

By the
United States Department of Transportation, Federal Highway Administration
and
North Carolina Department of Transportation

Cooperating Agencies:
United States Department of Agriculture, Forest Service
Tennessee Valley Authority

6/26/08
Date of Approval

for Gregory J. Thorpe, PhD.
Environmental Management Director, Project Development & Environmental Analysis Branch
North Carolina Department of Transportation

6/27/08
Date of Approval

for John F. Sullivan, III, PE
Division Administrator, Federal Highway Administration

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

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The North Carolina Department of Transportation, in conjunction with the Federal Highway Administration, is proposing to construct a four-lane, divided highway with partial access control in Graham County, North Carolina. The proposed action is approximately 10 miles in length, extending from US 129 in Robbinsville to NC 28 in Stecoah, and includes portions on both existing and new location. Existing and projected conditions of the study area are described and alternatives evaluated with respect to potential environmental consequences associated with construction of the proposed project.

Comments must be received by Mr. Gregory J. Thorpe, PhD, Environmental Management Director, Project Development and Environmental Analysis Branch, NC Department of Transportation, 1548 Mail Service Center, Raleigh, NC 27699-1548 by _____.

US 74 RELOCATION
GRAHAM COUNTY, NORTH CAROLINA
FROM US 129 IN ROBBINSVILLE TO NC 28 IN STECOAH

FEDERAL PROJECT NO. NHF-74(22)
STATE PROJECT NO. 8.T930201
WBS # 32572.1.1
T.I.P. PROJECT NO. A-9 B & C

Administrative Action
Draft Supplemental Final Environmental Impact Statement
Volume I of II

Documentation Prepared by:
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6/18/08
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US 74 RELOCATION
GRAHAM COUNTY, NORTH CAROLINA
FROM US 129 TO NC 28 IN STECOAH
FEDERAL AID PROJECT NO. NHF-74(22)
STATE PROJECT NO. 8.T930201
WBS NO. 32572.1.2
T.I.P. NO. A-9 B & C

PROJECT COMMITMENTS

The following special commitments have been agreed to by NCDOT:

1. ***Project Development & Environmental Analysis Branch***

- Stream habitat loss on National Forest System (NFS) lands will be mitigated on a 1:1 basis on National Forest System (NFS) lands. Specific locations will be identified by the US Forest Service (USFS) prior to project construction, to be initiated within six months of start of construction.

- An archaeological survey of the Preferred Alternative shall be conducted prior to the Final Supplemental FEIS. Evaluation of identified archaeological resources, including previously identified but unassessed sites, shall be conducted.

2. ***Project Development & Environmental Analysis Branch & Highway Design Branch***

- Rechannelization or modification of project study area streams will utilize natural channel design where possible.

3. ***Project Development & Environmental Analysis Branch and Roadside Environment Unit***

- On NFS lands, project vegetation will consist of native shrubs and trees to replicate the vegetative mix of the surrounding forest. Design and final review of planting plan will be coordinated with a USFS landscape architect.

4. ***Highway Design Branch***

- The power distribution line that crosses the Appalachian Trail northeast of Stecoah Gap, will be partially relocated along the NC 143 corridor. Approximately 1,300 feet of the existing powerline will be relocated along NC 143 for a distance of approximately 3,850 feet. Construction of the partial relocation will occur concurrent with construction of the C portion of the project. This action would allow viewable sections of the existing powerline right-of-way to re-vegetate and screen views of the project.

5. ***Highway Design Branch and Roadside Environmental Unit***

- Tunnel entrances will be faced with natural-appearing material. Emergency Services buildings at the east end of the tunnel will be of a design, finish material and color which harmonizes with the surrounding natural landscape, *i.e.* wood, stone, or similar material. The final design will be coordinated with a USFS landscape architect.

6. ***Roadside Environmental Unit and Division 14***

- For waters designated as High Quality Waters (HQW) by the NC Division of Water Quality or trout waters by the NC Wildlife Resource Commission, the NCDOT will adhere to *Design Standards in Sensitive Watersheds* (15A NCAC 4B .0124).

- For three years after grading activities are completed, water quality monitoring will be conducted in local trout streams.

7. ***Division 14***

- The project manager and/or contractor will inform all personnel associated with the project that Indiana bats may be present in the project area and that potential Indiana bat roosting habitat should be protected. To avoid the potential for impacts to the Indiana bat, **the clearing of trees will begin no earlier than October 15 and will be completed by the beginning of the Indiana bat roosting season on April 15.** This action would protect suitable roosting trees, thereby eliminating the potential for impacts to this species.

- Coordination with USFS biologists will be conducted regarding right-of-way vegetation clearing within the 100-foot riparian buffer area on NFS lands.

- Design and final review of cut and fill slope recommendations and blasting techniques will be coordinated with a USFS landscape architect.

- The design of the exterior finish of the bridge at Stecoah Creek will be coordinated with a USFS landscape architect.

- If rock netting or fencing is required on solid rock cuts, measures will be taken to reduce the visibility of these devices.

- Measures will be implemented to keep blasting debris out of project area waters.

EXECUTIVE SUMMARY

S.1 FEDERAL HIGHWAY ADMINISTRATION

Administration Action: Draft Supplemental Final Environmental Impact Statement.

S.2 CONTACTS

The following individuals may be contacted for additional information regarding this Draft Supplemental Final Environmental Impact Statement (Draft Supp. FEIS):

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S.3 DESCRIPTION OF THE PROPOSED ACTION

The B & C segments of the US 74 Relocation project involve the construction of a four-lane divided highway from US 129 in Robbinsville to NC 28 at Stecoah in Graham County. The proposed action is identified in the Draft 2009-2015 North Carolina Department of Transportation (NCDOT) Transportation Improvement Program (TIP) as Project No. A-9 B & C and is the middle portion of the entire US 74 Relocation from the Andrews Bypass to SR 1121 in Almond (A-9 ABCD). Exhibit 1.1.2 shows the project study area and the B & C segments of the A-9 corridor.

S.4 PURPOSE AND NEED

This project is a part of the Appalachian Development Highway System (ADHS) and would provide a needed highway facility for Graham County and complete a missing link in the ADHS

Corridor "K". It would offer Graham County improved access to other areas of the state, provide a solution to the geographic isolation caused by rugged terrain and substandard roads, and stimulate the local economy by providing an improved transportation system.

S.5 OTHER GOVERNMENTAL ACTIONS REQUIRED

A Section 404 permit from the US Army Corps of Engineers and a Section 401 Water Quality Certification from the North Carolina Division of Water Quality would be required. An easement from the US Forest Service (USFS) would be required for the portion of the project on the National Forest System (NFS) lands of the Nantahala National Forest. Section 26a approval from the Tennessee Valley Authority (TVA) would also be required.

S.6 ALTERNATIVES CONSIDERED

This section provides a discussion of the alternatives considered in this Draft Supp. FEIS. To maintain compatibility with the two-tiered purpose of and need for the entire A-9 project, the No-Build Alternative includes a comparison of existing US 74 and relocated US 74. Likewise, the Improve Existing Alternative examines improving existing US 74 through the Nantahala Gorge.

No-Build Alternative

The No-Build Alternative would forego any improvements to existing roads with the exception of routine maintenance. No other changes to US 129 or NC 143 are assumed to take place by the 2030 design year. Existing US 74 would remain the major east-west corridor in the western tip of the state and would continue as a two-lane roadway from the Andrews Bypass through the Nantahala Gorge to the intersection of US 19-74 with NC 28. Exhibit 2.1.1 shows the existing US 74 alignment and the corridor of the Recommended Alternative from the 1984 FEIS.

The No-Build Alternative was eliminated because it does not meet the transportation goals of the State of North Carolina, the transportation needs of the region, or the objectives of the project. The No-Build Alternative does, however, provide a basis for comparing the adverse impacts and benefits of the other alternatives.

Transportation Systems Management (TSM) Alternative

Transportation Systems Management (TSM) improvements involve increasing the available capacity of the facility within the existing right-of-way with minimum capital expenditures and

without reconstructing the existing facility. Items such as the addition of turn lanes, striping, signing, signalization, and minor realignments are examples of TSM physical improvements. Traffic law enforcement, speed restrictions, access control and signal timing changes are examples of TSM operational improvements. There is only one signal along the project corridor, located at NC 143 and US 129 in Robbinsville, plus the project study area's roads are narrow, winding, two-lane roads. Therefore, TSM improvements would not be feasible within the project study area as they would not be able to improve the levels of service along NC 143 and US 74. In addition, they would not satisfy the purpose and need of completing a segment of Corridor K of the ADHS. Therefore, the TSM Alternative is not considered a reasonable and feasible alternative.

Mass Transit Alternative

The Mass Transit Alternative was eliminated from consideration because it would not address the purpose of and need for the project.

Improve Existing Alternative

The Improve Existing Alternative would widen existing US 74 through the Nantahala Gorge. Without upgrading US 129 substantially, however, this alternative would not improve access from US 74 to Robbinsville or Graham County. This alternative would not connect to the D section of the A-9 project, which has been completed; therefore, it is not consistent with current transportation plans. Due to these factors, the Improve Existing Alternative was not considered a reasonable and feasible alternative and was eliminated from further consideration.

Relocation Alternatives

Four relocation alternatives designated as Alternative X, Alternative Y, Alternative XY, and Alternative YX, are analyzed in this Draft Supp. FEIS. Alternative X and Alternative Y are two distinct alignments that share a common section along NC 143 and a eastern terminus near Stecoah. Two additional alternatives result from combining Alternatives X and Y. Alternative XY utilizes the X alignment from US 129 to the NC 143 crossing of Beech Creek and the Y alignment from Beech Creek to NC 28. Alternative YX utilizes the Y alignment from US 129 to the NC 143 crossing of Beech Creek and the X alignment from Beech Creek to NC 28.

Exhibit 2.5.1 shows the relocation alternative corridors for the A-9 B & C segment of the US 74 Relocation from US 129 at Robbinsville to NC 28 at Stecoah. Each of these relocation alternatives is proposed as a four-lane divided highway with partial control of access and was analyzed as an expressway with speed limit of 45 miles per hour (mph) or above. The roadway typical section consists of two separate two-lane sections 30 feet in width; each composed of two 12-foot lanes and 8-foot outside shoulders with 4-foot paved and 6-foot inside shoulders with 2-foot paved. The roadway is divided by a 30-foot wide median except at the tunnel approaches where the median widens to a 56-foot paved section. The detailed study alternatives (also referred to as the build alternatives) are described in detail below:

Alternative X – Alternative X matches the alignment of the Recommended Alternative from the 1984 FEIS, updated to meet current design standards and to minimize potential impacts. The western terminus is a new intersection on US 129 south of SR 1260 (Airport Road). The alignment bears northeast from US 129 and passes just west of SR 1273 (access road to American Uniform Company) and north of the American Uniform Company. Alternative X then intersects SR 1260 (Airport Road), SR 1206 (Old Tallulah Road), and SR 1277 (Old Sweetwater Road) before tying into NC 143 west of SR 1277 (Old Sweetwater Road).

While running concurrently with the existing NC 143 alignment, Alternative X intersects with SR 1218 (Slay Bacon Road), SR 1277 (Old Sweetwater Road), SR 1219 (England Branch Road), Sweeten Creek Road, SR 1221 (Pinhook Road), and SR 1223 (Beech Creek Road). East of SR 1223 (Beech Creek Road), the alignment diverges from NC 143 at a new intersection and turns south on new location. The alternative traverses Stecoah Gap via a 2,870-foot long tunnel, with an approximate depth at its center of 577 feet. Alternative X curves from a south to a north bearing and intersects SR 1229 (Dry Creek Road) southeast of SR 1227 (Cody Branch Road). Alternative X parallels then intersects NC 28 east of the NC 28/SR 1235 (Lower Stecoah Road) intersection and terminates just east of Wolf Creek Grocery and gas station on NC 28.

For Alternative X, eight major drainage structures are proposed: Tallulah Creek, Long Branch, Sweetwater Creek (2 crossings), Beech Creek, Stecoah Creek, Dry Creek, and an unnamed tributary to Stecoah Creek (this bridge is recommended based on design parameters rather than hydraulic analysis).

Alternative Y – The west terminus of Alternative Y is located further north along US 129 than that of Alternative X. The alignment begins at a new intersection on US 129 north of SR 1260 (Airport Road) and bears east to an intersection with SR 1206 (Old Tallulah Road) north of SR 1260 (Airport Road). Alternative Y then bisects SR 1208 (Long Branch Road) south of SR 1277 (Old Sweetwater Road) and intersects with SR 1277 (Old Sweetwater Road) east of the SR 1208 (Long Branch Road)/SR 1277 (Old Sweetwater Road) intersection.

From SR 1277 (Old Sweetwater Road), Alternative Y bears east and intersects with NC 143 west of the existing SR 1277 (Old Sweetwater Road) intersection. Alternative Y then runs concurrently with NC 143 and intersects SR 1218 (Slay Bacon Road), SR 1277 (Old Sweetwater Road), SR 1219 (England Branch Road), Sweeten Creek Road, SR 1221 (Pinhook Road), and SR 1223 (Beech Creek Road). The alignment diverges from NC 143 at a new intersection and bears northeast on new location to Stecoah Gap where Alternative Y requires a 1,919-foot tunnel with an approximate depth at its center of 427 feet. The alignment takes a southward to northward curve before intersecting with SR 1229 (Dry Creek Road) about 1,280 feet southeast of SR 1277 (Old Sweetwater Road). Alternative Y intersects with NC 28 approximately 5,220 feet east of the NC 28/SR 1235 (Lower Stecoah Road) intersection and shares the same east terminus as Alternative X just east of its intersection with NC 28.

For Alternative Y, eight major drainage structures are proposed: Tallulah Creek, Long Branch, Sweetwater Creek (2 crossings), Beech Creek, Stecoah Creek, Dry Creek, and an unnamed tributary to Stecoah Creek (this bridge is recommended based on design parameters rather than hydraulic analysis).

Alternative XY – Alternative XY is the combination of the Alternative X alignment from US 129 to NC 143 and the Alternative Y alignment from NC 143 to NC 28.

Intersections are proposed at US 129, SR 1260 (Airport Road), SR 1206 (Old Tallulah Road), SR 1277 (Old Sweetwater Road) (2 intersections), NC 143 (2 intersections), SR 1218 (Slay Bacon Road), SR 1219 (England Branch Road), Sweeten Creek Road, SR 1221 (Pinhook Road), SR 1223 (Beech Creek Road), SR 1229 (Dry Creek Road), and NC 28. A 1,919-foot long tunnel is proposed at Stecoah Gap.

Major drainage structures are proposed at the following crossings: Tallulah Creek, Long Branch, Sweetwater Creek (2 crossings), Beech Creek, an unnamed tributary to Stecoah Creek (this bridge is recommended based on design parameters rather than hydraulic analysis), Stecoah Creek, and Dry Creek.

Alternative YX – Alternative YX is the combination of the Alternative Y alignment from US 129 to NC 143 and the Alternative X alignment from NC 143 to NC 28.

Intersections are proposed at US 129, SR 1206 (Old Tallulah Road), SR 1277 (Old Sweetwater Road) (2 intersections), NC 143 (2 intersections), SR 1218 (Slay Bacon Road), SR 1219 (England Branch Road), Sweeten Creek Road, SR 1221 (Pinhook Road), SR 1223 (Beech Creek Road), SR 1229 (Dry Creek Road), and NC 28. A 2,870-foot long tunnel is proposed at Stecoah Gap.

Major drainage structures are proposed at the following crossings: Tallulah Creek, Long Branch, Sweetwater Creek (2 crossings), Beech Creek, an unnamed tributary to Stecoah Creek (this bridge is recommended based on design parameters rather than hydraulic analysis), Stecoah Creek, and Dry Creek.

S.7 SUMMARY OF IMPACTS

Relocations – Based on the April 2008 relocation report contained in Appendix A.4, it is estimated that Alternative X would displace 35 residences and 1 business, Alternative Y would displace 44 residences and 2 businesses, Alternative XY would displace 41 residences and 2 businesses, and Alternative YX would displace 38 residences and 1 business.

Land Use – Development trends in the project study area include increasing commercial growth in the Robbinsville area and promotion of Graham County as an eco-tourism destination. Some growth in commercial employment would most likely occur as a result of this project as it would improve transportation access to Graham County.

Communities – Because the alternatives are located largely on rural unimproved property, it is anticipated that there would be no disruptive effect on communities or separation of neighborhoods.

Community Facilities, Parks, and Recreation – Alternatives X and XY would impact the community soccer fields immediately west of the Graham County Recreational Park, along Tallulah Creek.

Farmlands – The project study area's soils are characterized as prime and statewide important farmlands. A Farmland Conversion Impact Rating Form was submitted to the Natural Resources Conservation Service for the Build Alternatives and is included in Appendix A.3. The total scores for each alternative range between 132 and 140 and are in compliance with the FPPA. The estimated amount of prime, unique, and local important farmland within the proposed right-of-way for each build alternative is as follows: Alternative X: 105 acres, Alternative Y: 81 acres, Alternative XY: 100 acres, and Alternative YX: 86 acres. The actual impacts to farmlands based on construction limits would be less than the total amount of farmland within the proposed right-of-way.

Utilities – All four build alternatives would require the relocation of portions of existing waterlines and short-term interruptions to service could be expected during construction. None of the alternatives would impact any sewer or natural gas service. Relocation of telephone cable would be required where it is located within the construction limits of the alternatives; however, it is not anticipated that area residents would experience disruption in service.

Hazardous Material Sites and Underground Storage Tanks – Alternatives X and XY would affect the Brad Day property and the Joe Crisp property. As discussed in Section 3.6.4, the Brad Day property is the former location of the Graham County landfill; the Joe Crisp property is adjacent to the Brad Day property and contains an operating junkyard. Prior to project construction, soil samples will be taken at the Brad Day property to determine if contaminates are present. Unless contamination is discovered during sampling, no special handling of the materials at the Brad Day property would be required. Initial inspections of Joe Crisp property indicate that the junkyard does not appear to have waste buried at the site. Items found in the junkyard would require proper disposal or recycling, but should not require any special handling. Alternatives Y and YX would not affect any hazardous material site or USTs.

Archaeological Resources – The evaluation of archaeological resources is not included in this Draft Supp. FEIS. An archaeological survey was performed in 1980; its results were included in the 1984 FEIS and are summarized in Section 3.4.6. However, archaeological surveys will be conducted prior to completion of the Final Supp. FEIS.

Historic Architectural Resources – In a letter dated June 30, 2005, included in Appendix A.5, the North Carolina Historic Preservation Office (HPO) concurred that there are no historic properties within the project's Area of Potential Effects (APE). No historic structures would be affected by construction of the proposed project.

National Forest System (NFS) Land – Based on each alternative's proposed right-of-way, the anticipated impacts to NFS lands are as follows: Alternatives X and YX would each affect 65.0 acres and Alternatives Y and XY would each affect 92.0 acres.

Floodplain Impacts – All of the build alternatives would cross five 100-year floodplains (Tallulah Creek, Sweetwater Creek (2), Beech Creek, and Dry Creek). Table S.1 shows the anticipated 100-year floodplain impacts based on the construction limits of the proposed project. Impact quantities were calculated for the embankments (*i.e.*, fill slopes) at each stream crossing location and do not account for the reduction of floodplain impacts through stream relocation/restoration and natural channel design. None of the build alternatives would result in a substantial encroachment to regulatory floodways and are not expected to increase the extent or level of flood hazard risk.

Air Quality – No exceedances of the 1-hour and 8-hour concentration standards, as established by the National Ambient Air Quality Standards, are exceeded by construction of any of the build alternatives. This project is not anticipated to create any adverse effects on the air quality of this attainment area. Mobile Source Air Toxics (MSATs) are discussed in Section 4.5.5 and Appendix C.4.

Noise – Out of the total 278 noise receptors analyzed, it is anticipated that 2030 traffic volumes would result in 18 impacts for Alternative X, 16 impacts for Alternatives Y and XY each, and 17 impacts for Alternative YX. It should be noted that 17 impacts occur in the No-Build scenario and therefore exist regardless of construction of the project.

Mineral Resources – There are no active or inactive permitted mines within the immediate project study area nor within Graham County. Therefore no mines, active or inactive, would be impacted, nor are there any known mineral resources that would be impacted by the alternatives.

Water Quality – The natural hydraulics of some waterbodies would be affected by construction of the proposed project. After construction, runoff from the highway would carry hydrocarbon pollutants and, in winter, probably road salt and sand into the receiving streams. Chemical and silt runoff tends to be episodic; however, prolonged negative effects may occur to aquatic species inhabiting mountain streams.

A related impact could be alteration of the groundwater systems proximal to the right-of-way. The grading of hillsides has the potential to alter the area's groundwater hydrology, thereby affecting the well-water supplies of citizens in these coves and valleys.

Biotic Communities – The proposed project would interrupt areas of forested land with a graded road that would permanently replace vegetation with impervious surface cover. Table S.1 shows impacts to upland forest communities.

These changes would: 1) reduce available habitat for plants; 2) increase surface runoff that must be accommodated by residual plant communities; 3) affect vegetation adjacent to the construction limits; 4) possibly alter plant-water relationships by changing the topography and natural subsurface water movement; 5) fragment forest communities; and 6) temporarily disrupt the landscape during construction.

Much of the proposed roadway is along the current transportation corridor in Graham County, which minimizes the amount of additional impervious surface cover and habitat fragmentation. The western segment of the project would be constructed at a new location, however, diverging south from the NC 143 corridor near the intersection of NC 143 and SR 1222 (Orr Branch Road). Several tracts of land south of NC 143 and NC 28 would be disconnected from undeveloped land south of the proposed roadway, which would reduce the connectivity of habitats in that area.

Efforts to minimize adverse effects on biotic communities include the use of bridges at a majority of the major stream crossings to maintain natural channel morphology and provide for fish and terrestrial animal passage. The proposed tunnel would reduce the amount of additional impervious cover as well as minimize vegetation loss and habitat fragmentation effects. Given the length of the proposed project along the existing NC 143 corridor plus the minimization efforts described above, no significant adverse impacts to biotic communities is expected from any alternative corridor.

Waters of the United States – Wetland and stream impacts are based on extensive fieldwork conducted in 1998 and verified in 2003 and 2005. Anticipated wetland and stream impacts are shown in Table S.1.

Rare and Protected Species – To avoid the potential for impacts to the Indiana bat, the clearing of trees will begin no earlier than October 15 and will be completed by the beginning of the Indiana bat roosting season on April 15. This action would protect suitable roosting trees and substantially reduce the potential for impacts to this species. Although the proposed project may affect, it is not likely to adversely affect, the Indiana bat.

Given the marginal quality and patchy distribution of suitable habitat for the Appalachian elktoe (*Alasmidonta raveneliana*) within the project study area, in combination with the absence of mussels or relic shell material, the effects of existing human activities, and the presence of the Santeetlah dam, the proposed project would not affect this federally listed species. The proposed project would not affect the Graham County critical habitat of the Appalachain elktoe.

There is no suitable habitat for, or recorded occurrences of, the Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), rock gnome lichen (*Gymnoderma lineare*), bald eagle (*Haliaeetus leucocephalus*), and Virginia spiraea (*Spiraea virginiana*), within the project study area; therefore, the proposed project would not effect these federally protected species. The bog turtle (*Clemmys muhlenbergii*) is listed as threatened due to similarity of appearance and is not subject to Section 7 consultation.

In summary, impacts to federally protected species are not anticipated to occur as a result of the construction of this project.

Visual Impacts – The USFS prepared a draft *Scenery and Recreation Impact Analysis* (USFS, 2003d) to assess the impacts to the Appalachian Trail and to prescribe visual mitigation measures associated with this project. Sections 3.9 and 4.9 summarize and contain excerpts of the USFS report, which is also included in its entirety in Appendix C.3. The USFS's final analysis and mitigation measures will be included in the Final Supp. FEIS. A brief summary of impacts is included in the following paragraph.

In the eastern portion of the project corridor, sights of the new highway would be apparent from the National Forest and private lands in the Stecoah Community. Appalachian Trail users would see glimpses of the highway from numerous locations north and south of Stecoah Gap and at least five viewpoints would have unobstructed views of the project. Visual impacts to the trail would be greater during leaf-off season.

In addition to the use of a tunnel in the Stecoah Gap area, several mitigation measures for visual impacts were developed as a result of extensive coordination with the USFS. The primary visual impact mitigation measure is the partial relocation of the power distribution line that crosses the Appalachian Trail northeast of Stecoah Gap to the existing NC 143 corridor. Although outside the construction limits of the proposed project, this action would allow viewable sections of the existing powerline right-of-way to re-vegetate and screen views of the project. A complete discussion of the visual impact mitigation measures is contained in Section 4.9.

Preliminary Cost Estimates – Estimated construction and right-of-way costs for the relocation alternatives are shown in Table S.1.

S.8 RECOMMENDED ALTERNATIVE

Alternative YX, described in Section 2.5.4 and shown in Exhibit 2.9.1, is the Recommended Alternative for the US 74 Relocation from US 129 at Robbinsville to NC 28 at Stecoah (TIP No. A-9 B&C). This recommendation is based on geotechnical considerations and the results of a

preliminary comparison of impacts between the build alternatives. This information is discussed in Sections 2.6 and 4.0, respectively.

The selection of a Preferred Alternative, however, will not be made until the alternatives' impacts and comments on this Draft Supp. FEIS have been fully evaluated.